

Draft Environmental Impact Report

ORD18-2
EIR18-0001
SCH# 2018082023

Volume 1

NEVADA COUNTY COMMERCIAL CANNABIS CULTIVATION ORDINANCE PROJECT



Nevada County
Community Development Agency
Nevada City, California

January 2019

Kimley»Horn
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Draft

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1.0 INTRODUCTION

CEQA requires California public agencies to consider the environmental consequences of projects for which they have discretionary authority. The public agency with the principal responsibility for carrying out or approving a project is the “lead agency.” CEQA requires the lead agency to prepare an EIR if there is substantial evidence, in light of the whole record, that a project may have a significant effect on the environment. A significant effect is defined in CEQA as a substantial and adverse physical change in the environment. Nevada County (County) is the lead agency for the Nevada County Commercial Cannabis Cultivation Ordinance (proposed NCCO or proposed project).

The County of Nevada (County) is proposing the Nevada County Commercial Cannabis Cultivation Ordinance (proposed NCCO¹ or proposed project) to be consistent with state law and to enable a structured and logical management procedure for the cultivation of cannabis within all unincorporated areas within the County. The proposed NCCO has been drafted pursuant to the authority granted by Article XI, Section 7 of the California Constitution, Health and Safety Code section 11362.83, and Government Code Section 25845. In consideration of the amendment to the Zoning Ordinance, Nevada County has determined that the proposed project requires an Environmental Impact Report (EIR) to evaluate the environmental impacts that could result from adoption of the proposed NCCO and future implementation of associated commercial cannabis cultivation. This Draft EIR has been prepared under the direction of Nevada County in accordance with the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000–21177) and the State CEQA Guidelines (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, Sections 15000–15387).

The proposed NCCO would be adopted to replace the existing cannabis regulations in the Nevada County Land Use and Development Code (Development Code under Title 2, Chapter IV, Article 5 Marijuana Cultivation. The proposed NCCO details new County-specific regulations to address the licensing of cannabis cultivation activities in only the unincorporated areas of the County. As part of this action, the proposed project is meant to help ensure public health and safety, and to protect the environment by legalizing and permitting existing cultivation as well as providing a means for new cultivation to obtain approval through the procedures described in the proposed regulations.

The proposed NCCO is a comprehensive framework that defines an entire plan for implementation of commercial cannabis cultivation requirements. Within this framework and in part, the proposed NCCO defines the locations and zoning designations in which cannabis may be cultivated, places size limitations on cultivation areas, defines three types of cultivation, provides for a structured permitting process, implements standards to help address neighborhood compatibility concerns and the provision of services and utilities, and implements procedures meant to protect natural resources and the environment. Additionally, the proposed NCCO would provide for local control over cannabis cultivation and provide a new source of revenue for the County through an increased tax base. The proposed project would not alter personal use cannabis activities in regard to cultivation or consumption and does not preempt federal prohibition of the use or possession of cannabis and does not prevent federal law enforcement officers from enforcing federal law. In sum, the proposed project, in conformance with existing laws,

¹ For the sake of brevity and readability the acronym for the proposed ordinance has been shorted from NCCCCO to NCCO for this EIR.

would regulate and provide management oversight to cannabis cultivation in a way that is intended to protect the environmental and preserve the existing neighborhood character and quality of life for all residents within the County.

1.1 ENVIRONMENTAL BASELINE

The environmental impacts that could result from implementation of a project, in this case the NCCO, are evaluated by comparing the environmental conditions that existed before the project was implemented to the environmental conditions that are expected after a project is implemented. The point in time before a project was implemented and is measured against is referred to as the baseline. The changes in environmental conditions between the baseline and the environmental conditions upon project completion represent the environmental impacts of the proposed project. The description of the environmental conditions in the project study area under baseline conditions is referred to as the environmental setting. The State CEQA Guidelines Section 15125 provides the following guidance for establishing the baseline:

An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation (NOP) is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant.

In the case of the proposed project, the NOP was published on August 10, 2018. Thus, the conditions as they existed on this date are considered the baseline environmental conditions for the proposed project as the NOP initiated the CEQA analysis. Even though the CEQA Guidelines are clear and, in most cases, establishing this “existing conditions” baseline is a straightforward task; there are circumstances that may make this task more complex and challenging.

For example, some areas of the County the baseline existing conditions (either on-site physical conditions or an existing operation) are the result of illegal activity related to cannabis cultivation. This may also consist of existing activities that are inconsistent with existing permits. This scenario and consideration is applicable to the proposed project because the majority of existing cannabis cultivation within the County is unauthorized and considered illegal. While it may appear complicated, this issue of illegal activity and baseline conditions was previously addressed in *Fat v. County of Sacramento* (2002), 97 Cal.App.4th 1270. In this case the court (citing *Riverwatch v. County of San Diego* (1999) 76 Cal.App.4th 1428) noted that the preparation of a CEQA document is not a forum for determining the nature and consequences of the prior conduct of a project applicant. In this case, the Court upheld the County’s use of the NOP issuance date as the baseline despite the fact that a conditional use permit (CUP) for an existing use had expired many years earlier and that use had actually expanded and continued operation.

Accordingly, for the purpose of the proposed project, the County and this Draft EIR evaluate the impacts of the proposed project against actual conditions that existed at the time CEQA review commenced. The County is not required to go back to a time that predates the illegal activity. Further, to attempt to go back to a date in which there was no cannabis cultivation to establish a baseline would be impractical, infeasible, and require significant speculation. A CEQA analysis using such a methodology would nullify any associated impact conclusions. Therefore, the baseline or environmental setting used in the

preparation of this Draft EIR, by which the environmental impacts of the proposed project are evaluated, is based on the estimated 3,500 existing cannabis cultivation operations within the County.

The estimated 3,500 existing cannabis grows is based the experience of County staff, and other anecdotal evidence based on nuisance claims and some limited interpretation of aerial photography. Information provided by the Community Advisory Group (CAG) and other stakeholders including existing cultivators, interested parties, and law enforcement also was used to estimate existing cultivation. While it is recognized that the actual amount of cultivation could be greater or fewer than this number, because these existing grows operate illegally, there is no current mechanism for tracking the exact number of existing cannabis operations. Therefore, considering input from and use of these resources evaluation based on 3,500 existing cannabis cultivation operations is appropriate for the CEQA analysis.

Further detail related to the existing conditions is provided in *Section 2.0: Executive Summary*, *Section 3.0: Project Description*, and in the respective Environmental Resource Sections (*Sections 4.1 through 4.16*), of this Draft EIR.

1.2 PURPOSE OF THIS EIR

An EIR is a public informational document used in the planning and decision-making process. This program-level Draft EIR will analyze the environmental impacts of the project. The Nevada County Planning Commission and Board of Supervisors will consider the information in the Draft EIR, including the public comments and staff response to those comments, during the public hearing process. The purpose of an EIR is to identify:

- The significant potential impacts of the proposed project on the environment and indicate the manner in which those significant impacts can be avoided or mitigated;
- Any unavoidable adverse impacts that cannot be mitigated; and
- Reasonable and feasible alternatives to the proposed project that would eliminate any significant adverse environmental impacts or reduce the impacts to a less-than-significant level.

An EIR also discloses growth-inducing impacts; impacts found not to be significant; and significant cumulative impacts of a proposed project when taken into consideration with past, present, and reasonably anticipated future projects.

CEQA requires an EIR to reflect the independent judgment of the lead agency regarding the impacts, the level of significance of the impacts both before and after mitigation, and mitigation measures proposed to reduce the impacts. A Draft EIR is circulated to responsible agencies, trustee agencies with resources affected by the project, and interested agencies and individuals. The purposes of public and agency review of a Draft EIR includes sharing expertise, disclosing agency analyses, checking for accuracy, detecting omissions, discovering public concerns, and soliciting mitigation measures and alternatives capable of avoiding or reducing the significant effects of the proposed project, while still attaining most of the basic objectives of the proposed project.

Reviewers of a Draft EIR are requested to focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the proposed project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate significant environmental effects.

1.3 PROGRAM-LEVEL EIR ANALYSIS

This EIR is being prepared as a Program EIR in accordance with Section 15168 of the CEQA Guidelines, which states the following:

- a) *General. A Program EIR is an EIR, which may be prepared on a series of actions that can be characterized as one large project and are related either:*
 - 1) *Geographically,*
 - 2) *As logical parts in the chain of contemplated actions,*
 - 3) *In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or*
 - 4) *As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.*
- b) *Advantages. Use of a Program EIR can provide the following advantages. The Program EIR can:*
 - 1) *Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action,*
 - 2) *Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis,*
 - 3) *Avoid duplicative reconsideration of basic policy considerations,*
 - 4) *Allow the Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and*
 - 5) *Allow reduction in paperwork.*
- c) *Use with Later Activities. Subsequent activities in the program must be examined in the light of the Program EIR to determine whether an additional environmental document must be prepared.*
 - 1) *If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.*
 - 2) *If the agency finds that pursuant to Section 15162, no new effects could occur, or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required.*
 - 3) *An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.*
 - 4) *Where the subsequent activities involve site-specific operations, the agency should use a written checklist or similar device to document the evaluation of*

the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.

- 5) *A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required.*

This Program EIR is intended to serve as the primary environmental document for all entitlements associated with the proposed project, including all discretionary approvals requested or required to implement the proposed project. Nevada County, as Lead Agency, can approve subsequent actions without additional environmental documentation unless otherwise required by Section 21166 of the CEQA Statutes and Section 15162 of the CEQA Guidelines. Section 21166 of the CEQA Statutes states that:

When an environmental impact report has been prepared for a project pursuant to this division, no subsequent or supplemental environmental impact report shall be required by the lead agency or by any responsible agency, unless one or more of the following events occurs:

- (a) Substantial changes are proposed in the project which will require major revisions of the environmental impact report.*
- (b) Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report.*
- (c) New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available.*

1.4 SCOPE OF ENVIRONMENTAL ANALYSIS

This EIR assess the potential environmental impacts that could occur with implementation of the proposed project. Potentially significant environmental impacts including issues raised in public comments received in response to the Notice of Preparation (NOP) and at the public scoping meetings are evaluated in this EIR. The scoping process has determined that the project has the potential to result in significant environmental impacts on the following resources, which are addressed in detail in this Draft EIR:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources/Tribal Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Minerals Resources
- Noise

- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems
- Energy Conservation

1.5 RESPONSIBLE AND TRUSTEE AGENCIES

Projects or actions undertaken by the lead agency, in this case Nevada County, specifically the Nevada County Planning Department and Nevada County Building Department, may require subsequent oversight, approvals, or permits from other public agencies in order to be implemented. Other such agencies are referred to as “responsible agencies” and “trustee agencies.” Pursuant to Sections 15381 and 15386 of the CEQA Guidelines, as amended, responsible agencies and trustee agencies are defined as follows:

- A “*responsible agency*” is a public agency that proposes to carry out or approve a project, for which a lead agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term “responsible agency” includes all public agencies other than the lead agency that have discretionary approval power over the project (Section 15381).
- A “*trustee agency*” is a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California (Section 15386).

The various public, private, and political agencies and jurisdictions with a particular interest in the proposed project include, but are not limited to, the following:

FEDERAL AGENCIES

- United States Fish and Wildlife Service (USFWS)
- United States Army Corps of Engineers (USACE)

STATE AGENCIES

- California Department of Fish and Wildlife (CDFW)
 - Section 1600 et seq. permits (Streambed Alteration Agreements)
 - Section 2081 Permit (State-listed endangered species)
- Central Valley Regional Water Quality Control Board (Central Valley RWQCB), and
- Lahontan Regional Water Quality Control Board (Lahontan RWQCB)
 - National Pollutant Discharge Elimination System (NPDES) Construction General Permit
 - General Construction Stormwater Permit (Preparation of a SWPPP)
 - Regional Water Quality Certification (401 Permit)
- California Department of Transportation
- Bureau of Medical Marijuana Regulation
- Department of Consumer Affairs

- Department of Food and Agriculture – CalCannabis Cultivation Licensing
- Department of Pesticide Regulation
- Board of Equalization
- Franchise Tax Board
- Department of Justice
- Department of Public Health
- Industrial Welfare Commission
- State Board of Forestry
- The Division of Occupational Safety and Health
- California Environmental Protection Agency

LOCAL AGENCIES

- Nevada Irrigation District
- Northern Sierra Air Quality Management District
- Nevada County
 - Department of Agriculture
 - Building Department
 - Department of Code Compliance
 - Department of Environmental Health
 - Department of Farm Advisor
 - Planning Department
 - Department of Public Works
- Bear River Recreation & Park District
- Beyers Lane Community Service District
- Higgins Fire Protection District
- Kingsbury Greens Community Services District
- Lake of the Pines Ranchos Community Services District
- Mystic Mine Road Community Services District
- Nevada County Resource Conservation District
- Northern Sierra Air Quality Management District
- Nevada Cemetery District
- Nevada County Consolidated Fire District

- Nevada Irrigation District
- North San Juan Fire Protection District
- Oak Tree Park & Recreation District
- Ophir Hill Fire Protection District
- Peardale-Chicago Park Fire Protection District
- Penn Valley Fire Protection District
- Rough & Ready Fire Protection District
- San Juan Ridge County Water District
- Truckee Cemetery District
- Truckee Donner Public Utility District
- Truckee-Donner Recreation & Park District
- Truckee Fire Protection District
- Truckee Sanitary District
- Washington County Water District
- Western Gateway Recreation & Park
- Tahoe Forest Hospital District
- Truckee Tahoe Airport District
- Tahoe Truckee Sanitation Agency

1.6 CEQA PUBLIC REVIEW PROCESS

NOTICE OF PREPARATION

A Notice of Preparation (NOP) for the EIR was prepared and issued on August 10, 2018 and the 30-day comment period extended from August 10, 2018 to September 10, 2018. The NOP was circulated to local, state, and federal agencies and other interested parties, consistent with the requirements of CEQA. The NOP is included as Appendix A of this EIR.

Pursuant to Section 21083.9 of the CEQA Statute, the lead agency is required to conduct at least one scoping meeting for all projects of statewide, regional, or area-wide significance. A scoping meeting is for jurisdictional agencies and interested persons or groups to provide comments regarding, but not limited to, the range of actions, alternatives, and environmental effects to be analyzed. Nevada County hosted two public scoping meetings on August 22, 2018, from 1:30 PM to 3:00 PM, at the Foothills Event Center located at 400 Idaho Maryland Road, Grass Valley, CA 95945 and from 6:00 PM to 7:30 PM, at the Bear River High School Multi-Purpose Room at 11130 Magnolia Road, Grass Valley, CA 95949. A third scoping meeting was held on August 30, 2018 at City of Truckee Town Hall, at 10183 Truckee Airport Road, Truckee, CA 96161.

In the process of preparing the NOP, the County completed an Initial Study and Environmental Checklist based on Appendix G of the CEQA Guidelines to assess the potential impacts of the proposed project. Based on the analysis in the Initial Study, the NOP indicated the following environmental topics would be addressed in this project level EIR:

1. Aesthetics
2. Agricultural and Forestry Resources
3. Air Quality and Greenhouse Gas Emissions
4. Biological Resources
5. Cultural and Tribal Cultural Resources
6. Geology and Soils
7. Hazards and Hazardous Materials
8. Hydrology/Water Quality/Flooding
9. Land Use and Planning
10. Mineral Resources
11. Noise
12. Population and Housing
13. Public Services
14. Recreation
15. Transportation and Traffic
16. Utilities and Service Systems
17. Cumulative Impacts
18. Alternatives

Applicable agencies and interested members of the public had up to 30-days to respond to the NOP regarding the contents of the Draft EIR. The comment letters received during the NOP circulation period are provided in Appendix A.

COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

During the NOP public review period, Nevada County received forty-two (42) comment letters. A copy of each letter is provided in Appendix A of this EIR. In addition, verbal comments were received at the public scoping meetings. *Table 1-1: Summary of NOP Comments* provides a summary of NOP comments received during the NOP public review period. The full text of agency comments can be found in Appendix A.

PUBLIC REVIEW OF THIS DRAFT EIR

The County prepared and distributed a Notice of Availability (NOA) for the Draft EIR to relevant agencies and interested parties within the County on January 11, 2019. The NOA provides notice of a minimum 45-day public review and comment period for the Draft EIR, from January 11, 2019 to February 25, 2019, and

the Draft EIR is made available on the County's website (XX website link) and at the County libraries (CEQA Guidelines Section 15087). During this period, public agencies and members of the public may provide written comments on the analysis and content of the EIR. In reviewing a Draft EIR, readers should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and on ways in which the significant effects of the project might be avoided or mitigated.

All written comments on this Draft EIR must be mailed, delivered, faxed or emailed by 5:00 p.m. on February 25, 2019, and addressed as follows:

Mail or Delivery:

Nevada County
Community Development Agency
950 Maidu Avenue, Suite 170
Nevada City, CA 95959

Attention: Brian Foss Planning Director

Fax:

Brian Foss, Planning Director
Nevada County Community Development Agency
(530) 265-9851

Email:

planning@co.nevada.ca.us

All comments received on the Draft EIR within the 45-day public review period will be responded to by the County in the Final EIR.

Table 1-1: Summary of NOP Comments

Commenter	Date	Summary of Issues
Federal Agencies		
None Received		
State Agencies		
California Department of Fish and Wildlife	9/6/2018	Environmental assessment re: land conversion, species & plants, water, birds, pesticide use, cumulative impacts
Central Valley Regional Water Quality Control Board	9/5/2018	Antidegradation considerations, permitting requirements, construction storm water general permit, sewer system permits, industrial storm water general permit, clean water act section 404 permit, clean water act section 401 permit, dewatering permit, compliance for irrigated agriculture, low/limited threat General NPDES permit, NPDES permit
CA Department of Food and Agriculture	9/7/18	Aesthetics, land use/planning, mineral resources, noise, odor, recreation, public services/utilities, traffic
CA Department of Forestry and Protection	9/4/18	Timberland conversion permit, timber harvest plan
Native American Heritage Commission	8/14/208	Cultural resources assessments
Local Agencies		
None Received		
Organizations		
South Yuba River Citizens League	9/10/2018	Water quality, hydrology, forest impacts, wildlife and listed species, energy use/conservation
Nevada Co Cannabis Alliance	9/10/2018	Details on how the following will be mitigated: aesthetics, agriculture/forestry resources, air quality, biological resources, cultural/tribal resources, geology/soils, hazards/hazardous materials, hydrology/water quality, land use & planning, noise, population/housing, public services, recreation, transportation/traffic, utilities/service systems, mineral resources, energy conservation, greenhouse gases
Wolf Creek Alliance	9/10/2018	Setbacks, water/soil contamination
Interested Parties		
Nancy & Jack Henderson	8/24/2018	Agriculture, odor, water theft, lawyers
CJ Brady	8/29/2018	Odor control for neighbors
Andrew Goodwin	8/29/2018	Immature plants, no moving commercial gardens, garden setbacks

Table 1-1: Summary of NOP Comments

Commenter	Date	Summary of Issues
Rauwendaal Extrusion Engineering	3/2/2018	Water sources, taxes, employees/ADA compliance, grading/tree removal, pesticides/fertilizers, sediment and water runoff, setbacks, soil samples, grows in RA area
Lisa Robinson	8/23/2018	Fire risk/insurance, smoke & respiratory problems, algae content in lakes, rodents, government oversight and taxes, crime, visual/noise pollution
Diane Mackey	9/10/2018	Property values, water pollution, odor, traffic, regulation
Rosemary Metrailler	9/10/2018	Tone and focus of study, barriers for farmers
Mark Johnson	9/10/2018	Assumptions for creating laws, water contamination, air quality
David Cooper	9/10/2018	Aesthetics, air quality, biological resources, soils, water quality, land use & planning, transportation/traffic, energy conservations,
Anonymous	9/10/2018	Farmers journal on practices/methods for cultivating cannabis
Tracy Huston	9/10/2018	Water use and its impact
Mark Schaefer	9/10/2018	Odor
Wade Laughter	9/10/2018	Personal use cultivation, licensing
Larry Haynes	8/26/2018	Residential growers
Patricia Andersen	8/27/2018	Water supply & rights
Richard Anderson for Ray Butler	8/31/2018	Pesticides, neighbors' wells, dewatering of streams, wastewater systems, electricity, public safety, law enforcement, global warming
Richard Anderson for Ron Rettig	8/31/2018	Loss of federal funds, fire risk
Alex Squared	9/5/2018	CO2 enrichments
Sara Fors	9/5/2018	CO2 enrichments
Dave Schafer	9/7/2018	CO2 enrichments
Gary Baker	9/9/2018	Baseline condition, economic impacts, adding grows in the RA zone as alternative project
Abigail Givens	9/10/2018	Extension of time, federally illegal, water quality, property values, wildlife, small, light, fire, crime, traffic,
Sarah Johnson	9/10/2018	water quality, crime, traffic, quality of life,
Diana Veneski	8/11/2018	Impaired driving, odor
Graham Burke	8/23/2018	Odor is NOT a problem

Table 1-1: Summary of NOP Comments

Commenter	Date	Summary of Issues
Donna A Meares	9/1/2018	Chemicals in cultivation and run off to lakes/creeks
Allison Durham	9/10/2018	Water supply
Eileen Grider	8/21/2018	Home values, crime, commercial grows on small plots
Gerald Bushore	8/25/2018	Water flow
Virginia Akers	8/22/2018	Electricity, water usage, crime, fire risk
Kathy Sherman	8/9/2018	Against commercial grows
Josh Emery	8/11/2018	Groundwater levels/availability
John Rodrigues	8/15/2018	Outdoor personal use, environmental burden of indoor grows
Maureen Brooks	8/9/2018	Odor

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FINAL EIR

Following the close of the public comment period, a Final EIR will be prepared to respond to all substantive comments related to environmental issues surrounding the content of the Draft EIR. Pursuant to Section 15088.5(f)(2) of the CEQA Guidelines, the County will request that reviewers limit their comments to the content of the Draft EIR and will respond to all comments related to the disposition of environmental effects made during the Draft EIR public review period.

The Final EIR will be available prior to Planning Commission and Board of Supervisors public hearings to consider this Draft EIR and the proposed project.

Concurrent with the County's consideration of the Final EIR, the Board of Supervisors will also consider the merits of the project itself. This consideration may render a request to revise the proposed project, or an approval or denial of the proposed project. If the proposed project is approved, the Board of Supervisors may require mitigation measures specified in this Draft EIR as conditions of project approval. Alternatively, the Board of Supervisors could require other mitigation measures deemed to be effective mitigations for the identified impacts, or it could find that the mitigation measures cannot be feasibly implemented. For any identified significant impacts for which no mitigation measure is feasible, or where mitigation would not reduce the impact to a less-than-significant level, the Board of Supervisors would be required to adopt a finding that the impacts are considered and accepted because specific overriding considerations indicate that the project's benefits outweigh the impacts in question.

1.7 ORGANIZATION OF THIS DRAFT EIR

This Draft EIR is organized as follows:

Section 1: Introduction. Provides an introduction and overview that describes the purpose of the EIR, summarizes the EIR review and certification process, identifies key areas of environmental concern, and outlines the EIR process.

Section 2: Executive Summary. Summarizes the proposed project, required actions by the County and other agencies, environmental setting, potential impacts of the project, mitigation measures identified to reduce or eliminate significant impacts, and alternatives to the proposed project.

Section 3: Project Description. Presents project objectives, describes the site location and characteristics, provides a detailed description of the proposed project and specifies the intended use of the EIR, including the actions required to implement the project.

Section 4: Environmental Analysis. Describes the existing conditions, analyzes the proposed project's potential environmental impacts and specifies measures to mitigate the identified impacts.

Section 5: Other CEQA Sections. Discusses irreversible or irretrievable commitments of resources and significant unavoidable impacts. Includes discussion of cumulative impacts; those impacts that could occur from combined effect of other past, present, and reasonably foreseeable future projects.

Section 6: Alternatives. Evaluates a reasonable range of project options (alternative ways of meeting the project objectives) that would reduce or avoid environmental impacts, including the No Project Alternative.

Section 7: Bibliography. Lists sources of information used in the preparation of the EIR.

Section 8: Organizations and Persons Consulted. List of Organizations and people contacted dur the preparation of the EIR.

Section 9.0: List of Preparers. Lists personnel who prepared the EIR, including County staff and consultants.

Section 10.0: Commonly Use Acronyms and Abbreviations. List of commonly used acronyms and abbreviations used in the preparation of the EIR.

2.0 EXECUTIVE SUMMARY

2.1 INTRODUCTION

This Executive Summary is provided in accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15123. As stated in the State CEQA Guidelines Section 15123(a), “[a]n EIR shall contain a brief summary of the proposed actions and its consequences. The language of the summary should be as clear and simple as reasonably practical.” State CEQA Guidelines Section 15123(b) states, “[t]he summary shall identify: (1) each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect; (2) areas of controversy known to the Lead Agency, including issues raised by agencies and the public; and (3) issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects.” Accordingly, this summary includes a brief synopsis of the proposed project and project alternatives, environmental impacts and mitigation, areas of known controversy, and issues to be resolved during environmental review. *Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation* (at the end of this section) presents the summary of potential environmental impacts, their level of significance without mitigation measures, the mitigation measures, and the levels of significance following the implementation of mitigation measures.

2.2 PROJECT OVERVIEW

Adoption of the proposed Nevada County Commercial Cannabis Cultivation Ordinance (NCCO)¹ would result in regulation of the cultivation of cannabis within unincorporated areas of the County. All existing and proposed cannabis cultivation would be subject to the guidance contained in the proposed NCCO. Under the proposed NCCO, a Cannabis Cultivation Permit (CCP) would be required for cultivation with less than 2,500 sf of canopy, and an ADP would be required for cultivation between 2,500 sf and 10,000 sf of canopy. An ACP also would be the needed and would be required to be renewed annually. The following pages provide a detailed summary of the proposed NCCO with the above considerations and describes the land uses and areas in which cultivation would be allowed as well as the amount of cannabis that could be cultivated based on the locations. The full content of the proposed NCCO is provided in Appendix B of this EIR.

The type of cannabis cultivation within the County would be defined as either indoor, mixed-light, or outdoor cultivation. The definitions of these terms are as follows:

Indoor or Indoors – “indoor” or “indoors” means cultivation with exclusively artificial light within a detached fully enclosed and secure accessory structure using artificial light at a rate above twenty-five watts per square foot and that complies with the California Building Code (Title 24, California Code of Regulations) for that specific occupancy type, as adopted by the County of Nevada, except for structures that are exempt from the

¹ For the sake of brevity and readability the acronym for the proposed ordinance has been shorted from NCCCCO to NCCO for this EIR.

requirement to obtain a building permit under the Nevada County Land Use and Development Code. For purposes of Personal Use only, “Indoor” or “Indoors” shall also include Cultivation inside a private Residence or attached garage, but not in areas inhabited by humans, including, but not limited to bedrooms and kitchens.

Mixed-Light- “mixed-light” means the cultivation of mature or immature cannabis plants in an accessory structure permitted in compliance with local building codes and permitted specifically for cannabis cultivation using light deprivation and/or one of the artificial lighting models described below:

Mixed-Light Tier 1: The use of artificial light at a rate of six watts per sf or less;

Mixed-Light Tier 2: The use of artificial light at a rate above 6 watts and up to 20 watts per sf. Mixed-light cultivation must take place in an accessory structure permitted in compliance with local building codes and permitted specifically for cannabis cultivation.

Outdoor or Outdoors- outdoor cultivation means cultivation of cannabis in any location that is not “indoors” nor “mixed-light” and which is cultivated without the use of any artificial light at any time.

The proposed NCCO has been written, in part, to remedy existing environmental degradation to water quality, creation of objectionable odors, land use conflicts, impacts biological resources, and to address potential use of agricultural and forest resources, and protect the visual character of the County. The proposed NCCO establishes certain requirements for the initial issuance of cannabis cultivation permits and the continued annual permitting process. Under the proposed project, there would be a three-tier system for 1) personal use; 2) commercial use; and 3) non-remuneration cultivation use. The regulations for cultivation of cannabis have been developed to be consistent with requirements of other commercial activities as well as consistent with State law. Under the proposed project, cannabis cultivation would be managed using the policies and regulations within the NCCO.

Cultivation of cannabis is prohibited on any Parcel or Premises located within the following areas:

- Upon any premises located within 1,000 feet of any “Sensitive Site.” This setback is measured from the edges of the designated canopy area to the property line of the Sensitive Site.
- In any location where the cannabis would be visible from the public right-of-way or publicly traveled private roads at any stage of growth.
- Within any setback area required by this Article.

Table 2-1: Cannabis Cultivation for Personal Use, below, provides a breakdown of the allowable number of cannabis plants based on zoning, parcel acreage, and cultivation method. Cultivation in all other zones would not be a permitted use.

Table 2-1: Cannabis Cultivation for Personal Use

Zoning	Parcel Acreage	Cultivation Method		
		<i>Indoor</i>	<i>Mixed-Light</i>	<i>Outdoor</i>
R1 R2 R3 RA (Residential Designation)	Parcel of Any Size	Maximum of six plants, mature or immature.	Cultivation is Prohibited	Cultivation is Prohibited
R-A (Rural and Estate Designation)	5.00 acres or greater	Maximum of Six Plants, mature or immature		
AG AE FR TPZ	1.99 or less	Maximum of Six Plants, mature or immature	Cultivation is Prohibited	Cultivation is Prohibited
	Parcels 2.00 acres or greater	Maximum of Six Plants, mature or immature		
Source: Nevada County, 2018				
Abbreviations: R-1 (Single Family); R-2 (Medium Density); R-3 (High Density); R-A (Residential Agriculture); AG (General Agriculture), AE (Agriculture Exclusive), FR (Forest), TPZ (Timber Production Zone).				

Table 2-2: Cannabis Cultivation for Commercial Use, below, provides a breakdown of the of the allowable square feet of plant canopy based on zoning, parcel acreage, and cultivation method.

Table 2-2: Cannabis Cultivation for Commercial Use

Zone	Parcel acre	Cultivation Method		
		<i>Indoor</i>	<i>Mixed-Light</i>	<i>Outdoor</i>
R1 R2 R3 RA (Regardless of Zone Designation), and TPZ	Parcel of Any acreage	Commercial Cultivation is Prohibited		
AG	2.0 acres or less	Commercial Cultivation is Prohibited		
AE FR	Parcels 2.00 acres to 4.99 acre	Maximum of 500 sf canopy	Commercial Cultivation is Prohibited	
	Parcels 5.00 acres to 9.99 acres	Up to a maximum of 2,500 sf of canopy for any method or combination thereof.		

Table 2-2: Cannabis Cultivation for Commercial Use

Zone	Parcel acre	Cultivation Method		
		Indoor	Mixed-Light	Outdoor
	Parcels 10.00 acres to 19.99 acres	Up to a maximum of 5,000 sf of canopy for any method or combination thereof.		
	Parcels 20 acres or greater	Up to a maximum of 10,000 sf of canopy for any method or combination thereof.		

Source: Nevada County, 2018

Abbreviations: R-1 (Single Family); R-2 (Medium Density); R-3 (High Density); R-A (Residential Agriculture); AG (General Agriculture), AE (Agriculture Exclusive), FR (Forest), TPZ (Timber Production Zone).

A detailed description of the proposed project components is included in *Section 3: Project Description*, of this document.

2.3 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Pursuant to State CEQA Guidelines Section 15382, a significant effect on the environment is defined as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.” Section 4 of this Draft EIR describes in detail the significant environmental impacts that would result from implementation of the proposed project. Section 5 provides a discussion of cumulative and growth-inducing impacts. *Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation* summarizes the environmental impacts and mitigation measures discussed in these sections.

2.4 SIGNIFICANT AND UNAVOIDABLE IMPACTS

A detailed analysis of existing regulations per the Nevada County Land Use and Development Code and other applicable regulations of this report that are intended to mitigate project effects to the extent feasible. For the following environmental issue areas, one or more impacts are considered significant and unavoidable; that is, no feasible mitigation is available to reduce the project’s impacts or the project’s contribution to cumulative impacts to a less-than-significant level.

Aesthetic Resources (Section 4.1)

- Cumulative impacts on light and glare

Agricultural Resources (Section 4.2)

- Conversion of Prime Farmlands to a non-agricultural use.
- Conversion of Forest Land to a non-forest use.
- Other Changes resulting in a conversion of farmland or forest land to a non-agricultural use.

- Cumulative impacts from conversion of Prime Farmlands to a non-agricultural use.

Air Quality (Section 4.3)

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate an air quality plan or contribute substantially to a violation.
- Long-term operational emissions of criteria pollutants and precursors.
- Exposure of people to objectionable odors.
- Cumulative air quality impacts involving particulate matter (PM10) emissions.
- Cumulative impacts from exposure of people to objectionable odors.
- Cumulative impacts from GHG emissions.

Biological Resources (Section 4.4)

- Cumulative impacts on special status wildlife species.
- Cumulative impacts on riparian habitat, old growth habitat, and other sensitive natural communities.
- Cumulative impacts on special status plant species.
- Cumulative impacts on wetlands and waters of the United States.
- Cumulative impacts on resident or migratory wildlife corridors or nursery sites.

Hydrology and Water Quality (Section 4.8)

- Substantially deplete groundwater supplies or interfere with ground water recharge effecting aquifer volume or groundwater table.
- Cumulative impacts associated with groundwater extraction

Land Use and Planning (Section 4.9)

- Conflict with the Town Truckee Sphere of Influence and policies or regulations of the Town.

Utilities and Service Systems (Section 4.16)

- Provision of sufficient water supplies and infrastructure needs.
- Cumulative impacts associated with the provision of sufficient water supplies and infrastructure needs.

Energy (Section 4.17)

- Use large amounts of fuel or energy in an unnecessary, wasteful, or inefficient manner
- Result in a constraint on energy supplies resulting in the construction of expansion of facilities resulting in environmental effects.
- Cumulative impacts associated with increased energy demands.
- Cumulative impacts associated with new energy infrastructure.

2.5 SUMMARY OF PROJECT ALTERNATIVES

State CEQA Guidelines Section 15126.6, as amended, mandates that all EIRs include a comparative evaluation of the proposed project with alternatives to the project that are capable of attaining most of

the project's basic objectives but would avoid or substantially lessen any of the significant effects of the project. CEQA requires an evaluation of a "range of reasonable" alternatives, including the "no project" alternative. *Section 6: Alternatives* of this Draft EIR provides an analysis of the comparative impacts anticipated from the following alternatives to the proposed project:

NO PROJECT ALTERNATIVE

Under this Alternative, an amendment to Nevada County Code Title 2, Chapter IV Article 5 Section G-IV 5.4, which defines the current parameters of allowable medical cultivation activities based on the land use designations would not occur. This alternative would allow cultivation in accordance with the current ordinance and state law providing for cultivation for personal use and for medical purposes only. No commercial cannabis cultivation would be allowed. This alternative would not place any restriction on the number of properties on which cultivation could occur. This alternative would maintain that any cultivation undertaken outside the restrictions of the code would be considered a nuisance and may be abated by any legal means available. This alternative also would not permit commercial cultivation.

THIRTY PERCENT COMMERCIAL CANNABIS CULTIVATION ALTERNATIVE

This Alternative would reduce the number of eligible parcels zoned, (AG, AE, or FR) within the County that could be used for commercial cannabis cultivation from 100% to 30%. Within the County, there are a currently total of 27,207 parcels zoned AG, AE, and FR. The Draft EIR presents a conservative analysis of the total possible number of parcels that could be used for commercial cannabis cultivation. This is done to ensure that the Draft EIR captures the total cultivation area that could occur and fully discloses all potential impacts that would occur under this scenario. Under this alternative, the total number of AG, AE, and FR parcels on which commercial cultivation would be allowed is has been reduced to 8,162 or approximately 30% of the above 27,207.

NO GROUNDWATER CULTIVATION ALTERNATIVE

This alternative removes the eligibility of cultivators from using personal wells to draw groundwater for irrigation of commercial cannabis operations. All water would be provided by either Nevada Irrigation District (NID) or other provider. In areas where ground water is the only water source, cultivation activities would be required to cease or an alternative source such as a water diversion or rainwater catchment could be used. Although this alternative would not directly restrict cultivation or change the zones in which cultivation would be permitted, it is expected to decrease the overall area that would be cultivated. Cultivation would still be permitted in the same areas as the proposed project but the increased cost from purchasing water, or from developing alternative sources (diversion from a stream or spring, installing a rainwater catchment system, or purchase water to be trucked in.

NO PERMANENT STRUCTURES IN DESIGNATED FARMLAND ALTERNATIVE

This alternative is proposed to avoid significant impacts on Prime Farmland, Unique Farmland, and Farmland of Statewide Importance (collectively identified as Designated Farmland). Under this alternative commercial cannabis would be permitted on designated farmland, but only without the development of any permanent structures that would result in the conversion of Designated Farmland to non-agricultural uses. This would include permanent structures such as buildings pads or permanent structures for use in support of commercial cannabis cultivation, permanent structures to be used as greenhouses or mixed light facilities, or other improvements such as paved roadways or other infrastructure improvements that

would result on the conversion of designated farmland to a non-agricultural use. As noted in Section 4.1, while commercial cannabis is not considered an agricultural product under the NCCO, the growing of cannabis would not preclude some other agricultural use from occurring either concurrently or in the future. The restrictions of this alternative would not apply to the development of a new single-family residence constructed consistent with the applicable regulations of the County's Land Use and Development Code. This alternative requires the NCCO to be amended to preclude the development of permanent structures on designated farmland which would provide County staff with an additional mechanism for managing agricultural resources beyond what is currently required in the County's Land Use and Development Code.

2.6 AREAS OF CONTROVERSY

Section 15123 of the State CEQA Guidelines requires the summary section of a Draft EIR to identify areas of controversy known to the Lead Agency, including issues raised by agencies and the public. The following provides a summary of issues raised through scoping and comments on the notice of preparation (NOP) that could be considered controversial. A summary of the all the NOP comment letters is provided in Table 1-1: Summary of NOP Comments. The whole text of the comment letters received on the NOP are included in Appendix A of this document.

- Impacts related to land use compatibility conflicts between cannabis uses and non-cannabis uses
- Biological Impacts due to land conversion of undeveloped land
- Impacts related to loss of agricultural lands
- Land Use impacts related to aesthetics and odors
- Impacts related to water quality
- Impacts related to water supply, including groundwater supply.

2.7 ISSUES TO BE RESOLVED IN THE EIR

Section 15123 of the State CEQA Guidelines requires the summary section of a Draft EIR to identify issues to be resolved in the EIR including the choice among alternatives and whether or how to mitigate the significant project effects. Issues to be resolved, in addition to the "Areas of Controversy," include the following:

- The Draft EIR adequately describes the environmental impacts of the project; and
- Consideration of additional performance standards for the construction and operation of commercial cannabis cultivation, including their locations within the County.

2.8 RESPONSIBLE AND TRUSTEE AGENCIES

Under CEQA, a responsible agency is a public agency, other than the lead agency, that has responsibility to carry out or approve a project (Public Resources Code [PRC] Section 21069). A trustee agency is a state

agency that has jurisdiction by law over natural resources that are held in trust for the people of the State of California (PRC Section 21070).

The following federal, responsible, and trustee agencies may have jurisdiction over elements of the project:

LOCAL

- Nevada Irrigation District;
- Northern Sierra Air Quality Management District;
- Nevada County
 - Department of Agriculture
 - Building Department
 - Department of Code Compliance
 - Department of Environmental Health
 - Department of Farm Advisor
 - Planning Department
 - Department of Public Works
- Bear River Recreation & Park District
- Beyers Lane Community Service District
- Higgins Fire Protection District
- Kingsbury Greens Community Services District
- Lake of the Pines Ranchos Community Services District
- Mystic Mine Road Community Services District
- Nevada County Resource Conservation District
- Northern Sierra Air Quality Management District
- Nevada Cemetery District
- Nevada County Consolidated Fire District
- Nevada Irrigation District
- North San Juan Fire Protection District
- Oak Tree Park & Recreation District
- Ophir Hill Fire Protection District
- Peardale-Chicago Park Fire Protection District
- Penn Valley Fire Protection District
- Rough & Ready Fire Protection District

- San Juan Ridge County Water District
- Truckee Cemetery District
- Truckee Donner Public Utility District
- Truckee-Donner Recreation & Park District
- Truckee Fire Protection District
- Truckee Sanitary District
- Washington County Water District
- Western Gateway Recreation & Park
- Tahoe Forest Hospital District
- Truckee Tahoe Airport District
- Tahoe Truckee Sanitation Agency

STATE

- California Air Resources Board – (Northern Sierra Air Quality Management District) -Fugitive Dust Control Plan, Authority to Construct, Permit to Operate;
- California Department of Fish and Wildlife (CDFW), Agreements/Permits/Authorizations pursuant to the California and Federal Endangered Species Acts, if necessary;
- Central Valley Regional Water Quality Control Board (Central Valley RWQCB) and Lahontan Regional Water Quality Control Board (Lahontan RWQCB)
- California Water Boards
 - California Waterboard Cannabis Cultivation Program Water Right;
 - Issuance of a Cannabis Cultivation General Order permit
 - Regional Water Quality Certification (401 Permit)
- California Department of Transportation (Caltrans)
 - Right-of-Way Encroachment Permit
 - Oversized Loads Permit
- California Bureau of Cannabis Control
- California Department of Consumer Affairs
- California Department of Food and Agriculture – CalCannabis Cultivation Licensing
- California Department of Pesticide Regulation
- California Board of Equalization
- California Franchise Tax Board

- California Department of Justice
- California Department of Public Health
- Industrial Welfare Commission
- California State Board of Forestry
- California Division of Occupational Safety and Health
- California Environmental Protection Agency

Other additional permits or approvals from California responsible agencies may be required for at the individual project level.

FEDERAL

- United State Army Corps of Engineers (USACE)
- United States Fish and Wildlife Service (USFWS)

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Aesthetics			
Impact 4.1-1: Have a Substantial Adverse Effect on a Scenic Vista			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.1-2: Substantially Damage Scenic Resources, Including, but Not Limited to, Trees, Rock Outcroppings, and Historic Buildings within a State Scenic Highway			
	Potentially significant	MM AES-1: Protected Tree Avoidance. Amend the NCCO to require all commercial cannabis applications to show on project site plans any landmark trees, landmark groves, and heritage trees and groves that exist on the project site. If such trees exist, the applicant shall indicate that the proposed cultivation sites and any proposed ancillary structures would not require removal of any of the listed trees and that all cannabis cultivation and accessory structures are outside the existing drip line of all trees. If any cultivation or accessory structure would require removal or encroach in the drip line of any trees and the project plans shall be revised to avoid the trees. If any trees or groves are dead, dying, or a public safety hazard as determined by a qualified professional, no further action is required.	Less than significant
Impact 4.1-3: Substantially Degrade the Existing Visual Character or Quality of the Site and Its Surroundings			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.1-4: Create a New Source of Substantial Light or Glare Which Would Adversely Affect Day or Nighttime Views in the Area			
	Potentially significant	MM AES-2: Lighting Control Plan. Amend the NCCO to require commercial cannabis cultivation applicants with exterior light fixtures (including mixed light applications) to submit a light control plan that would demonstrate how light used for cultivation purposes would be controlled. Light control measures may include but not be limited to means such as using blackout tarps to	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		completely cover all greenhouses and hoop-houses or restricting the use of lighting between sunset and sunrise.	
Agricultural Resources			
Impact 4.2-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to Non-Agricultural Use			
	Potentially significant	MM AG-1: Farmland Resources: Amend the proposed NCCO, to require all commercial cannabis applications to show on project site plans any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance based on the most recent available mapping provided by the California Department of Conservation (CDOC) Farmland Mapping & Monitoring Program (FMMP) that exist on the project site. If such lands exist, the applicant shall show on the site plan(s) that any proposed accessory structure and related improvements (e.g., driveways, staging areas, etc.) have been located on the property in which impacts to mapped farmlands are reduced to the maximum extent practicable. Implement Land Use and Development Code Section L-II 4.4.3 regarding Important Agricultural Lands	Significant and unavoidable
Impact 4.2-2: Conflict with Existing Agricultural Zoning or Williamson Act Contract			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.2-3: Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land, Timberland, or Timberland Zoned Timberland Production			
	Less than significant	Implement Land Use and Development Code Section L-II 4.3.14 regarding Important Timber Resources. No mitigation measures are required.	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.2-4: Result in the Loss of Forest Land or Conversion of Forest Land to Non-Forest Use.			
	Potentially significant	Implement Land Use and Development Code Section L-II 4.3.3 regarding Important Agricultural Lands Implement Land Use and Development Code Section L-II4.3.14 regarding Important Timber Resources.	Significant and Unavoidable
Impact 4.2-5: The Project Would Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Farmland to Nonagricultural Use or Forest Land to Non-Forest Use			
	Potentially significant	Implement MM AG-1 Implement Land Use and Development Code Sections L-II 4.3.3 regarding Important Agricultural land and Section L-II 4.3.14 regarding Important Timber Resources.	Significant and unavoidable
Air Quality			
Impact 4.3-1: Conflict with or Obstruct Implementation of the Applicable Air Quality Plan			
	Potentially significant	MM AIR-1 Conformance to NSAQMD Rules and Regulations. Amend the NCCO to require all commercial cannabis applications to include language in project cultivation plans and on project site plans when applicable, that that the grading or building permit for the proposed project shall comply with applicable state and federal air pollution control laws and regulations, and with applicable rules and regulations of the NSAQMD during any construction and during operations of cannabis facilities. Compliance with NSAQMD Rule 226 Dust Control Plan shall be required, and all construction equipment (75 horsepower and greater) shall not be less than Tier 3, less than Tier 4 Interim if construction starts after 2025, and Tier 4 Final if construction starts after 2030Written documentation that the cannabis facility is in compliance with the NSAQMD shall be provided to the Nevada County Planning Department.	Significant and unavoidable

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		Impacts would exceed air pollutant thresholds established by the Northern Sierra Air Quality Management District.	
Impact 4.3-2: Violate any Air Quality Standard or Contribute Substantially to an Existing or Projected Air Quality Violation			
	Potentially significant	Implement MM AIR-1	Significant and unavoidable
Impact 4.3-3: Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Region is Nonattainment under an Applicable Federal or State Ambient Air Quality Standards			
	Potentially significant	Implement MM AIR-1 Impacts would exceed air pollutant thresholds established by the Northern Sierra Air Quality Management District.	Significant and unavoidable
Impact 4.3-4: Expose Sensitive Receptors to Substantial Pollutant Concentrations			
	Less than Significant	No mitigation measures are required.	Less than Significant
Impact 4.3-5: Create Objectionable Odors, Affecting a Substantial Number of People			
	Potentially significant	MM AIR-2 Prohibit burning of cannabis and other vegetation. Amend the NCCO to prohibit all commercial and non-remuneration operations to from burning any cannabis or other vegetative materials. The following language shall be added to the proposed NCCO: "The burning of any part of the cannabis plant or plant materials that is considered excess or waste is prohibited from being burned." Commercial cannabis cultivation would generate objectionable odors despite a required 100-foot setback from property lines.	Significant and unavoidable

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.3-6: Generate Greenhouse Gas Emissions, Either Directly or Indirectly, That May Have a Significant Impact on the Environment Based on any Applicable Threshold of Significance			
	Potentially significant	Implement MM AIR-1.	Significant and unavoidable
Impact 4.3-7: Conflict with an Applicable Plan, Policy or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases			
	Less than Significant	No mitigation measures are required.	Less than Significant
Biological Resources			
Impact 4.4-1: Disturbance or Loss of Special Status Wildlife Species and Habitat			
	Potentially significant	<p>MM BIO-1 Generator Noise: The proposed NCCO shall be amended to require all projects under either a CCP or an ADP to keep all generators in containment sheds while in use to reduce generator noise to no greater than 50dB as measured at 100 feet from any sensitive habitat or known sensitive species. This would be an annual requirement and verified yearly when the ACP is renewed. If conformance is not shown, the permit shall be denied or the held in abeyance until the project infraction is brought into conformance with the NCCO.</p> <p>MM BIO-2 Biological Resources Pre-Screening: The proposed NCCO shall be amended to require all applicants to submit biological pre-screening materials of all project sites for both CCP and ADP applications. The materials shall include adequate information to define site constraints and show potentially sensitive biological resource areas. Materials shall include, at a minimum, project location (site address and parcel numbers); site aerials, photographs of proposed areas of disturbance (includes canopy area, accessory structures, and any related improvements [e.g., driveways, staging areas, etc.]), photographs of vegetative cover, a thorough project description</p>	Less Than Significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>describing all phases of construction, all proposed structures and cultivation areas, location of any streams, rivers, or other water bodies, limits and depth of grading, any grading cut or fill in a stream, river, or other water body, any water diversions and/or description of the source of water, water storage locations, and source of electricity (if applicable).</p> <p>The applicant shall provide site plan(s) showing all areas of disturbance, multiple site plans may be used to clearly show the following: site aerials showing vegetation patterns and habitats (without snow cover), location of any water courses including ephemeral drainages and any other water bodies, all existing or proposed cultivation areas and structures, location of electric generators (if applicable), and grading plans with areas of cut and fill (if applicable).</p> <p>If the pre-screening materials identify habitats known to support sensitive or special status plant or animal species, then avoidance of the sensitive or special status species shall be required. If avoidance of a special status species cannot be achieved, then a Biological Inventory shall be prepared. The Biological Inventory shall be prepared by a qualified biologist. The Biological Inventory shall contain an environmental setting, a project description, review of CNDDDB database for the project location, a description of potential sensitive habitats existing on site, field survey methodology and findings (if needed), mitigation to reduce impacts (if needed), level of impacts conclusion. Due to the varying nature of biological conditions and variable locations of habitat types and dispersion of sensitive species, additional evaluations such as wetland delineations, protocol level surveys, nesting bird surveys, etc., may be required consistent with the applicable resources standards identified in Sections L-II 4.3 of the Nevada County Land Use and Development Code. If additional avoidance or protection measures are required, a Habitat Management Plan (HMP) consistent with the requirements of Section L-II 4.3.3 of the Nevada County Land Use and Development Code shall be prepared for both CCP and ADP permit applications. The HMPs would be implemented on a project by project basis and included as part of the project-specific approval process. If potential impacts on these biological resources cannot be reduced to less than significant, no permit shall be issued.</p>	

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.4-2: Disturbance to or Loss of Special Status Plant Species and Habitat			
	Potentially significant	Implement BIO MM-1 and MM BIO-2	Less Than Significant
Impact 4.4-3: Disturbance to or Loss of Riparian Habitat or Other Sensitive Natural Communities			
	Potentially significant	Implement MM BIO-2	Less Than Significant
Impact 4.4-4: Disturbance to or Loss of Wetland or Water of the United States			
	Potentially significant	Implement MM BIO-2	Less Than Significant
Impact 4.4-5: Interfere with Resident or Migratory Wildlife Corridors or Native Wildlife Nursery Sites			
	Less Than Significant Impact	Implement MM BIO-2	Less Than Significant
Cultural and Tribal Cultural Resources			
Impact 4.5-1: Cause a Substantial Adverse Change in the Significance of a Historical Resource			
	Potentially significant	MM CUL-1: Prior to project approval of either a CCP or an ADP, the project applicant, to the satisfaction of the County Planning Department shall submit a Non-Confidential Records Search to NCIC to determine the sensitivity of potential commercial cannabis cultivation site to disturb historic, cultural, or tribal resources. The applicant shall submit the sensitivity	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		<p>letter with the CCP or ADP. Upon receipt, should the County find the NCIC recommends a cultural resource study, the applicant shall retain a qualified professional to conduct a cultural resource study of the project area. No permit shall be issued until the completion of such report, and if needed, until recommended mitigation is implemented, or a plan has been submitted to the County for implementation.</p> <p>MM CUL-2: The proposed NCCO shall be amended to include a Cultural Resources Inadvertent Discovery Protocol (IDP) for projects that require grading or ground disturbance. The IDP shall include requirements that if subsurface archaeological features or deposits are discovered during construction or ground disturbance all activities within 50-feet of the find shall cease and the County shall be notified immediately. A qualified archeologist shall be retained by the County to assess the find and shall have the authority to prescribe all appropriate protection measures to future work.</p> <p>If buried human remains are discovered during construction or ground disturbance all activities shall cease and the County shall be notified immediately. The County shall notify the coroner to examine the remains. If the remains are determined to be of Native American origin, the Native American Heritage Commission shall be notified, and all sections detailed in Section 5097.98 of the California Public Resources Code shall be followed.</p> <p>Implement Land Use and Development Code Section L-II 4.3.6 Significant Cultural Resources</p>	
Impact 4.5-2: Cause a Substantial Adverse Change in the Significance of an Archaeological Resource			
	Potentially significant	Implement MM CUL-1 and MM CUL-2 Implement Land Use and Development Code Sections L-II 4.4.6 regarding Cultural Resources.	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.5-3: Directly or Indirectly Destroy a Unique Paleontological Resource or Site or Unique Geologic Feature			
	Potentially Significant	MM CUL-3: The proposed NCCO shall be amended to include a Paleontological and Unique Geologic Resources Inadvertent Discovery Protocol (IDP) for projects that require grading or ground disturbance. The IDP shall include requirements that if subsurface paleontological features or unique geologic features are discovered during construction or ground disturbance all activities within 50-feet of the find shall cease and the County shall be notified immediately. A qualified paleontologist shall be retained by the County to assess the find and shall have the authority to prescribe all appropriate protection measures to future work.	Less than significant
Impact 4.5-4: Disturb any Human Remains, including those Interred outside of Formal Cemeteries			
	Potentially Significant	Implement MM CUL-1 and MM CUL-2 Implement Land Use and Development Code Section L-II 4.4.6 regarding Cultural Resources.	Less than significant
Impact 4.5-5: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource, Defined in PRC Section 21074, that is Listed or Eligible for Listing in the California Register of Historical Resources, or in a Local Register of Historical Resources as Defined in PRC Section 5020.1(k)			
	Potentially Significant	Implement MM CUL-1 and MM CUL-2 Implement Land Use and Development Code Section L-II 4.4.6 regarding Cultural Resources.	Less than significant
Impact 4.5-6: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource, defined in PRC Section 21074, that is a Resource Determined by Nevada County to be Significant Pursuant to Criteria Set Forth in PRC Section 5024.1(c)			
	Potentially Significant	Implement MM CUL-1 and MM CUL-2 Implement Land Use and Development Code Section L-II 4.3.6 Significant Cultural Resources.	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Geology and Soils			
Impact 4.6-1: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving the Rupture of a Known Earthquake Fault			
	Less than significant	Implement Land Use and Development Code Section L-II 4.3.8 Earthquake Faults & Seismically Sensitivity No mitigation measures are required.	Less than significant
Impact 4.6-2: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving Strong Seismic Ground Shaking			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.6-3: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving Seismic-Related Ground Failure, Including Liquefaction			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.6-4: Expose People or Structures to Substantial Adverse Effects, Including the Risk of Loss, Injury, or Death Involving Landslides			
	Less than significant	Implement Land Use and Development Code Section L-II 4.3.5 Avalanche Hazards No mitigation measures are required.	Less than significant
Impact 4.6-5: Result in Substantial Soil Erosion or Loss of Topsoil			
	Less than significant	Implement Land Use and Development Code Section L-II 4.3.13 Steep Slopes/High Erosion Potential No mitigation measures are required.	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.6-6: Be Located on a Geologic Unit or Soil That Is Unstable, or That Would Become Unstable as a Result of the Project, and Potentially Result in On- or Off-site Landslide, Lateral Spreading, Subsidence, Liquefaction, or Collapse			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.6-7: Be Located on Expansive Soil, as Defined in Table 18-1-B of the Uniform Building Code (1994), Creating Substantial Risks to Life or Property			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.6-8: Have Soils Incapable of Adequately Supporting the Use of Septic Tanks or Alternative Wastewater Disposal Systems Where Sewers Are Not Available for the Disposal of Wastewater			
	Less than significant	No mitigation measures are required.	Less than significant
Hazards and Hazardous Materials			
Impact 4.7-1: Create a Significant Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.7-2: Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment			
	Less than significant	No mitigation measures are required.	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.7-3: Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.7-4: Be Located on a Site Which is Included on a List of Hazardous Material Sites Compiled Pursuant to Government Code Section 65962.5 and Create a Significant Hazard to Public or the Environment			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.7-5: For a Project Located within an Airport Land Use Plan or, Where Such a Plan Has Not Been Adopted, within Two Miles of a Public Airport, Would the Project Result in a Safety Hazard for People Residing or Working in the Project Area			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.8-6: For a Project Located within the Vicinity of a Private Airstrip, Would the Project Result in a Safety Hazard for People Residing or Working in the Project Area			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.7-7: Impair Implementation of, or Physically Interfere with, an Adopted Emergency Response Plan or Emergency Evacuation Plan			
	Less than significant	No mitigation measures are required.	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.7-8: Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires, Including Where Wildlands are Adjacent to Urbanized Areas or Where Residences are Intermixed with Wildlands			
	Less than significant	Implement Land Use and Development Code Section L-II 4.3.18 Wildland Fire Hazard Areas. No mitigation measures are required.	Less than Significant
Hydrology and Water Quality			
Impact 4.8-1: Violate Any Water Quality Standards or Waste Discharge Requirements			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.8-2: Substantially Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge Such That There Would be a Net Deficit in Aquifer Volume or a Lowering of the Local Groundwater Table Level			
	Potentially significant	No feasible mitigation measures have been identified that could be implemented on a project by project basis	Significant and unavoidable
Impact 4.8-3: Substantially Alter the Existing Drainage Pattern of the Site or Area, Including through the Alteration of the Course of a Stream or River, or Substantially Increase the Rate or Amount of Surface Runoff in a Manner Which Would Result in Substantial Erosion or Siltation On-site or Off-site			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.8-4: Substantially Alter the Existing Drainage Pattern of the Site or Area, Including through the Alteration of the Course of a Stream or River, or Substantially Increase the Rate or Amount of Surface Runoff in a Manner Which Would Result in Substantial Flooding On-site or Off-site			
	Less than significant	No mitigation measures are required.	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.8-5: Create or Contribute Runoff Water Which Would Exceed the Capacity of Existing or Planned Stormwater Drainage Systems or Provide Substantial Additional Sources of Polluted Runoff			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.8-6: Otherwise Substantially Degrade Water Quality			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.8-7: Place Housing Within a 100-Year Flood Hazard Area as Mapped on a Federal Hazard Boundary or Flood Insurance Rate Map or Other Flood Hazard Delineation Map			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.8-8: Place Structures Within a 100-Year Flood Hazard Area Which Would Impede or Redirect Flood Flows			
	Less than Significant	Implement Land Use and Development Code Section L-II 4.3.10 Floodplains No mitigation measures are required.	Less than significant
Impact 4.8-9: Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Flooding, Including Flooding as a Result of the Failure of a Levee or Dam			
	Less than significant	No mitigation measures are required.	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.8-10: Result in Inundation by Seiche, Tsunami, or Mudflow			
	Less than significant	No mitigation measures are required.	Less than significant
Land Use and Planning			
Impact 4.9-1: Physically Divide and Established Community			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.9-2: Conflict with Any Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction Over the Project (Including, but not Limited to, the General Plan, Specific Plan, Local Coastal Program, or Zoning Ordinance) Adopted for the Purpose of Avoiding Mitigating an Environmental Effect			
	Potentially significant	Potential conflicts with the Truckee Sphere of Influence are significant. No feasible mitigation measures are available.	Significant and Unavoidable
Mineral Resources			
Impact 4.10-1: Result in the Loss of Availability of a Known Mineral Resource That Would be of Value to the Regional and the Residents of the State			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.10-2: Result in the Loss of Availability of a Locally Important Mineral Resource Recover Site Delineated on a Local General Plan, Specific Plan, or Other Land Use Plan			
	Less than significant	No mitigation measures are required.	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Noise			
Impact 4.11-1: Exposure of Persons to, or Generate, Noise Levels in Excess of Standards Established in the Local General Plan or Noise Ordinance or Applicable Standards of Other Agencies			
	Less than significant	Implement Land Use and Development Code Section L-II 4.1.7 Noise No mitigation measures are required.	Less than significant
Impact 4.11-2: Exposure of Persons to, or Generate, Excessive Ground Borne Vibration or Ground Borne Noise Levels			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.11-3: A Substantial Permanent Increase in Ambient Noise Levels in the Project Vicinity Above Levels Existing without the Project			
	Less than significant	Implement MM BIO-1 No mitigation measures are required.	Less than significant
Impact 4.11-4: A Substantial Temporary or Periodic Increase in Ambient Noise Levels in the Project Vicinity Above Levels Existing without the Project			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.11-5: For a Project Located Within and Airport Land Use Plan or, Where Such a Plan Has Been Adopted, Within Two Miles of a Public Airport or Public Use Airport, Would the Project Expose People Residing or Working in the Project Area to Excessive Noise Levels			
	Less than significant	No mitigation measures are required.	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.11-6: For a Project Within the Vicinity of a Private Airstrip, Would the Project Expose People Residing or Working in the Project Area to Excessive Noise Levels.			
	Less than significant	No mitigation measures are required.	Less than significant
Population and Housing			
Impact 4.12-1: Would the Project Induce Substantial Population Growth in an Area, Either Directly or Indirectly			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.12-2: Would the Project Displace Substantial Numbers of Existing Housing Necessitating the Construction of Replacement Housing Elsewhere			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.12-3: Would the Project Displace Substantial Numbers of People Necessitating the Construction of Replacement Housing Elsewhere			
	Less than significant	No mitigation measures are required.	Less than significant
Public Services			
Impact 4.13-1: Result in Substantial Physical Impacts Associated with the Provision of New or Physically Altered Governmental Facilities, Need for New or Physically Altered Governmental Facilities, the Construction of Which Could Cause Significant Environmental Impacts in Order to Maintain Acceptable Service Ratios, Response Times, or Other Performance Objectives for Fire Protection, Law Enforcement Protection, Schools, Parks or Other Public Services			
	Less than significant	No mitigation measures are required.	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Recreation			
Impact 4.14-1: Would the Project Increase the Use of Existing Neighborhood Regional Parks or Other Recreational Facilities Such That Substantial Physical Deterioration Would Occur or Be Accelerated			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.14-2: Would the Project Include Recreational Facilities or Require Construction or Expansion of Recreational Facilities That Might Have an Adverse Physical Effect on the Environment			
	Less than significant	No mitigation measures are required.	Less than significant
Transportation and Traffic			
Impact 4.15-1: Conflict with an Applicable Plan, Ordinance, or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System			
	Potentially significant	After the payment of the RTMF and LTMF fees, no feasible mitigation measures have been identified	Significant and unavoidable
Impact 4.15-2: Conflict with an Applicable Congestion Management Program, Including, but Not Limited to Level of Service Standards and Travel Demand Measures, or Other Standards Established by the County Congestion Management Agency for Designated Roads or Highways			
	Potentially significant	No feasible mitigation is available	Significant and unavoidable
Impact 4.15-3: Change in Air Traffic Patterns That Result in Substantial Safety Risks			
	Less than significant	No mitigation measures are required.	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.15-4: Substantially Increase Hazards Due to a Design Feature or Incompatible Uses			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.15-5: Result in Inadequate Emergency Access			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.15-6: Conflict with Adopted Policies, Plans, or Programs Supporting Alternative Transportation			
	Less than significant	No mitigation measures are required.	Less than significant
Utilities and Service Systems			
Impact 4.16-1: Exceed Wastewater Treatment Requirements of the Applicable Regional Water Quality Control Board			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.16-2: Require or Result in the Construction of New Water or Wastewater Treatment Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects			
	Less than significant	No mitigation measures are required.	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Impact 4.16-3: Require or Result in the Construction of New Stormwater Drainage Facilities or Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.16-4: Have Insufficient Water Supplies Available to Serve the Project from Existing Entitlements and Resources, Thereby Requiring New or Expanded Entitlements			
	Potentially Significant	No feasible mitigation measures have been identified.	Significant and Unavoidable
Impact 4.16-5: Result in a Determination by the Wastewater Treatment Provider Which Serves or May Serve the Project that it Has Inadequate Capacity to Serve the Project's Project Demand in Addition to the Provider's Existing Commitments			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.16-6: Be Served by a Landfill with Insufficient Permitted Capacity to Accommodate the Project's Solid Waste Disposal Needs			
	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.16-7: Comply with Federal, State, and Local Statutes and Regulations Related to Solid Waste			
	Less than significant	No mitigation measures are required.	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Energy			
Impact 4.17-1: Use Large Amounts of Fuel or Energy in an Unnecessary, Wasteful, or Inefficient Manner			
	Potentially Significant	Implement Land Use Development Code Section L-II 4.3.9 regarding Energy Conservation of the Nevada County Land Use Development Code No feasible mitigation measures have been identified	Significant and Unavoidable
Impact 4.17-2: Constrain Local or Regional Energy Supplies, Affect Peak and Base Periods of Electrical or Natural Gas Demand, Require or Result in the Construction of New Electrical Generation and/or Transmission Facilities, or Necessitate the Expansion of Existing Facilities, the Construction of Which Could Cause Significant Environmental Effects			
	Potentially Significant	No feasible mitigation measures have been identified	Significant and Unavoidable
Impact 4.17-3: Conflict with existing energy standards, including standards for energy conservation			
	Less than significant	No mitigation measures are required.	Less than significant
Cumulative Impacts			
Cumulative Aesthetic, Light and Glare Impacts			
	Potentially significant	Implement MM AES-1 and MM AES-2.	Significant and Unavoidable
Cumulative Agriculture and Forest Resource Impacts			
	Potentially significant	Implement MM AG-1	Significant and unavoidable

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
		Implement Land Use and Development Code Sections L-II 4.3.3 regarding Important Agricultural land and Section L-II 4.3.14 regarding Important Timber Resources.	
Cumulative Air Quality and Greenhouse Gas Emission Impacts			
	Potentially Significant	Implement MM AIR-1	Significant and Unavoidable
Cumulative Biological Resources Impacts			
	Potentially significant	Implement BIO MM-1 and MM BIO-2 Implement Land Use and Development Code Sections Section L-II 4.3.7 Deer Habitat, Major, L-II 4.4.12 and L-II 4.4.17 regarding Deer Habitat, Rare, Threatened and Endangered Species and Their Habitat and Watercourses, and Wetlands, and Riparian Areas.	Significant and unavoidable
Cumulative Cultural and Tribal Resources Impacts			
	Potentially significant	Implement MM CUL-1 and MM CUL-2 Implement Land Use and Development Code Section L-II 4.4.6 regarding Cultural Resources.	Less than significant
Cumulative Geology and Soils Impacts			
	Less than significant	No mitigation measures are required.	Less than significant
Cumulative Hazards and Hazardous Materials Impacts			
	Less than significant	Implement Land Use and Development Code Section L-II 4.3.18 Wildland Fire Hazard Areas. No mitigation measures are required.	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Cumulative Hydrology and Water Quality Impacts			
	Potentially Significant	Implement Land Use and Development Code Section L-II 4.3.10 Floodplains Groundwater impacts would be significant	Significant and unavoidable
Cumulative Land Use Impacts			
	Less than Significant	Conflicts with the Truckee SOI may occur. This is isolated to the Truckee SOI. No mitigation measures are required	Less than significant
Cumulative Mineral Resource Impacts			
	Less than significant	No mitigation measures are required.	Less than significant
Cumulative Noise Impacts			
	Less than significant	No mitigation measures are required.	Less than significant
Cumulative Population and Housing Impacts			
	Less than significant	No mitigation measures are required.	Less than significant
Cumulative Public Service Impacts			
	Less than significant	No mitigation measures are required.	Less than significant

Table 2-3: Summary of Impacts, Mitigation Measures, and Level of Significance after Mitigation

Impact	Level of Significance before Mitigation	Mitigation Measure(s)	Level of Significance after Mitigation
Cumulative Recreation Impacts			
	Less than significant	No mitigation measures are required.	Less than significant
Cumulative Transportation and Traffic Impacts			
	Potentially Significant	No mitigation measures are available	Less than Significant
Cumulative Utilities and Service Systems Impacts			
	Potentially Significant	No feasible mitigation measures have been identified	Significant and Unavoidable
Cumulative Energy Impacts			
	Potentially significant	No feasible mitigation measures have been identified	Significant and unavoidable

3.0 PROJECT DESCRIPTION

The County of Nevada (County) is proposing the Nevada County Commercial Cannabis Cultivation Ordinance (proposed NCCO¹ or proposed project) to be consistent with state law and to enable a structured and logical management procedure for the cultivation of cannabis within all unincorporated areas within the County. The proposed NCCO has been drafted pursuant to the authority granted by Article XI, Section 7 of the California Constitution, Health and Safety Code section 11362.83, and Government Code Section 25845. In consideration of the amendment to the Zoning Ordinance, Nevada County has determined that the proposed project requires an Environmental Impact Report (EIR) to evaluate the environmental impacts that could result from adoption of the proposed NCCO and future implementation of associated commercial cannabis cultivation. Further, the County has determined that for the analysis, a Program EIR under CEQA with the Nevada County as the Lead Agency will provide the most appropriate level of detail in the environmental analysis. A Program EIR is generally used for the projects resulting in the issuance of rules and regulations that are likely to result in a series of linked, logical actions, that are geographically related, and likely to have similar environmental effects that can be mitigated in similar ways. This Program EIR evaluates the proposed project and considers the overall environmental effects in a way that will enable the use of subsequent project specific documentation for future cannabis related projects when more detail on these individual projects is available after being provided by future applicants. Based on these reasons and the purpose of the proposed NCCO, and as detailed in *Section 1.0: Introduction* and *Section 2.0: Executive Summary*, the County determined that this Program EIR is meant to be the basis for future evaluations of cannabis cultivation activities and potential environmental effects within Nevada County.

The proposed NCCO would be adopted to replace the existing cannabis regulations in the Nevada County Land Use and Development Code (Development Code under Title 2, Chapter IV, Article 5 Cannabis Cultivation). The proposed NCCO details new County-specific regulations to address the licensing of cannabis cultivation activities only in the unincorporated areas of the County. As part of this action, the proposed project is meant to help ensure public health and safety, and to protect the environment by legalizing and permitting existing cultivation as well as providing a means for new cultivation to obtain approval through the procedures described in the proposed regulations.

More specifically, the proposed NCCO defines the locations and zoning designations in which cannabis may be cultivated, sets size limitations on cultivation areas, defines three types of cultivation, provides for a structured permitting process, implements standards to help address neighborhood compatibility concerns and the provision of services and utilities, and implements procedures to protect natural resources and the environment. Additionally, adoption of the proposed NCCO would provide for local control over cannabis cultivation and provide a new source of revenue for the County through establishment of an increased tax base. The proposed project would not alter personal use cannabis activities in regard to cultivation or consumption and does not preempt federal prohibition of the use or possession of cannabis and does not prevent federal law enforcement officers from enforcing federal law. In summation, the proposed project, in conformance with existing laws, would regulate and provide management oversight to cannabis cultivation with the intent to protect the environment, preserve the existing neighborhood character, and enhance the quality of life for all residents within the County.

¹ For the sake of brevity and readability the acronym for the proposed ordinance has been shorted from NCCCCO to NCCO for this EIR.

3.1 PROJECT BACKGROUND

3.1.1 REGULATORY SETTING

STATE REGULATORY SETTING

Cannabis regulation has a history in California dating back decades, but due to contradictions between state and federal law related to cannabis, the interactions between regulations at these different levels of government are complex and variable. At the Federal level, the Federal Controlled Substances Act (CSA) of 1970 makes it a crime to manufacture, distribute or dispense, or possess cannabis; however, states and local jurisdictions can regulate cannabis if their laws do not positively conflict with the CSA. For example, at the State level, California voters approved Proposition 215, the Compassionate Use Act (CUA), in 1996. The CUA makes it legal for a qualified patient(s) and a primary caregiver(s) to possess and cultivate as much cannabis as is needed for their personal medical use given the recommendation or approval of a California-licensed physician. The intent of the act was to ensure that seriously ill Californian’s have the right to obtain and use cannabis for medical purposes, where the use is deemed appropriate and that use would benefit a person’s health as determined by a physician, and to protect those persons and their caregivers from criminal prosecution (California Legislative Information, 2018). Initially, the CUA did not allow for the commercial cultivation or manufacturing of cannabis or cannabis products and in 2003, the California Legislature enacted Senate Bill (SB) 420, otherwise known as the Medical Cannabis Program (MMP). This refined the CUA by broadening Proposition 215 beginning January 1, 2004 and provided further protections for patients and caregivers from state criminal prosecution for cannabis related activities, such as transporting medical cannabis; allowing patients to form medical cultivation “collectives” or “cooperatives” to grow cannabis for medical use; and established a voluntary state ID card system for county health departments to administer.

In 2015, the California Legislature passed the Medical Cannabis Regulation and Safety Act (MMRSA or MCRSA), which established a permitting program for cannabis cultivation at the state level (with local approval). Although the law went into effect on January 1, 2016, it has been used by relatively few jurisdictions. It allowed for local governments to choose to adopt new ordinances to permit or license local businesses in preparation for state licensing. Under the MMRSA, facilities currently operating in accordance with state and local laws were allowed to do so until their license applications are approved or denied.

On November 8, 2016, California voters approved Proposition 64, also known as the Adult Use of Cannabis Act (AUMA) for non-medicinal cannabis activities. Subject to restrictions, Proposition 64 legalized adult use cannabis for persons age 21 or older; legalized the cultivation of up to six plants for personal use for persons age 21 or older; legalized personal possession of up to one ounce of flower or up to eight grams of concentrates for persons age 21 or older; established sale and cultivation taxes; established packaging, labeling, advertising, and marketing standards and restrictions; and prohibited marketing and advertising directly to minors. Proposition 64 did not affect the CUA, but Senate Bill 94 (SB 94), signed on June 27, 2017, repealed the MMRSA and merged the provision with the AUMA creating the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA), which is now the foundation of cannabis law in California.

The MAUCRSA renamed the State’s Bureau of Cannabis to the Bureau of Cannabis Control, revised references to “cannabis” or “medical cannabis” in existing law to instead refer to “cannabis” or “medicinal

cannabis,” respectively, and applied a definition of “cannabis” similar to the definition used in MCRSA to MAUCRSA. SB 94 also generally imposed the same requirements on both commercial medicinal and commercial adult-use cannabis activity, with specific exceptions and made applying for and being issued more than one license contingent upon the licensed premises being separate and distinct. In addition, the MAUCRSA provided for testing of both adult-use cannabis and medicinal cannabis under single testing laboratory license and made protection of the public to be the highest priority for a licensing authority in exercising its licensing, regulatory, and disciplinary functions by requiring the protection of the public to be paramount over any other interests sought to be promoted. In addition, it required the advisory committee advising the licensing authorities on the development of standards and regulations to include persons who work directly with racially, ethnically, and economically diverse populations. The MAUCRSA also addressed transportation and delivery of cannabis products; placed specific requirements on testing and testing procedures; repealed the residency requirement; gave cities full power and authority to enforce the MAUCRSA; authorized the denial of applications for inability to comply with requirements; renamed certain panels; placed limits on certain advertising; imposed an excise tax; required the identification of water supply and coordination with the California Department of Fish and Wildlife (CDFW); regulated and required addressing of discharges of waste(s); required the development of pesticide use guidelines and required by, January 1, 2021, development of a program comparable to the National Organic Program and California Organic Food Farming Act; required conformance to building standards and a track and trace program; provided for medical confidentiality; eliminated the Bureau’s ability to regulate hemp and exempt certain infused products; allowed for the formation of cannabis cooperatives; established the formation of an impaired driving task force; redefined some cannabis related infractions(s); and made a variety of conforming and related changes and allowed for the severability of the bill’s provisions (CLI, 2018).

FEDERAL REGULATORY SETTING

In response to numerous states’ laws legalizing medicinal and/or adult use cannabis use, the United States Department of Justice (USDOJ) issued a series of memoranda regarding guidance for federal law enforcement as it relates to cannabis activities. Beginning in August 29, 2013, the USDOJ issued *Guidance Regarding Cannabis Enforcement*, which acknowledged that while the USDOJ is committed to enforcing the CSA, it is also committed to using its limited investigative and prosecutorial resources to address the most significant threats in the most effective, consistent, and rational way (USDOJ, 2013). On February 14, 2014, USDOJ issued *Guidance Regarding Cannabis Related Financial Crimes*, which addresses federal law enforcement regarding financial transactions from cannabis-related activities. This memorandum stated that “prosecutors should apply the eight enforcement priorities described in the August 29 guidance” when determining whether to charge individuals or institutions and that the guidance rests on the expectation that states that have enacted laws authorizing cannabis-related conduct will implement clear, strong and effective regulatory and enforcement systems in order to minimize the threat posed to federal enforcement priorities.

Most recently, on January 4, 2018 the USDOJ released a memorandum, *Justice Department Issues Memo on Cannabis Enforcement*, announcing “...a return to the rule of law and the rescission of previous guidance documents, “ and in it, “directs all U.S. Attorneys to enforce the laws enacted by Congress and to follow well-established principles when pursuing prosecutions related to cannabis activities and to deploy Justice Department resources most effectively to reduce violent crime, stem the tide of the drug crisis, and dismantle criminal gangs” (USDOJ, 2018).

NEVADA COUNTY REGULATORY SETTING

The regulatory history of cannabis at the County level began in November of 2011, when the County began to develop a draft medical cannabis ordinance after receiving input from cultivators and members of the community. Since that time, the County has continued working with, and receiving input from, all stakeholders and members of the public, with the purpose of adopting long-term cannabis regulations. The current cannabis ordinance, which is found in Nevada County Code Title 2, Chapter IV, Article 5 (Cannabis Cultivation), is written to both address public and stakeholder requests for guidance as well as to conform to state law. Since the process began, the ordinance has gone through numerous revisions in response to feedback, public comments, professional suggestions, requests, and legal requirements. Accordingly, the proposed NCCO is the culmination of an extensive seven-year process with the County. The proposed project continues to work toward passing a permanent ordinance, as evaluated within this EIR.

While the County cannabis cultivation regulations were evolving, and as discussed above, On November 8, 2016 California voters approved Proposition 64 or the AUMA, which later became the MAUCRSA on June 27, 2017 when Senate Bill (SB) 94 was signed. It should be noted that one of the ways the Nevada County Board of Supervisors (Board) was responsive to public input was to form what was called the Community Advisory Group (CAG). The CAG consisted of stakeholders and community members and was meant to provide direction for cannabis cultivation. The CAG held ten meetings between May 23, 2017 and December 19, 2017, to give residents and other interested individuals and groups an opportunity to provide input to the County's regarding adult use and medical use, cultivation for personal and commercial use, and other related activities now legal the State of California but ultimately under local control (Nevada County, 2018).

Considering input from the CAG Board meetings, in May 2018, the Board directed County staff to initiate the first steps in the process to allow preparation of an EIR for the anticipated cannabis ordinance. Also, in May 2018, the Board revised the Nevada County Zoning Ordinance, with Ordinance 2450 to respond to the January 1, 2018 State implementation of "emergency regulations." These regulations pertained to commercial cannabis activities which allowed for businesses to obtain temporary licenses for commercial cannabis activities. The State's temporary license program requires local governments to provide "local authorization" for licensees to engage in commercial cannabis activities. Ordinance 2450 allowed for the issuance of Temporary Medical Commercial Cannabis Permits allowed in the General Agriculture (AG), Exclusive Agriculture (AE), and Forest Reserve (FR) zoned parcels. Ordinance 2450 provided some additional certainty and guidance to those who choose to cultivate cannabis legally in Nevada County and was adopted to help address potential threats to the health, safety, and welfare of Nevada County residents that was occurring through unregulated cannabis cultivation.

Ultimately, the seven-year process has culminated with the proposed NCCO. The Proposed NCCO seeks to provide a measured cannabis regulatory framework for the unincorporated County lands. The proposed NCCO is intended to balance the needs of medical patients and their caregivers and to promote the health, safety, and general welfare of the residents and businesses within the unincorporated territory of the County of Nevada. The proposed NCCO is intended to be consistent with State propositions, laws, and regulations by establishing reasonable regulations regarding the way cannabis may be cultivated, including restrictions on the amount and location of cannabis that may be cultivated on any premises, in order to protect the public health, safety, and welfare in Nevada County, and to address the adverse

impacts that previous local regulations have failed to curtail. A complete description of the proposed NCCO is provided further below.

3.1.2 ENVIRONMENTAL SETTING

REGIONAL LOCATION

Nevada County is located in northeastern California and is bordered by Yuba and Sierra Counties to the north and west, the state of Nevada to the east, and Placer County to the south. The County has unique geographic and climatic conditions, which include dense forests, high mountains, and low valleys. For example, eastern portions of the county can receive well over a hundred inches of total precipitation (rainfall and snowfall), while the western valley areas may receive only 20 inches of rainfall per year. In addition, due to the dramatic topographic and elevation differences, temperatures can often vary significantly. Accordingly, high temperatures in the valley can be greater than 100°F and lows in the Sierra Nevada Mountains can drop below 0°F. Temperatures in the lower lying foothills are much more temperate, and this characteristic, along with the rural nature of many areas of the County, provide conditions that are favorable to cannabis cultivation. Cannabis growers can achieve a high per-plant yield with high economic value because of the County's favorable growing conditions (Nevada County, 2018).

PROJECT LOCATION

The proposed project is located in the unincorporated areas of Nevada County (County). Nevada County's total land area is approximately 978 square miles or approximately 612,900 acres, of which approximately 70% is privately owned and approximately 30% is public lands. Public lands are managed by the U.S. Forest Service (USFS) in the Tahoe National Forest (TNF), while other public lands are managed by the Bureau of Land Management (BLM). The County has an estimated total population of 99,155 people of which 66,207 people live in unincorporated areas and 32,948 people live in incorporated cities. The County includes three incorporated cities include Grass Valley with 13,041 people, Truckee with 16,681 people, and Nevada City with 3,226 people [California Department of Finance (CDOF), 2018].

Figure 3-1, Regional Location Map shows Nevada County in relation to its position within the State of California and *Figure 3-2, Vicinity Map* shows Nevada County in relation to surrounding counties, major cities, and major roadways. Nevada County consists of urbanized areas as well as rural residential, commercial, industrial, open space, and agriculture. The proposed NCCO would not apply to the three incorporated cities of Grass Valley, Nevada City, and Truckee.

The geography of Nevada County is comprised of low lying valleys to mountainous areas. Nevada County is within a portion of the Sierra Nevada Mountains, a geologic block approximately 400 miles long and 80 miles wide that extends in a north-south band along the eastern portion of California. The western third of the County is comprised of rolling foothills, which form a transition between the low-lying Sacramento Valley on the west and the mountains to the east. The eastern two-thirds of the County is comprised of the generally steep, granitic terrain within the Sierra Nevada Mountains that was formed by uplift and volcanic activity.

The County can be divided into three broad geologic groups that create its unique topography. The Western Foothills generally extend from the Yuba County border to just northeast of the Grass Valley/ Nevada City area. The Central Portion of the County, is delineated from northeast of the Grass Valley/ Nevada City area to the upper mountainous areas, and the Eastern portion of the County extends through

the remainder of the Sierra Nevada Mountains to the Nevada state line. Elevations within the County vary substantially and range from approximately 300 feet above mean sea level (amsl) in the west to 9,200 amsl in the mountains.

The distinct geologic regions result in a diverse weather pattern within the County. Overall, the County experiences a generally long and warm summer season with cool, snowy winters. Because of the elevation changes and associated topographic features, the County experiences high seasonal fluctuations in rainfall, snowfall and temperature. For example, western Nevada County may experience average rainfall of approximately 22 inches per year, an average annual high temperature of approximately 76 degrees Fahrenheit (°F) and average low temperature of approximately 49°F. The months of January and December are typically the coldest months with lows around 50°F and the warmest months are June through September with average temperatures of 95°F (U.S. States Climate data, 2018a).



State of Nevada

PACIFIC OCEAN



FIGURE 3-1: Regional Location Map
Nevada County Cannabis EIR

In Nevada City, in the central portion of the County, rain fall averages approximately 62 inches a year with approximately 40 inches of that occurring between November through January. Temperatures average approximately 55°F with high's in the upper 80°F during the summer and lows of approximately 30°F during winter (U.S. Climate data, 2018b). At higher elevations, the Sierra Nevada Mountains can receive an average of 206 inches of snow a year, although some years can see significantly more or less snow (Nevada County, 2017). The town of Truckee in the eastern Sierra Nevada Mountains, rain and snow falls average approximately 22 and 97 inches per year, respectively with the majority of precipitation occurring between November through March. The annual average high temperature is approximately 62°F, and a low average of approximately 24°F, with the coldest month being December through February and temperatures in the low teens (U.S. Climate data, 2018c).

Nevada County is characterized by many areas with scenic qualities including mountain views, sweeping valleys, the Yuba River, Bear River and associated tributaries, Old Highway 40, and locations along roadways, highways, as well as the TNF and other public lands.

Major circulation routes within the County include Interstate 80 (I-80), which generally trends east and west along the southern County border, and State Route 20 (SR-20), State Route (SR-49), and State Route (SR-89). These highways are the major thoroughfares providing north-south and east-west access through the County and into adjacent areas. SR-20 and SR-49 are located in the westerly portions of the County and provide connectivity between the cities and communities. SR-89 provides north-south access through the Sierra Nevada Mountains in the eastern portion of the County and through the Town of Truckee.

COUNTY REGIONS

For planning purposes related to the proposed NCCO and to be consistent with the existing County Zoning Maps, the County has been divided into two regions that include western Nevada County and eastern Nevada County. These areas are delineated by an imaginary north and south longitudinal line that separates the County into these two main areas.

WESTERN NEVADA COUNTY

Western Nevada County encompasses a portion of the foothills and Sierra Nevada Mountains and extends westerly, northerly, and southerly to the County boundaries. The central portion of western Nevada County is characterized by the cities of Grass Valley and Nevada City, lower lying hills, and the valley region further west and to the County boundary.

The residential developments in western Nevada County are predominantly single-family units, with multiple-family development occurring mainly in the Grass Valley and Nevada City areas. As of January 2018, Grass Valley had an estimated population of 13,041 people and Nevada City had an estimated population of 3,226 people (CDOF, 2018b). In the unincorporated area of the County, the greatest residential density occurs in the Alta Sierra area which lies to the south of Grass Valley and Nevada City; Lake Wildwood to the west of Grass Valley and Nevada City; and Lake of the Pines to the south of Alta Sierra at the southerly County boundary (Nevada County, 2016).

While residences are found along many of the highways and roadways in the rural areas of the County, residential development also occurs in very low density rural communities. These Rural Places vary in size and include Cascade Shores, Cedar Ridge, Chicago Park, Deer Creek Park, Peardale, Red Dog/You Bet, Rough and Ready, North San Juan, Washington, Soda Springs, and Hirschdale.

EASTERN NEVADA COUNTY

Eastern Nevada County encompasses a portion of the Sierra Nevada Mountains and includes high mountain valleys, lakes and rivers, and areas east of the Town of Truckee that extend easterly to the border with the State of Nevada, and northerly and southerly to the County boundaries. Eastern Nevada County is generally characterized by steep terrain in the Sierra Nevada Mountains. This area is characterized by sparse development but does contain the Town of Truckee near the County's eastern boundary.

Land development in the eastern portion of Nevada County tends to be more consolidated than in the western areas. Residential land uses in eastern Nevada County are concentrated around Donner Lake, in the large Tahoe-Donner development, in the Glenshire area, and the Prosser subdivisions to the north on SR-89, as well as in the incorporated town of Truckee. Soda Springs, Kingvale, and Floriston are Rural Places in this area that have less than 100 residences. There are relatively few large-scale residential developments outside of these established areas; however, growth in eastern Nevada County area has generally kept pace with the overall growth of the County (Nevada County, 2016).

PUBLIC LANDS

Public land is a major factor in the County's land use pattern. There are several key public land ownerships that cover a significant amount of the County's total land area. Approximately 169,045 acres, or 265 square miles, of land in Nevada County is owned by the Federal Government for the TNF, operated by the USFS. The USFS lands are primarily located on near the summit of the Sierra Nevada Mountains and north of Truckee. The BLM has approximately 20,000 acres, or 31 square miles, of land in Nevada County. The Spenceville Wildlife and Recreation Area (SWRA) contains 11,000 acres, or 17.19 square miles, with half the SWRA in western Nevada County and the other half in Yuba County. These three areas cover a total of approximately 200,960 acres, or approximately 314 square miles, of Nevada County's total area of approximately (603,520 acres, or 943 square miles) (Nevada County, 2016).

AGRICULTURE AND TOURISM

Over the decades, Nevada County has transitioned from a predominantly resource based (timber, mining, farming and ranching), rural county to a more varied and diverse population and economic base which is reflected by the increase in commercial, industrial, rural-residential, and recreational uses; however, resource based land uses continue to be significant in terms of their extent and the continuity of their function in the County's economy. While cattle ranching remains the main producer of Nevada County's agriculture lands, vineyards and wineries are steadily increasing. In addition, the promotion of local agriculture has increased opportunities for direct agricultural marketing, certified farmers' markets, and agritourism attractions. Agriculture in Nevada County is evolving in response to emerging markets that incorporate a wide range of innovative activities including on-farm direct marketing, entertainment, farm accommodations, outdoor recreation, and educational programming. Therefore, the new land use pattern for agricultural lands is more intensive farming on smaller parcels which are more accessible to the public.

These agricultural uses contribute to maintaining the rural environment of the County, a rural character, that plays a strong role in and enhances tourism in the County. Tourism has been an important part of development in the County. Many of the new jobs in service and retail employment are related to visitor serving uses, including lodging and resorts, and these uses are expected to be important to the county and continue to increase.

NEVADA COUNTY GENERAL PLAN

Nevada County's General Plan (General Plan) is the long-term policy guide for the physical development of the County. It is comprised of 19 elements including: Land Use; Economic Development; Public Facilities and Services; Circulation; Recreation; Open Space; Education; Housing; Noise; Safety; Water; Soils; Wildlife and Vegetation; Air Quality; Forest; Agriculture; Mineral Management; Aesthetics; and Cultural Resources. Each element contains goals, policies, and programs, which are based upon assessments of current and future County needs and available resources, and which are intended to carry out the four central themes critical to the future of Nevada County and its quality of life. The four central themes include: fostering a rural quality of life; sustaining a quality environment; development of a strong, diversified, sustainable local economy; and planned land use patterns to determine the level of public services appropriate to the character, economy, and environment of each region. These themes respond to the environmental, economic, and social qualities of the County which have evolved over time and constitute the setting for the General Plan.

The General Plan provides a basis to guide future decisions by County officials and other government agencies, as well as for residents, property owners, developers, business establishments, and industries. Within the 21 General Plan land use designations, the role of the General Plan is to provide the framework for the future physical growth of the County and serve as the foundation for land use decisions. Because it embodies public policy, it is intended to be used by County decision makers to review new development and to ensure that such development will contribute to achieving the vision for Nevada County. The General Plan and its designated specific land uses are discussed in additional detail in *Section 4.8: Land Use and Planning*, in addition to pertinent goals and policies. Specific environmental issues addressed in the General Plan are discussed in the relevant sections of this EIR. Please refer to *Figure 3-3: General Plan Overview* for a graphic representation of land uses within the County.

AREA PLANS

In addition to the General Plan, Nevada County has five Area Plans that guide development in specific areas of the County. Area Plans are supporting land use policy documents that compliment and assist in the further implementation of the goals, policies and programs of the General Plan. The five adopted Area Plans are: Higgins Corner Area Plan (2000), Loma Rica Industrial Area Plan (2006), North San Juan Area Plan (2010), Penn Valley Village Area Plan (1999), and Soda Springs Area Plan (2016). The following five communities have been recognized as likely candidates for Area Plans: Washington, Chicago Park, Cedar Ridge, Alta Sierra, and Rough and Ready. As they pertain to the proposed project, the Areas Plans and pertinent elements within, are briefly described below and discussed in additional detail in *Section 4.8: Land Use and Planning*, and other portions of other sections throughout this EIR.

ZONING ORDINANCE

The Zoning Ordinance is the regulatory tool that implements the Goals and Policies of the General Plan. The Zoning Ordinance includes the zoning map; land use regulations and development standards for each zoning district; general regulations regarding parking, signs, landscaping, density bonuses, and nonconforming uses, structures and parcels; standards for unique land uses that require more specific regulation; land use and development approval procedures; and procedures for public noticing and conduct of public hearings, appeals, amendments and enforcement. The zoning districts within the County include: RA (Residential Agriculture), R1 (Single Family), R2 (Medium Density), R3 (High Density), AG (General Agriculture), AE (Agriculture Exclusive), FR (Forest), TPZ (Timberland Production Zone), C1

(neighborhood Commercial), C2 (Community Commercial), C3 (Service Commercial), CH (Highway Commercial), OP (Office & Professional), BP (Business Park), M1 (Light Industrial), M2 (Heavy Industrial), IDR (Interim Development Reserve), OS (Open Space), PD (Planned Development Base District), P (Public), and REC (Recreation).

The Zoning Ordinance also includes twelve Combining Districts (CD) including: Airport Influence (AI) CD, Historic Preservation (HP) CD, Mineral Extraction (ME) CD, Mobilehome Parks (MH) CD, Planned Development (PD) CD, Potential Snow Avalanche Area (PSAA), Scenic Corridor (SC) CD, Site Performance (SP) CD, Subdivision Limitation (X) CD, Rural Center (RC) CD, Regional Housing Need (RH) CD, and Continuing Care Retirement Community (CCRC) CD.

3.1.3 PHYSICAL DESCRIPTION CANNABIS CULTIVATION AND COMMERCE PROCESSES

OVERVIEW

The process of cannabis cultivation is highly variable depending on the qualities and quantities of cannabis that a given cultivator wants to develop. For the purposes of this discussion, this section will focus on the activities associated with commercial and medical cannabis cultivation, including growth stages and the use of nurseries, indoor, mixed-light, and outdoor growth strategies. Cultivation of cannabis generally refers to the vegetative and flowering stages of cannabis plants life. The cultivators may have unique methods they prefer to use to grow and cultivate the cannabis flowers. Accordingly, depending on what cultivators you speak with, some prefer and will use different soil types, apply lighting at different intensities, times, and durations, use different air mixtures and ventilation, some may even incorporate a 100% carbon dioxide saturation at times. This section provides an overview of the different types of cultivation, a brief description of some of the techniques that may be used, as well as a description of some of the structures and physical locations in which cultivation may occur. At its core, cannabis is a plant that requires the same basic conditions of most plants, including both light and medium growth, water, and nutrients, but varying these base requirements can produce different outcomes.

ENVIRONMENTAL CONSIDERATIONS

If not managed carefully, cannabis cultivation operations like most land uses, on private and public lands can cause significant environmental damage if not appropriately regulated, either because regulations are not in place to provide environmental protection, or because of illegal growing operations. Water quality-related impacts include erosion and stream habitat degradation from site preparation activities, pollution from inappropriate fertilizer and pesticide applications, and reduce water available to the public and to wildlife from unlawful water diversions.

Over the past two decades, California has seen a marijuana cultivation boom without putting forth a statewide plan address and reduce the potentially harmful effects on the environment. California's drought has dramatically exposed marijuana production's harmful impacts on sensitive rivers and streams, mostly from illegal cultivation operations. While farmers of more established crops sometimes collect and store water during the rainy season to use during the summer and fall, marijuana growers will often use ground water or divert water straight from streams during the dry season. Diverting and/or pumping water from springs, creeks, and rivers during the summer/dry months reduces stream flows and increases water temperatures. This can reduce already low water levels and threaten the species such as salmon, amphibians, and other animals that rely on these water sources.

Nevada County, California General Plan 1995 Map Series

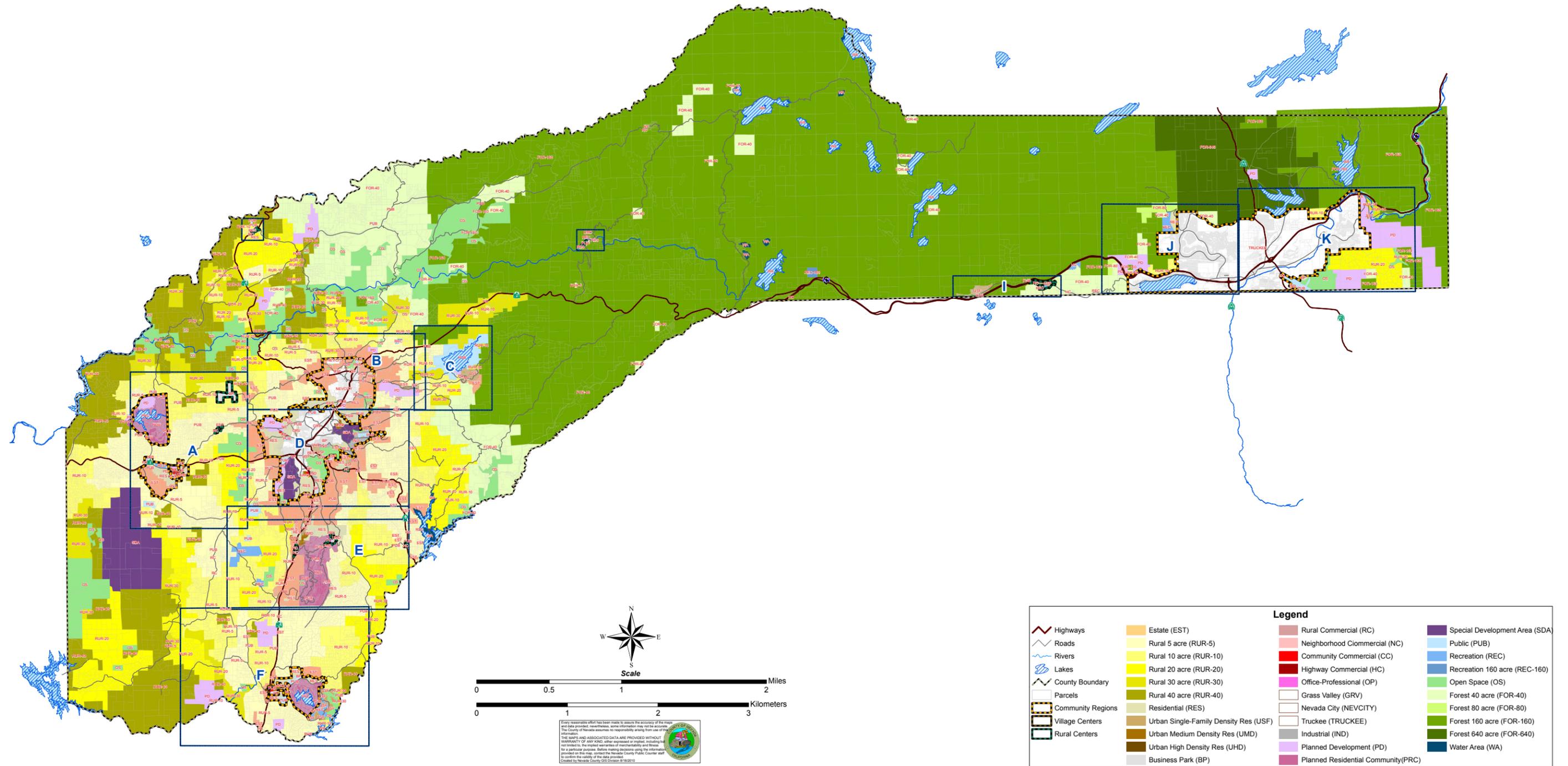


FIGURE 3-3: General Plan Overview
Nevada County Cannabis EIR

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In California, a typical cultivated outdoor cannabis plant requires a large share of water at a time when the majority of the state's water bodies are in their lowest flow period (late summer to fall). Use for cultivation can greatly affect the quantity and quality of water available for human and animal consumption and use, and can threaten the survival of endangered fish species, and amphibians and reptiles that rely on water for habitat and to complete their life cycles. For example, illegal water diversions in watersheds where there is a high density of cannabis cultivation operations has led to the dewatering and/or fragmenting of streams that support extremely sensitive and endangered species.

Pollution is another issue that can arise. Forest clearing, land terracing, and road construction can occur adjacent or near to streams and rivers. Erosion from improperly constructed and maintained roads can lead to erosion. Sediment from the roads can be washed away and enter into streams, damaging spawning and fish rearing habitat for species such as coho salmon and steelhead trout. Application of pesticides and herbicides from cultivation areas can be washed downstream and can contaminate water and poison wildlife. Cultivation operations that use generators for electricity and for machinery may use diesels, fuels and other lubricants that can leak and be washed into streams and further stressing fish, reptiles and amphibians, as well as bird and mammal species that depend on waterways.

These issues had been noted to be so problematic that in 2016 when Proposition 64 passed legalizing recreational use of marijuana in California, twenty percent (20%) of the estimated \$1 billion tax revenue was supposed to be used to clean, restore, and remediate environmental damage caused by the cultivation of cannabis. Funds were also being used to discourage the illegal cultivation of cannabis which has a history of causing substantial environment harm.

CULTIVATION AND PLAN DEVELOPMENT

Although variable, cannabis cultivation generally falls into one of four categories. This depends on the location in which the cannabis is cultivated and use of lighting and structures the structures in which the cannabis may be cultivated. This includes: nursery, outdoor cultivation, indoor cultivation, and mixed-light cultivation. These cultivation operations vary in several ways, including but not limited to the density of the plants, potential number of harvests per year, energy demand, and water demand. These categories and some of the associated cultivation methodologies are described in more detail as follows.

NURSERY PHASE – CLONING AND GERMINATION

To maintain specific varieties of cannabis at cultivation sites, the practice of cloning plants is often employed. Cloning involves taking cutting from "mother" plants and growing these cutting to mature flowering plants from which the cannabis flowers are harvested. Cuttings (i.e., targeted trimmings of a plant) are taken and dipped in medium to stimulate root growth. Once roots develop, the clones are placed in small pots to grow to sufficient size for transplanting into larger planting pots or gardens which give them more room to grow to maturity. The mature female plants are maintained in a vegetative non-flowering stage by artificial light for approximately 18 hours per day as a source of the cuttings or what are often referred to as "clones." The clones are all female plants with the same genetic composition as the "mother" plant.

Some cultivators may also grow mature cannabis plants from seeds. Germination is the process in which seeds sprout, and typically occurs in a nursery in an enclosed greenhouse building. Generally, germination is initiated by soaking seeds either between wet paper towels, in a cup of water at room temperature, in wet peat pellets, or directly in potting soil. Warmth, darkness, and moisture initiate metabolic processes such as the activation of hormones that trigger the expansion of the embryo within the seed. Once

germination is complete, seedlings are prepared for indoor, outdoor, or mixed-light cultivation. The plants are sorted by sex. Male plants are isolated by varietal as a source of pollination for future seed production and to avoid cross-pollination between separate strains. Only female plants are grown for production of product for medical or adult recreational use.

Artificial light is typically used during the germination/nursery phase. The artificial light is used to stimulate initial plant growth and jump start the process. This use of artificial light is not considered to be a mixed-light cultivation, but it can substantially increase energy demand. Nurseries are frequently located on the same site as an ancillary component of cultivation operations. For remote off-the-grid cultivation sites, maintenance of a nursery often requires off-grid energy sources or use of generators. Nurseries can also be operated as a stand-alone retail or wholesale operation that can provide a source of seed or immature clone plants, which can be purchased for personal use or as part of a commercial cultivation operation.

OUTDOOR CULTIVATION

Outdoor cultivation occurs in open-air using only natural light. Open field cultivation is typically found on land that is designated for agriculture; however, each agency throughout California, as well as the United States, takes a different approach with respect to designating land-uses appropriate for commercial marijuana cultivation. Many jurisdictions have elected to ban open field cultivation or implement a cap on the number of cultivation sites they choose to permit. A general trend, however, is to require commercial marijuana cultivation to obtain a conditional use permit or special use permit. This EIR assumes that cannabis grown outdoors averages two harvests per year. Cultivated areas can either have unobstructed access to sunlight or can be covered with a light-permeable temporary structure such as a traditional hoop house with transparent cover and no electrical components. A traditional hoop house is typically 12 feet in height, with rounded support rods holding the cover materials. The hoop houses are easily moved and may be disassembled and shifted throughout the day. The hoop houses and involves no foundation, lighting, or permanent HVAC improvements.

Outdoor cultivation can be, but is not always, secured with fencing and located in relatively inaccessible areas on private properties to dissuade trespassing and theft. Usually, the cannabis plants grown outdoors are not planted directly into native soil but are in soil-filled containers, permeable fabric pots, or bags. Some strains perform better than others in outdoor settings, an attribute that depends on different conditions, variables, and such as lighting and temperatures. To generate optimum quantities of cannabinoids, the plant needs fertile soil and long hours of daylight. For outdoor cultivation, growers generally select areas that receive twelve hours or more of sunlight a day.

In the northern hemisphere, if seeds are used instead of clone plants, growers typically plant seeds from mid-April through early June to allow for four to nine months of growth (one harvest a year). Harvest is usually between mid-September and early November. Depending on the variety, each plant can reach as much as twelve or more feet in height with a radius of six feet or more. Based on published information for California, approximately 230,000 gallons of water are required per half acre of outdoor cultivation, or 10.65 gallons per canopy sf per year. However, water demands vary based on local climate conditions, watering methods, and other variables. Based on cannabis permit application data, water demands for outdoor cultivation ranges from 1.23 gallons to 14.71 gallons per canopy sf per year in Humboldt County. Water supply sources used in Nevada County for cannabis cultivation primarily consist of groundwater wells, on-site rainwater collection, surface water diversions, and public water.

Field production/outdoor cultivation of psychoactive cannabis is environmentally similar to growing hemp (non-psychoactive cultivars of cannabis) or other nitrogen-hungry field or row crops. Environmental climate effects include small fossil energy inputs per unit of product, mostly diesel fuel for cultivation, indirect energy use for fertilizer production, and fertilizer N₂O release (BOTECH, 2013). On average, outdoor cultivation tends to yield approximately 40 grams of marijuana per sf of harvest; however, product yield can be higher because open field cultivation can yield between one and three harvests per year.

INDOOR CULTIVATION (WAREHOUSES AND GREENHOUSES)

Growing cannabis indoors requires careful and energy-intensive replication of ideal outdoor conditions, including provision of light, ventilation for fresh air and desired mixtures, cooling (required due to the energy density of lighting and ventilation), and control of pests and fungal agents. For indoor cultivation in warehouses requiring artificial light, on average four mature plants require the energy equivalent to approximately 24 refrigerators. In addition, the bulb types often contain hazardous materials which can include fluorescent, compact fluorescent, high-pressure sodium, mercury vapor, and metal halide lamps. The HID bulbs are not recyclable, and each bulb contains approximately 30 mg of mercury.

Indoor growing tends to provide cultivators with higher profits because the growing environmental can be controlled and used to produce a typically high-grade product. From a visual standpoint, these indoor cultivation areas are harder to perceive and can be made secure. Indoor cultivation can also achieve multiple harvests per year where growing marijuana with electricity divorces the process from the constraints of seasonal growing and typical harvest cycles that rely on sunlight to drive the photosynthesis process.

According, like other plants, cannabis can be grown faster indoors than outdoors because of the ability to control light, and carbon dioxide concentrations, and humidity. Cannabis also is grown indoors through the use of hydroponics, which uses a mineral nutrient solution in water without soil. Year-round indoor cultivation is subject to substantial energy demands associated with: high wattage lighting fixtures (typically 600 – 1,200-watt high pressure sodium), cooling ventilation systems, humidity control, watering, and air filtration systems. According to application data received by Humboldt County, the energy demand for a 5,000 sf indoor cultivation operation is equivalent to the demand for up to 100 typical American homes (1,084 megawatts per year). Indoor cultivation does require compliance with fire code regulations regarding disabled access, emergency exits, frequency and spacing of egresses, and sprinkler systems are required.

HVAC Systems are essential for indoor growing of cannabis. There are traditionally two main types of HVAC systems: a packaged DX (direct expansion) unit or a split unit. A packaged DX unit works by flowing air across a cooling coil past the dew point, which pulls moisture out of the air as it chills. Once the air is dry, a reheater brings the temperature to a healthier target for the plants. A split unit is similar to a residential-use air conditioner, which runs in two parts: a condenser that rejects heat (possibly outside the building), and fan coil units or air-handling units inside the building. Refrigerant runs between the outside and inside units, pulling heat out of the air inside the building.

On average, indoor cultivation tends to yield approximately 40 grams of marijuana per sf of harvest. Product yield can be higher because indoor cultivation can yield between four and six harvests per year.

Water demand for indoor cultivation varies, depending on whether the grower employs a water capture/reuse system. Based on local data, indoor cultivation uses approximately 11 gallons per canopy sf per year. The use of dehumidifiers or modified air conditioning systems that can capture water for reuse

can reduce water demand. However, because indoor grows tend to allow for multiple harvests per year, which may also increase annual water demand. This EIR assumes that cannabis grown in buildings averages three to four harvests per year.

MIXED-LIGHT CULTIVATION

Mixed-light cultivation refers to cultivation using a combination of natural and supplemental artificial lighting to allow up to three harvests per year. Mixed-light cultivation operations allow for manipulation of light and dark cycles through the use of artificial lighting or deprivation of light. Light manipulation is used to increase or decrease the vegetative and flowering phases by mimicking seasonal daylight variation. In the northern hemisphere, daylight exceeds 12 hours per day beginning with the vernal equinox (March 21) and is less than 12 hours per day after the autumnal equinox (September 21). Longer light exposure, which in nature peaks at the summer solstice (June 21), is associated with the vegetative stage; the flowering stage is prompted when the number of daylight hours approaches 12 hours per day or less.

Light manipulation techniques can increase the number of harvests per year. Artificial light is used to “extend” daylight hours, or to disrupt periods of darkness (typically for approximately two hours in the middle of the night) to foster vegetative development, and shorter hours of exposure by light deprivation in mixed-light operations by covering hoop houses with light-blocking opaque tarps, to promote flowering. In addition, artificial light may be used to supplement sunlight, during periods of low light (i.e., several days of rain). Light systems that are not connected to the electrical grid will typically use generators and/or solar-powered batteries when natural light is not available for power needs. Mixed-light operations with only two growing cycles per year with harvests in July and October-November can be accomplished with minimal supplemental lighting with low wattage florescent or LED bulbs (below the 25 watt/sf threshold), and modest energy demand. It is reasonably possible to supply sufficient power to low wattage supplemental lighting primarily, if not exclusively, by solar power with battery storage.

GREENHOUSE AND NON-TRADITIONAL IMPROVED HOOP HOUSES

This type of cultivation occurs inside a greenhouse structure, which can provide mixed light sources. Passive greenhouses use only natural light, though it can be controlled with shading, and typically use drip or recirculating irrigation. Mixed light greenhouses supplement natural light with light suppression/shielding and artificial lights, along with HVAC and other climate controls, and irrigation plumbing. Greenhouses may or may not be secured and locked to prevent trespassing and theft. Non-traditional hoop houses are commonly used for cannabis cultivation, and from a regulatory standpoint they are considered to be greenhouses. Nontraditional hoop houses vary from the traditional hoop house in that they are not set up to be quickly dismantled, may be built on paving or impervious surfaces, include electrical lighting and irrigation features, are sealed or otherwise insulated from outside moisture, and typically include mechanical ventilation. Due to the variety of set-ups observed in the field, with some producing two harvests per year and others four harvests per year, this EIR assumes that cannabis grown in these types of facilities averages three to four harvests per year. Greenhouse cultivation demands significantly less energy than does indoor cultivation, though actual energy intensities vary widely. As sunlight is used for plant photosynthesis, most greenhouse energy consumption results from heating, or cooling, though a well-designed greenhouse with built-in thermal inertia can keep itself warm most of the time by sunlight alone. Lighting can be augmented with lamps and may be needed to match the yields from fully indoor growing, particularly in the winter months.

Operations with three or more harvests per year require longer periods of higher intensity lighting and increasing energy demand, which may require on-grid power or heavy generator use. Similar to the other cultivation techniques described above, water demand for mixed-light cultivation varies depending on whether the grower employs a water capture/reuse system.

Overall, both outdoor and indoor cultivation require similar processes and have similar environmental concerns as other agricultural crops. Many of the newsworthy environmental impacts (i.e., stream diversion, water quality, hazardous materials, and energy use) stem from illegal cultivation practices. As discussed above, the passage of Proposition made available funds to use to clean, restore, and remediate environmental damage caused by the cultivation of cannabis. Funds would also be used to discourage the illegal cultivation of cannabis that could continue to harm the environment. The emerging commercial cannabis cultivation industry has the opportunity to enhance their public image and protect the environment by incorporating best management practices to reduce or eliminate toxic runoff, odors, and other adverse environmental impacts from cultivation operations.

3.1.4 PROJECT OBJECTIVES

Section 15124(b) of the CEQA Guidelines requires that an EIR include “[a] statement of the objectives sought by the proposed project. A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the proposed project.” The underlying purpose of the proposed NCCO is to establish a regulatory framework for both the commercial cultivation of cannabis and cultivation of cannabis for personal use within Nevada County. Within that overall goal, the County has defined the following objectives for the proposed project:

- Provide a mechanism for the regulation of a legal commercial cannabis cultivation industry within the unincorporated county;
- Reduce the level of nuisance that existing commercial cannabis cultivation represents to adjacent areas of existing growers;
- Encourage existing cannabis businesses to secure a license to operate in compliance with County and state regulations;
- Reduce the adverse effects of commercial cannabis cultivation on the environment through implementation of these regulations and permitting process;
- Adopt an ordinance that defines specific zones within the County in which production of commercial cannabis cultivation will be allowed;
- Adopt an ordinance that defines, within the specific zones, the total area of commercial cannabis cultivation that will be allowed;
- Reduce the effects of potential adverse effects of commercial cannabis cultivation on sensitive receptors by ensuring compatibility with existing surrounding land uses;
- To align cannabis regulations with regulations applicable to other commercial activities.

3.1.5 DESCRIPTION OF THE PROPOSED ORDINANCE

It is estimated there are approximately 3,500 commercial cannabis cultivation operations within the County that are unauthorized and operate illegally.² In part, the proposed ordinance is intended to reduce the persistence of illegal commercial cannabis cultivation through the introduction of regulations. These regulations are intended to reduce the environmental effects to the surrounding County environment, downstream locations, and residents of the surrounding areas. The proposed project only applies to unincorporated County lands and would not allow or authorize cultivation activities within any public land area. However, cultivation may occur adjacent County lands and cultivators may utilize roadways that traverse through these areas to access cultivation sites.

Adoption of the proposed NCCO would result in regulation of the cultivation of cannabis within unincorporated areas of the County. To help ensure conformance, adoption of the proposed project would render indoor, mixed-light, and outdoor cultivation of cannabis, on any parcel or premises in an area or in a quantity greater than as provided by the proposed project, or in any other way not in conformance with or in violation of the provisions of the proposed project and/or State law, as a public nuisance that may be abated by any means available by law. All existing and proposed cannabis cultivation would be subject to the guidance contained in the proposed NCCO. The proposed NCCO provides definitions of all applicable terminology and the permitting and regulatory requirements to obtain the necessary permit to legally cultivate cannabis. Initially, the proposed NCCO includes three permit types that include a Cannabis Cultivation Permit (CCP) for cultivation canopy less than 2,500 sf, Administrative Development Permit (ADP) for cultivation canopy between 2,501 and 10,000 sf, and an Annual Cannabis Permit (ACP) for all commercial and non-remuneration commercial cultivation. Non-remuneration cultivation is the cultivation of medical cannabis only by a Primary Caregiver on behalf of a qualified individual for no monetary compensation.

As discussed, the permit requirements will depend on the size of the cultivation activity and all proposed commercial cannabis cultivation will require either a CCP or an ADP, and an ACP to legally cultivate cannabis for commercial use, and/or non-remuneration cultivation use. An ACP would not be required for personal use. The following pages provide a detailed summary of the proposed NCCO with the above considerations and describe the land uses and areas in which cultivation would be allowed as well as the amount of cannabis that could be cultivated based on the locations. The full content of the NCCO is provided in Appendix B of this EIR.

The type of cannabis cultivation within the County would be defined as either indoor, mixed-light, or Outdoor Cultivation. The definitions of these terms are as follows:

Indoor or Indoors – “indoor” or “indoors” means Cultivation using exclusively artificial light within a fully enclosed and secure Accessory Structure using artificial light at a rate above twenty-five watts per sf and that complies with the California Building Code (Title 24, California Code of Regulations) for that specific occupancy type, as adopted by the County of Nevada, except for structures that are exempt from the requirement to obtain a building permit under the Nevada County Land Use and Development Code. For

² This estimate is based the experience of County staff, other anecdotal evidence based on nuisance claims and some limited aerial photography, as well as information provided during the CAG process from stakeholders and other interested parties. The actual amount could be more or less than this number. As these existing cannabis grows operate illegally, there is no mechanism for tracking existing cannabis operations.

purposes of Personal Use only, “Indoor” or “Indoors” shall also include Cultivation inside a private Residence or attached structure, but not in areas inhabited by humans, including, but not limited to bedrooms and kitchens.

Mixed-Light – “mixed-light” means the cultivation of mature or immature cannabis plants in an accessory structure permitted in compliance with local building codes and permitted specifically for cannabis cultivation using light deprivation and/or one of the artificial lighting models described below:

Mixed-Light Tier 1: The use of artificial light at a rate of six watts per sf or less;

Mixed-Light Tier 2: The use of artificial light at a rate above 6 watts and up to 20 watts per sf. Mixed-light cultivation must take place in an accessory structure permitted in compliance with local building codes and permitted specifically for cannabis cultivation.

Outdoor or Outdoors – outdoor cultivation means cultivation of cannabis in any location that is not “indoors” nor “mixed-light” and which is cultivated without the use of any artificial light at any time.

The proposed ordinance has been written, in part, to remedy existing environmental degradation to water quality, creation of objectionable odors, land use conflicts, and impacts to the visual character of the County. The ordinance establishes certain requirements for cannabis permits and the annual permitting process. Under the proposed project, there would be a three-tier system for 1) personal use; 2) commercial use; and 3) non-remuneration cultivation use. The regulations for cultivation of cannabis have been developed to be consistent with requirements of other commercial activities as well as consistent with State law. Under the proposed project, cannabis cultivation would be managed using the policies and regulations within the NCCO. The general intent of the proposed project is to result in:

- Removing or reducing cannabis cultivation in residential areas and allowing increased cannabis cultivation in the AG, AE and FR zones, including commercial cultivation for medical purposes.
- Eliminating the existing set of regulations intended for personal and/or cooperative cannabis cultivation and replacing these regulations with a three-tier system based on the nature of the cultivation activity at issue (personal, commercial, or non-remuneration cultivation), to align with current State law.
- Adding requirements for certain cannabis permits (for the property on which cultivation would occur), and an annual regulatory permit (for the cannabis operation). This facilitates issuance of local authorizations and aligns cannabis regulations with regulations applicable to other commercial activities.
- Updating definitions and other technical requirements to align with current State law and addressing environmental impacts related to cultivation.
- Revising and increasing penalties for failing to comply with County cannabis regulations including increased fines, permit revocations, and criminal penalties.

The proposed project would allow for the cultivation of cannabis for personal use within eight zoning classifications. Cultivation for personal use would be allowed in four residential zone classifications including:

- R-1 (Single Family);

- R-2 (Medium Density);
- R-3 (High Density); and
- R-A (Residential Agriculture).

Cultivation for personal use would be allowed in four non-residential zone districts including:

- General Agricultural;
- Agriculture Exclusive;
- Forest; and
- the Timber Production Zone.

Commercial cannabis cultivation would be prohibited in the following zone districts:

- R1, R2, and, R3 (High Density);
- RA (Residential Designation) zones; and
- TPZ (Timber Production Zone).

Commercial cannabis cultivation would be allowed in the following zone districts:

- AG (General Agriculture);
- AE (Agriculture Exclusive); and
- FR (Forest) zones.

The proposed project also includes setbacks applicable to all cannabis cultivation sites regardless of purpose or cultivation method:

- For all Parcels or Premises: 100 linear feet measured from the edge of the Canopy Area to the adjacent property lines.
- In a mobile home park as defined in Health and Safety Code Section 18214.1, 100 feet from mobile home that is under separate ownership.

Cultivation of cannabis is prohibited on any Parcel or Premises located within the following areas:

- Upon any Premises located within 1,000 feet of any "Sensitive Site." (as described on page 3-37) This setback is measured from the edges of the designated Canopy Area to the property line of the Sensitive Site.
- In any location where the cannabis would be visible from the public right-of-way or publicly traveled private roads at any stage of growth.
- Within any setback area required by this Article (as discussed above).

Table 3-1: Cannabis Cultivation for Personal Use, below, provides a breakdown of the allowable number of cannabis plants based on zoning, parcel acreage, and cultivation method. Cultivation in all other zones would not be a permitted use.

Table 3-1: Cannabis Cultivation for Personal Use

Zoning	Parcel Acreage	Cultivation Method		
		<i>Indoor</i>	<i>Mixed-Light</i>	<i>Outdoor</i>
R1 R2 R3 RA (Residential Designation)	Parcel of Any Size	Maximum of six plants, mature or immature.	Cultivation is Prohibited	Cultivation is Prohibited
R-A (Rural and Estate Designation)	5.00 acres or greater	Maximum of Six Plants, mature or immature		
AG AE FR TPZ	1.99 or less	Maximum of Six Plants, mature or immature	Cultivation is Prohibited	Cultivation is Prohibited
	Parcels 2.00 acres or greater	Maximum of Six Plants, mature or immature		

Source: Nevada County, 2018
Abbreviations: R-1 (Single Family); R-2 (Medium Density); R-3 (High Density); R-A (Residential Agriculture); AG (General Agriculture), AE (Agriculture Exclusive), FR (Forest), TPZ (Timber Production Zone).

Table 3-2: Cannabis Cultivation for Commercial Use, below, provides a breakdown of the of the allowable sf of plant canopy based on zoning, parcel acreage, and cultivation method.

Table 3-2: Cannabis Cultivation for Commercial Use

Zone	Parcel acre	Cultivation Method		
		<i>Indoor</i>	<i>Mixed-Light</i>	<i>Outdoor</i>
R1 R2 R3 RA (Regardless of Zone Designation), and TPZ	Parcel of Any acreage	Commercial Cultivation is Prohibited		
AG AE FR	2.0 acres or less	Commercial Cultivation is Prohibited		
	Parcels 2.00 acres to 4.99 acre	Maximum of 500 sf canopy	Commercial Cultivation is Prohibited	
	Parcels 5.00 acres to 9.99 acres	Up to a maximum of 2,500 sf of canopy for any method or combination thereof.		
	Parcels 10.00 acres to 19.99 acres	Up to a maximum of 5,000 sf of canopy for any method or combination thereof.		
	Parcels 20 acres or greater	Up to a maximum of 10,000 sf of canopy for any method or combination thereof.		

Source: Nevada County, 2018
Abbreviations: R-1 (Single Family); R-2 (Medium Density); R-3 (High Density); R-A (Residential Agriculture); AG (General Agriculture), AE (Agriculture Exclusive), FR (Forest), TPZ (Timber Production Zone).

According to the County's existing zone districts, the purpose of the eight zone districts in which cannabis cultivation would be allowed are as follows:

- RA (Residential Agricultural). The RA District establishes provisions for low density single-family dwellings, as well as other dwelling unit types in keeping with the rural character of the area, at densities equivalent to 1.5-acre minimum parcel size, or 3-acre minimum parcel size where neither a public water nor public sewer system is available. Within the Residential and Estate General Plan land use designations, the single-family dwelling is of primary importance and agricultural uses are secondary. Within the Rural General Plan land use designations, agricultural operations and natural resource related uses and residential uses are of equal importance.
- R1 (Single-Family). The R1 District implements the General Plan's Urban Single-Family land use designation. It is intended to provide for single-family dwellings, as well as other dwelling unit types, at densities of up to four dwelling units per acre.
- R2 (Medium Density). The R2 District implements the General Plan's Urban Medium Density land use designation and provides for moderate density multiple-family housing, as well as other dwelling unit types. Densities of up to six dwelling units per acre are permitted. The R2 District is appropriate for the development of affordable housing through clustering of residences or other design techniques.
- R3 (High Density). The R3 District implements the General Plan's Urban High-Density land use designation and provides for high density multiple-family housing, as well as other dwelling unit types. Densities of up to 20 dwelling units per acre within an incorporated area's sphere of influence and 15 units per acre elsewhere are permitted unless otherwise designated on the official zoning map.
- AG (General Agricultural). The AG District provides areas for farming, ranching, agricultural support facilities and services, low intensity uses, and open space. It is consistent with all agricultural-oriented General Plan land use designations, as well as those land use designations that allow for more intensive uses. Agricultural uses are of primary importance and all other uses are secondary.
- AE (Agricultural Exclusive). The AE District provides for the preservation and protection of important agricultural lands that are being used for commercial agricultural production. It is consistent with all agricultural-oriented General Plan land use designations, as well as those designations that allow for more intensive uses. Agricultural uses are of primary importance and all other uses determined to be incompatible with agriculture shall not be permitted.
- FR (Forest). The FR District provides areas for the protection, production, and management of timber, timber support uses, including but not limited to equipment storage, temporary offices, low intensity recreational uses, and open space.
- TPZ (Timberland Production Zone). The TPZ District provides for prudent and responsible forest resource management and the continued use of timberlands for the production of timber products and compatible uses. It is established in conformance with the Forest Taxation Reform Act of 1976 and all requirements and restrictions therein shall apply. It is intended to be a district where the land is devoted to the growing and harvesting of timber and for such compatible uses that do not significantly detract from the use of the land for the growing and harvesting of timber.

The existing County Zoning Designation are shown in *Figure 3-4a: Western Nevada County Zoning Districts (Northern Portion)*, *Figure 3-4b: Western Nevada County District Zoning (Southern Portion)*, and *Figure 3-*

4c: Eastern Nevada County Zoning Districts. These maps reflect the existing zoning districts within the County and show the associated locations and zones that cultivation would be authorized.

CULTIVATION AREA REQUIREMENTS

In addition to the zoning restrictions discussed above, the proposed project also includes elements and requirements that involve all cultivation areas. These regulations are in place to provide a defined process and to detail requirements related to cannabis cultivation. Additional details and requirements for persons engaging in cultivation for personal use of cannabis and commercial cannabis cultivation are further defined below and are within the attached copy of the full proposed NCCO in Appendix B. Relating to all areas and purposes, all cannabis cultivation areas shall comply with the following requirements:

- All cannabis cultivation sites shall be adequately secured to prevent unauthorized entry, including a secure locking mechanism that shall remain locked at all times when the Cultivator is not present within the Cultivation area;
- Cannabis cultivation shall not adversely affect the health, safety, or general welfare of persons at the Cultivation site or at any nearby residence by creating dust, glare, heat, noise, noxious gasses, odor, smoke, traffic, light, or vibration, by the use or storage of hazardous materials, processes, products or wastes, or by any other way. The cultivation of cannabis shall not subject residents of neighboring parcels who are of normal sensitivity to reasonably objectionable odors;
- All electrical, mechanical, and plumbing used for indoor or mixed-light cultivation of cannabis shall be installed with valid electrical, mechanical, and plumbing permits issued and inspected by the Nevada County Building Department, which building permits shall only be issued to the legal owner of the premises or their authorized agency. The collective draw from all electrical appliances on the premises shall not exceed the maximum rating of the approved electrical panel for the parcel.
- Cultivation of cannabis indoors shall contain effective ventilation, air filtration and odor-reducing or odor-eliminating filters to prevent odor, mold and mildew in any area used for Cultivation or which is used as, designed, or intended for human occupancy, or on adjacent premises.
- All structure and site utilities (plumbing, electrical, and mechanical) shall comply with the California Building Standards Codes, as adopted by the County of Nevada.
- All lights used for the cultivation of cannabis shall be shielded and downcast or otherwise positioned in a manner that will not shine light or allow light glare to exceed the boundaries of the Parcel upon which they are placed and shall comply with the requirements of Section L-II 4.2.8.D. of the Nevada County Land Use and Development Code. Lights are not permitted to be detectable during the night time hours. If lights are to be used during night time hours, black out or light barriers must be used to ensure no light is visible during night time hours.
- Noise levels generated by Cultivation shall not exceed the standards set forth in Table L-II 4.1.7 (Exterior Noise Limits) of the Nevada County Zoning Ordinance applicable to the Land Use Category and Zoning District for the Premises on which the Cultivation occurs.

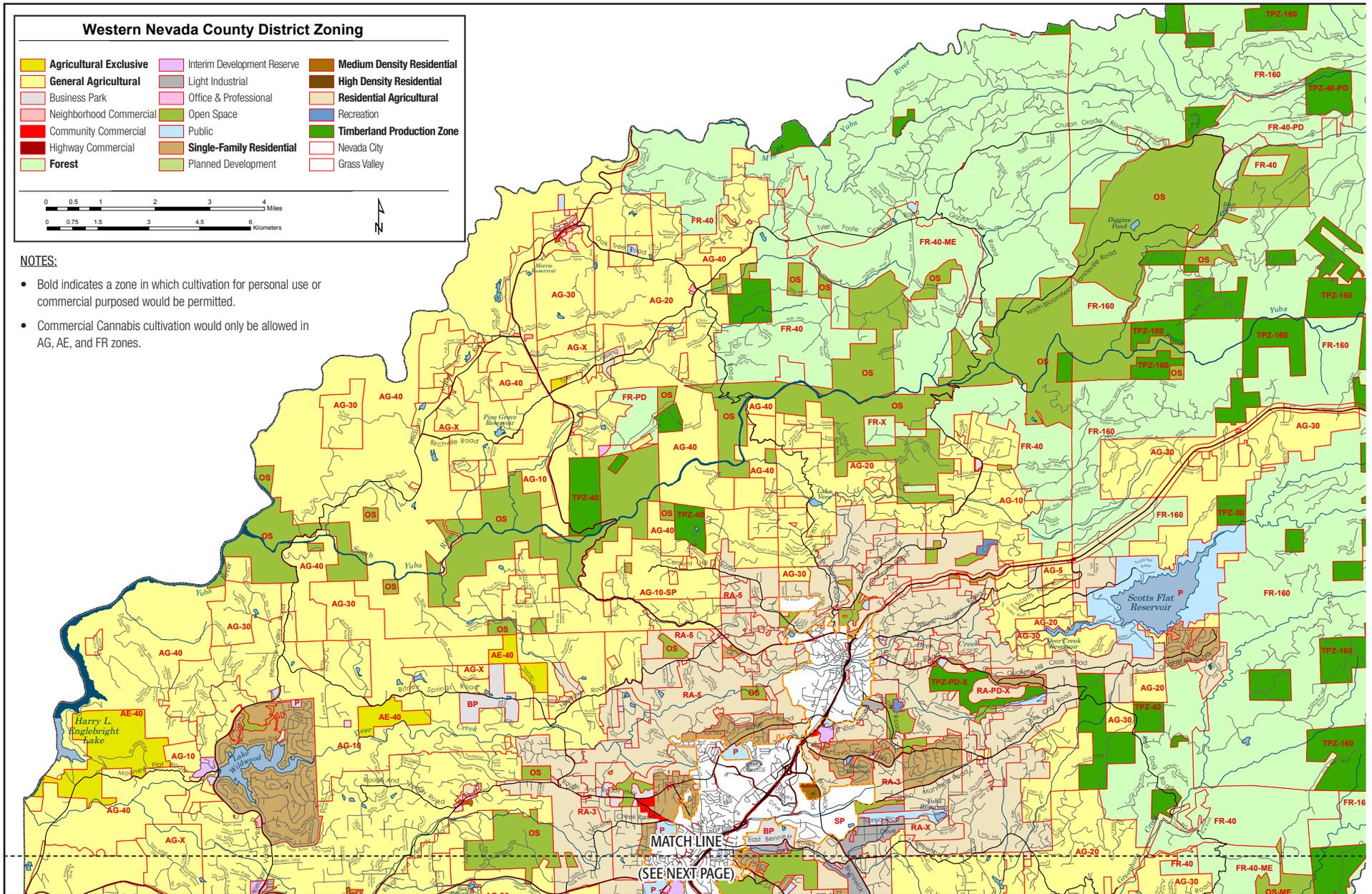


FIGURE 3-4a: Western Nevada County District Zoning – Northern Portion
Nevada County Cannabis EIR

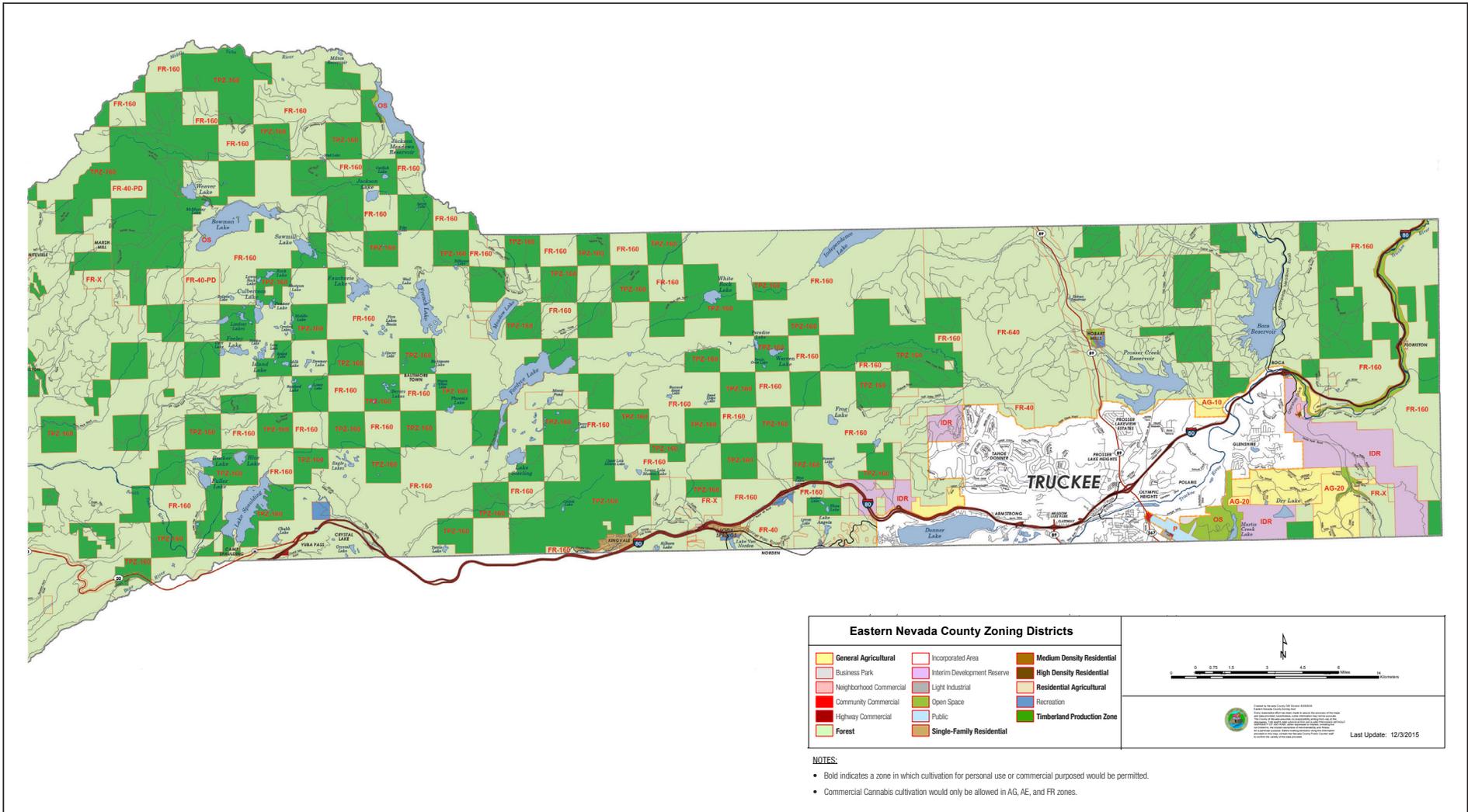


FIGURE 3-4c: Eastern Nevada County Zoning Districts
Nevada County Cannabis EIR

- If the person(s) cultivating cannabis on any Legal Parcel is/are not the legal owner(s) of the parcel, the person(s) who is cultivating cannabis on such parcel shall: (a) give written notice to the legal owner(s) of the parcel prior to commencing cultivation of cannabis on such parcel, and (b) shall obtain a signed and notarized Nevada County issued authorization form from the legal owner(s) consenting to the specific cannabis activity for which a local permit and state license are being sought on the Parcel and provide said authorization to Nevada County prior to the commencement of any Cultivation activities and at least annually thereafter. A copy of the most current letter of consent shall be displayed in the same immediate area as designated in the permit and license, in such a manner as to allow law enforcement and other Enforcing Officers to easily see the authorization without having to enter any building of any type. Such authorization must also be presented immediately upon request by an Enforcing Officer.
- The use of Hazardous Materials shall be prohibited in the cultivation of cannabis except for limited quantities of Hazardous Materials that are below State of California threshold levels of 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of compressed gas. Any Hazardous Materials stored shall maintain a minimum setback distance of 100 feet from any private drinking water well, spring, water canal, creek or other surface water body, and 200 feet from any public water supply well. The production of any Hazardous Waste as part of the Cultivation process shall be prohibited.
- All Premises used for the cultivation of cannabis shall have a legal and permitted water source on the Parcel and shall not engage in unlawful or unpermitted drawing of surface water or permit illegal discharges of water from the Parcel.
- All Premises used for the cultivation of cannabis shall have a legal and permitted sewage disposal system on the Parcel and shall not engage in unlawful or unpermitted drawing of surface water or permit illegal discharges of water from the Parcel.

As shown above, the proposed NCCO provides for both commercial cultivation of cannabis as well as cultivation for personal use. All individuals desiring to cultivate cannabis for personal use must first register as Registered Cultivator with the Enforcing Officer and obtain proof of registration. This proof of registration must be produced immediately upon request by an Enforcing Officer. Failure to register before cultivating will be considered a violation of this Ordinance. While *Table 3-1: Cannabis Cultivation for Personal Use*, above, provides a summarization of the land use designation and parcel sizes in which personal use cultivation is allowed, the following regulations provide written description of the zoning and maximum grow sizes:

- For Personal Use only, cannabis cultivation may occur only on a Parcel or Premises with a Legally Permitted Primary Residence and only in zones as set forth as follows:
 - R-1, R-2, R-3 and R-A (Residential Designation):
 - Indoors: maximum of six plants, mature or immature.
 - Mixed-light, or outdoors: cultivation is prohibited.
 - R-A (Rural and Estate Designation (Parcels of 5 acres or more):
 - Indoors, mixed-light and outdoors or a combination of methods: a maximum of 6 plants, mature or immature
 - AG, AE, FR, and TPZ (Parcels of equal to or less than one to three acres):
 - Indoors: a maximum of 6 plants, mature or immature.

- Mixed-light and outdoors: cultivation is prohibited
- AG, AE, FR, and TPZ (Parcels of greater than one to three acres):
 - Indoors, mixed-light and outdoors: a maximum of 6 plants, mature or immature.

Cultivation of commercial cannabis will be specifically regulated under the proposed NCCO. While *Table 3-2: Cannabis Cultivation for Commercial Use*, above, provides a summarization of the land use designation and parcel sizes in which commercial cultivation is allowed, the following regulations provide written description of the zoning and maximum grow sizes. Commercial cannabis cultivation could occur only on a parcel or premises with a legally permitted residence, or on a vacant parcel adjacent to a parcel with a legally permitted residence under common ownership, and only in zones as set forth as follows:

- R-1, R-2, R-3 and R-A (Regardless of General Plan Designation) and TPZ:
 - Commercial cannabis cultivation is prohibited.
- AG, AE, and FR:
 - Parcels or less than or equal to 2 (two) acres:
 - Commercial cannabis is prohibited.
 - Parcels of greater than 2 (two) acres up to 5 (five) acres
 - Indoors: a maximum of 500 sf of canopy.
 - Mixed-light and outdoors: commercial cannabis is prohibited.
 - Parcels of greater than 5 (five) acres up to 10 (ten) acres:
 - Indoors, mixed-light, outdoors or a combination of said methods: maximum of 2,500 sf of Canopy.
 - Parcels of greater than 10 (ten) acres up to 20 acres:
 - Indoors, mixed-light, outdoors, or a combination of said methods: a maximum of 5,000 sf of canopy.
 - Parcels of greater than 20 acres:
 - Indoors, mixed-light, outdoors or combination of said method: a maximum of 10,000 sf of Canopy.
- The six plants permitted to be Cultivated on any Parcel or Premises for Personal Use is in addition to the amounts allowed for commercial cannabis cultivation.
- Commercial cannabis may be cultivated on a vacant Parcel adjacent to a Parcel with a legally permitted and occupied Residence under common ownership. There shall be the ability to have direct access from one parcel to the other. The total canopy area shall not exceed that allowed area based on each specific parcel size. A total of 10,000 sf of canopy area shall not be exceeded when combining canopy areas on all parcels adjacent to and including the parcel with a legally permitted and occupied Residence
- All those engaged in commercial cannabis cultivation in Nevada County must possess and maintain the appropriate commercial cannabis license(s) from the State of California. State licenses must cover and allow for the commercial cannabis cultivation activities being conducted in Nevada County.
- The holder of an Annual Cannabis (ACP) for commercial cannabis cultivation in Nevada County may also Transport their own cannabis from their licensed and permitted Premises to other State

of California licensees to the extent allowed under California State law without obtaining an additional permit from Nevada County. The permit from Nevada County, however, must indicate that Transportation/Distribution is specifically allowed. In order to engage in transport of cannabis products, however, proof of possession of a “Distributor Transport Only” (Self-Distribution only) California State license, as set forth in California Code of Regulations, Title 16, Division 42, Chapter 1, Article 1 §5315, allowing for transport of cannabis from the cultivation site must be provided to the County of Nevada. Said state license must be maintained in good standing in order to engage in the Transport of cannabis in the County of Nevada. This provision does not authorize the holder of an ACP to transport Cannabis from Cultivation sites of other licensees.

- Commercial cannabis activity in the County of Nevada may only be conducted by individuals and/or entities licensed by the State of California to engage in the activity for which a permit was issued by the County of Nevada. Commercial cannabis activities may not commence, and the Nevada County permit is not valid, until the appropriate license is obtained from the State of California.
- Cannabis may be cultivated for medical purposes only.
- A maximum of 3 permits will be issued per person or entity for purpose of engaging in commercial cannabis activities. No person or entity may have any financial interest in more than 3 commercial cannabis businesses and/or enterprises in Nevada County. To the extent ownership of a commercial cannabis business or enterprise includes an individual or entity with ownership interest in more than 3 sites in Nevada County, a permit will not be issued.
- A Qualified Caregiver who cultivates cannabis exclusively for the personal medical use of no more than five (5) specified Qualified Individuals for whom he or she is the primary caregiver within the meaning of Section 11362.7 of the Health and Safety Code, but who does not receive remuneration for these activities except for compensation in full compliance with subdivision (c) of Section 11362.765 of the Health and Safety Code, is exempt from the local requirement of holding a state license. Cultivation under this provision, however, must otherwise comply with all other regulations applying to commercial cultivation of cannabis under this Article.
- Cannabis support areas for cannabis storage, processing, immature plants, and/or packaging are limited to a maximum area of 25% of the overall canopy area. The support area boundary shall be clearly identified on any plans that are submitted and on the Premises. All cannabis support areas shall be within a permitted Accessory Structure and meet all Nevada County Land Use and Development Code requirements as well as meet all Indoor requirements.

The third type of cultivation is Non-Remuneration Cannabis Activities. Permitting to engage in commercial cannabis activities or non-remunerative cannabis cultivation in Nevada County is a two-prong process. Both a Land Use Permit and an ACP must be obtained. Land use permits would be issued only to the legal owner of the parcel or premises.

ACCESSORY STRUCTURES

Accessory structures, which may include an attached structure, would be allowed, provided the accessory structure meets certain criteria including but not limited to: the structure is properly permitted (i.e. grading, building, electrical, plumbing, etc.); it conforms to all setback requirements; greenhouses use glass or polycarbonate; roofs are properly supported; and all indoor or mixed-light cultivation areas are on the same parcel as the private residence, the structure must be properly secured, and the owner must allow access for required inspections. Unless specifically enumerated in the ordinance, all other cannabis

related activities are prohibited within the County. Accessory structures used for the cultivation of cannabis would meet all of the following criteria:

- The accessory structure, regardless of size, would be legally constructed in accordance with all applicable development permits and entitlements including, but not limited to, grading, building, structural, electrical, mechanical and plumbing permits approved by applicable federal, state, and local authorities prior to the commencement of any cultivation activity. The conversion of any existing accessory structure, or portion thereof, for cultivation would be subject to these same permit requirements and would be inspected for compliance by the applicable federal, state, and local authorities prior to commencement of any cultivation activity. Any accessory structure would also be permitted for the specific purpose of commercial cannabis cultivation.
- Agricultural structures constructed in compliance with the Nevada County Land Use and Development Code may be used for commercial cannabis cultivation that obtain a letter of exemption issued by the Nevada County Building Official or their approved designee that meet all requirements to receive a letter of agricultural exemption.
- The Accessory Structure shall not be built or placed within any setback as required by the Nevada County Land Use and Development Code or approved development permit or entitlement.
- Accessory Structure shall not be served by temporary extension cords. Electrical wiring conductors shall be sized based on the currently adopted California Electrical Code with anticipated loads identified.
- Accessory Structures used for indoor cultivation shall be equipped with a permanently installed and permitted odor control filtration and ventilation system adequate to prevent any odor, humidity, or mold problem within the structure, on the Parcel, or on adjacent Parcels.
- Any structure used for indoor cultivation of cannabis shall have a complete roof enclosure supported by connecting walls extending from the ground to the roof, and a foundation, slab, or equivalent base to which the floor is securely attached. The structure must be secure against unauthorized entry, accessible only through one or more lockable doors, and constructed of solid materials that cannot easily be broken through, such as 2" x 4" or thicker studs overlain with 3/8" or thicker plywood. Polycarbonate panels, or equivalent materials. Exterior walls must be constructed with non-transparent material. Plastic sheeting, regardless of gauge, or similar products do not satisfy these requirements. Indoor or Indoors, for purposes of commercial cannabis cultivation means within a space which is not habitable by humans.

ASSUMPTIONS ON AREA OF COMMERCIAL CANNABIS OPERATIONS

For purposes of this EIR, it was assumed that all parcels that met the minimum requirements (as described above) for commercial cannabis cultivation would be utilized as commercial cannabis sites. After excluding parcels that do not meet the required zoning classifications, minimum size requirements, and excluding government lands, there are a total of 27,207 parcels spread throughout the unincorporated area throughout the County. If each of these parcels were to cultivate the maximum amount of canopy area that would be permitted would equate to approximately 2,684 acres. As such, this assumption represents a worst-case scenario for purposes of analyzing environmental impacts.

This assumption represents a conservative analysis in that it is unlikely that every eligible parcel would be build out and used for cannabis cultivation. Aside from meeting the required zoning and parcel size, commercial operations must also meet the cultivation area requirements of the proposed ordinance, as

well as other requirements such as setbacks from sensitive uses, having a legal residence on the property or adjacent to the property, and having electrical and water service that meet State and County building code requirements. This would likely eliminate many of the most remote and rural parcels. Other parcels may be eliminated due to physical constraints (e.g., steep slopes or inadequate roadways) or regulatory constraints (e.g., wetlands, oak woodlands, or other environmentally sensitive habitat impacts). For these reasons assuming that all eligible parcels could be used for cannabis cultivation represents a worst-case analysis.

REQUIRED PERMITS

The permitting of commercial and non-remuneration cannabis activities is defined in the proposed NCCO. The proposed NCCO lists the permitting requirements for locations that would be engaged in commercial and non-remuneration cannabis activities. The types of permits that would be needed include either a CCP or an ADP, and an ACP. A summary of these permits is provided in *Table 3-3: Required Permits for Commercial Cannabis Cultivation*.

Table 3-3: Required Permits for Commercial Cannabis Cultivation

Cannabis Cultivation Permit	A CCP would be required for commercial cultivation activities for all canopy sizes less than 2,500 sf. An ADP would apply to all indoor, mixed-light, or outdoor cultivation. An ADP would only be issued to the legal owner of the parcel of premises.
Administrative Development Permit	An ADP would be required for commercial cultivation activities for all canopy sizes to between 2,500 sf to a maximum of 10,000 sf. An ADP would apply to all indoor, mixed-light, or outdoor cultivation. An ADP would only be issued to the legal owner of the parcel of premises.
Annual Cannabis Permit	An ACP would be issued to the individual or entity engaging in the commercial cannabis activity or non-remuneration cultivation and must be renewed annually

Table 3-3: Required Permits for Commercial Cannabis Cultivation, above, provides a summary of the permits needed for cannabis cultivation, the following regulations provide written description of the zoning and maximum cultivation sizes. Permitting to engage in commercial cannabis activities or non-remunerative cannabis cultivation in Nevada County is a two-prong process: both a Land Use Permit and an ACP must be obtained. Land Use Permits would be issued only to the legal owner of the parcel or premises.

CANNABIS CULTIVATION PERMIT (CCP)

The CCP permitting process would be for commercial and non-remuneration cultivation of cannabis with less than 2,500 sf of canopy size. This permitting process is considered ministerial and would be processed by the Building Department. The application for the CCP would be reviewed for completeness and adequacy by staff and to ensure all permit requirements are included to the application. CCP permits would be subject to Standard Development Conditions, and after review staff would have the option, if required, to include additional Conditions of Approval to the cultivation project. Upon completion of review, payment of all applicable fees, conclusion that the application is complete, agreement by the applicant to implement all Standard Development Conditions, and if necessary additional Conditions of

Approval, the CCP may be issued. The following lists the basic requirements to obtain a CCP. As discussed above, the County may include additional conditions based on the nature of the proposed cultivation site.

CCP requirements are as follows:

- Canopy sizes of a combined total of up to 2,500 sf (indoors, mixed-light, or outdoors) on allowed parcels in allowed zones;
- Compliance with all local CCP permitting requirements is necessary;
- CCPs, are not transferrable or assignable to any other person, entity, or property;
- Applicant must provide the following as part of their application for a CCP:
 - A complete application;
 - A list of all individuals and/or entities with any financial interest in the commercial cannabis activity, including names, addresses, titles, nature and extent of financial interest, and disclosure of all financial interest in any and all cannabis businesses in the County;
 - Copy of approved identification;
 - A detailed site plan setting forth the intended location of the canopy area, detailed description of intended activities, setbacks, descriptions of existing and proposed structures, and any other aspects required to show compliance with this Article;
 - Irrigation water service verification;
 - Sewer/septic service verification;
 - Electrical service verification;
 - A security plan;
 - Notarized landlord authorization;
 - Acknowledgement of standards set forth in ordinance;
 - Copy of valid state license application allowing for type of commercial cannabis activity applied for (if available);
 - Lease information;
 - Payment of applicable fees;
 - Provide proof of purchase of a Certificate of Deposit from a State of California licensed commercial banking institution in the amount of \$5,000.00 which may be accessed by County of Nevada; and
 - Applicant must allow for inspections to ensure permit eligibility and compliance
 - Secondary Access Requirement Exemption:
 - Secondary access may be waived at the discretion of the permitting authority if applicant attests that there will be no special events held on the premises, that the general public will not have access to the premises that no more than ten (10) employees will be on site.
- Applicant shall obtain and keep a valid and active ACP for the CCP to remain active. If an ACP is not obtained and active the CCP will automatically expire

ADMINISTRATIVE DEVELOPMENT PERMIT (ADP)

The ADP permitting process would be for commercial and non-remuneration cultivation of cannabis with 2,500 sf to 10,000 sf of canopy size. This permitting process is considered administrative and would be processed by the Planning Department. The application for the ADP would be reviewed for completeness and adequacy by staff and to ensure all permit requirements are included to the application. ADP permits would be subject to Standard Development Conditions, and after review staff would have the option, if required, to include additional Conditions of Approval to the cultivation project. Upon completion of review, payment of all applicable fees, conclusion that the application is complete, agreement by the applicant to implement all Standard Development Conditions, and if necessary additional Conditions of Approval, the ADP may be issued. The following lists the basic requirements to obtain a CCP. As discussed above, the County may include additional conditions based on the nature of the proposed cultivation site.

The applicant will submit the following information as part of the application process:

- Canopy sizes of a combined total of 2,501-10,000 sq. feet (Indoors, Mixed-Light or Outdoors on allowed Parcels and in allowed zones.
- Compliance with all ADP permitting requirements is necessary.
- ADP's are not transferable or assignable to any other person, entity or property;
- Applicant must provide the following as part of their application for an ADP;
 - A complete application;
 - The exact location of the proposed activity;
 - A list of all individuals and/or entities with any financial interest in the Commercial Cannabis Activity, including names, addresses, titles, nature and extent of financial interest, and disclosure of all financial interest in any and all cannabis businesses in the County;
 - Copy of approved identification;
 - A detailed site plan setting forth the intended location of the canopy area, detailed description of intended activities, setbacks, descriptions of existing and proposed structures, and any other aspects required to show compliance with this Article;
 - Irrigation water service verification;
 - Sewer/septic service verification;
 - Electrical service verification;
 - A security plan;
 - Copy of Deed to Property indicating applicant ownership;
 - Acknowledgement of standards set forth in ordinance;
 - Copy of valid state license application allowing for type of commercial cannabis activity applied for (if available);
 - Lease information;
 - Payment of applicable fees;
 - Proof of purchase of a Certificate of Deposit from a State of California licensed commercial banking institution in the amount of \$5,000.00 which may be accessed by County of Nevada.
 - Applicant must allow for inspections to ensure permit eligibility and compliance

- Secondary Access Requirement Exemption:
 - Secondary access may be waived at the discretion of the permitting authority if applicant attests that there will be no special events held on the premises, that the general public will not have access to the premises that no more than ten (10) employees will be on site.

ANNUAL CANNABIS PERMIT (ACP)

This permit will be issued to the individual/entity engaging in the commercial cannabis activity and non-remuneration cultivation. The ACP must be renewed annually.

Permit for commercial cannabis activities. The applicant must submit the following information as part of the application process:

- A complete application;
- The exact location of the proposed activity;
- A copy of all applications of licensure submitted to the State of California related to cannabis activities;
- A list of all individuals and/or entities with any financial interest in the Commercial Cannabis Activity, including names, addresses, titles, nature and extent of financial interest, and disclosure of all financial interest in any and all cannabis businesses in the County;
- Tax identification number;
- Detailed description of any law enforcement and/or code enforcement activities at the Premises proposed for the Cannabis Activities;
- Copy of approved identification;
- A detailed site plan setting forth the intended location of the canopy area, detailed description of intended activities, setbacks, descriptions of existing and proposed structures and any other aspects required to show compliance with this Article;
- Irrigation water service verification;
- Sewer/septic service verification;
- Electrical service verification;
- A security plan;
- Notarized landlord authorization to engage in activity or deed of ownership
- Acknowledgement of standards set forth in ordinance
- Copy of valid state license application allowing for type of Commercial Cannabis Activity applied for (if available)
- Lease information
- Payment of applicable fees

NON-REMUNERATIVE ACTIVITIES

The applicant will submit the following information for this part of the application process:

- A complete application;
- The exact location of the proposed Cultivation;

- Sufficient proof that the applicant is a Qualified Caregiver;
- Copies of valid recommendations from qualified physicians for each qualified Individual for whom cannabis is being cultivated;
- Detailed description of any law enforcement and/or code enforcement activities at the premises proposed for the cannabis cultivation;
- Copy of approved identification;
- A detailed site plan setting forth the intended location of the canopy area, detailed description of intended activities, setbacks, descriptions of existing and proposed structures and any other aspects required to show compliance with this Article;
- Irrigation water service verification;
- Sewer/septic service verification;
- Electrical service verification;
- A security plan;
- Notarized landlord authorization;
- Acknowledgement of standards set forth in ordinance;
- Lease information;
- Payment of applicable fees.
- Applicant must allow for inspections to ensure permit eligibility and compliance
- Secondary Access Requirement Exemption:
 - Secondary access may be waived at the discretion of the permitting authority if applicant attests that there will be no special events held on the premises, that the general public will not have access to the premises, that no more than 10 employees will be on site at any given time, and that CalFire and/or local fire authorities approve the exemption.
- This ACP must be renewed annually

NON-CONFORMING CULTIVATION

For instances in which either indoor, mixed light or outdoor cultivation, does not conform to the proposed NCCO (either permitted or unpermitted cultivation of cannabis) that cultivation is considered a public nuisance that may be abated by any means available by law.

Cannabis cultivation would be prohibited on any parcel or premises within the unincorporated territory of Nevada County except parcels or premises with a legally established residence.

Cannabis cultivation will be undertaken only as follows:

1. On a parcel improved with a permanent, occupied, legally permitted residence or a parcel under common ownership which is adjacent to a parcel with a permanent, occupied, legally permitted residence;
2. Only by an individual or entity who cultivates commercially for medical purposes and in accordance with federal, state, and local law; and
3. By an individual for personal in compliance with all applicable laws and regulation of the NCCO.

Indoor and mixed light cultivation will only occur within a permitted accessory structure, for the purposes of the specified type of cannabis cultivation and will be required to comply with all applicable provisions

of County Codes. No cannabis cultivation will be allowed to occur within kitchens, bathrooms, bedrooms, common areas, or other space designated for human occupancy. Structures that are exempt from the requirements to requirement to obtain a building permit under the Nevada County Land Use and Development Code, may be used for commercial cannabis cultivation if meeting all requirements of the Nevada County Land Use and Development Code for that specific structure. Notwithstanding the above, cannabis cultivation for personal use may be cultivated inside a private residence but, not in bedrooms or kitchens.

Variances:

Setback Variances will be considered only relating to Accessory Structures and Outdoor Cultivation Canopy Areas, will be granted and issued at the discretion of the Building/Planning Directors or their designees, and only as follows:

- Except as set forth in subsections (c)(i) and (c)(ii) below, no variance will be considered for any other provision of this Article including, but not limited to, plant count/grow area size, minimum parcel size, zoning designations or methods of cultivation.
- Set Back Easement:
 - Maximum 40% variance of required setback;
 - The majority of the burden of the setback much remain with the original owner;
 - The easement must contain the following language: “This easement may be used to meet the setback requirements to construct an Accessory Structure for the purpose of Cultivating Cannabis or for the Outdoor Cultivation of Cannabis.”
 - All other legal and local requirements of a setback easement must be met.
- The Planning Director, and/or his/her designee, has the discretion to authorize construction of an Accessory Structure less than 1,000 feet from a state and/or federal park if the following criteria are met:
 - the proposed site is at least 300 feet from the property line of the State or Federal Park; and
 - the portion of the State or Federal Park that is adjacent to the Parcel or Premises upon which the Accessory Structure is proposed to be constructed is inaccessible by the public, not frequented by the public and is unimproved.
 - The Planning Director, and/or his/her designee, has the authority to submit the application through the Planning Commission process for approval, if, in his/her discretion, such approval is appropriate.

SENSITIVE SITES

Cultivation will not be allowed within 1,000 feet of sensitive sites. Current State law requires a setback from schools, daycare centers, and youth centers. Accordingly, the proposed NCCO defines a sensitive site to include a school, church, park, child or day care center, or youth-oriented facility. A youth-oriented facility is defined as any facility that caters to, or provides services primarily intended for, minors, or the individuals who regularly patronize, congregate or assemble at the establishments are predominantly

minors. The proposed NCCO includes provisions for the consideration of locating a sensitive use in proximity to a cannabis cultivation area and mechanism for disseminating information to the cultivators.

OTHER ORDINANCE ELEMENTS

The proposed project also includes regulations pertaining to continued enforcement and monitoring of cannabis cultivation areas. Although these regulations are related to administrative actions taken by the County, which would not necessarily have the potential to result in environmental impacts by themselves, they do provide a mechanism by which environmental regulations may be enforced and are tools the County may use to discourage cultivation activities from harming the environment. In general, elements include: the denial or revocation of licenses and remedies; the ability to issue notices to abate unlawful cannabis activities and associated processes; an administrative review process; create liability for costs; define enforcement, accounting, and an associated hearing process; and allow for the assessment of liens and revocations. The following elements are included to the proposed NCCO:

- Where the provisions of the proposed NCCO are more restrictive than the Nevada County Land Use and Development Code, the provisions of this Article shall govern.
- Nothing herein shall limit the ability of the Chief Building Official or designee, Fire Marshall or designee, or any other state or local employees or agents from entering the property to conduct the inspections authorized by or necessary to ensure compliance with this Article, or the ability of the Sheriff to make initial inspections or independent compliance checks. The Enforcing Officer is authorized to determine the number and timing of inspections that may be required.
- All Canopy Areas must be adequately secured to prevent unauthorized entry and entry by children and include a locking gate that shall remain locked at all times when a Designated Responsible Party is not present within the Cultivation area. The Cultivation site shall also be developed so it is not visible from a public right of way.
- Notwithstanding the above, cannabis cultivation of up to 6 immature or mature plants for personal use may be Cultivated inside a private Residence or attached structure except that it may not be Cultivated in any space inhabited by humans, including but not limited to bedrooms and kitchens.
- Cannabis-related activities which are not expressly permitted by this Article are prohibited in the County of Nevada. (Ord. 2405, 1/12/16; Ord. 2416, 7/26/16; Ord. 2426, 1/10/17).

COMPREHENSIVE SITE DEVELOPMENT STANDARDS

The proposed project also relies on Article 4 Comprehensive Site Development Standards Division 4.3 Resource Standards. Section. L-II 4.3.1. Purpose states:

“The primary purpose of site development resource standards is to avoid the impact of development projects on sensitive environmental resources and natural site constraints. Where avoidance is not possible, development should minimize impacts in a reasonable fashion that strikes a balance between allowing development of the project site and protecting the resource or avoiding the constraint. Standards shall ensure protection of the County’s unique character, environmentally sensitive resources, and important agricultural, mineral, and timber resources. Standards shall also assist in preventing and reducing public health and safety hazards associated with wildland fires, floods, avalanches, and earthquakes. Standards are not in lieu of, but are in addition to, the requirements of the California Environmental Quality Act.”

In addition, standards shall be used to assist in proper community design, provide transitions between various land uses, reduce potential land use conflicts, enhance native vegetation and landscaping, and provide for open space.”

In the case of the proposed project, Sections L-II 4.3.4 through Section L-II 4.3.18, which define specific development standards pertaining to specific resource areas, would be applied to the proposed project and are discussed in detail as applicable within the various sections of this Program EIR. Section L-II 4.3.1 Applicability states that the resource standards shall apply to all development permits, use permits, and subdivisions, and as appropriate would be applied to all subsequent projects requiring either a CCP or an ADP:

- Important Agricultural Land
- Avalanche Hazard
- Significant Cultural Resources
- Major Deer Habitat
- Earthquakes Faults & Seismically Sensitive Areas
- Energy Conservation
- Floodplains
- Significant Mineral Areas
- Rare, Threatened and Endangered Species and Their Habitat
- Steep Slopes/High Erosion Potential
- Important Timber Resources
- Trees
- Visually Important Ridgelines and Viewsheds
- Watercourses, Wetlands and Riparian Areas
- Wildland Fire Hazard Areas

Where required any of the listed resource areas are potentially affected, project applications shall provide for the professional site-specific inventory and analysis of the resources and constraints identified in this Section. Inventories and analyses shall be funded by the applicant but prepared by independent consultants approved by, or under the direction of, County staff. This evaluation shall include recommended mitigation and/or alternatives necessary to avoid or lessen impacts. Accordingly, the Land Use and Development Code states, realistic and effective avoidance of impacts and then minimization of impacts must first precede the use of compensatory mitigation. Based on this evaluation, the County shall determine the acceptable level of resource impact and constraint avoidance of the project. The inventory and analysis may be exempted at the discretion of the Planning Director if it is determined the project would create little or no land disturbance or there is virtually no possibility of impacts to sensitive environmental features or natural constraints.

To the extent resources or constraints are impacted, mitigation measures and alternatives shall be incorporated into the project design to avoid, minimize, or compensate for such impacts. In these instances, avoidance is preferred with minimization, and compensating being the second and third preferences, respectively. Realistic and effective avoidance of impacts and then minimization of impacts must first precede the use of compensatory mitigation. These terms, as used in the Land Use and Development Code are described as follows:

Avoidance – Avoiding the impact is done by designing or re-designing a project so that the resource or constraint is fully protected and not disturbed. Avoidance is the preferred standard unless it would remove the potential for the reasonable development of a parcel. Strategies used for avoidance include but are not limited to clustering, buffering, screening, reducing building envelopes, providing open space, or using other strategies that permanently protect a resource. Provisions to avoid the resource or constraint would become conditions of approval or mitigation measures of future projects.

Minimization – Minimizing is the preferred alternative when avoidance is not feasible. Minimizing would use a County-approved Management Plan prepared by an independent consultant approved by, or under the direction of, County staff, that limits the degree of impact to the maximum extent possible. Strategies used for minimization include but are not limited to clustering, buffering, screening, reducing building envelopes, the providing of open space, or using other strategies that permanently protect a resource. Provisions to minimize effects to the resource or constraint would become conditions of approval or mitigation measures of future projects.

Compensation – Compensating for an impact by replacing or providing a substitute resource or environments is appropriate where the Planning Agency determines that avoiding or minimizing the impact is not acceptable. Compensation would include strategies such as the on-site or off-site provision or creation, protection, and maintenance of a resource or habitat. Management Plan provisions to compensate for impacts would become conditions of approval of the project. Lands used as compensation for unavoidable project impacts would be acquired through fee title or conservation easements with the express purpose of maintenance as compensation for impacts to wildlife in perpetuity. Holders of title or easements would be restricted to mutually agreed upon agencies or private, non-profit conservation entities approved by the Planning Agency.

To assist in the professional inventory and analysis, the following maps and other sources can be used as a foundation for identifying resources and constraints. Inventory and analysis can be prepared for the entire site or parcel. However, no inventory or analysis would be required for those portions of a site or parcel where non-disturbance is ensured through conditions of approval, mitigation measures, and/or permanent private restrictions running with the land.

- Fish and Wildlife Service National Wetland Inventory
- State Department of Fish and Game Migratory Deer Range Maps.
- State Department of Forestry and Fire Protection Hardwood Rangeland Maps.
- California Natural Diversity Data Base.
- California Native Plant Society Inventory of Rare and Endangered Vascular Plants of California.
- United States Geological Survey Quadrangle Topographic Maps.
- Federal Emergency Management Agency Flood Insurance Rate Maps.
- State Department of Conservation Important Farmland Maps.
- State Division of Mines and Geology Mineral Classification Maps.
- Soil Conservation Service Soil Survey of Nevada County.
- Department of Agriculture Soil Survey of the Tahoe National Forest.
- Landslide Activity Map
- State Division of Mines and Geology Geologic Map of the Chico Quadrangle.
- State Division of Mines and Geology Fault Map of California.
- Bureau of Reclamation Seismotectonic Study of the Truckee/Lake Tahoe Area.
- Norman Wilson Avalanche Hazard Study.
- State Department of Forestry and Fire Protection Fire Hazard Severity Zone Maps

MANAGEMENT PLANS

In-door cultivation of six plants for personal use would not be subject to these requirements. The Nevada County Land Use and Development Code (LUDC) provides a process for mitigating and reducing impacts to environmental resources within the County using Management Plans. A Management Plan is a tool that can be used to minimize the impacts of development on environmentally sensitive environmental resources and/or constraints. Management Plans would be used where avoidance is not a feasible per LUDC Section L-II 4.3.2 Applicability, Management Plans would only be required for encroachments to certain resources. These management plans would apply to both CCP and ADP permit applications. These sections of code that define these parameters include the following:

- Section 4.3.10 Floodplains;
- Section 4.3.11.C.3 Significant Mineral Areas;
- Section 4.3.13 Steep Slopes and Erosion Potential;
- Section 4.3.17 Watercourses, Wetlands and Riparian Areas; and
- Section 4.3.18 Wildland Fire Hazard. (Ord. 2090, 7/9/02)

Per the Section L-II 4.3.2 of the LUDC, the additional management plans could be required for ADP applications if proposed commercial cannabis activities would impact additional resources. As discussed in Sections L-II 4.3.4 through Section L-II 4.3.18, additional management plans may be required on a project by project basis if, based on resources on the site and in the vicinity, they are determined to be required by the Planning Department or designee. Additional management plans could include:

- Section 4.3.16 Visually Important Ridgelines and Viewsheds;
- Section 4.3.4 Agricultural Lands;
- Section 4.3.12 Biological Resources;
- Section 4.3.6 Cultural Resources; and
- Section 4.3.8 Earthquake Faults and seismically active areas.

Future commercial cannabis projects, depending on the nature of the environmental resources on-site and in the vicinity, may utilize a Management Plan to reduce or minimize impacts to those resources. A management plan would require approval by the Planning Director or their designee. If the Management Plan is not exempt from CEQA, an Initial Study would be required, and a public hearing would be held before the Zoning Administrator. Management Plans proposed in conjunction with a cannabis cultivation project would be considered by the hearing body reviewing the project.

If a management plan is determined to be required or appropriate for a cannabis cultivation project, an initial evaluation of the specific environmental resources that could be affected by the cultivation project would be prepared by a qualified professional. The management plan would include identification of the resources or constraints that could be affected by the project, a discussion supporting project design to include as necessary alternatives for avoidance or minimization, description of mitigation or compensation, conclusions and recommendations, a time frame for implementation included to the Conditions of Approval, success standards, a monitoring plan, remediation measures in the event the mitigation or compensation fails, and a performance bond.

In addition, the scope and level of detail associated with each management plan shall depend upon the scale and type of project, size and quality of resource or level of constraint, and the degree to which a project would affect the resource or constraint. Management Plans for smaller projects with limited

impacts to resources or constraint would be limited and concise, with mitigation measures commensurate with the anticipated level of impact. Management Plans for larger projects with the potential to significantly affect a high-quality resource or major constraint could require greater detail and a more comprehensive analysis to ensure effective minimization measures are required. To ensure all project conditions and mitigation measures would be fully enforced, for all future commercial cannabis cultivation projects a monetary deposit may be required, as determined by the Planning Agency. The value of this deposit would depend on the, size and scale of the project, resource sensitivity, evaluated risk, cost of mitigation, and whether there is evidence that disturbance of the resource has occurred without required permits.

It should be noted that management plans would not be required for every project or each environmental resource potentially affected. The management plans would be developed on a project by project basis and would follow a standard and consistent format to ensure uniformity and ease of understanding for all parties involved. The management plans are considered reasonable measures to account for resource areas that due to their specific nature and scale and scope of the proposed project, cannot be fully accounted for at this Program level of environmental analysis. The management plans would be an effective way to reduce impacts to resources that are unable to be determined at this time. Because the proposed project area is so large, it is not possible to specifically quantify each resource on every potential cultivation site.

3.1.6 FUTURE ENTITLEMENTS

The County of Nevada is considered the Lead Agency under CEQA and is responsible for reviewing and certifying the adequacy of this Program EIR. As discussed above, and in *Section 1.0: Introduction* and *Section 2.0: Executive Summary*, future activities related to commercial cannabis cultivation within the County may utilize this Program EIR as a basis to begin environmental analysis. Cannabis cultivation for commercial or non-remuneration up to 2, 500 sf would require processing of a CCP, and cultivation for commercial or non-remuneration between 2,500 to a maximum of 10,000 sf would require processing of an ADP and considered for approval by the Planning Director, subsequent environmental analysis on a project-specific basis may be required for consideration. Based on the information provided in project-specific applications, the Planning Director would determine if potential impacts are fully covered in the context of this Program EIR. If the Planning Director determines that pursuant to State CEQA Guidelines Section 15162, that now new effects could occur, or no new mitigation measures would be required, then agency can approve the project as being with the scope of the project covered by the program EIR, and no new environmental document would be required. Conversely, if a future project would have impacts that were not identified in the program EIR, a new initial study would be required to determine the appropriate environmental document to be prepared.

This process also would, as necessary, require approval from responsible or trustee agencies under the CEQA process after determining if subsequent environmental review is needed. The specific responsible agencies may vary, depending upon the specific nature of future proposed activities, their locations, and the resources that may be impacted by proposed cultivation. A preliminary list of potentially responsible and trustee agencies, that would oversee future commercial cannabis activities at a project-level, is provided below.

3.1.7 PROGRAM EIR DISCRETIONARY ACTIONS

The Nevada County Planning Department, as lead agency for the proposed project, has discretionary authority. Consideration and implementation of the proposed project would require certain discretionary actions and approvals including, but not limited to, the following:

- Revocation of the existing County Cannabis Ordinance
- Adoption of the proposed NCCO;
- Certification by the County of Nevada that the Final Program EIR has been completed in compliance with CEQA and has been reviewed and considered by the decision makers.
- Adoption of a Mitigation and Monitoring Program (MMP).

Future approvals and possible permitting requirements from other public agencies may be required. Upon completion of the environmental review process and prior to construction, a proposed project would be reviewed by the County to verify that the project conforms to all applicable County regulations and permitting requirements.

LOCAL

- Nevada Irrigation District;
- Northern Sierra Air Quality Management District;
- Nevada County
 - Department of Agriculture
 - Building Department
 - Department of Code Compliance
 - Department of Environmental Health
 - Department of Farm Advisor
 - Planning Department
 - Department of Public Works
- Bear River Recreation & Park District
- Beyers Lane Community Service District
- Higgins Fire Protection District
- Kingsbury Greens Community Services District
- Lake of the Pines Ranchos Community Services District
- Mystic Mine Road Community Services District
- Nevada County Resource Conservation District
- Northern Sierra Air Quality Management District
- Nevada Cemetery District
- Nevada County Consolidated Fire District
- Nevada Irrigation District
- North San Juan Fire Protection District
- Oak Tree Park & Recreation District

- Ophir Hill Fire Protection District
- Peardale-Chicago Park Fire Protection District
- Penn Valley Fire Protection District
- Rough & Ready Fire Protection District
- San Juan Ridge County Water District
- Truckee Cemetery District
- Truckee Donner Public Utility District
- Truckee-Donner Recreation & Park District
- Truckee Fire Protection District
- Truckee Sanitary District
- Washington County Water District
- Western Gateway Recreation & Park
- Tahoe Forest Hospital District
- Truckee Tahoe Airport District
- Tahoe Truckee Sanitation Agency

STATE

- California Air Resources Board – (Northern Sierra Air Quality Management District) -Fugitive Dust Control Plan, Authority to Construct, Permit to Operate;
- California Department of Fish and Wildlife (CDFW), Agreements/Permits/Authorizations pursuant to the California and Federal Endangered Species Acts, if necessary;
- Central Valley Regional Water Quality Control Board (Central Valley RWQCB) and Lahontan Regional Water Quality Control Board (Lahontan RWQCB)
- California Water Boards
 - California Waterboard Cannabis Cultivation Program Water Right;
 - Issuance of a Cannabis Cultivation General Order permit
 - Regional Water Quality Certification (401 Permit)
- California Department of Transportation (Caltrans)
 - Right-of-Way Encroachment Permit
 - Oversized Loads Permit
- California Bureau of Cannabis Control
- California Department of Consumer Affairs
- California Department of Food and Agriculture – CalCannabis Cultivation Licensing
- California Department of Pesticide Regulation
- California Board of Equalization
- California Franchise Tax Board
- California Department of Justice
- California Department of Public Health

- Industrial Welfare Commission
- California State Board of Forestry
- California Division of Occupational Safety and Health
- California Environmental Protection Agency

Other additional permits or approvals from California responsible agencies may be required for at the individual project level.

FEDERAL

- United State Army Corps of Engineers (USACE)
- United States Fish and Wildlife Service (USFWS)

4.1 AESTHETICS, LIGHT AND GLARE

This section provides a description the existing aesthetic environment within the County and analyzes potential impacts on the overall aesthetic character of the County that would result from operation of cannabis cultivation sites, as well as impacts to surrounding areas that could occur upon implementation of the Nevada County Cannabis Ordinance (proposed NCCO or proposed project). The analysis considers the quality and character of existing scenic and visual resources and how the different levels of visibility of existing and new cannabis facilities as viewed from surrounding areas may be affected. This includes physical changes that may occur within the environment, such as the construction of new structures, changes to scenic vistas, removal of vegetation, and introduction of light and glare. A few of the key focus areas are the effects of the proposed project as viewed from adjacent sensitive viewers to cultivation sites, effects on public scenic vistas, impacts on scenic resources as viewed from scenic highways, and protection of the night sky. The potential impacts associated with the proposed project are evaluated on a qualitative basis through an analysis of the cannabis cultivation and the associated physical effect on the visual environment. The evaluation of project impacts is based on professional judgment, analysis of Nevada County's General Plan policies pertaining to aesthetics, the Nevada County Development Code, and the significance criteria established by Appendix G of the *CEQA Guidelines*. If necessary, mitigation measures are recommended to reduce the significance of potential impacts.

4.1.1 ENVIRONMENTAL SETTING

VISUAL RESOURCES

Visual resources are highly variable throughout the County. The scenic landscape is characterized by the rolling vistas of foothills and valleys, and views of mountains, meadows, forests, wetlands and the unique granitic landscapes of the Sierra Nevada mountains. There are many scenic views within the County that are afforded from roadways and highways and public and private lands. Nevada County has 16 peaks greater than 8,000 feet (Nevada County Peaks, 2018) and scenic views include but are not limited to these mountain peaks such as Castle Peak and Basin Peak. Views and scenic vistas of Donner Lake, the gorge of the South Fork of the Yuba River, and expansive westward views of the Sacramento Valley and beyond also are afforded from roadways and public and private areas. Prominent visual resources also include numerous other areas including views of the foothills, mountain ridgelines, oak groves, river corridors; mountain and valley lakes and reservoirs; scenic highway corridors; open space; and historic architecture.

The County is predominantly rural in character but many of the residences in the rural areas are screened from views by vegetation and topography, which adds to the County's overall rural character. Most of the more suburban development is concentrated in incorporated areas of the County including Nevada City, Grass Valley, and Truckee. While the proposed project only applies to unincorporated county areas and would not apply to these cities, the scenic values and aggregate appearance of these areas and the more rural locations where residences are typically more dispersed, all combine to define a unique aesthetic quality of Nevada County.

Scenic preservation within the County is accomplished by designation of scenic highways, establishment of permanent open spaces, public forests, conservation areas, and agricultural zoning. To accommodate a more desirable urban design quality the County uses architectural controls, historic preservation ordinances and regulations, and the County zoning controls land use patterns and regulates some visual

elements such as lighting, resource protection, and development setbacks. The types of land uses, development codes, patterns of development, and areas preserved as open space contribute significantly to the County's aesthetic quality and can be used to preserve scenic value. The ownership and operation of forests by the U.S. Forest Service (USFS) in the Tahoe National Forest (TNF) and the open lands under the control of the Bureau of Land Management (BLM) also preserve a significant portion of land within the County which is done in part to preserve scenic quality.

VISUAL CHARACTER OF CURRENT CANNABIS OPERATIONS

Within the County there are an estimated 3,500 existing cannabis operations (Nevada County Sheriff's Office, 2018). Existing outdoor and mixed-light cannabis cultivation in the County are generally located in more remote rural and agricultural areas. Cannabis cultivation can include the use of greenhouses, hoop houses, water storage tanks and ponds, storage buildings for equipment and materials storage, solar panels, and other appurtenant structures. Depending on the area and desires of the cultivator, cannabis cultivation sites may be screened with fencing, or may be located outside public views using vegetative screening and may or may not be visible from highways and roadways. Due to the nature of cannabis cultivation, some of these sites also may include the use of artificial lighting to assist in plant growth and flowering. The lighting may be visible in the evening and night from off-site area. *Figure 4.1-1a Typical Views of Cannabis Cultivation, Figure 4.1-1b, Typical Views of Cannabis Cultivation, and Figure 4.1-1c Typical Nighttime Views of Cannabis Cultivation without Blackout Tarps), and Figure 4.1-1d Typical Nighttime Views of Cannabis Cultivation with Blackout Tarps),* provides a visual representation of what cannabis cultivation would look like.

VISUAL CHARACTER OF RESOURCES IN NEVADA COUNTY

SCENIC RESOURCES

Scenic resources include open spaces, hillsides, valleys, ridgelines, forested views and notable buildings. Much of the land that would be authorized for cultivation containing open grasslands and forested areas. Depending on the topography, these areas range from generally flat to areas with steep and rugged mountainous terrain. The Nevada County General Plan identify the aesthetic importance of natural and architectural features to residents and their quality of life. Therefore, some of the project areas may be considered visually important resources.

Foothills, ridges, and Sierra Nevada Mountains -The terrain of Nevada County is largely characterized and influenced by features of the Sierra Nevada Mountains. The western third of the County consists of valleys, foothills, and the transition into the higher mountains. The rolling foothills rise out of the Sacramento Valley in Yuba county to the west and form a transition between that area and mountains to the east. The rolling foothills of the western portion of the County are characterized by grassland and oak woodlands. The foothill terrain is visible from public roadways including State Route 49 (SR-49) and State Route 20 (SR-20), public and private properties, and from views west from the Sacramento Valley. The eastern two thirds of the County are comprised of steep terrain, forests, and exposed granite of the Sierra Nevada Mountains. Prominent mountain ridges and peaks in the eastern two-thirds of the County are highly visible from Interstate Highway 80, State Route 20, and numerous local roads. From these locations, one can view coniferous forests and granitic formations associated with the higher elevations of the mountains.



Source: www.theunion.com



Source: www.marijuanaventure.com

FIGURE 4.1-1a: Typical Views of Cannabis Cultivation
Nevada County Cannabis EIR



Source: www.theunion.com

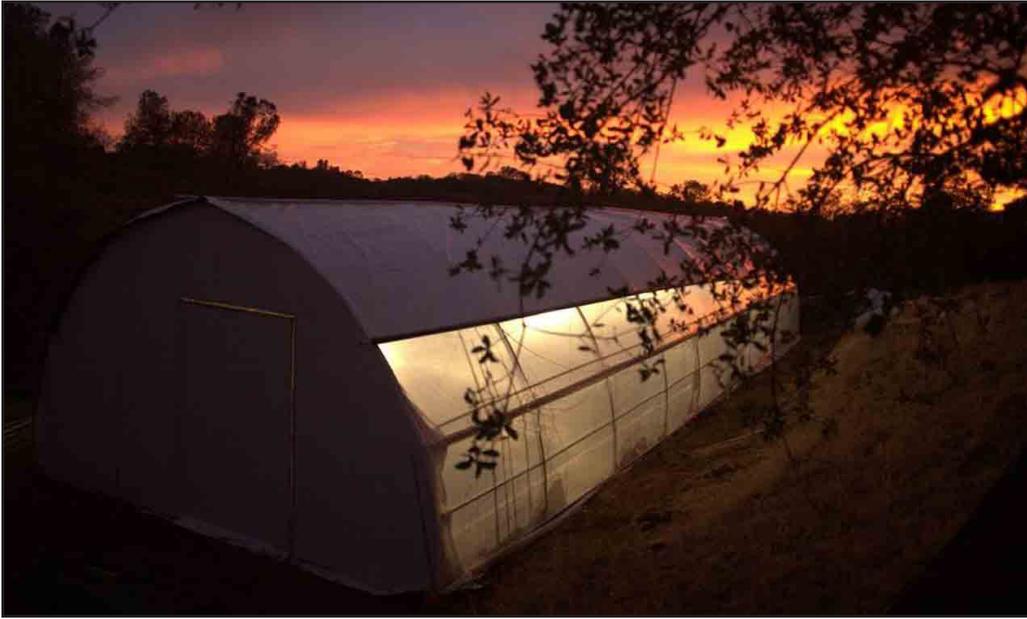


FIGURE 4.1-1b: Typical Views of Cannabis Cultivation
Nevada County Cannabis EIR



Source: <http://kymkemp.com/2018/05/10/glowing-greenhouses-light-up-rural-hills/>

FIGURE 4.1-1c: Typical Nighttime Views of Cannabis Cultivation without Blackout Tarps
Nevada County Cannabis EIR



Source: <https://www.fullbloomhydroponics.net/light-deprivation-greenhouse>
<https://www.advancingalternatives.com/>
<https://emeraldkingdomgreenhouse.com/>

FIGURE 4.1-1d: Typical Greenhouse/Hoophouse with Blackout Tarps
Nevada County Cannabis EIR

Significant Oak Groves- Significant oak groves and expanses of grassland are visible in the western portions of the County. The oaks are a significant visual resource that can create contrast with low-lying surrounding vegetation to create visual interest. Oaks themselves can be considered visually appealing due to the branching patterns, vegetative edges, and complex structures they can exhibit.

River Corridors – Nevada County is characterized by many diverse systems of rivers, streams, and creeks. Drainage occurs in three primary watersheds: The Truckee River basin in the eastern part of the County; and the Yuba River and Bear River Basins in the western part of the County. Throughout all these areas, there is an extensive network of perennial and intermittent creeks, streams, and rivers, ranging in size from the approximate 65-mile-long South Yuba River that flows year-round to much smaller unnamed seasonal drainages that dry during the dry season. Along the margins of these areas are often heavily-vegetated riparian corridors that can be primary visual feature along these watercourses.

Lakes and Reservoirs – Lakes and reservoirs in Nevada County are prominent visual features both in the lower lying valley and foothill areas as well as high mountain lakes in the Sierra Nevada Mountains. These areas include but are not limited to Donner Lake, Lake of the Pines, Lake Wildwood, Rollins Reservoir, and Scotts Flat Reservoir.

Scenic Highway Corridors: The scenic highways in Nevada County are administered by Caltrans and are an important scenic resource within the County. California’s Scenic Highway Program was created by the California Legislature in 1963 and is managed by the California Department of Transportation. The goal of this program is to preserve and protect scenic highway corridors from changes that would affect the aesthetic value of the land adjacent to highways. A highway may be designated “scenic” depending on how much of the natural landscape travelers can see, the scenic quality of the landscape, and the extent to which development intrudes on travelers’ enjoyment of the view.

Nevada County contains five highways in the State Scenic Highway Program and are; therefore, part of an important scenic program within Nevada County. These highways include one “Officially Designated State Scenic Highway” (SR-20) and four “Eligible State Scenic Highways” (SR-49, SR-89, SR-174, and Interstate 80 (I-80) in the California Scenic Highway Program. SR-49 also is a County designated scenic corridor. In order to protect these scenic resources and those associated with the SR-49, the County has established a Scenic Corridor Combining District for areas along the highway.

In addition, portions of I-80, SR-89, SR-20, and SR-49, also are a part of the United States Forest Service Scenic Byway program. These roadways are discussed under the Federal Regulatory discussion further below. See *Figure 4.1-2, State Scenic and Eligible Scenic Highways in Nevada County*, and *Figure 4.1-3, United States Forest Service Scenic Byways*.

State Route 20 (SR-20)-The Officially Designated State Scenic Highway is an approximate 7.0-mile portion State SR-20 from Skillman Flat Campground to one-half mile east of Lowell Hill Road, prior to its intersects with Interstate 80 (I-80). While this section of the roadway is an officially Designated State Scenic Highway” by the State of California the majority of the remaining sections of SR-20, from near Grass Valley to Interstate 80 including a section near Penn Valley, are not “officially designated” as scenic highways, but are listed as “Eligible State Scenic Highways” by the State of California.

Eligible State Scenic Highways- The Eligible State Scenic Highways in Nevada county include segments of most of the other major roadway segments in the County. This includes State Route SR-49 from the southern county boundary with Sierra County to the northern boundary with Yuba County. The section of State Route 174 (SR-174) from the southern county boundary with Sierra county to its intersection with SR-20 in Grass Valley also is included. SR-20 from the intersection with SR-49 east to the above described

Officially Designated segment also is eligible. Further east, the I-80 is eligible from the SR-20 merge east into the State of Nevada. Lastly, State Route 89 (SR-89) from its southerly intersection with I-80 north to the border with Sierra County is also eligible (Caltrans, 2011).

Undeveloped Areas –The majority of development within the County is concentrated in the three cities, Grass Valley, Nevada City, and the Town of Truckee. The County also include many unincorporated communities such as Alta Sierra, Chicago Park, Higgins Corner, Scotts Flat, Town Talk, and Penn Valley. These areas are dispersed throughout the County separated by generally undeveloped expanses of open areas. This large amount of undeveloped land and open space in the County contributes to the County’s aesthetic quality and scenic value. The ownership and operation of forests by the US Forest Service in the Tahoe National Forest and the open lands under the control of the Bureau of Land Management (BLM) also preserves lands within the County for permanent scenic quality.

Open Space- Open space in the County is used for local and regional parks or as a means of preserving significant features and is incorporated into programs for the preservation of natural resources, managed for the production of resources, used for outdoor recreation, and set aside, where appropriate, for public health and safety. Lands can be preserved to preserve such as plant and animal life and habitats, protective corridors to eliminate encroachment along major streams; open space is used to managed resource production including agricultural lands and mineral resources. Most notably in relation to aesthetic resources, open space is used to preserve scenic resources and ensuring these areas provide passive recreational opportunities within scenic routes, park and recreation districts, bikeway/pedestrian/equestrian trails, and public lands.

Historic Architecture: Scenic resources in Nevada County include historic structures. There are historic buildings in the cities of Grass Valley, Nevada City, and Truckee. When concentrated in one area, these structures create a uniform urban design that conveys the historic qualities of the County. Within unincorporated areas there are seven sites including the Boca Dam just north of Truckee, the Bridgeport Covered Bridge in French Corral, Davis Mill or Randolph Quartz Mine Millsite (three miles northeast of Nevada City), the Donner Camp (2.6 miles west of Truckee on US. 40), Footes Crossing Road (Tahoe National Forest, North Columbia), Malakoff Diggins – North Bloomfield Historic District (Granite Star Route, North Bloomfield), Meadow Lake Petroglyphs (French Lake) on the National Register of Historic Places (National Register, 2018).

VISUAL ANALYSIS TERMINOLOGY

VISUAL QUALITY

Visual quality can be defined as what viewers like and dislike about visual resources that compose the visual character of a particular scene. When viewing the same landscape, people may have different responses to that landscape and different responses to proposed visual changes based upon their values, familiarity, concern, or expectations for that landscape and its scenic quality. Because each person’s attachment to and value for a particular landscape is unique, visual changes to that landscape inherently affect viewers differently. Different viewers evaluate specific visual resources based on their interests and values they place on things like natural harmony, cultural order, and environmental coherence. For examples, neighbors of a particular site and travelers through that same area may, in particular, have different opinions on what they like and dislike about a scene (Federal Highway Administration [FHWA], 2015).

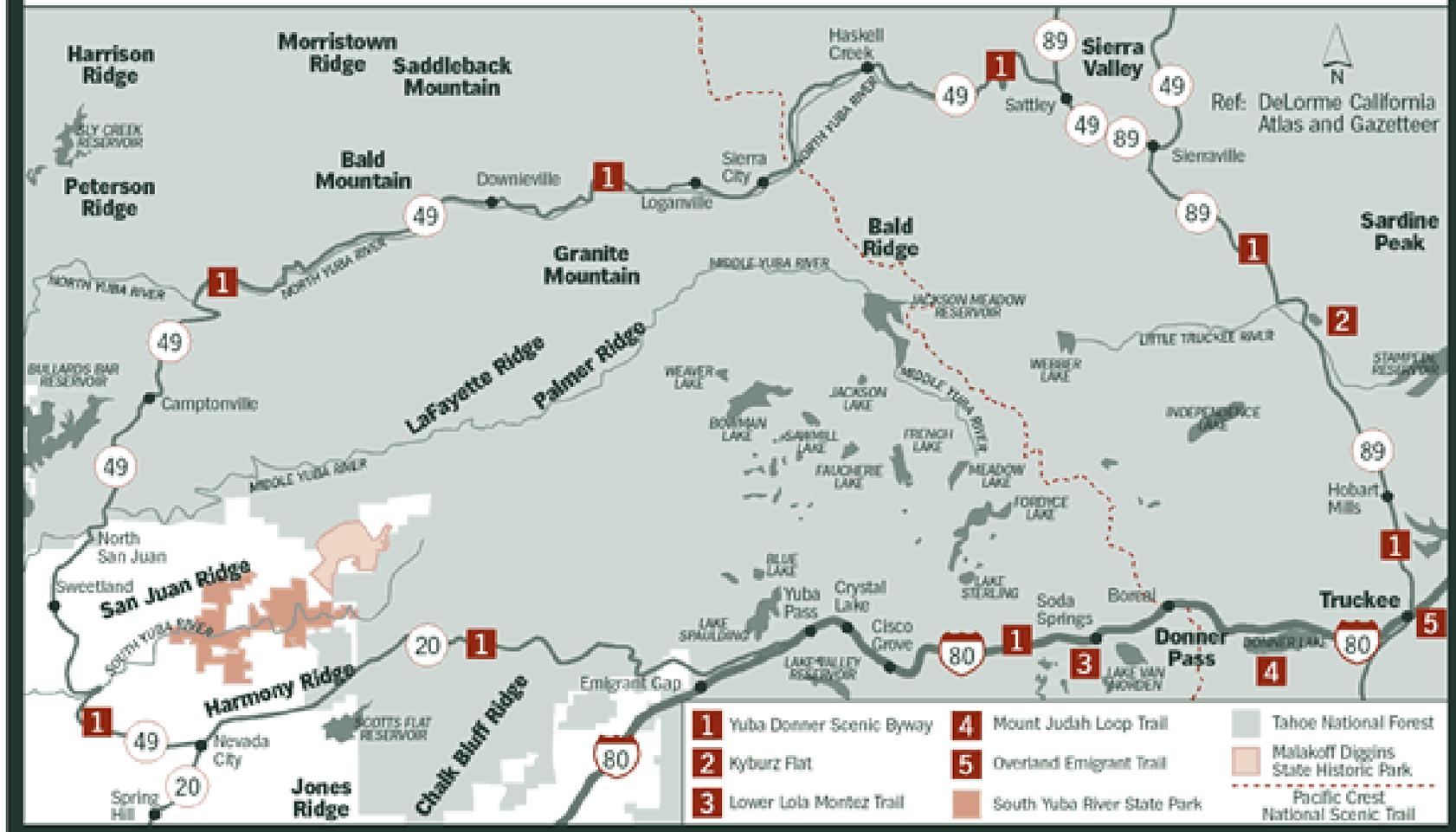


Source: www.dot.ca.gov

FIGURE 4.1-2: State Scenic and Eligible Scenic Highways in Nevada County
 Nevada County Cannabis EIR

Yuba Donner Scenic Byway

This 160-mile loop of highways crosses the Tahoe National Forest and extends into four Sierra Nevada counties.



Source: Sherpa Guides

FIGURE 4.1-3: United States Forest Service Scenic Byways
Nevada County Cannabis EIR

Overall, a viewer's visual impression of an area is determined by the attractiveness of the area or view. This is influenced by the particular characteristics of the landscape or structures within and includes landscape and landforms, including rocks, water features, and vegetation patterns; as well as the types, sizes, colorings, and scale of buildings within the built environment. Accordingly, the attributes of all the existing components in the area combine in various ways to create landscape characteristics whose variety, vividness, coherence, uniqueness, harmony, and pattern contribute to the overall visual quality of the viewshed area. Because Nevada County contains several distinct regions, the visual quality of a particular location or view within that site can be considered within the context of that area as a whole.

In general, the overall visual character of an area can be based on using three primary criteria: vividness, intactness, and unity, which are defined as follows:

- **Vividness** is the extent to which a landscape is memorable and is associated with the distinctiveness, diversity, and contrast of visual elements. A vivid landscape will typically make an immediate and lasting impression on the viewer.
- **Intactness** is the integrity of the visual order in the landscape and the extent to which the natural landscape is free from visual intrusion.
- **Unity** is the extent to which visual intrusions are sensitive to and in visual harmony with the natural landscape (Caltrans, 2008).

Views are evaluated differently by different types of viewer groups such as neighbors, travelers, or site seers and the level of importance they place on each of the listed criteria. A viewpoint with exceptionally high visual quality may be considered a scenic vista. A scenic vista is generally considered to be a location from which the public can experience unique and exemplary high-quality views—often from elevated vantage points that offer panoramic views of great breadth and depth. Additionally, the value of a view or views from a site are further differentiated by factors that would modify perception, such as the viewers location, activity, and awareness or concern. For example, activities such as driving for commuting, shopping, or working can distract the observer from the visual environment, while driving for leisure or being involved in recreational activities like hiking can create a greater sensitivity to the visual surroundings.

LIGHT AND GLARE

There are two typical types of light intrusion. First, light emanates from the interior of structures and passes out through windows. Second, light projects from exterior sources, such as security lighting and landscape, as well as other outdoor sources such as street lighting. "Light spill" is typically defined as the presence of unwanted and/or misdirected light on properties adjacent to the property being illuminated. Light introduction can be a nuisance to adjacent residential areas and diminish the view of the clear night sky. In addition, the light can disturb wildlife in natural habitat areas.

Perceived glare is the unwanted and potentially objectionable sensation as observed by a person when looking directly into the light source of a luminaire. Glare also results from sunlight reflection off flat building surfaces, with glass typically contributing the highest degree of reflectivity.

Currently, light sources within the County vary depending on the amount of development. In more densely populated areas and on more heavily travelled roadway, light and glare would be generated from structures and vehicles. This would be the case in areas with more densely developed existing residential neighborhoods and commercial centers. In these areas the primary sources of nighttime lighting are from existing structures and vehicle headlights on area roadways. In more rural areas, lighting would be more

dispersed between the less densely developed homes and more intermittent from the fewer cars using the area roadways.

SENSITIVE VIEWERS

Viewer responses sensitivity to changes in the visual settings are inferred from a variety of factors, including distance and viewing angle, types of viewers, number of viewers, duration of view, and viewer activities. The viewer type and associated viewer sensitivity are distinguished among viewers in recreational, residential, commercial, military, and industrial areas. Viewer activities can range from a circumstance that encourages a viewer to observe the surroundings more closely (such as recreational activities) to one that discourages close observation (such as commuting in heavy traffic). Viewers in recreational areas are considered to have high sensitivity to visual resources. Residential viewers generally have moderate sensitivity but experience extended viewing periods. Viewers in commercial, military, and industrial areas are considered to have low sensitivity.

The sensitivity of viewer groups also may vary based on their levels of concern regarding changes to the visual environment. For example, viewers who are very familiar with surroundings, such as residents or frequent visitors, would be more aware of adverse changes and may be more sensitive to changes than viewers who may pass through an area on an infrequent basis.

Additionally, certain variables related to the particular view including how visible the changes are within the landscape; how far the viewer is from the change; duration of the view, if the viewer is looking up or down at the change and if the view is panoramic or narrowed by intervening vegetation or structures and duration of the view, also will determine how sensitive a viewer is to changes in the view scape.

VIEWER GROUPS IN THE COUNTY

Based on the above, three basic viewer groups can be delineated within the County as they relate to the proposed project and commercial cannabis cultivation. These user groups and their expected visual sensitivity are discussed as follows:

RESIDENTS AND OTHER LAND OWNERS

Residential viewer groups would include all permanent and seasonal residents all residential locations. Rural residents could be highly sensitive to changes in views within the project area because they generally experience views with relatively less dense development than the more urbanized cities and towns. Rural areas also are typically afforded wider viewsheds and panoramic views of open and undeveloped lands. While urban residents, generally have less exposure to scenic and panoramic view, if those views are afforded in they can be sensitive to the reductions in scenery. In addition, these viewers also may have a high sensitivity to changes in viewsheds while travelling through rural areas.

MOTORISTS, CYCLISTS, AND PEDESTRIANS

Residents, visitors, and others passing through the County would use roadways and other corridors for commuting, business purposes, and basic transportation from place to place. Pedestrians also would use local roadways but for generally shorter trips both in distance and duration. Due to driving speeds, motorists' views of a given parcel or viewshed are typically of moderate duration, where views for cyclists would be longer and those viewing time for pedestrian would be the longest. Generally, views from local roadways would be slightly extended compared to views from highways due to slower travel speeds; however, distant views from elevated portions of highways are available for extended periods in some locations within the County, such as from I-80 due to these reasons. Both motorists, cyclists, and

pedestrian who are most familiar with the existing highways and roadways would likely be more sensitive to land use and visual changes within the proposed project area. This is because the landscapes would be more familiar to them than users passing through the area or those who use the travel ways intermittently.

VISITORS AND RECREATIONISTS

Nevada County is visited for tourism and the outdoor recreational opportunities it provides such as camping, fishing, hiking, cycling, golf, rafting and boating, winter sports, and locations used for site seeing. Visitors and recreationists using trails, visiting County or State Parks, or using other outdoor facilities are considered a sensitive group. This group would be susceptible to physical changes to the surrounding landscape, where a change in the quality of visual resources can diminish the experience for these users.

4.1.2 REGULATORY SETTING

This regulatory framework identifies the federal, State, regional, and local statutes, ordinances, or policies that govern the light, glare, viewshed, and scenic character to be considered by Nevada County for the proposed project and during the subsequent decision-making process for future cultivation projects. Under the program, the U.S. Secretary of Transportation recognizes certain roads as National Scenic Byways or All-American Roads based on their archaeological, cultural, historic, natural, recreational, or scenic qualities.

FEDERAL

Although cannabis is “decriminalized” under State law, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government. There are no federal laws related to visual and aesthetic resources that would be applicable to the proposed project.

NATIONAL SCENIC BYWAYS PROGRAM

The National Scenic Byways program is part of the U.S. Department of Transportation, Federal Highway Administration (FHWA). The program was established under the Intermodal Surface Transportation Efficiency Act of 1991 and was reauthorized in 1998 under the Transportation Equity Act for the 21st Century. The program was established to help recognize, preserve, and enhance selected roads throughout the United States. There are no officially designated scenic byways within Nevada County (FHWA, 2018).

U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE

The National Trails System Act of 1968, as amended, calls for establishing trails in both urban and rural settings for people of all ages, interests, skills, and physical abilities. The act promotes the enjoyment and appreciation of trails while encouraging greater public access. It establishes four classes of trails: national scenic trails, national historic trails, national recreation trails, and side and connecting trails (National Park Service [NPS], 2009).

The NTSA assigns management responsibility for trails to various federal resource agencies, depending on which agency holds jurisdiction over the public lands on which the trail is located in a given area (U.S. Forest Service, U.S. Park Service, or BLM). The Pacific Crest Trail was created under the NTSA to provide for outdoor recreation opportunities and the conservation of significant scenic, historic, natural, or cultural qualities. The PCT stretches 2,650 miles from Mexico to Canada through California, Oregon, and

Washington and crosses the easterly portion of Nevada County from south to north. The U.S. Forest Service (USFS) administers the PCT within the County (PCT Association, 2018).

NATIONAL WILD AND SCENIC RIVERS SYSTEM

The National Wild and Scenic Rivers System was created by Congress in 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq.) to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act is notable for safeguarding the distinctive character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection (WSR, 2018a). There are no wild and scenic rivers in Nevada County (WSR, 2018b).

NATIONAL SCENIC BYWAYS PROGRAM

The National Scenic Byways Program is part of the U.S. Department of Transportation, Federal Highway Administration. Established in Title 23, Section 162 of the United States Code under the Intermodal Surface Transportation Efficiency Act of 1991 and reauthorized and expanded significantly in 1998 under TEA-21 and again under SAFETEA-LU in 2005, the program is a grass-roots collaborative effort established to help recognize, preserve and enhance selected roads throughout the United States. There are no National Scenic Byways within the project area. National Forest Scenic Byways are discussed below.

USDA FOREST SERVICE – NATIONAL FOREST SCENIC BYWAYS PROGRAM

The USDA Forest Service established the National Forest Scenic Byways Program in May 1988. The program's purpose is to showcase driving routes located on National Forest lands that provide access to outstanding scenic corridors and important natural, recreational and historic features.

The Chief of the Forest Service can designate routes traversing National Forest System lands as National Forest Scenic Byways. The first ten National Forest Scenic Byways were designated in 1989. In just 20 years, the system has grown to include 144 National Forest Scenic Byways designated by the Chief, encompassing over 9,000 miles of highways and roads on National Forest system lands

The goals of the National Forest Scenic Byways Program are to:

- Support and enhance rural community economic development.
- Showcase outstanding National Forest and Grassland scenery.
- Increase public understanding of National Forests as a major provider of outdoor recreation.
- Increase public awareness and understanding of National Forest activities and the importance of sustaining healthy, productive ecosystems.
- Ensure that people remain socially connected to public lands, so they become better stewards of our natural resources.
- Meet the growing demand of driving for pleasure as a significant recreation use.
- Increase use of National Forests by nontraditional users, including minorities and the elderly.
- Contribute to the nation's overall scenic byways effort (byways101.org, 2018).

YUBA DONNER SCENIC BYWAY

The Yuba Donner Scenic Byway is an approximate 175-mile paved loop, the majority of which runs through Nevada County. The balance of the byway is located in Yuba County and Sierra County. The route provides view of alpine valleys and rugged mountains and over both Donner Pass and Yuba Pass (Trails.com, 2018).

The portion of the byway through Nevada County is approximately 72 miles in length and includes segments beginning at State Route 89 from Sierra County on the north to Interstate 80 (I-80) near the town of Truckee. The byway follows I-80 west and transitions to State Route 20 (SR-20) near Emigrant Gap continuing west to Nevada City. From Nevada City, the byway transitions to State Route 49 (SR-49) north through San Juan Ridge and North San Juan to the border with Yuba County. Special attractions along or near the route within Nevada County includes: Donner Memorial, Empire Mine, Donner Lake, Donner Summit Bridge, the crossing of the Yuba River. At the border with Yuba County, is the officially designated Yuba River Scenic Byway, which is discussed below.

LOCAL FRAMEWORK

NEVADA COUNTY GENERAL PLAN

The Nevada County General Plan identifies the County as an area of extraordinary scenic quality. Scenic resources in the County include a wide variety of landscapes, scenic views/vistas and visual resources. Scenic views include those from roadways, surrounding open areas, as well as scenic vistas of lakes, rivers, valleys, the foothills and mountains and various other natural amenities.

The Open Space and Aesthetics Elements of the Nevada County General Plan include several goals, objectives and policies with respect to aesthetics, as identified below.

OPEN SPACE ELEMENT

Goal 6.1 Encourage that land use patterns and site development reflect open space values.

Objective 6.1 Integrate open space consideration in the establishment of land use patterns.

Directive Policies

Policy 6.1 The General Plan recognizes the importance of open space serving one or more of the following purposes:

- a. Preservation of natural resource areas;
- b. Conservation of open spaces for the managed production of resources;
- c. Maintenance of areas with importance for outdoor recreation;
- d. Delineation of open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions; and
- e. Provision of open spaces to create a buffer which may be landscaped to minimize the adverse impact of one land use on another.

The General Plan includes an Open Space land use designation, which is intended to provide for lands, serving one or more of the above purposes, which is either in public ownership, or permanently preserved as open space through easements or other restrictive mechanisms. The uses of land under the Open Space designation and implementing zoning are limited to those which have minimal impact on the natural character and environmental features of the land.

In addition, the Rural, Forest and Recreation designations of the General Plan also provide visual and functional open space, including open space for production of resources and provision of recreation opportunities.

Policy 6.3 Maintain the density of development allowed in the Rural and Forest land use designations as shown on the General Plan Land Use Maps in order to provide for

low density development in Rural Regions which preserves an open, rural character and complements the permanent public and private open space.

Objective 6.2 Implement development standards that incorporate open space values.

Action Policies

Policy 6.9 Development standards for project design, grading, construction and use, established through the Comprehensive Site Development Standards, shall be used in project review of all discretionary project permits to determine open space requirements for each project.

These standards shall provide for consideration of non-disturbance of, and open space setbacks from identified sensitive environmental, biological, or cultural resources, e.g. 100-year floodplains, wetlands, slopes in excess of 30% (excepting access across slopes up to 30%), lakes, ponds, significant historic or archaeological sites/resources, critical wildlife areas, minimization of land disturbance, consistency with the landforms and aesthetic context of the site, temporary and permanent erosion and sedimentation controls, and vegetation retention, replacement and enhancement.

AESTHETICS ELEMENT

Goal 18.1 Promote and provide for aesthetic design in new development which reflects existing character.

Objective 18.1 Develop appropriate community design guidelines to ensure aesthetic design in new development.

Action Policy

Policy 18.1 The County shall prepare Community Design Guidelines applicable to the various General Plan Designations and zoning classifications and adopt such guidelines as part of Comprehensive Site Development Standards, to be used in the project site review of all discretionary and ministerial project permits. The guidelines may include, but not be limited to the following:

- a. Community identity
- b. Preservation of natural landforms
- c. Protection and management of viewsheds
- d. Protection and management of river corridors and other significant streams

These Guidelines shall be the base design standards applicable to all projects. Area-specific Design Guidelines, where adopted by the County pursuant to Policy 18.2, shall be applicable in addition to the base guidelines within the specified area.

Directive Policy

Policy 18.2 The County may adopt Specific Design Guidelines for areas within Community Regions, Rural Places, and Rural Centers to provide for the maintenance of community identity, scenic resources and historic sites and areas.

The Specific Design Guidelines may include, but not be limited to standards which:

- a. Reflect the distinctions among and transitions between different areas within Community Regions;
- b. Reflect and retain the historic character of the area by requiring designs consistent with historic buildings, areas and sites related to a project;
- c. Reflect and retain the rural and small-town character of the County;
- d. Address building height and bulk at locations of visual sensitivity;
- e. Encourage consistent thematic use of building materials and design elements appropriate to the visual and scenic qualities of specific areas;
- f. Encourage cluster-type development of office, commercial uses, and residential uses to enhance open space;
- g. Encourage office and commercial development provide safe, functional and attractive pedestrian connections and, where appropriate, social places (e.g. seating, landscaped patio areas, etc.);
- h. Locate parking areas out of view from road traffic where conditions permit and provide measures to reduce the impacts of large paved areas;
- i. Encourage building designs which provide customer entrance from pedestrian and parking areas, with customer-friendly store fronts facing pedestrian areas; and
- j. Provide uniform criteria for project design review.
- k. Encourage landscape treatment to enhance the built environment, including the preservation, long-term maintenance, and use of drought-tolerant native species.
- l. Specific Design Guidelines shall be implemented through the regulations of the "D" Design Combining District of the County zoning ordinance.

Goal 18.2 Protect and preserve important scenic resources.

Objective 18.2 Develop standards to protect scenic resources and viewsheds.

Action Policies

Policy 18.3 The County shall establish standards for the protection of large-scale views and viewsheds and shall incorporate such standards in the Comprehensive Site Development Standards. The standards shall provide an inventory of sensitive views and viewsheds within Nevada County, and specify protective measures and impact controls applicable through the project site review process.

Directive Policy

Policy 18.6 Discretionary development in Rural Regions and in Community Regions near the Community Boundary shall, wherever possible, preserve natural landmarks and avoid ridge-line placement of structures.

Policy 18.7 Encourage protection of scenic corridors wherever feasible.

Objective 18.3 Promote the conservation of scenic roads and highways.

Policy 18.8 The County shall amend the "SC" Scenic Corridor Combining District Regulations to require design review of all proposed development within the district.

Policy 18.8A The County will designate scenic corridors along the following routes: Interstate 80 and Highways 49, 89, 174, and 267 for their entire length in the County; all of Highway 20, Donner Pass Road (Old Highway 40), from the Interstate 80 intersection at Soda Springs to the town limits of Truckee. These corridors should be placed within the SC "Scenic Corridor" Combining District, with boundaries based upon adopted studies.

NEVADA COUNTY LAND USE DEVELOPMENT CODE

The Nevada County Land Use Development Code (LUDC) recognizes visual and aesthetic resources and the importance of these resources to the character of individual communities as well as the County overall. Although not inclusive of every LUDC section that would pertain to the proposed project, the following provides a listing and brief description of the most pertinent sections of the code related to visual and aesthetic resources.

Section L-II 2.7.7 Scenic Corridor (SC) Combining District the purpose of which is to protect and preserve the scenic resources of areas adjacent to highways and roads which have been identified as having high scenic quality requiring protection for the benefit of residents and visitors.

Section L-II 2.7.2 Historic Preservation (HP) Combining District the purpose of which is to identify and highlight areas of the County having natural or man-made features which are of cultural, archaeological or educational value and areas which are important to local, state and national history and provides for the identification, preservation and enhancement of the elements which reflect an area's or individual site's history. **Section L-II 5.3** relates to design review and provides the procedures and standards by which new development can be reviewed for compatibility with surrounding development, natural resources and/or historic features within the project area.

Section L-II 4.2.8 addresses outdoor lighting within the County and specifies requirements for lighting in new development, street lights, street light placement and design standards.

Section L-II 4.3.16 relates to visually important ridgelines and viewsheds also sets standards to protect the natural appearance and aesthetic quality of visually prominent ridgelines and large-scale viewsheds.

DIVISION 4.3 RESOURCE STANDARDS

Section 3.0 Project Description discusses the Comprehensive Development Standards found in Article 4 Comprehensive Site Development Standards and defined in Division 4.3 Resource Standards. In part, the purpose of the development standards is to avoid the impact of development projects on sensitive environmental resources and natural site constraints. The following discusses those standards applicable to geology and soils and specific requirements related to the protection of the associated resource(s) is discussed in *4.1.4 Potential Impacts and Mitigation Measures*, below.

Section L-II 4.3.13 Steep Slopes/High Erosion Potential. This section has the purpose to preserve the natural, topographic, and aesthetic characteristic of steep slopes, and to minimize soil erosion, water quality impacts, earth movement and disturbance, and the adverse impact of grading activities, while providing for reasonable use of private property. Steep slopes are those greater than 30 percent and high erosion soils are based on U.S. Soil Conservation Service and U.S. Forest Service surveys

Section L-II 4.3.15 Trees. This section is in place to require protection and minimization of impacts to trees, and to maximize the long-term preservation of trees in their natural setting. The ordinance calls for avoidance of impacts to Landmark Trees or Landmark Groves. Landmark Trees are defined as any oak with

a dbh of at least 36 inches, or any tree whose size, visual impact, or association with a historically significant structure or event has caused it to be marked for preservation by the county, state, or federal governments. Landmark Groves are defined as hardwood tree groves with at least 33 percent canopy closure, or groves whose size, visual impact, or association with a historically significant structure or event has caused it to be marked for preservation by the county, state, or federal government.

Section L-II 4.3.16 Visually Important Ridgelines and Viewsheds. The purpose of this section is to protect the natural appearance and aesthetic quality of prominent ridgelines and large scale viewsheds. A visually important ridgeline and viewshed is one that is visibly prominent ridgelines, and large-scale viewsheds considered to be of high natural scenic quality and are highly visible from public roadways, parks and other public places.

4.1.3 STANDARDS OF SIGNIFICANCE

ENVIRONMENTAL ANALYSIS

THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant aesthetic impact if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

The evaluation of aesthetic impacts is a subjective exercise because of widely varying personal perceptions. Nevertheless, replacement of undeveloped land with land uses anticipated by the proposed project would permanently alter the appearance of the project area.

4.1.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACT 4.1-1: HAVE A SUBSTANTIAL ADVERSE EFFECT ON A SCENIC VISTA.

Impact Analysis

Nevada County is predominantly rural in character and is located in a topographically diverse area containing low lying valleys, rivers, streams, and high mountain peaks associated with the Sierra Nevada Mountains in the eastern portions of the county. Many areas within the county are considered to have high visual quality and associated scenic views due to the undeveloped and rural character and the presence of scenic resources. Scenic vistas are defined as expansive views of highly valued landscapes from publicly accessible viewpoints and include views of natural features such as topography, watercourses, rock outcroppings, and natural vegetation, and man-made scenic structures, such as high mountain peaks and ridges, trees and dense forests, open grasslands, deep river cut valleys, and lakes, rivers, and streams. Numerous scenic views of the valleys, rivers including the Yuba River and North Fork of the Yuba River and Bear River, mountains peaks, meadows, forests, wetlands and other habitats unique to the Sierra Nevada Mountains and its foothills are available from existing roads and public and private

places within the County. The Nevada County General Plan identifies natural resources such as these as important scenic resources. The County also contains one Officially Designated State Scenic Highway consisting of approximate 7.0-miles of the easterly portion of State Route 20 (SR-20), and four eligible State Scenic Highways including SR-49, SR-174, SR-20 from the intersection with SR-49 east to the Officially Designated segment and SR-89 from I-80 north to Sierra County.

Construction

Under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. For commercial and non-remuneration cultivation less than 2,500 sf of combined indoor, mixed-light, or outdoor, applicants would be required to apply for and obtain a Commercial Cannabis Permit (CCP) and an Annual Cannabis Permit (ACP). For commercial and non-remuneration cultivation between 2,500 sf and 10,000 sf applicants would be required to apply for and obtain an Administrative Development Permit (ADP) and an ACP. In both cases the ACP would need to be renewed annually.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Cultivation for personal use would be limited to a total of six plants and would require registration with the enforcing officer through an administrative action. The cultivation activities of up to six plants for personal use in R1, R2, R3, or RA zones would be limited to indoor cultivation only. Because cultivation would occur indoors, it would not alter the visual character of these locations, would not be visible from off-site locations, and would not have the potential to affect any scenic vistas. Impacts in this regard would not occur and mitigation is not required.

Implementation of the proposed project would facilitate future development for commercial cannabis cultivation or non-remuneration cultivation activities in the AE, AG, and FR zones. Although not all cultivation activities would result in construction, some new structures to facilitate new and continuing cultivation would be built and would likely include but not be limited to hoop houses, water storage tanks, ponds or other storage reservoirs, and other cannabis related appurtenance buildings including sheds and greenhouses. As a result of grading, depending on the site, some thinning or removal of vegetation and creation of debris is expected. Some of the construction related activities could have short-term aesthetic impacts if they occur within the viewshed of a scenic vista or if they would be visible from off-site locations. To the maximum extent possible, existing views of scenic resources and open space would be preserved; however, existing scenic views of ridgelines, hillsides, and valleys could be compromised.

Construction activities would result in the transportation of construction equipment to and from existing and future cultivation sites that would be permitted under the proposed NCCO. Transportation of machinery and construction materials could occur along designated highways and in areas that afford views of scenic resources adversely affecting the short-term views along local roadways in the vicinity of the project sites. However, the movement of construction materials along these roadways would be temporary in nature and occurring over a brief period time.

Depending on the size and location of future proposed cannabis cultivation areas, construction could require grading to create pads for cultivation areas and proposed structures. In these instances, grading plans would be required to be submitted to the County for review and approval prior to the commencement of any site disturbance. These types of activities would be subject to the County's Development Code and would go through the County's Development Review process.

Cannabis cultivation under a CCP could have a maximum cannabis canopy of 2,500 sf and maximum accessory structure square foot of 625 feet. It is not anticipated that an individual project of this limited

scope and scale would result in a substantial adverse affect on a scenic vista. As required in the NCCO, all cannabis canopy would be required to not be visible from off-site areas. Additionally, the NCCO requires each CCP applicant to submit a site plan that provides a detailed description of activities, location of canopy area, setbacks, descriptions of existing and proposed structures, as well as other relevant site planning details required by the ordinance. Project site plans would contain site elevations and proposed structure and slope heights (if applicable). As part of this review process, staff would confirm, based on existing topography, if any proposed ancillary structures, slopes, etc. would have the potential to degrade a scenic vista. If a scenic vista would be affected, changes to the site plans would be required. Implementation of this site plan review process would reduce potential impacts are less than significant.

Cannabis cultivation under an ADP could result in a canopy area of up to 10,000 sf and construction of accessory structures up to 2,500 sf. During the planning review process, all ADPs would be screened and reviewed for compliance with the following development standard.

Section L-II 4.3.15 of the Land Use and Development Code provides direction related to potential impacts to visually important ridgelines and viewsheds states:

- In no case shall the roofline or any portion of a structure extend above a visually important ridgeline.
- Site grading shall not alter the existing silhouette of visually important ridgelines.
- When the County determines that a project may impact a visually important ridgeline or viewshed, a management plan shall be prepared by a land use planner, an architect, or landscape architect. This determination may be based on a County-wide or area-wide inventory of visibly prominent ridgelines and large-scale viewsheds, or, in the absence of an inventory, upon a determination that the proposed project may be likely to impact a visually important ridgeline or viewshed.

If a management plan is required, the management plan would include a visual analysis which would normally include the following:

- a determination of the geographical location and level of visual quality of the defined area;
- a determination of the number and type of existing and potential viewers, viewing distance, angle, focal point, and landscape and topographic variety and uniqueness.

The management plan would include specific protective measures and impact controls necessary to minimize visual impact to the maximum extent possible.

Conformance to this process would ensure that all grading and earthwork would be conducted in accordance with code requirements and the approved construction permits issued by the County and would not conflict with a visually important ridgeline and viewshed or scenic vista.

Lastly, some of the cultivation activities would require the use of machinery and trucks to transport equipment and materials needed to facilitate the proposed construction. While views to trucks hauling equipment or materials (traveling to and from the project site from offsite locations) on roadways may result in short-term visual impacts, in accordance with County and City permit procedures, hauling plans could be required. These plans would be prepared on a project-by-project basis depending on the significance of hauling activities and would be subject to approval by the County. With conformance to all requirements of the commercial cannabis cultivation application process, which would require proof of all adherence to all construction permitting requirements, the construction related impacts to scenic vistas in this regard would be less than significant.

Operation

Operation of commercial cultivation activities after completion of construction would result in long-term changes to the visual environment and could have long-term effects on scenic vistas. Although not all cultivation activities would use hoop houses, water storage tanks, ponds, or other storage reservoirs, or appurtenant structures such as sheds, or greenhouses, depending on the placement of these structures in the landscape, they could become permanently visible to viewers from off-site locations and interfere with views of scenic vistas and detract from the visual environment at the future project sites by blocking views of open spaces, ridgelines, hillsides, and valleys.

Cannabis cultivation of all sizes on parcel two acres or greater whether for commercial or non-remuneration would require processing of a CCP or ADP. Applications for cultivation projects less than 2,500 sf of combined indoor, mixed-light, or outdoor, would be required to apply for and obtain a CCP and an ACP. For cultivation between 2,500 sf and 10,000 sf applicants would be required to apply for and obtain an ADP and an ACP. A determination of conformance to applicable regulations for either a CCP or ADP and approval or denial of the respective permit would be made by the Planning Director.

As part of this application process, the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with State, and local laws and regulations, related to visual resources. There are no federal laws for visual and aesthetic resources that would be applicant to cannabis cultivation on County lands. In addition, cultivation areas are required to maintain a 100-foot setback from the property line, and the NCCO requires that fencing block views of the cultivation area such that it would not be visible from off-site areas. In addition, as discussed in the construction impacts above, conformance with Development Standards would similarly ensure impacts from operation of projects would be minimized. With conformance to all requirements of the commercial cannabis cultivation application process, which would require proof of adherence to all construction permitting requirements, the operational related impacts to scenic vistas in this regard would be less than significant.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less Than Significant Impact.

IMPACT 4.3-2: SUBSTANTIALLY DAMAGE SCENIC RESOURCES, INCLUDING BUT NOT LIMITED TO, TREES, ROCK OUTCROPPINGS, AND HISTORIC BUILDINGS WITHIN A STATE SCENIC HIGHWAY.

IMPACT ANALYSIS

Nevada County contains a diverse landscape consisting of foothills, valleys, mountains, meadows, forests, wetlands and habitats unique to the Sierra Nevada Mountains and contains many areas with significant volumes of trees, visually appealing rock outcrops, and historic buildings that could be affected by the implementation of the proposed project.

Under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain either a CCP or an ADP and an ACP. The ACP would need to be renewed annually.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, would require registration with the enforcing officer through an administrative action. The cultivation activities of six plants for personal use in R1, R2, R3, or RA zones would be limited to indoor cultivation and would not result in physical changes or impacts to trees, rock outcroppings, or historic buildings within a state scenic highway. Impacts in this regard would not occur and mitigation is not required.

For commercial and non-remuneration cannabis cultivation of less than 2,500 sf of combined indoor, mixed-light, or outdoor, applicants would be required to apply for an obtain a CCP and an ACP. For commercial and non-remuneration cultivation between 2,500 sf and 10,000 sf applicants would be required to apply for an obtain an ADP and an ACP. In both cases the ACP would need to be renewed annually. A determination of conformance to applicable regulations for either a CCP or an ADP and approval or denial of the respective permit could be made by the Planning Director.

As part of the permitting and application process, the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with, State, and local laws and regulations, related to visual resources. This would require a disclosure of existing trees, rock-outcroppings, or historic resources, that would be affected by the existing and future cultivation projects. If cultivation activities commence without proper evaluation, these resources could be negatively affected.

Cannabis cultivation under a CCP could have a maximum cannabis canopy of 2,500 sf and maximum accessory structure square foot of 625 feet. It is not anticipated that an individual project of this limited scope and scale would not result in the removal of a significant number of trees, including landmark trees, landmark groves, and heritage trees and groves. It is further anticipated that cultivation of this size could be planned to avoid trees, groves, and rock outcroppings. Rock outcroppings provide little if any nourishment for plants, are costly to remove, and can complicate maintenance activities. Therefore, the removal of rock outcroppings for the purpose of growing cannabis on CCP sites is considered less than significant.

While the majority of individual project impacts to landmark trees, landmark groves, and heritage trees and groves are anticipated to be less than significant or not occur, considering the total number of possible commercial cannabis projects across the county, impacts could occur. To reduce the impacts, Mitigation Measure AES-1 would amended the proposed NCCO to include a requirement for commercial cannabis project applicants to identify any trees on the project site that meet the standards of landmark trees, landmark groves, and heritage trees and groves based on the definitions in Section L-II 4.3.15 – Trees. If any of these resources are proposed for removal the application would not be processed until the applicant revises the site plan to avoid impacts to the resources. This requirement would not apply to any trees or groves determined to be dead, dying, or a public safety hazard by a certified professional arborist, licensed landscape architect, registered professional forester, or qualified biologist or botanist (qualified professional). Implementation of this mitigation measure would ensure that potential impacts are less than significant.

Cannabis cultivation applications under ADPs, projects would be screened during the development and review process for impacts related to tree removal pursuant to Mitigation Measure AES-1. If removal of trees exceeds County thresholds for landmark trees, landmark groves, and heritage trees and groves would occur, the applicant would be required to implement the requirement in Section L-II 4.3.15: Trees.

The Nevada County Code discourages removal of these resources and depending on the number of trees requiring removal, a Management Plan to identify impacts and specify measures that would avoid or reduce such impacts may be required.

If a Management Plan is required, a Biological Inventory prepared by a qualified biologist, to determine whether the habitat for the defined resource, or the resource itself may be affected by a proposed project. Trees or groves determined to be dead, dying, or a public safety hazard by a certified professional arborist, licensed landscape architect, registered professional forester, or qualified biologist or botanist (referred to herein as a qualified professional) as well as trees that must be removed to ensure fire safe access or provide adequate fuel reduction as determined by the California Department of Forestry or local fire district, and removal of trees necessary to provide for site access and public utilities or public right-of-way also may be exempt from this standard. All these removals would require verification that they meet standards through the development review process.

However, for projects that could result in disturbance to defined trees or groves would require a management plan to be prepared. The management plan would be required to be prepared by a qualified professional and according to the Development standard would be required to contain the following elements:

- Evaluate the impact of the project on defined trees and groves and recommend project modifications that avoid or minimize impacts;
 - Place special emphasis on Blue oak (*Quercus Douglasii*) and Valley Oak (*Quercus Lobota*);
- Emphasize protection of groups of trees rather than individual;
- Replace trees on an inch for inch standard to equal the diameter removed;
- Provide for long term maintenance.

If impacts remain, or after review by County staff determines replanting in infeasible the applicant would be required to pay to Nevada County fees, determined by a qualified professional, to a Tree Preservation Fund to pay for planting on public property or off-site habitat preservation. The above requirements also shall apply to properties in which a grove or stand has existing for three years prior to project application. The County also may use alternative standards that have the same practical effect and provides for equal or greater mitigation.

For all trees retained during and after construction, a Tree Protection Plan would be required to be prepared by a qualified professional. The Tree Protection Plan would be required to include:

- pre-construction and post-construction protection measures defining tree protection zones; water needs, monitoring, and maintenance to ensure long-term care; and
- specification of a work efforts (pruning, bracing systems, mulch, pest management, irrigation, fencing installation) and construction plans;

Regarding the protection of rock outcroppings, Section L-II 4.3.13 Steep Slopes/High Erosion potential is discussed in detail in *Section 4.6 Geology and Soils.*, Section L-II 4.3.13 – 3a(b)(2) which addresses rock outcroppings in the context of grading and aesthetic value would be applicable to ADPs. This section states that the management plan to minimize impacts to steep slopes shall consist of an Erosion and Sediment Control Plan and will address the aesthetic quality of the slope by including the preservation of significant rock outcroppings and native plant material. If the preparation of a management plan is required, the management plan would be required to include a finding that the aesthetic quality of the slope is ensured and it would be required to include the preservation of significant rock outcroppings and native plant

materials. This would ensure that impacts in this regard for projects under an ADPs, which could be used for cultivation up to 10,000 sf would be less than significant.

As discussed above, Nevada County does contain portions of a State Designated Scenic Highway, eligible roadways, and an approximate 72-mile portion of the Yuba Donner National Forest Scenic Byway. The proposed project would not conflict with the existing visual characteristics of any of these highways, or affect views of the highways and byways, or views of the landscape from the highways and byways. All cannabis projects would be mapped to show their relationship within the landscape and position relative to the highways and byways. This information would be reviewed during the planning and review process for projects under both CCPs and ADPs. This would ensure that the projects would not conflict with views of or toward the highways and scenic byways. It should be noted, that as part of the project visual screening elements such as intervening vegetation and fencing is required to ensure cultivation areas are not visible from public rights-of-way, which would include the scenic highways.

Conformance with the development review process, and adherence to the listed requirement of the Resource Standards as well as other County required conditions of approval would reduce direct and indirect impacts to scenic resources, including but not limited to, trees, rock outcroppings, and historic building within a state scenic highway, and scenic highways and byways themselves. In addition, *Section 4.2, Agriculture and Forest Resources, Section 4.3 Cultural Resources, and Section 4.4 Biological Resources*, also contain discussions of these resources and protection measures that would be applied. With the incorporation of the protection measures for these resources, impacts would be less than significant and additional mitigation is not required.

MITIGATION MEASURE

MM AES-1 Protected Tree Avoidance. Amend the NCCO to require all commercial cannabis applications to show on project site plans any landmark trees, landmark groves, and heritage trees and groves that exist on the project site. If such trees exist, the applicant shall indicate that the proposed cultivation sites and any proposed ancillary structures would not require removal of any of the listed trees and that all cannabis cultivation and accessory structures are outside the existing drip line of all trees. If any cultivation or accessory structure would require removal or encroach in the drip line of any trees and the project plans shall be revised to avoid the trees. If any trees or groves are dead, dying, or a public safety hazard as determined by a qualified professional, no further action is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less Than Significant Impact.

DEGRADATION OF CHARACTER/QUALITY

IMPACT 4.3-3: SUBSTANTIALLY DEGRADE THE EXISTING VISUAL CHARACTER OR QUALITY OF THE SITE AND ITS SURROUNDINGS.

IMPACT ANALYSIS

The visual analysis of any project must consider the existing visual character and quality of the specific project area. Another factor to consider in the analysis would be the existing visual sensitivity in the vicinity of that project area, which is defined by the available public views of the project, the number of viewers, and the duration of those views. Therefore, a project located on a site that has both high visual quality and high visual sensitivity would have the most significant visual impact. In terms of the visual

character of the residential areas within the unincorporated county areas, some locations and towns are developed with single family, medium density, and high-density housing, but the majority of Nevada County remains rural in character. As discussed above, viewers from all residential areas may utilize local roadways that are near existing or future cannabis cultivation that would be permitted under the proposed project. Accordingly, both rural and urban residents could be sensitive to introduction of new development such as greenhouses, hoop structures, and the related use of night lighting needed for mixed-light cultivation.

Under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain a CCP for cultivation less than 2,500 sf, or an ADP for cultivation between 2,500 and 10,000 sf. An ACP would be required for all projects and need to be renewed annually.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, would require registration with the enforcing officer through an administrative action. The cultivation activities of six plants for personal use in R1, R2, R3, or RA zones would be limited to indoor cultivation and would not result in physical changes or substantially degrade the existing visual character or quality of the site and its surroundings. Impacts in this regard would not occur and mitigation is not required.

The landscape in the project areas that could be used for commercial cultivation, AG, AE, and FR zones, are largely defined by the existing forested/open grassland features and the County's overall rural character. These project sites range from areas of generally flat grasslands, agricultural lands, and gently sloping to steeply forested mountainous areas. Implementation of the proposed project would facilitate development for commercial cannabis that would both temporarily and permanently alter the nature and appearance of the cannabis cultivation sites.

CONSTRUCTION

Implementation of the proposed project would result in use of parcels within the AE, AG, and FR zones for commercial cannabis cultivation or non-remuneration cultivation activities. Activities associated with the development of new commercial cannabis facilities as well as improvements of existing cannabis operations may include grading, thinning or removal of vegetation, creation of debris, and the construction of structures and would be visible to viewers from off-site locations. Construction would occur as individual permits are issued, and while the timing and exact location of these sites is not known it would only occur in AG, AE, and FR zones. During construction, equipment including haul trucks and excavators, materials stockpiles, partially constructed buildings, and environmental protection measures, including runoff/erosion control measures (such as straw bales and sandbags, and hydroseeded and straw mulched areas), may be visible from off-site location. Depending on the elevations of sites, some areas may be visible from greater distances. The greater the number of total permits that are issued, the greater the likelihood the subsequent construction would result in a greater and more frequent visual changes experienced by viewers.

Although not all cultivation activities would result in construction, in areas where construction is required, some of the construction activities could have short-term aesthetic impacts if they are visible from off-site residences, business, or public roadways. Construction activities would result in the transportation of construction equipment to and from these future project locations. However, the movement of construction materials would be transitory in nature and occur over a very brief period time. Impacts in this regard would be less than significant.

Some construction activities and resultant landscape and appurtenant structures are expected to be visible from off-site areas resulting in visible changes to the character of the project sites. It is expected that in some areas existing vegetation would act as a visual screen where in others views of construction would not be fully screened. As part of the project, cultivation areas must be set-back from adjacent properties at least 100 feet and fencing such that it would block the cultivation area(s) from view are required. Incorporation of these project component would help minimize the visibility of construction activity in the viewsheds. In addition, construction activities would occur over a relatively brief period of time, and views of cultivation sites and appurtenant structures are expected to be limited as the commercial cannabis and non-remuneration projects would, occur in areas zoned AG, AE, FR on generally larger lots in rural locations. These facts would limit the areas from which the construction would be visible.

Depending on the size of proposed cannabis cultivation areas, future construction would require grading plans to be submitted to the County for review and approval prior to the commencement of any site disturbance. All such activities would be subject to the County's Development Code and all future development would be subject to the County's Development Review process for either a CCP or an ADP. This would ensure that all grading and earthwork would be conducted in accordance with approved construction permits issued by the County. Additionally, while views to trucks hauling equipment or materials on roadways may result in short-term visual impacts to adjacent residents, in accordance with County and City permit procedures, hauling plans would be prepared on a project-by-project basis, and would be subject to approval by the County. With conformance to all requirements of the commercial cannabis cultivation application process, the construction related impacts to scenic vistas in this regard would be less than significant

Regulations of the proposed NCCO and standard permitting conditions required for all development permits would apply to all new cultivation sites and certain improvements that would require permitting on existing sites. Accordingly, the need for visual screening and other measures to reduce visual intrusion of construction activities as viewed from surrounding areas would be evaluated as part of the CCP and ADP permitting processes. In addition, the construction of such facilities would be temporary in nature and occur over a short-term duration. Therefore, and impacts related to the degradation of the existing visual character or quality of the site and its surroundings would be less than significant in this regard.

OPERATION

Although design plans would be drafted as each site is developed, it can be assumed that if structures are proposed as a part of those projects, some of those structures would be at least partially visible from surrounding residents or other uses in which these viewers would have moderate to long term duration views of the future project sites. However, the existing and new commercial cannabis projects that would be permitted under the proposed ordinance could only occur in AG, AE, and FR zones, which allow for agricultural uses. Therefore, the agricultural components of cannabis cultivation would be visually consistent with the existing rural and agricultural character of the County in the areas it would be authorized. Cannabis operations would consist of similar structures and components that, aesthetically, are not substantially different in appearance from other agricultural operations.

Regulations included as part of the proposed project would apply to all new cultivation sites. As noted in *Section 3: Project Description*, all commercial cultivation sites regardless of purpose or cultivation method must maintain a 100-linear foot setback from the edge of the canopy area to the adjacent property line. All cultivation also would be prohibited in any location where the cannabis (at any stage of growth) would

be visible from the public right-of-way or publicly travelled private roads, as well as in violation of all other set back requirements required by the NCCO. To meet these requirements, areas under cultivation could be screened from view by materials such as intervening (non-cannabis) vegetation, structures, or fencing.

Therefore, although implementation of future commercial cannabis cultivation projects would represent a visual change within these localized environments, these changes are not considered substantial and impacts would be less than significant.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less Than Significant Impact.

LIGHT AND GLARE

IMPACT 4.3-4: CREATE A NEW SOURCE OF SUBSTANTIAL LIGHT OR GLARE THAT WOULD ADVERSELY AFFECT DAY OR NIGHTTIME VIEWS IN THE AREA

IMPACT ANALYSIS

CONSTRUCTION

Short-term light and glare impacts associated with construction of cannabis related structures and cultivation areas including grading, building of hoop-houses and greenhouses, and installation of water storage tanks, ponds, or other storage reservoirs, and other cannabis related appurtenances including sheds, are expected to be minimal. The majority of construction would occur during daytime hours and would be done in accordance with Section L-II 4.1.7 Noise of the County Land Use Development Code which permit construction only between the hours of 7:00 AM and 7:00 PM. Conformance to these requirements would substantially limit the need for lighting during the times of the year with darker mornings and evenings.

In areas with existing R1, R2, R3, and RA zoning destinations, commercial cultivation using indoor or mixed-light would be prohibited. Indoor commercial cultivation requiring the use of artificial lighting would be limited to AG, AE, and FR zones where existing populations are less dense. In these areas the primary sources of nighttime lighting are from existing structures and vehicle headlights on area roadways. Therefore, construction related impacts from the use of artificial lighting for indoor cannabis cultivation would not occur.

OPERATION

Operation of the proposed project and associated cultivation activities would consist of outdoor, indoor, and mixed-light cultivation operations that would use lighting to extend the photoperiod, growth, and enhance the flowering of cannabis plants. If the artificial lighting escapes the indoor or covered structures such as a greenhouse or hoop-house, the addition of the light to the nighttime environment could create a nuisance to adjacent properties and residences as well as motorists on nearby roadways. Depending on the size, location, and density of cultivation sites the additional light contributed to nighttime and sky glow could be substantial. The introduction of these light sources would add to the overall ambient light conditions in the area and increase the amount of glow resulting in negative lighting effects that would be visible from great distances. Substantial changes to the night environment and intrusion by light sources is typically viewed negatively by nighttime viewers. The impact of the lighting is a function of the

magnitude of visibility of the lights, the distance from which the light may be seen, and the areas in which the lighting occurs. For example, increased lighting in an existing city may be viewed less negatively than increased lighting effects in open space or rural areas. Because, under the NCCO, cannabis cultivation would occur in rural areas the resulting changes may be significant. In addition to effects on human viewers, the nighttime lighting could result in negative ecological effects on terrestrial, aquatic, and avian species, which are discussed in additional detail in *Section 4.3 Biological Resources*.

As part of the NCCO project, all future cultivation projects would be required to prepare and implement a security plan. These plans are likely to include security lighting. New security lighting would increase exterior lighting within the vicinity of cultivation sites and within the county as a whole. Security lighting would be similar to that used for residential security and would be required to meet the California Energy Commission's Building Energy Efficiency Standards for Outdoor Lighting.

Glare impacts are typically related to the use of modern, highly reflective surfaces colored in gold or silver, or covered with glass, acrylic and broad, or flat surfaces that are painted with highly reflective colors. These types of decorative facades are common in urbanized areas. These types of materials would not commonly be used for cultivation related structures and are less common building materials in rural areas including the AG, AE, and FR zones where commercial and non-remunerative cannabis cultivation would be permitted.

The proposed project would be required to conform to the requirements in Section L-II 4.2.8 Lighting of the Nevada County Land Use Development Code. The section establishes standards to provide for the efficient, safe, and attractive outdoor lighting while minimizing light pollution and energy waste and applies to all development and use permits. This section also addresses security lighting and requires security lighting fixtures to be shielded and aimed so that illumination is directed only to the designated area and not cast on other areas and encourages the use of motion or heat sensors which can provide greater security than continuous lighting, which are the preferred alternative to continuous nighttime lighting. Conformance with County lighting standards also requires lights be oriented away from adjacent residential areas and that lighting consist of the minimal wattage necessary to provide safety at the construction site would be implemented. This section; however, does not address the overall issue of nighttime and sky glow.

Therefore, while conformance to the code, would likely result in limitation of the use of artificial lighting sources and potentially reflective building, it could not provide adequate controls on increased glow effects. According, while some problem lighting effects would be screened out and rejected during the CCP or ADP project development review process, this would not be adequate to ensure increased sky and nighttime glow is not substantial. Therefore, while conformance with the resource standard would reduce the light and glare impacts, the scale and scope of long term operational impacts from cannabis cultivation activities on glow would be significant and mitigation would be required. Implementation of Mitigation Measure AES-2 would reduce potential impacts to less than significant.

MITIGATION MEASURE

MM AES-2 **Lighting Control Plan.** Amend the NCCO to require commercial cannabis cultivation applicants with exterior light fixtures (including mixed light applications) to submit a light control plan that would demonstrate how light used for cultivation purposes would be controlled. Light control measures may include but not be limited to means such as using blackout tarps to completely cover all greenhouses and hoop-houses, or restricting the use of lighting between sunset and sunrise.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

While the listed mitigation measure would reduce lighting impacts, light from other non-cultivation uses such as security lighting and other nighttime lighting, could still result in changes to the nighttime environment and impact sky and nighttime glow. Therefore, impacts would remain significant.

4.2 AGRICULTURE AND FORESTRY RESOURCES

This section evaluates the potential impacts of the proposed project on agriculture and forestry resources. A description of the environmental setting (affected environment) for existing resources is presented below in *Section 4.2.1: Environmental Setting*. The regulatory setting applicable to agriculture and forestry resources is presented in *Section 4.2.2: Regulatory Setting*, and the standards for significant impacts are presented in *Section 4.2.3: Standards of Significance*. The proposed project impacts and associated mitigation measures, where applicable, are analyzed in *Section 4.2.4: Impacts and Mitigation Measures*. This analysis is based upon applicable reference data from the California Department of Conservation (CDOC) files, the Nevada County General Plan (NCGP), and the Nevada County Code.

4.2.1 ENVIRONMENTAL SETTING

Nevada County (County) includes 978 square miles (approximately 612,900 acres) of land within the Sierra Nevada Range and its foothills, consisting of low-lying valleys to mountainous areas.

AGRICULTURAL LANDS

FARMLAND DEFINITIONS

The agricultural productivity of a particular soil is used to characterize and classify farmland. At the federal level, there are two systems used by the Natural Resources Conservation Service (NRCS):

- **Land Capability Classification System:** This system takes into consideration soil limitations, the risk of damages when the soils are used, and the way in which soils respond to treatment.
- **Storie Index Rating System:** This system ranks soil suitability for agriculture, based on soil profile, surface soil texture, slope of the land, and other conditions such as drainage, alkali content, or erosion.

The CDOC Division of Land Resource Protection applies the NRCS soil classifications to identify and designate agricultural lands for resource management and planning. Categories mapped by the CDOC Division of Land Resource Protection's Farmland Mapping and Monitoring Program (FMMP) (CDOC, 2017a) include:

- **Prime Farmland.** Farmland that has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Farmland of Statewide Importance.** Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Unique Farmland.** Farmland of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.

- **Farmland of Local Importance.** Land of importance to the local agricultural economy as determined by each county’s board of supervisors and a local advisory committee.
- **Grazing Land.** Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen’s Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.
- **Urban and Built-up Land.** Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- **Other Land.** Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than 40 acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

The first four categories are considered “Important Farmland”. The DOC has a minimum mapping unit of ten acres, with parcels that are smaller than ten acres being absorbed into the surrounding classifications.

County Agricultural Lands

The County’s agricultural lands are located in the western portion of the County. Soils and climate in the County make it well-suited for agriculture; it is typified by a rural setting of grazing land (approximately 133,500 acres) and farmland (approximately 8,000 acres), intermingled with other uses (CDOC, 2017b). *Figure 4.2-1: FMMP Agricultural Lands Map*, depicts farmland in the County. *Table 4.2-1: Agricultural Land Uses in Nevada County 2016*, shows the readily available agricultural land uses and their acreages within the County.

Table 4.2-1: Agricultural Land Uses in Nevada County 2016

Land Use Category	Total Area Inventoried (acres)
Prime Farmland	290
Farmland of Statewide Importance	1,283
Unique Farmland	462
Farmland of Local Importance	6,043
Important Farmland Subtotal	8,078
Grazing Land	133,508
Agricultural Land Total	141,586
Source: DOC, 2017b.	
Note: The 2014-2016 Land Use Conversion data from the DOC are the most recent numbers, being published in 2017. To date, the DOC has not released numbers for 2017 or 2018.	

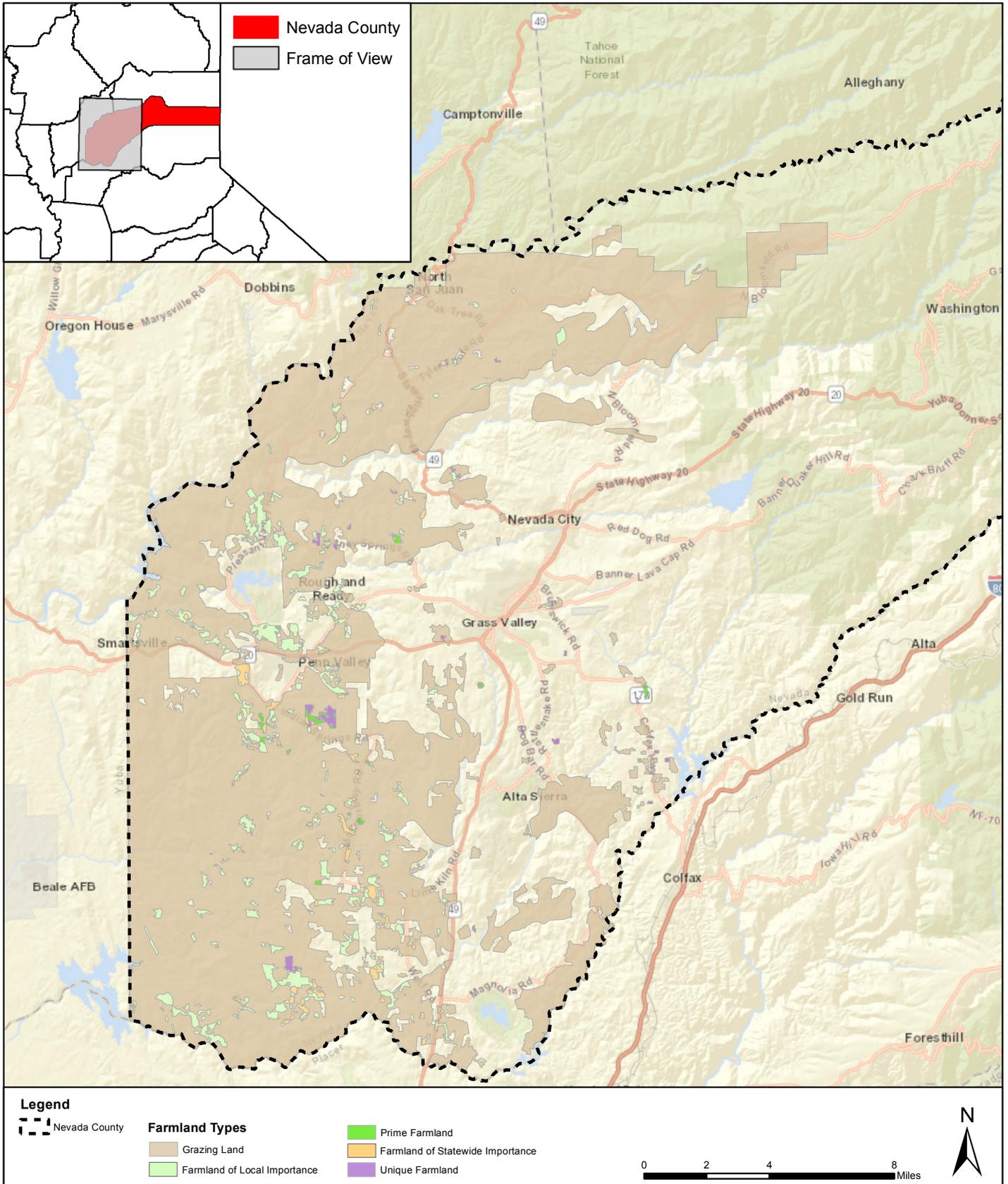


FIGURE 4.2-1: FMMP Agricultural Lands Map
Nevada County Cannabis EIR

Based on the FMMP definitions, the vast majority of agricultural land in the County is grazing land, and only about 6% of the land is considered Important Farmland. The NCGP zoning does not distinguish between grazing land and other agricultural land. The County is subject to population growth, and non-agricultural uses are encroaching on agricultural lands. Between 2014 and 2016, the County lost a net of 1,124 acres of agricultural land, primarily from the conversion of Prime Farmland and Farmland of Statewide Importance to non-agricultural uses (CDOC, 2017b).

The California Land Conservation Act of 1965, commonly known as the Williamson Act, provides property tax relief to owners of farmland and open-space land in exchange for a ten-year agreement that prevents their land from conversion to another use. The most recent status report states that, within Nevada County, there were 5,136 acres enrolled under the Williamson Act in 2014 and 5,139 acres in 2015 (CDOC, 2016). *Figure 4.2-2: Williamson Act Parcels Nevada County 2016*, provides a map of 2016 Williamson Act enrollment (most recent data available). *Figure 4.2-3: Timberland Production Zones and Forest Lands Map*, shows a map of forest land in the County.

In 2017, the total gross value of agricultural commodities produced in the County was approximately \$23.8 million, which was an increase of approximately 10 percent from the previous year (Nevada County, 2017). The top five commodities by gross value were cattle, timber, pasture/rangeland, vegetables, and wine grapes, which made up more than 91 percent (\$21.7 million) of the total crop value (Nevada County, 2017).

FOREST LANDS

Forest Land Definitions

The California Public Resources Code provides the following definitions related to forest resources:

- **Forest land.** Land that can support ten percent native tree cover of any species (including hardwoods) under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.
- **Woodland.** Forest land composed mostly of hardwood species such as oak.
- **Timberland.** Land (other than land owned by the federal government and land designated by the board as experimental forest land) which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species are determined by the board on a district basis.

The California Government Code provides the following definition:

- **Timberland production zone.** An area which has been zoned pursuant to Section 51112 or 51113 of the California Government Code and is devoted to and used for growing and harvesting timber, or for compatible uses.

County Forest Lands

Per the Nevada County Zoning Ordinance, within the boundaries of the County, there are approximately 93,000 acres zoned Timberland Production and approximately 244,000 acres zoned Forest. As described in the NCGP, forested lands within the County consist of timberlands and woodlands. The County supports an extensive commercial timber supply, the majority of which is in the central and eastern areas of the County (e.g. nearly 200,000 acres within the Tahoe National Forest [TNF]). These commercial timberlands

occur at elevations ranging from 1,200 feet above mean sea level (amsl) in the western part of the County to over 9,000 feet amsl in the eastern part of the County. Woodlands are located throughout the County, including many scattered parcels of less than 100 acres in size, as well as larger tracts located primarily north of State Route (SR) 20.

EXISTING CANNABIS CULTIVATION

Conversion of forest land to cannabis cultivation sites is prevalent in the United States. The total amount of conversion is difficult to ascertain, given the clandestine nature of these activities; however, almost half of eradication by government agencies occurs on federal lands such as national forests (Koch et al., 2016). In California, cannabis cultivation has grown exponentially in recent years (State Water Resources Control Board, 2017) and is mainly concentrated in remote forested watersheds (Carah et al., 2015). The U.S. Forest Service (USFS) reports that in 2012, approximately 83 percent of cannabis plants eradicated from national forests were in California (Office of National Drug Control Policy, 2018). Within Nevada County, there are approximately 3,500 commercial cannabis cultivation operations that are unauthorized and continue to operate illegally.

NEVADA COUNTY AREA PLANS

Higgins Corner Area Plan

The Higgins Corner Area Plan (HCAP) provides comprehensive development planning for the Higgins Corner-Lake of the Pines Village Center in unincorporated Nevada County. The primary goal of the HCAP is to retain the small-town character of the Higgins Area, while serving the basic needs of the surrounding community and provide a gateway to those entering western Nevada County. The HCAP does not designate zoning districts within the plan area that would be suitable for commercial cannabis cultivation. The parcels designated for multiple family residential, medium density multiple family residential, and residential agriculture zoning are suitable for indoor personal cannabis cultivation.

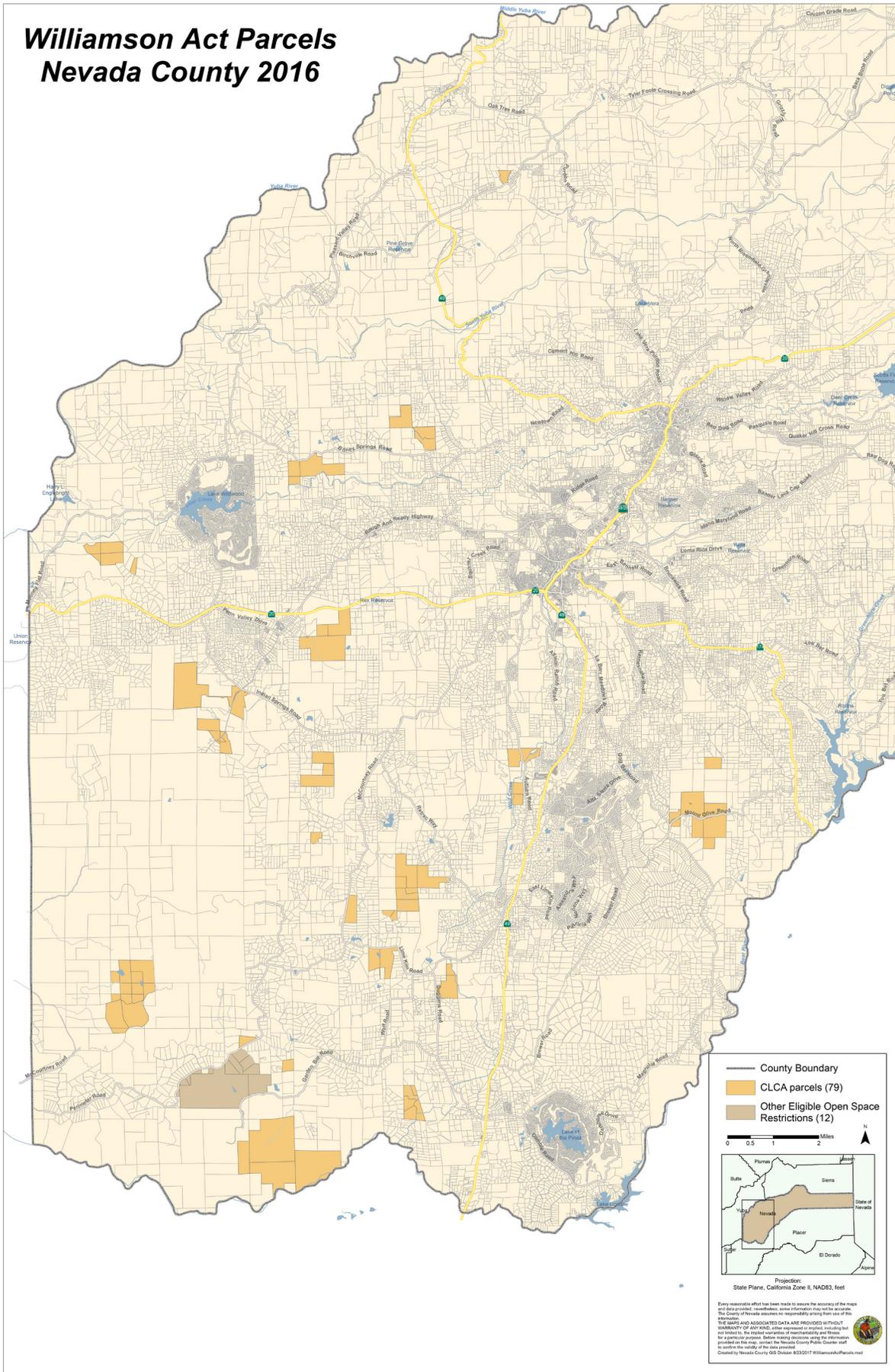
Loma Rica Drive Industrial Area Plan

The Loma Rica Drive Industrial Area Plan (LRAP) provides a framework for development and re-use of industrial lands in western Nevada County. The primary goal of the LRAP is to retain and enhance existing businesses, and to facilitate new development by evaluating the general development potential of, and by facilitating improvements within, the industrial area. The LRAP does not zone lands within the plan area that would be suitable for either commercial or personal cannabis cultivation.

North San Juan Area Plan

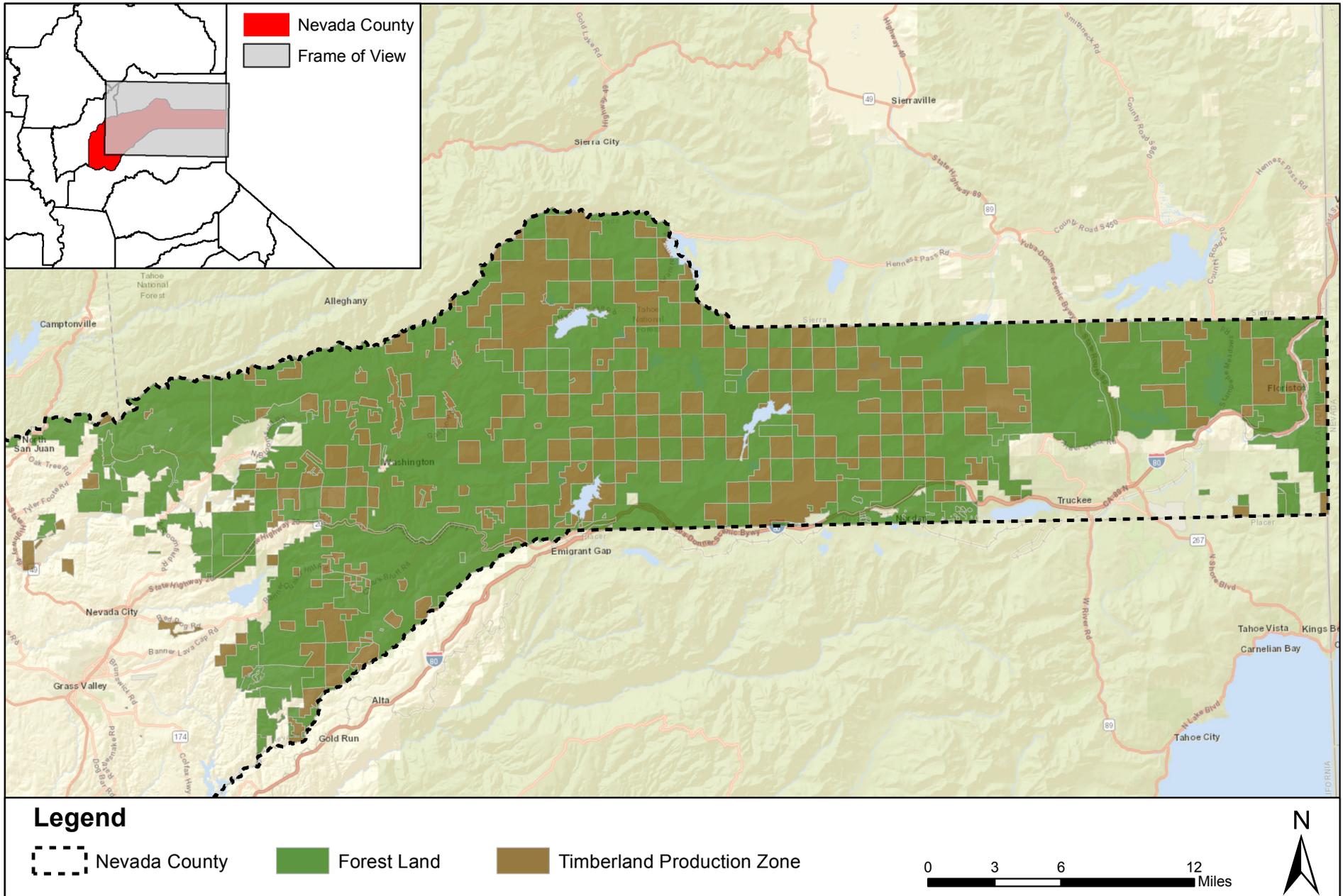
The North San Juan Area Plan (NSJAP) is a tool for achieving the vision and goals identified by the community during a series of public workshops, which are the basis for the policies, recommendation, and strategies contained within this Area Plan. The primary goal of the NSJAP is to identify the development constraints that inhibit desired economic growth within the existing community and to develop feasible solutions that will encourage a sustainable, safe environment for the residents of North San Juan and the surrounding rural community. The NSJAP encompasses approximately 23 acres and is located in the North San Juan Rural Center, which is the commercial center of the historic North San Juan townsite located in western Nevada County on SR-49. Zoning within the NSJAP are not suitable for commercial cannabis cultivation. The parcels zoned for medium density residential would be suitable for indoor personal cannabis cultivation.

Williamson Act Parcels Nevada County 2016



Source: California Department of Conservation

FIGURE 4.2-2: Williamson Act Parcels Nevada County 2016
Nevada County Cannabis EIR



Source: ESRI Online Basemap

FIGURE 4.2-3: Timberland Production Zones and Forest Lands Map
 Nevada County Cannabis EIR

Penn Valley Village Center Area Plan

The Penn Valley Village Center Area Plan (PVAP) establishes the goals and guidelines that will guide future development within the Penn Valley Village Center. The primary goal of the PVAP is to protect and enhance the rural and agricultural character of the Penn Valley Village Center. The PVAP encompasses approximately 320 acres within the Penn Valley community in western Nevada County, and includes 81 separate parcels.

The PVAP does not zone parcels within the plan area that would be suitable for commercial cannabis cultivation. The parcels zoned for multiple family residential, multiple family residential with mobile home and design combining districts, and residential agriculture are suitable for indoor personal cannabis cultivation.

Soda Springs Area Plan

The Soda Springs Area Plan (SSAP) serves as the comprehensive land use and zoning plan for the Donner Summit region and community of Soda Spring and embodies the expressed goals of residents, business owners, and elected officials and establishes concrete and achievable actions. The primary goal of the PVAP is to provide a blueprint for the ultimate development of the area derived from an assessment of current land use issues and potential solutions drawn from collaborative discussions and a careful analysis of what is needed to preserve and improve the functionality of the area. The SSAP encompasses approximately 148 acres within the Soda Springs Rural Center located on historic Donner Pass Road and includes 271 separate parcels. The SSAP implements the following General Plan designations and corresponding zoning:

The majority of the parcels zoned within the SSAP are not zoned to be suitable for commercial cannabis cultivation. The one forest zoned parcel in the SSAP would be suitable for indoor commercial cannabis cultivation. The parcels zoned for single family residential, medium density residential, high density residential, and forest are suitable for indoor personal cannabis cultivation.

4.2.2 REGULATORY SETTING

FEDERAL

Farmland Protection Policy Act (7 U.S.C. Section 4201)

Under Title 7 of the U.S. Code (U.S.C.) Section 4201, the purpose of the Farmland Protection Policy Act (FPPA) is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. "Farmland" subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up land. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to non-agricultural use and are completed by a federal agency or with assistance from a federal agency (NRCS, 2016).

The FPPA ensures that, to the extent possible, federal programs are administered to be compatible with State, local units of government, and private programs and policies to protect farmland. The FPPA does not authorize the Federal Government to regulate the use of private or non-federal land or, in any way, affect the property rights of owners.

STATE

State Cannabis Enforcement

Under Health and Safety Code Section 11362.777(a), medical cannabis is an agricultural product, and the California Department of Food and Agriculture (CDFA) is responsible for licensing medical cannabis cultivation. Adult-use cannabis is also an agricultural product (under Business and Professions Code Section 26069(a)), and its cultivation is also subject to licensing by CDFA. While the state classifies cannabis as an agricultural product, the County does not. This is discussed in more detail below

California Land Conservation Act (Williamson Act)

The California Land Conservation Act of 1965, commonly known as the Williamson Act, provides property tax relief to owners of farmland and open-space land in exchange for a ten-year agreement that prevents their land from conversion to another use. These “agriculture preserves” are contractually restricted to agricultural, public recreation, or open space uses. Contracts are automatically renewed each year unless a notice of non-renewal is filed by the landowner with the County Clerk.

The Williamson Act program is administered by the DOC, with individual contract arrangements administered by local governments. Counties may choose whether to adopt and implement the program, and participation of landowners is voluntary.

The Williamson Act is promulgated in Government Code Sections 51200-51297.4. It defines an “agricultural” use of land as any use to produce plant or animal products for commercial purposes. Within an agricultural preserve, the erection, construction, alteration, or maintenance of related facilities are determined to be compatible uses (unless otherwise decided by a local board or council). A board or council may allow other uses that would not significantly:

- compromise long-term productive agricultural capability of parcels in contracted lands;
- impair agricultural operations in parcels on contracted lands (unless they relate directly to production of commercial agricultural products, including activities such as harvesting, processing, or shipping); or
- remove adjacent contracted land from agricultural or open-space use.

A board or council adopts rules governing the administration of agricultural preserves. Each preserve specifies which uses are allowed, but in general all commercial agricultural uses are permitted. To permit and encourage compatible uses, local governments may identify compatible uses permitted with a use permit (CDOC, 2017c).

Williamson Act Guidelines

The Nevada County Board of Supervisors developed county-wide Rules & Regulations for the Williamson Act (Williamson Act Guidelines; Nevada County, 2018). These include criteria for applications for agricultural uses, the procedure for application for an agricultural preserve, and a description of how contracts are arranged between landowners and the County.

The Williamson Act Guidelines state that an agricultural preserve may be established even if it contains no prime agricultural land, provided that the land is designated for estate, rural, rural low density, or forest uses under the NCGP and subsequently restricted to agricultural, recreational, open space, or compatible uses. In general, the minimum acreage to be considered for an agricultural preserve is the

same as the minimum parcel size required in the zoning district in which the property is located. If a smaller parcel is large enough to accommodate commercial agricultural operations included in the contract without adversely affecting adjoining properties, and the parcel is legally-established, it may be considered.

Farmland Security Zone Act

The Farmland Security Zone Act is similar to the Williamson Act and was passed by the California State Legislature in 1999 to ensure that long-term farmland preservation is part of public policy. In return for a further 35 percent reduction in the taxable value of land and growing improvements (in addition to Williamson Act tax benefits), a landowner already under a Williamson Act contract can apply for Farmland Security Zone status.

Farmland Security Zone classification automatically renews each year for an additional 20 years. Contracts may be canceled, but only upon a finding that cancellation would both serve the purposes of the Williamson Act and be in the public interest (Government Code Section 51297).

Timberland Productivity Act

The California Timberland Productivity Act (Government Code Section 51100) describes how the State intends to maintain the limited supply of timberland to:

- ensure its current and continued availability for the growing and harvesting of timber and compatible uses;
- discourage premature or unnecessary conversion of timberland to urban and other uses;
- discourage expansion of urban services into timberland;
- encourage investment in timberlands based on reasonable expectation of harvest; and
- ensure that forest practice rules adopted by the State Board of Forestry and Fire Protection are followed.

Forest Practice Act

The California Forest Practice Act, adopted in 1973, requires owners of nonfederal timberland to apply for a Timberland Conversion Permit from the Director of the California Department of Forestry and Fire Protection (CalFIRE) for the conversion of timberland to another use. CalFIRE may grant exemptions for conversions of less than three acres (completed by a Registered Professional Forester). To qualify for an exemption from CalFIRE, applicants must comply with applicable provisions of the Forest Practice Act and regulations, county general plans, zoning ordinances, and other implementing ordinances of the local jurisdiction. The Forest Practice Act also governs the removal of “commercial” timber species from areas of pending new construction (CalFIRE, 2016).

Z’berg-Warren-Kenen-Collier Forest Taxation Reform Act

The Z’Berg-Warren-Keene-Collier Forest Taxation Reform Act (California Government Code Sections 5110-5119.5: Article 2), enacted in 1976, requires counties provide for the zoning of land used for growing and harvesting timber as Timberland Production Zones (TPZs). TPZs were established to preserve and protect timberland from conversion to other uses and avoid land use conflicts.

LOCAL

Nevada County General Plan (NCGP)

The NCGP identifies the County as an area that supports an extensive timber resource, and for which agriculture has always been an integral part of land use. The Forest and Agriculture Elements of the NCGP include goals, objectives, and policies with respect to agriculture and forestry resources, as identified below.

Forest Element

- Goal 15.1 Identify and maintain sustainable timber lands and resources.
- Objective 15.1 Identify and protect significant timber lands from conversion to unrelated residential and other non-timber-related uses.

Agriculture Element

- Goal 16.1 Encourage the use of significant agricultural lands and operations in *Rural Regions*.
- Objective 16.2 Maintain and encourage agriculture on lands zoned for agricultural use...while minimizing conflicts with adjacent nonagricultural lands.
- Objective 16.3 Minimize and reduce pressures to convert lands zoned for agricultural use to more intensive uses.

Nevada County Land Use and Development Code

Chapter II of the Nevada County Land Use and Development Code contains the Nevada County Zoning Ordinance, the purpose of which is to serve as the primary tool to implement and ensure consistency with the goals, objectives, and policies of the Nevada County General Plan. This zoning ordinance applies to all land uses and development within the unincorporated areas of Nevada County describes specific land uses that are allowed based on the zoning designation for a given area including agricultural lands. More specifically Section L-II 3.3 states the purpose of an agricultural use is to encourage agriculture and to promote a strong and sustainable local agricultural economy. The zoning code defines an agricultural product to include fresh fruits, vegetables, nuts, herbs, flowers, honey, poultry, fish, animal & animal products, hay and Christmas trees, but *does not include* plant nursery stock, live animals, cannabis or cannabis products, wine or wine products. Because the zoning ordinance supersedes the state code, for the purpose of the proposed NCCO, cannabis is not considered an agricultural product.

Nevada County Zoning Ordinance

According to Section L-II 2.3, Rural Districts within the County include:

- **AG (General Agricultural).** The AG District provides areas for farming, ranching, agricultural support facilities and services, lower intensity uses, and open space. It is consistent with all agricultural-oriented General Plan land use designations, as well as those designations that allow for more intensive uses. Agricultural uses are of primary importance and all other uses are secondary.

- **AE (Agricultural Exclusive).** The AE District provides for the preservation and protection of important agricultural lands that are being used for commercial agricultural production. It is consistent with all agricultural-oriented General Plan land use designations, as well as those designations that allow for more intensive uses. Agricultural uses are of primary importance and all other uses determined to be incompatible with agriculture shall not be permitted.
- **FR (Forest).** The FR District provides areas for the protection, production and management of timber, and timber support uses, including but not limited to equipment storage, temporary offices, low intensity recreational uses, and open space.
- **TPZ (Timberland Production Zone).** The TPZ District provides for prudent and responsible forest resource management and the continued use of timberlands for the production of timber products and compatible uses. It is established in conformance with the Forest Taxation Reform Act of 1976 and all requirements and restrictions therein shall apply. It is intended to be a district where the land is devoted to the growing and harvesting of timber and for such compatible uses that do not significantly detract from the use of the land for the growing and harvesting of timber.

Cultivation Restrictions

Section G-IV 5.4 identifies procedures for permitting of cannabis cultivation activities. These do not specify regulations on agricultural or forested lands.

Division 4.3 Resource Standards

Section 3.0: Project Description discusses the Comprehensive Development Standards found in Article 4 Comprehensive Site Development Standards and defined in Division 4.3 Resource Standards. In part, the purpose of the development standards is to avoid the impact of development projects on sensitive environmental resources and natural site constraints. The following discusses those standards applicable to geology and soils and specific requirements related to the protection of the associated resource(s) is discussed in *4.2.4 Potential Impacts and Mitigation Measures*, below.

Section L-II 4.3.4 Agricultural Land, important. The purpose of this section is to minimize the conversion of important agricultural areas to non-agricultural uses, the adverse impact of potentially incompatible land uses upon important agricultural land and operations, and the impairment of agricultural productivity of important agricultural land. This section provides the definitions for the types of agricultural lands as follows:

1. Non-agricultural projects shall be approved only when they are not within or adjacent to Important Agricultural Lands unless a Management Plan is prepared consistent with #2 below.
2. If the above standard effectively precludes development of the project, or adversely affects another environmentally sensitive resource, a Management Plan that avoids or minimizes impacts to the important agricultural lands may be prepared consistent with the provisions of Section 4.3.3.C. of this Article, and the following standards:
 - a. The Management Plan shall be prepared by one of the following agricultural professionals: a Registered Professional Forester, a certified rangeland manager, or an USDA/NRCS-certified conservation planner.
 - b. If the entire project site is mapped within or adjacent to important agricultural lands, the Management Plan shall provide for the development of the project on that portion of the

site determined to have the least impact on the long-term management of the agricultural resource.

- c. Management Plans shall be reviewed by the Nevada County Agricultural Commissioner.
3. Non-agricultural projects adjacent to important agricultural lands shall be designed to minimize impacts and shall be subject to the following standards:
- a. Subdivisions within or adjacent to important agricultural lands shall provide a 100-foot building setback from the property line(s) within or adjacent to the important agricultural land, limiting the use of the land to agricultural or open space uses compatible with adjacent agricultural land.
 - b. Require the recordation of a declaration acknowledging proximity to agricultural resources and the potential for conflict, which may be in the form of the Nevada County Right to Farm Notice provided in Nevada County Land Use and Development Code Section L-XIV 1.4.

Section L-II 4.3.14 Timber Resources, Important. The purpose is to protect important timber resources, and to ensure that development does not adversely impact timber resource management. An important timber resource is defined as Parcels that are 40 acres or larger, and mapped within the Forest designation, that have ideal soil characteristics for timber production, identified as those soils having a high site class or index by the Soil Surveys of Nevada County, prepared by the Soil Conservation Service and the Tahoe National Forest. The Standards related to these types of projects area as follows:

1. Projects shall be approved only when they are not within the defined area, unless a Management Plan is prepared consistent with paragraph 2 below.
2. If the above standard effectively precludes development of the project, or adversely affects another environmentally-sensitive resource, a Management Plan shall be prepared by a registered forester, a certified arborist, or a qualified botanist or biologist, that avoids or minimizes impacts to the defined area. If the entire site is within or adjacent to such an area, the plan shall provide for the development of the project on that portion of the site determined to have the least impact on the long-term management of the timber resource.

4.2.3 STANDARDS OF SIGNIFICANCE

ENVIRONMENTAL ANALYSIS

Methodology

This impact analysis is based on the county-wide agriculture and forest land information that is publicly available. The evaluation of the proposed project's effects on agriculture and forestry resources are qualitatively assessed at the program level. This EIR sets forth research criteria and report content needed to enable a project-level evaluation of resource occurrences. Any individual projects resulting from this proposed project would be required to adhere to the research criteria and report content set forth herein and could be required to undergo a separate CEQA evaluation pertaining to project-specific details. Impacts to biological resources within agricultural and forest lands are addressed separately in *Section 4.4: Biological Resources*, while impacts to hydrology and water quality within agricultural and forest lands are addressed separately in *Section 4.8: Hydrology and Water Quality*.

Because the scope of the proposed project does not include project-specific construction, modification, or replacement of cannabis cultivation facilities, construction-related impacts associated with converting agricultural land to nonagricultural uses, or forest land and timberland to non-forest uses, they are considered as part of the cumulative impact analysis and would be further evaluated on at a project-specific level, at the time of a County-issued permit.

It is assumed that cannabis cultivation activities would occur either at existing facilities or new locations, including facilities that have not yet been constructed. Although an inventory of the precise locations where activities would be conducted would be infeasible, the analysis assumes that commercial cannabis indoor, outdoor and mixed-light cultivation facilities primarily operate in agricultural, forested, or open space areas and not in urban or heavily developed areas of the County. Personal use cultivation of up to six plants could occur in residential areas.

Economic impacts are beyond the scope of environmental analysis under CEQA, except to the extent that they may lead to physical changes to the environment. This Program EIR does not consider potential economic impacts of the proposed project on agriculture and forest resources because there are no economic impacts that would result in physical impacts. Section 15131(a) of the CEQA Guidelines states:

Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.

Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on agriculture and forestry resources if it would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 426) or timberland zoned Timberland Production (as defined by Government Code section 51104(g));
- Result in the loss of forest land or conversion of forest land to non-forest use; or
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest uses.

4.2.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACT 4.2-1: CONVERT PRIME FARMLAND, UNIQUE FARMLAND, OR FARMLAND OF STATEWIDE IMPORTANCE (FARMLAND), AS SHOWN ON THE MAPS PREPARED

**PURSUANT TO THE FARMLAND MAPPING AND MONITORING PROGRAM OF
THE CALIFORNIA RESOURCES AGENCY, TO NON-AGRICULTURAL USE**

The proposed NCCO distinguishes between personal use cannabis cultivation and commercial use cannabis cultivation. For personal use cannabis cultivation, up to six cannabis plants would be allowed in eight zone classifications for indoor cultivation only: R-1 (Single Family); R-2; Medium Density); R-3 (High-Density); R-A (Residential Agriculture); AG (General Agricultural); AE (Agriculture Exclusive); FR (Forest); and TPZ (Timberland Production Zone). Within these zone classifications, personal use cannabis would be allowed to be cultivated as follows:

- R-1, R-2, R-3 and R-A (Residential Designation):
 - Indoors: Maximum of six plants, mature or immature.
 - Mixed Light, or Outdoors: Cultivation is prohibited.
- R-A (Rural and Estate Designation (Parcels of 5 acres or more)):
 - Indoors, Mixed-Light and Outdoors or a combination of methods: a maximum of six plants, mature or immature
- AG, AE, FR, and TPZ (Parcels of equal to or less than one to three acres):
 - Indoors: a maximum of six plants, mature or immature.
 - Mixed-Light and Outdoors: Cultivation is prohibited
- AG, AE, FR, and TPZ (Parcels of greater than one to three acres):
 - Indoors, Mixed-Light and Outdoors: a maximum of six plants, mature or immature.

Commercial cannabis cultivation would be allowed in three zone classifications: AG (General Agriculture); AE (Agriculture Exclusive); and FR (Forest). Within these zone classifications, commercial cannabis cultivation could occur only on a parcel or premises with a legally permitted residence or on a vacant parcel adjacent to a parcel with a legally permitted residence under common ownership. In addition, a maximum of three permits would be issued per person or entity for purpose of engaging in commercial cannabis cultivation activities. It should be noted that the proposed project would not allow cultivation within 1,000 feet of sensitive uses, as defined in *Section 3: Project Description*. Commercial cannabis would be allowed to be cultivated within the appropriate zone classifications as follows:

- Parcels two (2) acres or less: No commercial cannabis cultivation is allowed.
- Parcels between 2 and 4.99 acres: Indoor cultivation only for a maximum of 500 square feet (sf) of canopy
- Parcels between 5 and 9.99 acres: Indoor, Mixed Light, and Outdoor cultivation is allowed for a total of up to a maximum of 2,500 sf of canopy.
- Parcels between 10 and 19.99 acres: Indoor, Mixed Light, and Outdoor cultivation is allowed for a total of up to a maximum of 5,000 sf of canopy.
- Parcels 20 acres or greater: Indoor, Mixed Light, and Outdoor cultivation is allowed for a total of up to a maximum of 10,000 sf of canopy.

While personal use cannabis cultivation would be allowed within the AG (General Agriculture) and AE (Agriculture Exclusive) zone classifications, the maximum cultivation is six plants. This is similar to a personal garden and would continue to allow the property to be used for traditional agricultural purposes.

Thus, the impacts to conversion of farmland to nonagricultural uses for personal cultivation would be minimal. Impacts would be less than significant.

Commercial cannabis cultivation that would be allowed under the proposed project could result in the conversion of farmland to non-agricultural uses within agricultural zone classifications AG (General Agriculture) and AE (Agriculture Exclusive). Some of these areas are on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as defined by CDOC (refer to *Figure 4.2-1: Agricultural Lands Map*). The County contains a total of 2,035 acres of land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, approximately 0.3 percent of the total land area of the County.

Per the California Health and Safety Code (HSC) Section 11362.77(a) and the California Business and Professions Code Section 26067(a), cannabis is defined as an agricultural product. If conversion impacts were evaluated under the State Code, the cultivation of cannabis on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be an acceptable use of agricultural lands. Therefore, while the County does not recognize cannabis as an agricultural product, provided the cannabis cultivation does not introduce hardscape, a permanent conversion of farmland would not result. Thus, the state licensing process for cannabis cultivation would ensure agricultural purposes are carried out, and these actions would not convert prime soils to non-agricultural uses under state standards.

However, the proposed NCCO does not identify cannabis as an agricultural project and would supersede the state code. Under the proposed project, "Cannabis" shall have the same meaning as that set forth in Health and Safety Code Section 11018, as may be amended. The proposed NCCO states that as defined in this Article [cannabis] shall not be considered an agricultural activity, operation or facility under Civil Code Section 3482.5 or an Agricultural Product as defined in Section L-II 4.3 of the Nevada County Land Use and Development Code, or an Agricultural Operation as defined in Sections L-II 4.3 of the Nevada County Land Use and Development Code, and does not include hemp, hemp products, or hemp by-products.

Land Use and Development Code Implementation

Cannabis cultivation under a CCP could have a maximum cannabis canopy of 2,500 sf and maximum accessory structure square foot of 625 feet. It is not anticipated that an individual project of this limited scope and scale would result in removal or conversion of a substantial amount of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. It is further anticipated that most proposed commercial cannabis cultivation of this size could be planned to avoid farmlands. Nonetheless, if construction of permanent structures is allowed, some cultivation activities under CCPs could result in a conversion. It should be noted that although cannabis is not recognized as an agricultural project based on County standards, use of farmland for outdoor cannabis cultivation would not result the placement of permanent hardscapes. While outdoor cultivation would result in a temporary use not considered by the County to be an agricultural project, it would not result in a permanent conversion. Once removed, areas used for outdoor cannabis cultivation would be usable for a County recognized agricultural purpose. It is possible; however, that accessory structures proposed for projects under a CCP, could result in the creation of hardscape or a solid foundation resulting in a conversion of farmland.

Therefore, while the majority of individual project impacts to designated farmland are anticipated to be less than significant or not occur, considering the total number of possible CCP projects within the county, the potential for impacts would remain. To reduce the impacts, Mitigation Measure AG-1 would amended the proposed NCCO to include a requirement for project applicants under CCPs to account for any Prime

Farmland, Unique Farmland, or Farmland of Statewide Importance. If any of these resources are located on the project site and any permanent accessory structure or proposed improvements such as driveways or staging areas are proposed on the area, the application would not be processed until the applicant revises the site plan. The site plan would be required show impacts to Prime Farmland, Unique Farmland, and Farmland of Statewide Importance would be minimized to the maximum extent practicable.

This mitigation measure would not apply to any cannabis cultivation project if the project would not result in a permanent conversion of farmland. If accessory or other permanent structures are not proposed this measure would not apply, and impacts would be less than significant. Implementation of this mitigation measure would minimize that potential impacts from CCPs proposing accessory structures to less than significant.

For cannabis cultivation projects between 2,500 sf and 10,000 sf of canopy an ADP would be required, and the initial screening would be done by the County Planning Department. County staff would review application materials, including the proposed cultivation areas and overall site plans, including locations green houses, hoop houses, accessory structures, etc. If a permanent conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would occur compliance with Mitigation Measure AG-1 would be required. As discussed above, Mitigation Measure AG-1 would amended the proposed NCCO to include a requirement for project commercial cannabis applicants to account for Prime Farmland, Unique Farmland, or Farmland of Statewide Importance occurring on the project site. If designated farmland is located on the project site and any permanent accessory structure or proposed improvements are proposed on the area, the application would not be processed until the applicant revises the site plan. The revised site plan would be required to demonstrate impacts in Prime Farmland, Unique Farmland, and Farmland of Statewide Importance has been minimized to the maximum extent practicable.

Projects under ADP permits also would be required to comply with the development standards contained in Section L-II 4.3.4 Important Agricultural Lands, if applicable. For some of cultivation projects, it may not be possible to avoid or substantially lessen impacts associated with the permanent loss of some farmland. For example, if an entire parcel is mapped on designated farmland and a permanent structure is proposed, an additional loss of 2,500 sf could occur (accessory structure of 25% of 10,000sf is 2,500 sf). In these instances, in accordance with Section L-II 4.3.3 General Provisions, described in its entirety in *Section 3.0: Project Description*, compensation may be used and is appropriate in instances when it is not realistic or effective to avoid or minimize impacts. Compensation is defined as replacing or providing a substitute resource. Compensation may include the on-site or off-site provision or creation, protection, and maintenance of a resource or habitat.

The LUDC Section L-II 4.3.4 Agricultural Lands, Important, of the LUDC provides an additional tool to minimize the conversion of important agricultural areas to non-agricultural uses and reduce the impairment of agricultural productivity. This section of the LUDC provides a mechanism for implementation of a management plan for Agricultural and Forest Resources. The management plan would carry provisions to compensate for impacts that would become conditions of approval of the cultivation projects under and ADP. Lands used as compensation for project impacts would be acquired through fee title or conservation easements with the express purpose of maintenance as compensation for impacts to agriculture in perpetuity. Holders of title or easements shall be restricted to mutually agreed upon agencies or private, non-profit conservation entities approved by the Planning Agency.

The management plan would be subject to approval by the Planning Agency and because the plan would be associated with an allowable use (commercial cannabis cultivation upon approval of the proposed

project), they could be reviewed and approved by the Planning Director. The management plan would be required to include the following but not be limited to:

- Identification of the resource or constraint;
- A discussion supporting the proposed design as the preferred alternative, rather than avoidance of the resource or constraint altogether;
- Description of the mitigation or compensation measures and the extent to which they will offset or minimize the impact to the resource or the risk;
- Time frame for implementation;
- Success standards;
- Monitoring of mitigation and compensation measures, and other conditions of approval, to assess effectiveness;
- Remediation measures in the event of failure of mitigation or compensation, or other conditions of approval; and
- A performance bond.

If the future project is not exempt from CEQA, an Initial Study would be required, and a public hearing held before the Planning Commission would be required. In addition, the management plan proposed in conjunction with a future cannabis cultivation project would be considered by the hearing body reviewing the project.

For existing cannabis cultivation projects that are part of the estimated 3,500 currently operating in the County, if a previous conversion of farmland has occurred, that conversion would be considered part of the existing baseline and is not considered an impact for the purposes of this CEQA analysis. All existing cultivation projects that apply for either a CCP or ADP; would be required to comply with the listed requirements and mitigation as applicable.

As discussed above, in most cases it is expected that impacts to important farmland would be reduced to less than significant through avoidance and/or minimization. It should be noted, and as discussed above, outdoor cultivation would not result in the placement of permanent structures and these activities, were they to occur on designated farmland, could be readily converted to a County designated agricultural use. Additionally, most greenhouse and hoop-houses used for cannabis do not incorporate the use or large building pads. Most of these uses occur over the existing soils or incorporate permeable ground covers. In these instances, the permanent loss of designated farmland would be minimized.

However; although replacement in accordance with County standards would reduce impacts to agricultural land, it is not possible to account for the total potential permanent conversion of farmland to a non-agricultural use that could occur under the proposed NCCO. There is no feasible mitigation to further reduce this impact. Therefore, impacts would be significant and unavoidable.

MITIGATION MEASURE

MM AG-1 **Farmland Resources:** Amend the proposed NCCO, to require all commercial cannabis applications to show on project site plans any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance based on the most recent available mapping provided by the California Department of Conservation (CDOC) Farmland Mapping & Monitoring Program (FMMP) that exist on the project site. If such lands exist, the applicant shall show on the site plan(s) that any proposed accessory structure and related improvements (e.g.,

driveways, staging areas, etc.) have been located on the property in which impacts to mapped farmlands are reduced to the maximum extent practicable.

Future cannabis cultivation project applications would be evaluated for compliance with the County Land Use and Development Code, all applicable State laws, and ordinance requirements of any affected special districts related to agricultural lands. As discussed above, the proposed project includes a mitigation measure and would, when appropriate, require a management plan to reduce impacts to important agricultural lands for certain projects under an ADP. While impacts associated with CCPs would be reduced to less than significant, a significant impact from potential conversions under an ADP would remain. No additional mitigation measures have been identified that would reduce potential impacts to less than significant.

Level of Significance after Mitigation

Significant and unavoidable.

IMPACT 4.2-2: CONFLICT WITH EXISTING ZONING FOR AGRICULTURAL USE, OR A WILLIAMSON ACT CONTRACT

The California Land Conservation Act of 1965, commonly known as the Williamson Act, provides property tax relief to owners of farmland and open-space land in exchange for a ten-year agreement that prevents their land from conversion to another use. Under the Williamson Act, these “agricultural preserves” are defined as areas devoted to agricultural use (producing plant or animal products for commercial purposes), recreational use, and/or open-space use. The most recent status report states that, within Nevada County, there were 5,136 acres enrolled under the Williamson Act in 2014 and 5,139 acres in 2015 (CDOC, 2016). *Figure 4.2-2: Williamson Act Parcels Nevada County 2016*, provides a map of 2016 Williamson Act enrollment (most recent data available). To enter into a legal

Cannabis cultivation operations in Nevada County would comply with local jurisdiction requirements, including zoning ordinances. The proposed NCCO distinguishes between personal use cannabis cultivation and commercial use cannabis cultivation. For personal use cannabis cultivation, cannabis plants would be allowed in Rural Districts, for indoor cultivation only. According to Section L-II 2.3 of the Nevada County Zoning Ordinance, Rural Districts within the County include AG (General Agricultural), AE (Agricultural Exclusive), FR (Forest), and TPZ (Timberland Production Zone). Commercial cannabis cultivation would be allowed in three of the following zone classifications: AG (General Agricultural); AE (Agriculture Exclusive); and FR (Forest).

Per the California Health and Safety Code (HSC) Section 11362.77(a) and the California Business and Professions Code Section 26067(a), cannabis is defined as an agricultural product. As such, the commercial cultivation of cannabis on a Williamson Act agricultural preserve, by definition, is an acceptable use. Cultivation of personal use cannabis on an agricultural preserve would be allowed provided the area remain devoted to agricultural, recreational, and/or open-space uses as defined in the Act. No other provisions in the Williamson Act prohibit the growth of cannabis on land enrolled in the Williamson Act. Therefore, the proposed project would not conflict with existing zoning for agricultural uses, nor conflict with a Williamson Act contract based on the State regulations. However, the implementation of Williamson Act contracts in Nevada County is administered by the Board of Supervisors. As the NCCO does not recognize commercial cannabis as an agricultural product, future commercial cannabis

operations pursuant to the NCCO would not be eligible for Williamson Act contracts. Potential impacts are considered less than significant and no mitigation is required.

MITIGATION MEASURES

No Mitigation is required

Level of Significance after Mitigation

Impacts are less than significant.

IMPACT 4.2-3: CONFLICT WITH EXISTING ZONING FOR, OR CAUSE REZONING OF, FOREST LAND (AS DEFINED IN PUBLIC RESOURCES CODE SECTION 12220(G)), TIMBERLAND (AS DEFINED BY PUBLIC RESOURCES CODE SECTION 4526), OR TIMBERLAND ZONED TIMBERLAND PRODUCTION (AS DEFINED BY GOVERNMENT CODE SECTION 51104(G))

The California Public Resources Code defines forest land as land that can support ten percent native tree cover and allows for management of resources for public benefit and defines timberland as land for growing commercial trees. The California Government Code defines zoned timberland production as zones devoted to growing and harvesting timber, and compatible uses.

The County supports an extensive commercial timber supply, the majority of which is in the central and eastern areas of the County (refer to *Figure 4.2-3: Timberland Production Zones and Forest Lands Map*). The Nevada County Zoning Ordinance defines Timberland Production zones as separate from Forest zones. Within the boundaries of the County, there are approximately 93,000 acres zoned Timberland Production and approximately 244,000 acres zoned Forest.

The California Forest Practice Act, adopted in 1973, requires all commercial harvesting operations be subject to environmental review, and landowners submit Timber Harvest Plans to CalFIRE. To convert timberland to another use, owners of nonfederal timberland apply for a Timberland Conversion Permit from the Director of CalFIRE. CalFIRE may grant exemptions for conversions of less than three acres (completed by a Registered Professional Forester).

Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cannabis cultivation less than 2,500 sf, and an ADP for cannabis cultivation 2,500 sf to 10,000 sf. 10,000 sf of canopy is the maximum allowed under the proposed NCCO. Conformance to applicable regulations for a CCP or an ADP would be verified during the planning review process and approval could be made by the Planning Director.

All applicants for either a CCP or ADP would be required to comply with local requirements including zoning districts designated for forest land and timberland production and obtain all appropriate permits from CAL FIRE. The proposed project does not include nor propose any zone changes. For projects under a CCP, conformance would initially be verified by the Building Department, and for projects under an ADP the Planning Department would conduct the initial review. Therefore, the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned timberland production.

As it may apply to projects under an ADP, Section L-II 4.3.14 of the Land Use and Development Code discusses important Timber Resources and includes development standards for projects in areas with

important timber resources. The standard requires that projects within an important timber resource only be approved when a management plan is prepared in accordance with the following:

- If the above standard effectively precludes development of the project, or adversely affects another environmentally-sensitive resource, a management plan would be prepared by a registered forester, a certified arborist, or a qualified botanist or biologist, that avoids or minimizes impacts to the defined area. If the entire site is within or adjacent to such an area, the plan would provide for the development of the project on that portion of the site determined to have the least impact on the long-term management of the timber resource.

As part of the CCP and ADP process, the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with federal, State, and local laws and regulations, and for ADPs, as applicable, Section L-II 4.3.14 Timber Resources. As discussed above, all existing and future commercial cultivation projects would be subject to a design review process at which time the project would be evaluated for conformance with these codes.

There are approximately 3,500 existing cannabis cultivation projects that currently operating in the County and part of the baseline analysis. To become legal operations these cultivators would have to apply for either a CCP or ADP and would have to provide location and zoning information. If they are not in an allowed zone they would not be eligible for a permit and would be subject to code enforcement pursuant to Section 1.23 of the NCCO. Impacts are considered less than significant.

MITIGATION MEASURES

No mitigation is required.

Level of Significance after Mitigation

Impacts are less than significant.

IMPACT 4.2-4: RESULT IN THE LOSS OF FOREST LAND OR CONVERSION OF FOREST LAND TO NON-FOREST USE

According to the California Public Resources Code, forest land is defined as land that can support ten percent native tree cover of any species (including hardwoods) under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

According to the Nevada County Zoning Ordinance, forest land in the County is characterized by the following two zones:

- **FR (Forest).** The FR District provides areas for the protection, production and management of timber, and timber support uses, including but not limited to equipment storage, temporary offices, low intensity recreational uses, and open space.
- **TPZ (Timberland Production Zone).** The TPZ District provides for prudent and responsible forest resource management and the continued use of timberlands for the production of timber products and compatible uses. It is established in conformance with the Forest Taxation Reform Act of 1976 and all requirements and restrictions therein shall apply. It is intended to be a district where the land is devoted to the growing and harvesting of timber and for such compatible uses that do not significantly detract from the use of the land for the growing and harvesting of timber.

The proposed NCCO distinguishes between personal use cannabis cultivation and commercial use cannabis cultivation. For personal use cannabis cultivation, up to six cannabis plants would be allowed in FR and TPZ zone classifications, for indoor cultivation only. Within these zone classifications, personal use cannabis would be allowed to be cultivated as follows:

- Parcels of equal to or less than one to three acres:
 - Indoors: a maximum of six plants, mature or immature.
 - Mixed-Light and Outdoors: Cultivation is prohibited
- Parcels of greater than one to three acres:
 - Indoors, Mixed-Light and Outdoors: a maximum of six plants, mature or immature.

Commercial cannabis cultivation would be allowed in FR zone classifications, but not in TPZs. Within FR zones, commercial cannabis cultivation could occur only on a parcel or premises with a legally permitted residence or on a vacant parcel adjacent to a parcel with a legally permitted residence under common ownership. In addition, a maximum of three permits would be issued per person or entity for purpose of engaging in commercial cannabis cultivation activities. It should be noted that the proposed project would not allow cultivation within 1,000 feet of sensitive uses, as defined in *Section 3: Project Description*. Commercial cannabis would be allowed to be cultivated within the FR zone classifications as follows:

- Parcels two (2) acres or less: No commercial cannabis cultivation is allowed.
- Parcels between 2 and 4.99 acres: Indoor cultivation only for a maximum of 500 square feet (sf) of canopy
- Parcels between 5 and 9.99 acres: Indoor, Mixed Light, and Outdoor cultivation is allowed for a total of up to a maximum of 2,500 sf of canopy.
- Parcels between 10 and 19.99 acres: Indoor, Mixed Light, and Outdoor cultivation is allowed for a total of up to a maximum of 5,000 sf of canopy.
- Parcels 20 acres or greater: Indoor, Mixed Light, and Outdoor cultivation is allowed for a total of up to a maximum of 10,000 sf of canopy.

While personal use cannabis cultivation would be allowed within the FR and TPZ zone classifications, the maximum cultivation is six plants. This is similar to a personal garden and would continue to allow the property to be maintained as forest. Thus, the impacts to conversion of forest land to non-forest uses for personal cultivation would be minimal. Impacts would be less than significant.

Commercial cannabis cultivation that would be allowed through implementation of the proposed project could result in the conversion of forest land to non-forest uses throughout the project site, within FR zones. The County contains approximately 244,000 acres zoned FR, approximately 40 percent of the total land area of the County. Under the proposed project, measures would be implemented to reduce the loss of forest resources, however conversion could still occur.

Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cannabis cultivation projects less than 2,500 sf and maximum accessory structure sf of 625 feet. It is not anticipated that an individual project of this limited scope and scale would result in removal conversion of a substantial amount of forest land. It is further anticipated that most proposed commercial cannabis cultivation of this size could be planned to avoid forest land. Nonetheless, some cultivation activities under CCPs could require and result in a conversion. It should be noted that although cannabis cultivation

would require removal of timber, unless permanent accessory structure(s) are built, the cultivation activities themselves would result in a temporary loss of forest production land because the area could later be returned to forest uses.

Under an ADP cannabis cultivation between 2,500 sf to 10,000 sf of canopy would be allowed. An accessory structure up to 25% of total canopy also could be constructed. Under an ADP, initial project review would be done by the County Planning Department. County staff would verify that based on application materials, including the proposed cultivation and site plans, location of improvements such as green houses or hoop houses, or other accessory structures and related improvements if a conversion of forest lands would occur. Although cannabis cultivation under an ADP could require removal of timber, unless permanent appurtenant structure(s) are built, the cultivation activities themselves would result in a temporary loss of forest production land because the area could later be returned to forest uses.

The majority of individual project impacts to forest lands are anticipated to be avoided during the planning and review process by changing the location of proposed cultivation areas or structures. This would result in less than significant impacts. However, considering the total number of possible new CCP and ADP permits, potential impacts would remain. To reduce the impacts, Mitigation Measure AG-2 would be implemented to amend the proposed NCCO to include a requirement for project applicants that are proposing removal of timber, under both CCPs and ADPs, to consult with a registered professional forester (RPF) to ensure conform to the Forestry Practices Act and CALFIRE requirements.

For existing cannabis cultivation projects that are part of the estimated 3,500 currently operating in the County, if a previous conversion of timberland has occurred, that conversion would be considered part of the existing baseline and is not considered an impact for the purposes of this CEQA analysis. All existing cultivation projects that apply for either a CCP or ADP; would be required to comply with the listed requirements and CALFIRE permitting process. This would ensure that no new impacts from existing cannabis cultivation in areas zoned for timber production result from implementation of the proposed NCCO.

In most cases it is expected that impacts to forest lands would be reduced to less than significant through avoidance and/or minimization. However; in some instances, trees and/or timber would require removal to create open ground with adequate sunlight that could be used for cannabis cultivation. If trees are removed for a commercial purpose (sale, barter, exchange, or trade), the harvest would be considered a commercial operation and subject to the Forest Practices Act (FPA) and Rules. Such a harvest would be required to be conducted by a Licensed Timber Operator (LTO) who are licensed by CALFIRE. If trees removed to facilitate cannabis cultivation will not be used for subsequent commercial purposes an LTO to remove the trees is not required and the work may be completed by a licensed party and no additional permitting is required through CALFIRE.

For project that would fall under the requirements of the FPA, and harvested timber will be used for a commercial purpose a LTO would be required to complete the work. Based on the area of the overall harvest operations, applicants would be required to apply for, using a Registered Professional Forester, a Less-Than-3-Acre Conversion Exemption under the requirements of 14 CCR§1104 1(a) would be required. If the harvest is greater than 3 acres, a Timber Harvest Plan would be required. If the harvest is greater than 40 acres, the applicant would be required to have a Timber Harvest Plan prepared and comply with Section L-II 4.3.14 Timber Resources. Although it is not known how many acres of trees may be removed or would require removal to enable cannabis cultivation in forested areas, it is presumed that the proposed NCCO could result in a substantial amount of timber being harvested.

It should be noted that while some commercial and non-commercial timber harvests are expected, and the areas under cannabis cultivation would represent a conversion of the land to non-timber uses, the conversion to cultivation would not be permanent. Cultivation areas would remain arable and usable for future growth and eventual harvest of timber. If future projects harvest timber to construct permanent appurtenant structures, although minimal in comparison to the overall size of the site, a permanent conversion would occur in this regard. As discussed above, all commercial timber harvests would be required to go through FPA process and be permitted or exempted through CALFIRE. In addition, if a harvest did occur over greater than 40 acres, County regulations would be applicable.

Therefore, although most cultivation sites would largely remain available to future timber uses, areas would not be immediately returned to use for timber production. In addition, due to the scope and scale of the proposed project, timber harvests and the temporary conversions could occur over a large area. Future project applications must be determined to be in compliance with the County Land Use and Development Code, all applicable State laws including the FPA, and ordinance requirements of any affected special districts to be approved for a CCP or an ADP. However, even with conformance to the listed regulations, the proposed project could result in a permanent loss of forest lands and impacts on forest lands would be considered significant and unavoidable. No mitigation is available to further reduce impacts to less than significant.

MITIGATION MEASURES

No feasible mitigation measures have been identified.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and unavoidable.

IMPACT 4.2-5: INVOLVE OTHER CHANGES IN THE EXISTING ENVIRONMENT WHICH, DUE TO THEIR LOCATION OR NATURE, COULD RESULT IN THE CONVERSION OF FARMLAND TO NON-AGRICULTURAL USE OR CONVERSION OF FOREST LAND TO NON-FOREST USE

The California Land Conservation Act of 1965, commonly known as the Williamson Act, provides property tax relief to owners of farmland and open-space land in exchange for a ten-year agreement that prevents their land from conversion to another use. Under the Williamson Act, these “agricultural preserves” are defined as areas devoted to agricultural use (producing plant or animal products for commercial purposes), recreational use, and/or open-space use. Per the California Health and Safety Code (HSC) Section 11362.77(a) and the California Business and Professions Code Section 26067(a), cannabis is defined as an agricultural product. Thus, cannabis cultivation on an agricultural preserve would be consistent with the Williamson Act.

However, cannabis cultivation on existing farmland or forest land would be considered a conversion of use, as described above in Impact 4.2-1 and Impact 4.2-4. As discussed in Impact 4.2-1, the proposed project would potentially result in a significant impact on agricultural resources due to the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to non-agricultural use. Converting agricultural land to nonagricultural land could result in new development in the vicinity of a future cannabis cultivation and thus direct conversion could lead to new development in the area and further loss of agricultural lands. In most instances, the use of the listed development standards to avoid or minimize impacts are expected to reduce impacts to less than significant. However, in some instances

conformance with the development standards would require cultivation projects to attempt to reduce the severity of the impact of the loss of farmland by replacement and protection of agricultural lands at a ratio of 1:1 (one acre protected for every one-acre of farmland on the project site that is converted to another use). This replacement would be implemented as part of a MPAFR for agricultural and forest resources, but only preserve farmland that otherwise might be converted; it would not create new farmland. Impacts are considered significant in this regard.

As discussed in Impact 4.2-4, the proposed project would allow for cannabis cultivation within FR (Forest) zoned land; however, no commercial cultivation would be allowed in the TPZ (Timberland Production Zone) areas. Commercial cannabis cultivation that would be allowed through implementation of the proposed project could result in the conversion of forest land to non-forest uses throughout the project site, within FR zones. The County contains approximately 244,000 acres zoned FR, approximately 40 percent of the total land area of the County. Under the proposed project, in most instances, the use of the listed development standards to avoid or minimize impacts are expected to reduce impacts to less than significant, however conversions could still occur. However, in some instances impacts to forest resources would not be avoided or reduced and conformance with the development standards would require cultivation projects to attempt to reduce the severity of the impact of the loss of forest land through replacement and protection. The forest lands would be required to be replaced at a ratio of 1:1 (one acre protected for every one-acre of forest on the project site that is converted to another use). This replacement would be implemented as part of a MPAFR for agricultural and forest resources, but only preserve forest lands that otherwise might be converted; it would not create new forest lands. Impacts are considered significant in this regard.

There is a possibility that other farmland could be converted to cannabis cultivation or to other non-agricultural or non-forest uses. In addition, the proposed project could involve other changes in the existing environment which could result in conversion of farmland to non-agricultural use or forest land to non-forest use. These include effects on new development, population growth, and water supply.

The proposed project could result in new development in the vicinity of future cannabis cultivation operations (including facilities not related to cannabis cultivation), leading to further loss of agricultural/forest lands. This EIR does not include approvals for site development activities and any site-specific impacts must be determined by the local authority reviewing the action. Future cannabis cultivation is not anticipated to result in a substantial population increase, as further explained in *Section 4.12: Population and Housing*. Therefore, the proposed project would not result in an increase in development related to population increases. This would not result in the conversion of farmland to non-agricultural use or forest land to non-forest use.

In cases when replacement farmland or forest lands are required, although this would reduce impacts, even with the replacement and continued preservation, it is not possible to reduce the permanent impact of the loss. While outdoor cultivation areas would be readily convertible back to use for a recognized County agricultural projects, and although greenhouses and hoop-houses would not typically use permanent foundations and would generally use permeable materials as ground cover, permanent conversions may still occur. There is no feasible mitigation to further reduce this impact. Impacts would be significant and unavoidable.

MITIGATION MEASURES

Future cannabis cultivation project applications would be evaluated for compliance with the County Land Use and Development Code, all applicable State laws, and ordinance requirements of any affected special districts related to forest lands. As discussed above, the proposed project includes mitigation measure AG-1 that would be required for certain projects upon review of a CCP or ADP. Although these measures are expected to substantially reduce the level of impact on agricultural and forest resources, a significant impact would remain. No additional mitigation measures are available or proposed.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and unavoidable.

4.3 AIR QUALITY AND GREENHOUSE GAS EMISSIONS

This section describes the affected environment and regulatory setting for air quality and greenhouse gas (GHG) emissions in Nevada County (County). It also describes the impacts on air quality and GHG emissions that would result from implementation of the proposed Nevada County Commercial Cannabis Cultivation Ordinance (proposed NCCO or proposed project), and mitigation to reduce identified impacts where feasible. Information in this section is based on methodologies and assumptions recommended by the Northern Sierra Air Quality Management District (NSAQMD) and information from recent environmental documents prepared for the County.

Information in this section is based on *Section 3: Project Description*, and the following emissions estimation tools: California Emissions Estimator (CalEEMod) version 2016.3.2 (California Air Pollution Control Officers [CAPCOA] 2017) as well as the California Environmental Quality Act (CEQA) Guidelines, NSAQMD Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects (NSAQMD, 2016), and Nevada County's Code, Title 3, Land Use and Development Code, Chapter XIII, California Environmental Quality Act.

4.3.1 ENVIRONMENTAL SETTING

TOPOGRAPHY AND METEOROLOGY

Nevada County is located in the Mountain Counties Air Basin (Basin), which lies in the northeastern region of the State of California. The Basin is bounded to the east by the Sierra Nevada Mountain Range, to the west by the Coastal Mountain Range and to the south by the Tehachapi Mountains. The proposed project consists of areas area is located on the western slope of the Sierra Nevada Mountains in generally hilly mountainous terrain with thick forest covering most of the terrain. The western third of Nevada County consists of the valley region which is generally flat approaching the western county boundary but with rolling hills in the transition from mountains.

Nevada County exhibits a large variation in terrain and consequently experiences variations in climate, both of which affect air quality. The eastern portions of the County include steeper slopes of the Sierra Nevada Range and river canyons. The warmest areas within the County are found at the lower elevations along the west side of the County, while the coldest average temperatures are found at the highest elevations in the Sierra Nevada Mountains.

The prevailing wind direction over the County is westerly. However, the terrain of the area has a great influence on local winds, which results in a wide variability in wind direction. Afternoon winds are generally channeled up-canyon, while nighttime winds generally flow down-canyon. Winds are, in general, stronger in spring and summer and lower in fall and winter. Periods of calm winds and clear skies in fall and winter often result in strong, ground-based inversions forming in mountain valleys. These layers of very stable air restrict the dispersal of pollutants, trapping these pollutants near the ground, representing the worst conditions for local air pollution.

AIR POLLUTANTS OF CONCERN

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state laws. These regulated air pollutants are known as “criteria air pollutants” and are categorized into primary and secondary pollutants.

Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NOX), sulfur dioxide (SO₂), coarse particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), and lead are primary air pollutants. Of these, CO, NOX, SO₂, PM₁₀, and PM_{2.5} are criteria pollutants. ROG and NOX are criteria pollutant precursors and go on to form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. For example, the criteria pollutant ozone (O₃) is formed by a chemical reaction between ROG and NO_x in the presence of sunlight. O₃ and nitrogen dioxide (NO₂) are the principal secondary pollutants. Sources and health effects commonly associated with criteria pollutants are summarized in *Table 4.3-1, Air Contaminants and Associated Public Health Concerns*.

Table 4.3-1: Air Contaminants and Associated Public Health Concerns

Pollutant	Major Man-Made Sources	Human Health Effects
Particulate Matter (PM ₁₀ and PM _{2.5})	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; asthma; chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility.
Ozone (O ₃)	Formed by a chemical reaction between reactive organic gases/volatile organic compounds (ROG or VOC) ¹ and nitrous oxides (NO _x) in the presence of sunlight. Motor vehicle exhaust industrial emissions, gasoline storage and transport, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
Sulfur Dioxide (SO ₂)	A colorless gas formed when fuel containing sulfur is burned and when gasoline is extracted from oil. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision,

Table 4.3-1: Air Contaminants and Associated Public Health Concerns

Pollutant	Major Man-Made Sources	Human Health Effects
		causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO ₂)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone. Contributes to global warming and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Lead	Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Due to the phase out of leaded gasoline, metals processing is the major source of lead emissions to the air today. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.	Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ.
<p>Notes:</p> <p>1. Volatile Organic Compounds (VOCs or Reactive Organic Gases [ROG]) are hydrocarbons/organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases including ROGs and VOCs. Both ROGs and VOCs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. The major sources of hydrocarbons are combustion engine exhaust, oil refineries, and oil-fueled power plants; other common sources are petroleum fuels, solvents, dry cleaning solutions, and paint (via evaporation).</p> <p>Source: California Air Pollution Control Officers Association, Health Effects, http://www.capcoa.org/health-effects/, Accessed November 14, 2018.</p>		

EXISTING AIR QUALITY

The United States Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established health-based ambient air quality standards for criteria air pollutants listed in Table 4.3-1 above. The EPA sets National Ambient Air Quality Standards (NAAQS) for criteria pollutants. Primary standards provide public health protection, including protecting the health of “sensitive” populations, such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. In addition, CARB has established California Ambient Air Quality Standards (CAAQS) standards for these pollutants, as well as for sulfate (SO₄), visibility reducing particles, hydrogen sulfide (H₂S), and vinyl chloride. California standards are generally stricter than national standards. The NAAQS and the CAAQS are shown in *Table 4.3-2: National and California Ambient Air Quality Standards*.

Table 4.3-2: National and California Ambient Air Quality Standards

Pollutant	Averaging Time	National Standards ^a	California Standards ^b
Ozone (O ₃)	8 Hours	0.070 ppm (137 µg/m ³) ^c	0.070 ppm (137 µg/m ³)
	1 Hour	-- ^d	0.09 ppm (180 µg/m ³)
Carbon Monoxide (CO)	8 Hours	9 ppm (10 mg/m ³)	9.0 ppm (10 mg/m ³)
	1 Hour	35 ppm (40 mg/m ³)	20 ppm (23 mg/m ³)
Nitrogen Dioxide (NO ₂)	Annual Average	0.053 ppm (100 µg/m ³)	0.030 ppm (56 µg/m ³)
	1 Hour	100 ppb (188.68 µg/m ³)	0.18 ppm (338 µg/m ³)
Sulfur Dioxide (SO ₂)	3 Hour	0.5 ppm (1,300 µg/m ³)	--
	24 Hours	0.14 ppm (365 µg/m ³)	0.04 ppm (105 µg/m ³)
	1 Hour	75 ppb (196 µg/m ³)	0.25 ppm (655 µg/m ³)
Particulate Matter (PM ₁₀)	Annual Arithmetic Mean	-- ^e	20 µg/m ³
	24 Hours	150 µg/m ³	50 µg/m ³
Particulate Matter—Fine (PM _{2.5})	Annual Arithmetic Mean	12.0 µg/m ³	12 µg/m ³
	24 Hours	35 µg/m ³	--
Sulfates (SO ₄)	24 Hours	--	25 µg/m ³
Lead ^f (Pb)	Rolling Three Month Average	0.15 µg/m ³	--
	30-day Average	--	1.5 µg/m ³
Hydrogen Sulfide (H ₂ S)	1 Hour	--	0.03 ppm (42 µg/m ³)
Vinyl Chloride (chloroethene)	24 Hours	--	0.01 ppm (26 µg/m ³)
Visibility-Reducing Particles (VRPs)	8 Hours	--	-- ^g

Source EPA, 2016a; CARB, 2016,

ppm = parts per million; ppb = parts per billion; mg/m³ = milligrams per cubic meter; µg/m³ = micrograms per cubic meter.

^a The NAAQS, other than O₃ and those based on annual averages, are not to be exceeded more than once a year. The O₃ standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than 1. The National Primary Standards, which reflect the levels of air quality necessary, with an adequate margin of safety to protect the public health, are presented.

^b The CAAQS for O₃, CO, SO₂ (1-hour and 24-hour standards), NO₂, PM₁₀, and PM_{2.5} are values not to be exceeded. All other California standards shown are values not to be equaled or exceeded.

^c On October 1, 2015, the U.S. EPA Administrator signed the notice for the final rule to revise the primary and secondary NAAQS for O₃. The U.S.EPA is revising the levels of both standards from 0.075 ppm to 0.070 ppm, and retaining their indicators (O₃), forms (fourth-highest daily maximum, averaged across three consecutive years) and averaging times (eight hours). The U.S. EPA is in the process of submitting the rule for publication in the Federal Register. The final rule will be effective 60 days after the date of publication in the Federal Register. The lowered national 8-hour standards are reflected in the table.

^d One-hour O₃ standard revoked effective June 15, 2005.

^e Annual PM₁₀ standard revoked effective December 18, 2006.

^f On October 15, 2008, U.S.EPA strengthened the lead standard.

^g Statewide VRP Standard (except Lake Tahoe Air Basin): Particles in sufficient amounts to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

Table 4.3-3: Nevada County Attainment Status, presents the air quality attainment status for the Nevada County. Nevada County is in nonattainment for applicable state and federal ozone standards, in nonattainment for state PM10 standards and unclassified for federal PM10 standards, and unclassified/attainment for state and federal PM2.5 standards.

Table 4.3-3: Nevada County Attainment Status

Pollutant	Designation/Classification	
	National Standards ^a	State Standards ^b
O ₃ : 1 hour	No Federal Standard ^c	Nonattainment
O ₃ : 8 hour	Nonattainment	Nonattainment
PM ₁₀	Unclassified	Non-attainment
PM _{2.5}	Unclassifiable/Attainment	Unclassified
CO	Unclassifiable/Attainment	Unclassified

Source: NSAQMD, 2016.
^a See 40 CFR Part 81.
^b See CCR Title 17 Sections 60200–60210.
 In addition, the entire district is either Attainment or Unclassified for all State and federal NO₂, SO₂, Pb, H₂S, visibility reducing particles, sulfates, and vinyl chloride standards.

AMBIENT AIR MONITORING

The CARB and NSAQMD monitor the local ambient air quality in and around the proposed project area. CARB monitors ambient air quality at approximately 250 air monitoring stations across the state. Air quality monitoring stations typically measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations.

The CARB and NSAPCD operate a network of air monitoring stations in Nevada County. The monitoring station network provides air quality monitoring data, including real-time meteorological data and ambient pollutant levels, as well as historical data. Data was collected from monitoring stations at Grass Valley’s Litton Building, White Cloud Mountain and Truckee Fire Station.

Table 4.3-4: Existing Air Quality Monitoring Data in Proposed Project Area presents the measured ambient pollutant concentrations and the exceedances of state and federal standards that have occurred at the above-mentioned monitoring stations located within Nevada County from 2015 through 2017, the most recent years for which data are available.

Table 4.3-4: Existing Air Quality Monitoring Data in Proposed Project Area

Pollutant and Monitoring Station Location	Maximum Concentration			Days Exceeding Standard		
	2015	2016	2017	2015	2016	2017
O₃ – 1-hour CAAQS (0.09 ppm)						
Grass Valley – Litton Building	0.101	0.101	0.108	4	6	13
White Cloud Mountain	0.082	*	*	0	*	*
O₃ – 8-hour CAAQS (0.07 ppm)						
Grass Valley – Litton Building	0.093	0.097	0.099	30	46	85
White Cloud Mountain	0.078	*	*	6	*	*
O₃ – 8-hour NAAQS (0.07 ppm)						
Grass Valley – Litton Building	0.092	0.097	0.099	26	39	78

Table 4.3-4: Existing Air Quality Monitoring Data in Proposed Project Area

Pollutant and Monitoring Station Location	Maximum Concentration			Days Exceeding Standard		
	2015	2016	2017	2015	2016	2017
White Cloud Mountain	0.078	*	*	5	*	*
PM10 – 24-hour CAAQS (50 µg/m3) – no data						
PM10 – 24-hour NAAQS (150 µg/m3) – no data						
PM2.5 - 24-hour NAAQS (35 µg/m3)						
Grass Valley – Litton Building.	11.5	11.7	68.1	0	0	3
Truckee -- Fire Station	12.8	22.1	31.8	*	0	*
Source: CARB, 2018a Notes: ppm= parts per million * There was insufficient (or no) data available to determine the value.						

SENSITIVE RECEPTORS

The NSAQMD identifies a sensitive receptor as a location where human populations (especially children, senior citizens and sick persons) are present. Additionally, a sensitive receptor location occurs where there is a reasonable expectation of continuous human exposure to pollutants, according to the averaging period for ambient air quality standards, such as 24 hours, eight hours or one hour. Examples of sensitive receptors are residences, hospitals and schools; industrial and commercial uses are not considered sensitive receptors.

GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

Certain gases in the earth’s atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth’s surface temperature. Solar radiation enters the earth’s atmosphere from space. A portion of the radiation is absorbed by the earth’s surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead “trapped,” resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth’s climate, known as global climate change or global warming.

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot

be pinpointed, more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms of carbon sequestration. Of the total annual human-caused CO₂ emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO₂ emissions remains stored in the atmosphere (IPCC 2013). Table 4.3-5: Description of Greenhouse Gases, describes the primary GHGs attributed to global climate change, including their physical properties.

Table 4.3-5: Description of Greenhouse Gases

Greenhouse Gas	Description
Carbon Dioxide (CO ₂)	CO ₂ is a colorless, odorless gas that is emitted naturally and through human activities. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. The largest source of CO ₂ emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, and industrial facilities. The atmospheric lifetime of CO ₂ is variable because it is readily exchanged in the atmosphere. CO ₂ is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining Global Warming Potentials for other GHGs.
Nitrous Oxide (N ₂ O)	N ₂ O is largely attributable to agricultural practices and soil management. Primary human-related sources of N ₂ O include agricultural soil management, sewage treatment, combustion of fossil fuels, and adipic and nitric acid production. N ₂ O is produced from biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N ₂ O is approximately 120 years. The Global Warming Potential of N ₂ O is 298.
Methane (CH ₄)	Methane, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Methane is the major component of natural gas, about 87 percent by volume. Human-related sources include fossil fuel production, animal husbandry, rice cultivation, biomass burning, and waste management. Natural sources of CH ₄ include wetlands, gas hydrates, termites, oceans, freshwater bodies, non-wetland soils, and wildfires. The atmospheric lifetime of CH ₄ is about 12 years and the Global Warming Potential is 25.
Hydrofluorocarbons (HFCs)	HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is increasing, as the continued phase out of Chlorofluorocarbons (CFCs) and HCFCs gains momentum. The 100-year Global Warming Potential of HFCs range from 124 for HFC-152 to 14,800 for HFC-23.
Perfluorocarbons (PFCs)	PFCs have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Global Warming Potentials range from 6,500 to 9,200.
Carbon Dioxide (CO ₂)	CO ₂ is a colorless, odorless gas that is emitted naturally and through human activities. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. The largest source of CO ₂ emissions globally is the combustion of fossil fuels such as coal, oil, and

Table 4.3-5: Description of Greenhouse Gases

Greenhouse Gas	Description
	gas in power plants, automobiles, and industrial facilities. The atmospheric lifetime of CO ₂ is variable because it is readily exchanged in the atmosphere. CO ₂ is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining Global Warming Potentials for other GHGs.
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production in 1987. Global Warming Potentials for CFCs range from 3,800 to 14,400.
Sulfur Hexafluoride (SF ₆)	SF ₆ is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas. The Global Warming Potential of SF ₆ is 23,900.
Hydrochlorofluorocarbons (HCFCs)	HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, HCFCs are subject to a consumption cap and gradual phase out. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The 100-year Global Warming Potentials of HCFCs range from 90 for HCFC-123 to 1,800 for HCFC-142b.
Nitrogen trifluoride	Nitrogen trifluoride (NF ₃) was added to Health and Safety Code section 38505(g)(7) as a GHG of concern. This gas is used in electronics manufacture for semiconductors and liquid crystal displays. It has a high global warming potential of 17,200.
Source: Compiled from U.S. EPA, Overview of Greenhouse Gases, April 11, 2018 (https://www.epa.gov/ghgemissions/overview-greenhouse-gases); U.S. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016, 2018; IPCC Climate Change 2007: The Physical Science Basis, 2007; National Research Council, Advancing the Science of Climate Change, 2010; U.S. EPA, Methane and Nitrous Oxide Emission from Natural Sources, April 2010.	

4.3.2 REGULATORY SETTING

FEDERAL

CRITERIA AIR POLLUTANTS

Clean Air Act

The EPA oversees implementing national air quality programs. EPA's air quality mandates are drawn primarily from the federal Clean Air Act (CAA), enacted in 1970. Congress made the most recent major amendments to the CAA in 1990.

The principal air quality regulatory mechanism on the federal level is the Clean Air Act (CAA) and, in particular, the 1990 amendments to the CAA and the NAAQS that it establishes. These standards identify levels of air quality for "criteria" pollutants that are considered the maximum levels of ambient (background) air pollutants considered safe, with an adequate margin of safety, to protect the public health and welfare. The criteria pollutants are O₃, CO, NO₂ (a form of NO_x), SO₂ (a form of SO_x), PM₁₀, PM_{2.5}, and lead (Pb); refer to Table 4.3-2, *National and California Ambient Air Quality Standards*. The EPA

also has regulatory and enforcement jurisdiction over emission sources beyond state waters (outer continental shelf) and those that are under the exclusive authority of the federal government, such as aircraft, locomotives and interstate trucking.

The U.S. EPA sets federal vehicle and stationary source emission standards and oversees approval of all State Implementation Plans (SIP), as well as providing research and guidance in air pollution programs. The SIP is a state-level document that identifies all air pollution control programs within California that are designed to help the State meet the NAAQS. The SIP is modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies. EPA is responsible for reviewing all SIPs to determine whether they conform to the mandates of the CAA and its amendments, and whether implementation will achieve air quality goals. If EPA determines a SIP to be inadequate, a federal implementation plan that imposes additional control measures may be prepared for the nonattainment area. If an approvable SIP is not submitted or implemented within the mandated time frame, sanctions may be applied to transportation funding and stationary air pollution sources in the air basin.

Toxic Air Contaminants and Hazardous Air Pollutants

Toxic air contaminants (TACs), or in federal parlance, hazardous air pollutants (HAPs) are a defined set of airborne pollutants that may pose a present or potential hazard to human health. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, the TACs high toxicity or health risk may pose a threat to public health even at low concentrations. A wide range of sources, from industrial plants to motor vehicles, emit TACs. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage; or short-term acute effects such as eye watering, respiratory irritation (a cough), running nose, throat pain, and headaches.

For evaluation purposes, TACs are separated into carcinogens and non-carcinogens based on the nature of the physiological effects associated with exposure to the pollutant. Carcinogens are assumed to have no safe threshold below which health impacts would not occur. This contrasts with criteria air pollutants for which acceptable levels of exposure can be determined and for which the ambient standards have been established (Table 4.3-1). Cancer risk from TACs is expressed as excess cancer cases per one million exposed individuals, typically over a lifetime of exposure.

EPA and, in California, CARB regulate HAPs and TACs, respectively, through statutes and regulations that generally require the use of the maximum available control technology or best available control technology for toxics to limit emissions.

GREENHOUSE GASES

To date, no national standards have been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at a project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

Clean Air Act

The Federal Clean Air Act (FCAA) does not specifically regulate GHG emissions; however, on April 2, 2007 the U.S. Supreme Court in *Massachusetts v. U.S. Environmental Protection Agency*, determined that GHGs are pollutants that can be regulated under the FCAA. The EPA adopted an endangerment finding and cause or contribute finding for GHGs on December 7, 2009. Under the endangerment finding, the Administrator found that the current and projected atmospheric concentrations of the six, key, well-mixed GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) threaten the public health and welfare of current and future generations. Under the cause or contribute finding, the Administrator found that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare.

Based on these findings, on April 1, 2010, the EPA finalized the light-duty vehicle rule controlling GHG emissions. This rule confirmed that January 2, 2011, is the earliest date that a 2012 model year vehicle meeting these rule requirements may be sold in the United States. On May 13, 2010, the EPA issued the final GHG Tailoring Rule. This rule set thresholds for GHG emissions that define when permits under the Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. Implementation of the federal rules is expected to reduce the level of emissions from new motor vehicles and large stationary sources.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020, and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

Federal Vehicle Standards

In response to the U.S. Supreme Court ruling discussed above, the George W. Bush Administration issued Executive Order 13432 in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, President Barack Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and

NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO₂ in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking. On January 12, 2017, the EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program.

Clean Power Plan and New Source Performance Standards for Electric Generating Units

On October 23, 2015, the EPA published a final rule (effective December 22, 2015) establishing the carbon pollution emission guidelines for existing stationary sources: electric utility generating units (80 FR 64510–64660), also known as the Clean Power Plan. These guidelines prescribe how states must develop plans to reduce GHG emissions from existing fossil-fuel-fired electric generating units. The guidelines establish CO₂ emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel-fired electric generating units: (1) fossil-fuel-fired electric utility steam-generating units and (2) stationary combustion turbines. Concurrently, the EPA published a final rule (effective October 23, 2015) establishing standards of performance for GHG emissions from new, modified, and reconstructed stationary sources: electric utility generating units (80 FR 64661–65120). The rule prescribes CO₂ emission standards for newly constructed, modified, and reconstructed affected fossil-fuel-fired electric utility generating units. The U.S. Supreme Court stayed implementation of the Clean Power Plan pending resolution of several lawsuits. Additionally, in March 2017, President Trump directed the EPA Administrator to review the Clean Power Plan in order to determine whether it is consistent with current executive policies concerning GHG emissions, climate change, and energy.

Presidential Executive Order 13693

Presidential Executive Order 13693, Planning for Federal Sustainability in the Next Decade, signed in 2015, seeks to maintain federal leadership in sustainability and greenhouse gas emission reductions. Its goal is to reduce agency Scope 1 and 2 GHG emissions by at least 40 percent by 2025, foster innovation, reduce spending, and strengthen communities through increased efficiency and improved environmental performance. Sustainability goals are set for building efficiency and management, energy portfolio, water use efficiency, fleet efficiency, sustainable acquisition and supply chain greenhouse gas management, pollution prevention, and electronic stewardship.

Presidential Executive Order 13783

Presidential Executive Order 13783, Promoting Energy Independence and Economic Growth (March 28, 2017), orders all federal agencies to apply cost-benefit analyses to regulations of GHG emissions and evaluations of the social cost of carbon, nitrous oxide, and methane.

STATE

CALIFORNIA AIR RESOURCES BOARD

CARB is responsible for the coordination and oversight of State and local air pollution control programs in California. The CAAQS were established in 1969 pursuant to the Mulford-Carrell Act. These standards, included with the NAAQS in Table 4.3-2 (above), are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility-reducing particulates, hydrogen sulfide and sulfates.

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark AB 32 California Global Warming Solutions Act of 2006, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 building efficiency standards and Title 20 appliance energy standards, were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

CARB SCOPING PLAN

CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business-as-usual"). The Scoping Plan evaluates opportunities for sector-specific reductions; integrates early actions by CARB and the State's Climate Action Team and additional GHG reduction measures by both entities; identifies additional measures to be pursued as regulations; and outlines the adopted role of a cap-and-trade program. Additional development of these measures and adoption of the appropriate regulations occurred through the end of 2013. Key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33 percent by 2020.
- Developing a California cap-and-trade program that links with other programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions (adopted in 2011).
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets (several Sustainable Communities Strategies have been adopted).
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, heavy-duty truck measures, the Low Carbon Fuel Standard

(amendments to the Pavley Standard adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (adopted 2009).

- Creating targeted fees, including a public goods charge on water use, fees on gasses with high global warming potential, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation (CARB 2008).

In 2012, CARB released revised estimates of the expected 2020 emissions reductions. The revised analysis relied on emissions projections updated in light of current economic forecasts that accounted for the economic downturn since 2008, reduction measures already approved and put in place relating to future fuel and energy demand, and other factors. This update reduced the projected 2020 emissions from 596 million metric tons of CO₂e (MMTCO₂e) to 545 MMTCO₂e. The reduction in forecasted 2020 emissions means that the revised business-as-usual reduction necessary to achieve AB 32's goal of reaching 1990 levels by 2020 is now 21.7 percent, down from 29 percent. CARB also provided a lower 2020 inventory forecast that incorporated State-led GHG emissions reduction measures already in place. When this lower forecast is considered, the necessary reduction from business-as-usual needed to achieve the goals of AB 32 is approximately 16 percent.

CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes the most recent science related to climate change, including anticipated impacts to California and the levels of GHG emissions reductions necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32.

In 2016, the Legislature passed SB 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017 CARB adopted a second update to the Scoping Plan. The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and, support the Clean Power Plan and other Federal actions.

STATE AIR TOXICS PROGRAM

Toxic air contaminants are another group of pollutants of concern in California. There are hundreds of different types of toxic air contaminants, with varying degrees of toxicity. Sources of toxic air contaminants include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle engine exhaust. Public exposure to toxic air contaminants can result from emissions from normal operations, as well as accidental releases of hazardous materials during upset spill conditions. Health effects of toxic air contaminants include cancer, birth defects, neurological damage and death.

California regulates toxic air contaminants through its air toxics program, mandated in Chapter 3.5 (Toxic Air Contaminants) of the Health and Safety Code (Health and Safety Code Section 39660 et seq.) and Part 6 (Air Toxics "Hot Spots" Information and Assessment) (Health and Safety Code Section 44300 et seq.). CARB, working in conjunction with the State Office of Environmental Health Hazard Assessment (OEHHA), identifies toxic air contaminants. Air toxic control measures may then be adopted to reduce ambient concentrations of the identified toxic air contaminant to below a specific threshold, based on its effects on health, or to the lowest concentration achievable through use of best available control technology for

toxics. The program is administered by CARB. Air quality control agencies, including the NSAQMD, must incorporate air toxic control measures into their regulatory programs or adopt equally stringent control measures as rules within six months of adoption by CARB.

GREENHOUSE GAS EMISSIONS

Assembly Bill 32 (California Global Warming Solutions Act)

Assembly Bill (AB) 32 instructs the CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. AB 32 directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. It set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

Senate Bill 32 (California Global Warming Solutions Act of 2006: emissions limit). Signed into law in September 2016, Senate Bill (SB) 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

SB 375 (The Sustainable Communities and Climate Protection Act of 2008). Signed into law on September 30, 2008, SB 375 provides a process to coordinate land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction goals established by AB 32. SB 375 requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, aligns planning for transportation and housing, and creates specified incentives for the implementation of the strategies.

AB 1493 (Pavley Regulations and Fuel Efficiency Standards). California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the U.S. EPA's denial of an implementation waiver. The U.S. EPA subsequently granted the requested waiver in 2009, which was upheld by the by the U.S. District Court for the District of Columbia in 2011. The regulations establish one set of emission standards for model years 2009–2016 and a second set of emissions standards for model years 2017 to 2025. By 2025, when all rules will be fully implemented, new automobiles will emit 34 percent fewer CO₂e emissions and 75 percent fewer smog-forming emissions.

SB 1368 (Emission Performance Standards). SB 1368 is the companion bill of AB 32, which directs the California Public Utilities Commission to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 limits carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. The new law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. The California Public Utilities Commission adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, of 1,100 lbs. CO₂ per megawatt-hour (MWh).

SB 1078 and SBX1-2 (Renewable Electricity Standards). SB 1078 requires California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which

established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Executive Order S-21-09 also directed CARB to adopt a regulation by July 31, 2010, requiring the State's load serving entities to meet a 33 percent renewable energy target by 2020. CARB approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23. SBX1-2, which codified the 33 percent by 2020 goal.

SB 350 (Clean Energy and Pollution Reduction Act of 2015). Signed into law on October 7, 2015, SB 350 implements the goals of Executive Order B-30-15. The objectives of SB 350 are to increase the procurement of electricity from renewable sources from 33 percent to 50 percent (with interim targets of 40 percent by 2024, and 25 percent by 2027) and to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation. SB 350 also reorganizes the Independent System Operator (ISO) to develop more regional electricity transmission markets and improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs through the use of executive orders. Although not regulatory, they set the tone for the State and guide the actions of state agencies.

Executive Order S-3-05. Executive Order S-3-05 was issued on June 1, 2005, which established the following GHG emissions reduction targets:

- By 2010, reduce greenhouse gas emissions to 2000 levels.
- By 2020, reduce greenhouse gas emissions to 1990 levels.
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07. Issued on January 18, 2007, Executive Order S 01-07 mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. CARB adopted the Low Carbon Fuel Standard on April 23, 2009.

Executive Order S-13-08. Issued on November 14, 2008, Executive Order S-13-08 facilitated the California Natural Resources Agency development of the 2009 California Climate Adaptation Strategy. Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order S-14-08. Issued on November 17, 2008, Executive Order S-14-08 expands the State's Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. CARB adopted the "Renewable Electricity Standard" on September 23, 2010, which requires 33 percent renewable energy by 2020 for most publicly owned electricity retailers.

Executive Order S-21-09. Issued on July 17, 2009, Executive Order S-21-09 directs CARB to adopt regulations to increase California's Renewable Portfolio Standard (RPS) to 33 percent by 2020. This builds upon SB 1078 (2002), which established the California RPS program, requiring 20 percent renewable energy by 2017, and SB 107 (2006), which advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II.

Executive Order B-30-15. Issued on April 29, 2015, Executive Order B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MMCO_{2e}. The 2030 target acts as an interim goal on the way to achieving reductions of 80 percent below 1990 levels by 2050, a goal set by Executive Order S-3-05. The executive order also requires the State's climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among other provisions. With the enactment of SB 32 in 2016, the Legislature codified the goal of reducing GHG emissions by 2030 to 40 percent below 1990 levels.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 Appliance Efficiency Regulations. The appliance efficiency regulations (California Code of Regulations Title 20, Sections 1601-1608) include standards for new appliances. Twenty-three categories of appliances are included in the scope of these regulations. These standards include minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances.

Title 24 Building Energy Efficiency Standards. California's Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations Title 24, Part 6), was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2016 Building Energy Efficiency Standards approved on January 19, 2016 went into effect on January 1, 2017. The 2019 Building Energy Efficiency Standards were adopted on May 9, 2018 and take effect on January 1, 2020. Under the 2019 standards, homes will use about 53 percent less energy and nonresidential buildings will use about 30 percent less energy than buildings under the 2016 standards.

Title 24 California Green Building Standards Code. The California Green Building Standards Code (California Code of Regulations Title 24, Part 11 code) commonly referred to as the CALGreen Code, is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code went into effect January 1, 2017.

LOCAL**NORTHERN SIERRA AIR QUALITY MANAGEMENT DISTRICT (NSAQMD)**

Air districts have the primary responsibility to control air pollution from all sources other than those directly emitted from motor vehicles, which are the responsibility of CARB and the EPA. Air districts adopt and enforce rules and regulations to achieve state and federal ambient air quality standards and enforce applicable state and federal law.

The local air quality agency is the NSAQMD. The NSAQMD is comprised of three contiguous, mountainous, rural counties in northeastern California (Nevada, Sierra, and Plumas counties). The NSAQMD is part of the Mountain Counties Air Basin. The NSAQMD adopts and enforces controls on stationary sources of air pollutants through its permit and inspection programs and regulates open burning. Through its permitting powers, the NSAQMD enforces limitations for emission of criteria and toxic air contaminants. Other NSAQMD responsibilities include monitoring air quality, preparation of clean air plans and responding to citizen air quality complaints.

According to NSAQMD, significant impacts are projects that would generate 136 tons per day of ROG, NOX or PM10. Among the criteria used by the NSAQMD to evaluate a project's air quality impact is the project's potential to emit pollutants exceeding the established threshold amounts for individual pollutants. Level A thresholds require only standard mitigation applicable to all projects, which the NSAQMD typically recommends. Level B thresholds represent a "cumulatively considerable" emission that requires additional mitigation. Level C thresholds require the use of all feasible and reasonable mitigation strategies. Unmitigated emissions above 136 pounds per day are considered to represent a significant impact. In cases when predicted emissions are projected to be below the Level C thresholds but exceeding the Level A thresholds (thereby placing project related air quality impacts at Level B), the project would be considered potentially significant, subject to the recommended measures of NSAQMD's Mitigation for Use During Design and Construction Phases for Classifications as Level B Threshold (2009). Implementation of the appropriate NSAQMD mitigation from this collection of measures would reduce Level B air quality impacts to a less than significant level. Refer to Table 4.3-6, NSAQMD Thresholds for Significant Contribution to Regional Air Pollution.

Table 4.3-6: NSAQMD Thresholds for Significant Contribution to Regional Air Pollution

Criteria Pollutant	Threshold (pounds per day)		
	Level A	Level B	Level C
Oxides of Nitrogen (NO _x)	24	24-136	136
Reactive Organic Gases (ROG)	24	24-136	136
Particulate Matter (PM ₁₀)	79	79-136	136

Source: NSAQMD, Draft Guidelines for Assessing Air Quality Impacts of Land Use Projects, 2016, Accessed November 14, 2018.

The NSAQMD has not yet established significance thresholds for greenhouse gas emissions from project operations.

NEVADA COUNTY GENERAL PLAN

The Air Quality Element and the Circulation Element of the Nevada County General Plan includes several goals, objectives and policies with respect to air quality, including the following:

Air Quality Element

- Goal 14.1: Attain, maintain, and ensure high air quality.
- Objective 14.1: Establish land use patterns that minimize impacts on air quality.
- Policy 14.1: Cooperate with the Air Quality Management District (currently the NSAQMD), during review of development proposals. As part of the site plan review process, require applicants of all subdivisions, multi-family, commercial and industrial development projects to address cumulative and long-term air quality impacts, and request the District enforce appropriate land use regulations to reduce air pollution.
- Objective 14.2: Implement standards that minimize impacts on and/or restore air quality.
- Policy 14.2: Include the following as part of the Comprehensive Site Development Standards:
- a. Encourage maximized solar access, where feasible, and consistent with the maintenance of scenic values, in new subdivision designs to optimize energy efficiency.
 - b. Require all installations of solid fuel-burning devices comply with the current Federal EPA emission standards.
 - c. Require installation of masonry and zero-clearance fireplaces in new construction to comply with the current EPA Phase particulate emission limits.
- Policy 14.3: Where it is determined necessary to reduce short-term and long-term cumulative impact, the County shall require all new discretionary projects to offset any pollutant increases. Wherever possible, such offsets shall benefit lower-income housing.
- Policy 14.4: Encourage and cooperate with the Northern Sierra Air Quality Management District, or any successor agency, to:
- a. Work with the County, local public utility districts, other public agencies and the private sector to encourage the development and implementation of educational and incentive programs to encourage energy conservation, house weatherization, solar energy use in new and existing buildings and provide air quality monitoring and advisory programs (e.g., daily standard air pollution index data).
 - b. Develop a community biomass program in cooperation with the Nevada County Department of Sanitation and existing homeowner associations, and provide incentives for composting, mulching,

grinding, cogeneration, feedstocks and chipping in-lieu of outdoor burning.

- c. Adopt control measures to reduce pollutant emissions from open burning.
- d. Develop a program to regulate and control fugitive dust emissions from construction projects.
- e. Identify and establish visibility standards for air quality in the County.

Policy 14.5: Encourage and cooperate with the Northern Sierra Air Quality Management District, or any successor agency, to develop and implement a long-term monitoring program to quantify air quality in the County. The County shall work with the District to identify areas for monitoring and to develop an implementation program to begin on-site monitoring upon project application where a proposal will result in an increase of more than 25 tons per year of non-attainment pollutants (or precursors). The County will also cooperate with the District in developing a monitoring program for carbon monoxide emissions at key intersections as a basis for consideration of short- to long-term air quality in the preparation of the County Road Improvement Program.

Policy 14.6: For new construction, the County shall prohibit the installation of non-EPA certified and non-EPA exempt solid fuel burning devices.

Policy 14.7: The County shall cooperate with all appropriate agencies and other regional transportation agencies that include surrounding counties to develop programs designed to maximize the participation of employers in employer-operated van pool and/or ride sharing for employees, and mass transit service for both employees and customers.

Policy 14.7A: The County shall, as part of its development review process, ensure that proposed discretionary developments address the requirements of NSAQMD Rule 226.

Policy 14.7B: The County shall, as part of its Road Improvement Program, consider the benefits to air quality from the paving of unpaved roads.

Objective 14.3: Identify regional impacts and coordinate with other agencies to achieve attainment.

Policy 14.8: Consider adoption of Joint Powers Agreements or similar legal mechanisms with other counties located within Nevada County's regional sphere to comprehensively address regional air quality impacts as a result of development in each County.

Circulation Element

Goal RD-4.1: Reduce dependence on the automobile.

Goal RD-4.2: Increase the availability of alternative modes of transportation.

- Goal RD-4.3: Decrease vehicle miles traveled while encouraging increased transit ridership and vehicle occupancy.
- Goal RD-4.4: Encourage land use patterns that reduce the need for new roadways and promote the use of alternative transportation modes.
- Policy RD-4.3.4: Minimize the need to commute by:
- a. Providing for an adequate amount of residential, commercial, and industrial designations in proper balance, as shown on the General Plan Land Use Maps; and
 - b. Encouraging Economic Development and Public Facility policies that support local employment opportunities.

Environmental Protection

- Goal EP-4.3: To the extent feasible, encourage the reduction of Greenhouse Gas emissions during the design phase of construction projects.
- Goal EP-4.4: To the extent feasible, encourage the development of energy efficient circulation patterns.

Housing Element

Environmental Conservation

- Goal EC-8.1: Provide for a variety of alternative housing options and the use of alternative, innovative, and appropriate technology.
- Goal EC-8.2: To the extent feasible, encourage the reduction of Greenhouse Gas Emissions during the design phase of construction projects.
- Policy EC-8.6.1: Encourage energy efficient site design in new land divisions, particularly in larger subdivisions and planned developments where there is sufficient area for alternate designs as follows:
- a. Encourage lot patterns that maximize proper solar orientation;
 - b. Utilize interconnected streets and traffic calming features to reduce fuel consumption and encourage walkability;
 - c. Provide adequate on-site usable open space and relate the type, amount and location of open space to the types of households expected to occupy the building;
 - d. Include in the project, or locate project within walking distance to (generally, one-quarter to one-half mile), needed amenities such as storage, laundry, community rooms, recycling, childcare facilities, and convenient shopping facilities.
- Policy EC-8.6.3 Promote infill within existing residential neighborhoods and intensify land uses consistent within existing neighborhood or commercial district patterns in developed areas currently served by municipal services.

- Policy EC-8.6.4: In addition to Title 24, Part 6 of the California Code of Regulations, the County shall promote energy efficiency and alternative energy sources for new and rehabilitated housing using incentives and site plan review recommendations, which shall include the following:
- a. Passive solar design to maximize solar energy capture.
 - b. Preservation of native trees that provide shade, reduce energy costs, and slow structural deterioration.
 - c. Incorporation of adequate deciduous tree cover on the south and west side of dwellings and along streets to help reduce the cooling demand during summer months and capture maximum solar energy in winter.
 - d. Maximization of use of daylight and energy-efficient lighting, such as compact fluorescent lighting indoors and LED lighting outdoors.
 - e. Energy-Star rated appliances, solar hot water heating systems, and other plumbing, mechanical, electrical, and solar permits issued for systems that either produce energy or save natural resources, such as wind-generated electrical systems, tankless water heaters, and highly efficient heating, ventilation and air conditioning systems.
 - f. Water conservation features, including reclamation; landscaping appropriate to the site's climate, soils, and water resources; and water-saving irrigation practices.
 - g. Solid waste reduction and recycling.
- Program EC-8.6.5: Adopt a solar access ordinance that establishes development standards for new development to protect the solar access of adjacent properties.
- Policy EC-8.6.5: Continue to strongly support the current housing weatherization programs and Energy Crisis Intervention Program within Nevada County.

4.3.3 STANDARDS OF SIGNIFICANCE

ENVIRONMENTAL ANALYSIS

THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant aesthetic impact if it would:

- Conflict with or obstruct implementation of the applicable air quality plan
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation (as compared to NSAQMD Thresholds presented in Table 4.3-6)
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable Federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)

- Expose sensitive receptors to substantial pollutant concentrations
- Create objectionable odors affecting a substantial number of people
- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases

PROJECT EMISSIONS METHODS

CONSTRUCTION AND OPERATIONS EMISSIONS

Construction and operations emissions were quantified using the CalEEMod, which was developed by the CAPCOA and is approved for use in all areas of California (CAPCOA, 2016). CalEEMod quantifies emissions of NOx, CO, VOC, PM10, PM2.5, and GHGs from construction and operations activities using emission factors derived from CARB’s Emission Factor (EMFAC) and OFFROAD models, for on-highway and off-road vehicles, respectively. The model calculates vehicle emissions based on the fleet average emission rate of vehicles operating in the County for the year in which the construction activity occurs. Emission factors for fugitive dust are also included in the model.

CalEEMod runs were developed separately for the three project scenarios: Indoor Cultivation, Outdoor Cultivation and Mixed-Light Cultivation. Each scenario was developed for the most intense individual grow operation; as 500 square feet per acre was the most intensive development allowed and this intensity was assessed to develop energy, solid waste and water usage rates for Nevada County. Table 4.15-7, Estimated Project Trip Generation, provided the total acres for each cultivation scenario: 1,610 acres of Outdoor Cultivation, 804 acres of Mixed-Light Cultivation, and 268 acres of Indoor Cultivation. Additionally, the trip rates and trip distances were also provided in Table 4.15-7 and applied in these emissions estimates. Each scenario was individually modeled as follows:

- Outdoor Cultivation - 20 acre run for User Defined Industrial land use and the emissions output was then multiplied by 80.5 (which is 1,610 acres divided by 20 acres) to calculate total buildout
- Indoor Cultivation was a 10,000 sf run for General Heavy Industrial and the emissions output was then multiplied by 13.4 (which is 268 acres divided by 20 acres) to calculate total buildout
- Mixed-Light Cultivation was a 10,000 sf run for General Heavy Industrial and the emissions output was then multiplied by 40.2 (which is 804 acres divided by 20 acres) to calculate total buildout

Table 4.3-7: Nevada County NCCO Most Intensive Individual Project Unmitigated Construction Emissions presented the construction emissions for the most intensive individual project for each cultivation scenario.

Table 4.3-7: Nevada County NCCO Most Intensive Individual Project Unmitigated Construction Emissions

Scenario	Pollutant					
	ROG	NOx	CO	SO2	PM10	PM2.5
Tons Per Year						
Indoor Cultivation (10,000 sf)	0.292	1.618	1.237	0.002	0.263	0.159
Outdoor Cultivation (20 acres)	0.163	1.471	1.136	0.002	0.226	0.150

Table 4.3-7: Nevada County NCCO Most Intensive Individual Project Unmitigated Construction Emissions

Scenario	Pollutant					
	ROG	NOx	CO	SO2	PM10	PM2.5
Mixed Light Cultivation (10,000 sf)	0.292	1.618	1.237	0.002	0.263	0.159
Max Pounds Per Day						
Indoor Cultivation (10,000 sf)	46.633	54.621	34.200	0.064	20.606	12.170
Outdoor Cultivation (20 acres)	4.436	45.663	22.804	0.040	20.606	12.170
Mixed Light Cultivation (10,000 sf)	46.633	54.621	34.200	0.064	20.606	12.170
NSAQMD Threshold Level	B	B	--	--	A	-

Source: Insight Environmental Consultants, 2018

Table 4.3-8: Nevada County NCCO Most Intensive Individual Project Unmitigated Operations Emissions presented the operations emissions for the most intensive individual project for each cultivation scenario.

Table 4.3-8: Nevada County NCCO Most Intensive Individual Project Unmitigated Operations Emissions

Scenario	Pollutant					
	ROG	NOx	CO	SO2	PM10	PM2.5
Tons Per Year						
Indoor Cultivation (10,000 sf)	0.721	4.020	6.850	0.015	0.932	0.266
Outdoor Cultivation (20 acres)	0.020	0.119	0.204	0.00045	0.0278	0.0079
Mixed Light Cultivation (10,000 sf)	0.168	0.707	1.198	0.003	0.163	0.047
Max Pounds Per Day						
Indoor Cultivation (10,000 sf)	4.502	22.328	40.050	0.088	5.369	1.523
Outdoor Cultivation (20 acres)	0.126	0.6664	1.194	0.003	0.160	0.045
Mixed Light Cultivation (10,000 sf)	1.017	3.927	7.001	0.016	0.937	0.268
NSAQMD Threshold Level	A	A	--	--	A	--

Source: Insight Environmental Consultants, 2018

The NCCO total buildout unmitigated construction and operations emissions estimates for criteria air pollutants are presented in *Tables 4.3-9: Nevada County NCCO Total Buildout Unmitigated Construction Emissions* and *4.3-10: Nevada County NCCO Total Buildout Unmitigated Operations Emissions*.

Table 4.3-9: Nevada County NCCO Total Buildout Unmitigated Construction Emissions

Scenario	Pollutant					
	ROG	NOx	CO	SO2	PM10	PM2.5
Tons Per Year						
Indoor Cultivation	3.91	21.67	16.58	0.03	3.52	2.13
Outdoor Cultivation	13.09	118.44	91.42	0.15	18.16	12.08
Mixed Light Cultivation	11.72	65.02	49.74	0.08	10.57	6.38
Total Construction	28.71	205.14	157.75	0.26	32.26	20.58
Average Pounds Per Day						
Indoor Cultivation	21.40	118.76	90.86	0.15	19.31	11.65
Outdoor Cultivation	71.72	648.98	500.95	0.81	99.51	66.16
Mixed Light Cultivation	64.21	356.29	272.57	0.45	57.93	34.96

Table 4.3-9: Nevada County NCCO Total Buildout Unmitigated Construction Emissions

Scenario	Pollutant					
	ROG	NOx	CO	SO2	PM10	PM2.5
Total Construction	157.34	1124.04	864.38	1.41	176.75	112.77
NSAQMD Threshold Level	C	C	--	--	C	--

Source: Insight Environmental Consultants, 2018

Table 4.3-10: Nevada County NCCO Total Buildout Unmitigated Operations Emissions

Scenario	Pollutant					
	ROG	NOx	CO	SO2	PM10	PM2.5
Tons Per Year						
Indoor Cultivation	9.66	53.87	91.79	0.21	12.49	3.56
Outdoor Cultivation	1.60	9.61	16.42	0.04	2.24	0.64
Mixed Light Cultivation	6.76	28.43	48.16	0.11	6.54	1.89
Total Operations	18.02	91.91	156.37	0.35	21.27	6.09
Average Pounds Per Day						
Indoor Cultivation	52.91	295.16	502.95	1.12	68.46	19.53
Outdoor Cultivation	8.78	52.67	89.98	0.20	12.26	3.48
Mixed Light Cultivation	37.03	155.80	263.89	0.59	35.84	10.33
Total Operations	98.72	503.63	856.82	1.92	116.56	33.35
NSAQMD Threshold Level	B	C	--	--	B	--

Source: Insight Environmental Consultants, 2018

The annual GHG emissions from total buildout operations are presented in *Table 4.3-11: Nevada County NCCO Unmitigated Operational GHG Emissions*.

Table 4.3-11: Nevada County NCCO Unmitigated Operational GHG Emissions

Scenario	CO2e (Metric tons per year)						
	Area	Energy	Mobile	Waste	Waste	Ann. Construction	Total
Indoor Cultivation	0.00	495.29	18,758.21	83.56	91.15	81.47	19,509.68
Outdoor Cultivation	0.03	6.77	3,356.38	19.03	45.55	436.36	3,864.12
Mixed Light Cultivation	0.01	1,485.88	9,783.26	250.69	273.44	244.41	12,037.69
Total							35,411.49

Source: Insight Environmental Consultants, 2018

AMBIENT AIR QUALITY IMPACT ASSESSMENT

Ambient air quality analyses were performed for the Mountain Counties Air Basin to determine if the proposed Project has the potential to impact ambient air quality through a violation of the ambient air quality standards or a substantial contribution to an existing or projected air quality standard. The basis for these analyses is dispersion modeling and the proposed project’s operational emissions. A worst-case scenario for an individual facility of 10,000 sf of indoor cultivation was analyzed.

The maximum off-site ground level concentration of each pollutant for the 1-hour, 3-hour, 8-hour, 24-hour and annual periods was predicted using the most recent version of EPA’s AMS/EPA Regulatory Model (AERMOD)

dispersion software under the Lakes Environmental ISC-AERMOD View interface. CARB-approved, AERMET-processed meteorological datasets for calendar years 2009 through 2013 (CARB 2015) was input to AERMOD. These were the most recent available dataset available at the time the modeling runs were conducted. All of the regulatory default AERMOD model keyword parameters were employed. Rural dispersion parameters were used for the proposed project. The majority of the land surrounding the project site is considered “rural” under the Auer land use classification method (Auer 1978). Emissions were evaluated for each pollutant on a short-term (correlating to pollutant averaging period) and long-term (annual) basis, with the exception of CO that was evaluated only for short-term exposures since there are no long term significance thresholds for CO.

The majority of mobile emissions predicted by CalEEMod would occur beyond the proposed project boundary because of vehicle trips. The following methodology was used in order to determine the on-site vehicle emissions. An estimated on-site trip distance was determined by calculating the most likely on-site travel route for the majority of on-site trips. The on-site estimated trip distance for the proposed project was determined to be 0.06 miles. The on-site estimated trip distance was then divided by the average trip length, 5.0 miles, in order to determine the on-site to off-site mobile emissions ratio, 1.20%. The total mobile emissions calculated by CalEEMod were then reduced by 98.80% to estimate the mobile on-site emissions used for ambient air quality modeling.

A fenceline coordinate grid of receptor points was constructed. The grid consisted of a 25-meter fenceline spacing with five tiers of receptors. The first tier had 25-meter tier spacing extending a distance of 100 meters, the second tier had 50-meter tier spacing extending another 250 meters, the third tier had 100-meter tier spacing extending another 500 meters, the fourth tier had 200-meter tier spacing extending another 1,000 meters, and the fifth tier had 500-meter tier spacing extending another 2,000 meters with initial receptors starting 25 meters from the facility boundary. The elevated terrain option was employed.

For each pollutant and averaging period modeled, a “total” concentration was estimated by adding the maximum measured background air concentration to the maximum predicted proposed project impacts. The maximum measured background air concentrations used in this analysis were calculated from measured concentrations at the nearest monitoring stations. For the initial assessment (Step 1) of the ambient air quality impact analysis, the maximum background concentration for the proposed project area for each pollutant and averaging period combination was added to the corresponding maximum ground level concentration (GLC) from proposed project-related operations emissions. The sum of these values was then compared to the corresponding ambient air quality standard. If the incremental increase in concentration from proposed project-related sources did not cause an exceedance of an ambient air quality standard, then the analysis was complete for that source/receptor/pollutant combination. If the incremental increase in concentration from proposed project-related sources caused an exceedance of an ambient air quality standard, then the analysis proceeded to Step 2. Step 2 was similar to a Step 1 with one major difference. For this step, the maximum GLC of each pollutant and averaging period combination were compared to its corresponding Significant Impact Level (SIL). The SIL is used to evaluate whether the proposed project’s operations emissions would contribute to a violation of an ambient air quality standard, where the background level is close to or exceeds an ambient air quality standard. If the maximum GLC did not exceed the corresponding SIL, then the analysis was complete for that source/receptor/pollutant combination, and no further analysis was required.

Table 4.3-12: Operations Ambient Air Quality Impact Assessment Results, presents a summary of the two-step process taken to determine whether operations activities associated with the proposed project would cause or contribute to ambient air quality impacts.

Table 4.3-12: Operations Ambient Air Quality Impact Assessment Results¹

STEP 1 – Ambient Air Quality Standard Basis			
Impact Parameter	State/Federal AAQS	Operations	
	µg/m3	µg/m3	Status
1-hour CO	22,900	2,343	PASS
	40,100	2,343	PASS
8-hour CO	10,300	1,731	PASS
	10,300	1,731	PASS
1-hour NO2	338	109.09	PASS
	188	109.09	PASS
Annual NO2	56	15.97	PASS
	100	15.97	PASS
24-hour PM10	50	65.05	Step 2
	150	65.05	PASS
Annual PM10	20	10.83	PASS
24-hour PM2.5	35	68.12	Step 2
Annual PM2.5	12	5.80	PASS
	12	5.80	PASS
STEP 2 – Significant Impact Level (SIL) Basis			
Impact Parameter	PSD SILs	Construction SJVAB	
	µg/m3	µg/m3	Status
24-hour PM10	5	0.05	PASS
24-hour PM2.5	5	0.02	PASS

Source: Insight Environmental Consultants, 2018.
¹ Step 1 - the AAQS basis compares the background concentrations plus project contribution to the state and federal AAQS to determine if there would be an exceedance of the respective standard. For 24-hour PM10 and PM2.5, background concentrations already exceed the applicable AAQS, so Step 2—the SIL basis—compares the project contributions to levels determined to cause or contribute to ambient air quality exceedances and impacts.

ODORS IMPACT ASSESSMENT

Potential odor impacts associated with the proposed project operations impacts were assessed by modeling a theoretical worst-case area source because the exact location of the various activities cannot now be determined. The quantitative assessment of the potential for the proposed project to generate odors considers the reasonably anticipated, permitted land uses identified in the Nevada County Cannabis Ordinance and potential activity levels by activity types. The cultivation facilities are known to be a source odorous compounds. As such, an assessment of typical odorous compounds associated with the cultivation of cannabis, including estimates of odor range is included in the impact analysis. An odors analysis is used to determine if proposed project emissions are predicted to cause or contribute to a violation of odors in a specific location to create a nuisance. If a nuisance level is determined in excess of 1,000 feet (the setback distance required as part of the proposed project), then mitigation measure(s) are provided.

The ambient air quality odor impacts were modeled using the most recent version of EPA’s AMS/EPA Regulatory Model – AERMOD (recompiled for Lakes ISC-AERMOD View 9.6.5 (interface). This dispersion model is used throughout the U.S. for health risk assessments to determine the probable area where various airborne constituents may be dispersed from a given location. In order to determine which odor constituents to model, a review of an odor analysis study (Rice and Koziel 2015) was conducted. The study determined that the VOCs with the four highest odor activity values (OAV) from loose cannabis were

Benzaldehyde, Myrcene, Decanal, and Heptanal (Rice and Koziel 2015). OAV is the calculated ratio of surrogate concentrations to odor detection thresholds (ODT) which is used to determine the VOCs with the greatest odor impact. The top four odorous constituents based on OAV from cannabis plants were reviewed and were modeled.

Elevated terrain was modelled with standard meteorological conditions found within the Nevada County. Additionally, these constituents were modeled with no mitigation or controls to provide the most conservative result and would also be indicative of what would be expected for uncontrolled emissions from outdoor grow facilities as well.

Each of the top four VOCs were modeled as a 10,000 sf area sources. Emissions from one gram of loose cannabis for each VOC were calculated from the odor analysis study (Rice and Koziel 2015). Based on cannabis odor modeling conducted for a project in Kern County, it was assumed that a 1-acre outdoor grow facility would yield approximately 200,000 grams of cannabis. That ratio was used to calculate that a 10,000 sf grow facility would yield approximately 45,913.5 grams of cannabis. Therefore, the emissions based on one gram were multiplied by 45,913.5 to estimate the emission rate from the whole facility. *Table 4.3-13 VOC Emission Rates for Odor Analysis.*

Table 4.3-13: VOC Emission Rates for Odor Analysis

VOC	1 g Emission Rate g/s	10K SF Grow Facility Emission Rate g/s
Benzaldehyde	2.59E-05	1.189
Myrcene	2.05E-05	0.943
Decanal	1.72E-07	0.008
Heptanal	1.64E-06	0.075

Three rings of receptors were modeled at 100 feet, 1,000 feet and one mile from the proposed project location. For each VOC, a “1-hour” concentration was estimated and converted into a “10-minute” concentration. “10-minute” concentrations are typically evaluated for odor analysis. The concentrations were then compared to the ODT for each pollutant. The ODT is defined as the concentration of a compound that may be detectable by fifty percent (%) of the population. Nuisance levels typically occur at concentrations that are several multiples higher than the ODT. However, nuisance is subjective in that every person does not perceive odors the same. Therefore, odor nuisance varies person to person and compound to compound. *Table 4.3-14: Max VOC Concentrations* summarizes the VOC concentrations at 100 feet, 1,000 feet and one mile.

Table 4.3-14: Max VOC Concentrations

VOC	100 FT Concentrations		1,000 FT Concentrations		1 Mile Concentrations		ODT PPM
	1-hr (PPM)	10-min (PPM)	1-hr (PPM)	10-min (PPM)	1-hr (PPM)	10-min (PPM)	
Benzaldehyde	1.74E-01	2.86E-01	7.96E-02	1.31E-01	2.60E-02	4.30E-02	4.17E-02
Myrcene	1.07E-01	1.77E-01	4.91E-02	8.10E-02	1.61E-02	2.65E-02	1.30E-02
Decanal	7.80E-04	1.29E-03	3.58E-04	5.91E-04	1.18E-04	1.95E-04	8.97E-04
Heptanal	1.02E-02	1.68E-02	4.67E-03	7.71E-03	1.53E-03	2.52E-03	4.79E-03

As demonstrated in Table 4.3-14 each of the pollutants is at or exceeds the ODT at the 100-foot distance. Benzaldehyde, Myrcene, and Heptanal exceed the ODT at 1,000 feet and Myrcene and Benzaldehyde

exceed the ODT at 1 mile. However, Myrcene has the highest concentration to ODT ratio at 6.23 at the 1,000-foot distance. This concentration has a probability of causing a nuisance and was analyzed further.

The concentrations detailed in Table 4.3-14 represent the max concentration that will occur during the worst one-hour period over a five-year period. Therefore, further analysis was conducted to determine how often concentrations would reach this level. *Table 4.3-15: Myrcene Concentrations* summarizes the resulting concentrations for the top 10 hours over a five-year period for Myrcene and summarizes the 98th through 75th percentile concentrations at a 1,000-foot distance.

Table 4.3-15: Myrcene Concentrations

	1,000 FT Concentrations		ODT	# of Multiples Concentration above ODT	
	1-hr (PPM)	10-min (PPM)	PPM	1-hr	10-min
1st High	4.91E-02	8.10E-02	1.30E-02	3.78	6.23
2nd High	4.24E-02	7.00E-02	1.30E-02	3.26	5.38
3rd High	4.04E-02	6.67E-02	1.30E-02	3.11	5.13
4th High	4.04E-02	6.66E-02	1.30E-02	3.10	5.12
5th High	4.02E-02	6.64E-02	1.30E-02	3.10	5.11
6th High	4.00E-02	6.61E-02	1.30E-02	3.08	5.08
7th High	3.98E-02	6.57E-02	1.30E-02	3.06	5.06
8th High	3.98E-02	6.57E-02	1.30E-02	3.06	5.05
9th High	3.98E-02	6.57E-02	1.30E-02	3.06	5.05
10th High	3.98E-02	6.57E-02	1.30E-02	3.06	5.05
98th Percentile	3.74E-03	6.17E-03	1.30E-02	0.29	0.47
97th Percentile	2.01E-03	3.31E-03	1.30E-02	0.15	0.25
96th Percentile	1.43E-03	2.36E-03	1.30E-02	0.11	0.18
95th Percentile	1.15E-03	1.90E-03	1.30E-02	0.09	0.15
94th Percentile	1.01E-03	1.67E-03	1.30E-02	0.08	0.13
93rd Percentile	9.17E-04	1.51E-03	1.30E-02	0.07	0.12
92nd Percentile	8.42E-04	1.39E-03	1.30E-02	0.06	0.11
91st Percentile	7.73E-04	1.28E-03	1.30E-02	0.06	0.10
90th Percentile	7.10E-04	1.17E-03	1.30E-02	0.05	0.09
85th Percentile	4.00E-04	6.60E-04	1.30E-02	0.03	0.05
80th Percentile	1.60E-04	2.64E-04	1.30E-02	0.01	0.02
75th Percentile	2.83E-05	4.67E-05	1.30E-02	0.00	0.00

As shown in Table 4.3-15, 98% of the time over a 5-year period the “10-minute” concentration will be at less than half of the ODT or lower at a distance of 1,000 feet. All other VOCs are assumed to have a lower affect than Myrcene.

4.3.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACT 4.3-1: CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE APPLICABLE AIR QUALITY PLAN

IMPACT ANALYSIS

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. The cultivation activities of up to six plants would be the equivalent to a small garden and would not require the use of heavy equipment of machinery that would conflict with an air quality management plan. Impacts in this regard would not occur and mitigation is not required.

Implementation of the proposed project would result in construction and operations impacts from maximum development of Outdoor Cultivation, Indoor Cultivation and Mixed Light Cultivation. Under the proposed NCCO commercial and non-remuneration cultivation less than 2,500 sf of combined indoor, mixed-light, or outdoor, applicants would be required to apply for and obtain a Commercial Cannabis Permit (CCP) and an Annual Cannabis Permit (ACP). For commercial and non-remuneration cultivation between 2,500 sf and 10,000 sf applicants would be required to apply for and obtain an Administrative Development Permit (ADP) and an ACP. In both cases the ACP would need to be renewed annually.

As shown above in Tables 4.3-9 and 4.3-10, full buildout of the Nevada County NCCO would exceed NSAQMD Significance Thresholds (Table 4.3-6) for ROG, NOx and PM10. Although it is anticipated that the existing and future commercial cultivation cannabis sites would be phased in over time, the proposed project was analyzed at a worst-case buildout scenario and assumed the all potential cultivation sites would be built out if the project is approved. Because the full buildout of the proposed project would exceed Level C thresholds for ROG, NOx and PM10 during construction and NOx during operations, implementation of the proposed project would significantly impact the nonattainment area planning by the NSAQMD for the federal ozone standard and would disrupt or hinder implementation of any plan control measures.

MITIGATION MEASURES

MM AIR-1 Conformance to NSAQMD Rules and Regulations: Amend the NCCO to require all commercial cannabis applications to include language in project cultivation plans and on project site plans when applicable, that that the grading or building permit for the proposed project shall comply with applicable state and federal air pollution control laws and regulations, and with applicable rules and regulations of the NSAQMD during any construction and during operations of cannabis facilities. Compliance with NSAQMD Rule 226 Dust Control Plan shall be required, and all construction equipment (75 horsepower and greater) shall not be less than Tier 3, less than Tier 4 Interim if construction starts after 2025, and Tier 4 Final if construction starts after 2030. Written documentation that the cannabis facility is in compliance with the NSAQMD shall be provided to the Nevada County Planning Department.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and Unavoidable

Although implementation of mitigation measure AIR-1 amending the proposed NCCO is expected to reduce emissions, because the exact equipment chosen would be on a project by project basis and at this time is unknown. The level of exceedance of NSAQMD's thresholds as shown in Tables 4.3-9 and 4.3-10 are substantial, it would be speculative to conclude emissions could be reduced to below NSAQMD's for the total buildout of the proposed project. For these reasons, the proposed project would have a significant and unavoidable impact with applicable air quality plan(s).

IMPACT 4.3-2: VIOLATE ANY AIR QUALITY STANDARD OR CONTRIBUTE SUBSTANTIALLY TO AN EXISTING OR PROJECTED AIR QUALITY VIOLATION

IMPACT ANALYSIS

As discussed above, implementation of the proposed project would result cannabis cultivation for personal use on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. The cultivation activities of up to six plants would be the equivalent to a small garden and would not require the use of heavy equipment of machinery or earth moving that would violate any air quality standard or contribute substantially to an existing or projected air quality violation conflict with an air quality management plan. Impacts in this regard would not occur and mitigation is not required.

Under the proposed NCCO commercial and non-remuneration cultivation less than 2,500 sf of combined indoor, mixed-light, or outdoor, applicants would be required to apply for and obtain a CCP and an ACP. For commercial and non-remuneration cultivation between 2,500 sf and 10,000 sf applicants would be required to apply for and obtain an ADP and an ACP. In both cases the ACP would need to be renewed annually.

For construction and operations impacts from maximum development of Outdoor Cultivation, Indoor Cultivation and Mixed Light Cultivation. As shown above in Tables 4.3-9 and 4.3-10, full buildout of the Nevada County CCCO would exceed NSAQMD Level C Thresholds (Table 4.3-6) for ROG, NOx and PM10 during construction and NOx during operations. Detailed Ambient Air Quality Modeling was also prepared and summarized above in Table 4.3-12 and shows that Project operations would not exceed CAAQS and NAAQS.

With full buildout of the proposed project under all the potential CCPs and ACPS, the sum of the cultivation projects would exceed Level C thresholds for ROG, NOx and PM10 during construction and NOx during operations. While implementation of the proposed NCCO is expected to be phased in over time due and not all cultivation projects would be under construction and begin operation at the same time, to ensure potential impacts are completely accounted for, the air quality analysis assumes the worst-case scenario and build out of the potential cultivation projects occurs simultaneously. Based on this analysis; therefore, implementation of the proposed project would cause a significant impact to existing or projected air quality standards.

MITIGATION MEASURES

Implement mitigation measure AIR-1.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and Unavoidable

Although implementation of mitigation measure AIR-1 amending the proposed NCCO is expected to reduce emissions, because the exact equipment chosen would be on a project by project basis and at this

time is unknown. The level of exceedance of NSAQMD's thresholds as shown in Tables 4.3-9 and 4.3-10 are substantial, it would be speculative to conclude emissions could be reduced to below NSAQMD's for the total buildout of the proposed NCCO. For these reasons, the proposed project would have a significant and unavoidable impact with violating any air quality standard.

IMPACT 4.3-3: RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF ANY CRITERIA POLLUTANT FOR WHICH THE PROJECT REGION IS IN NONATTAINMENT UNDER AN APPLICABLE FEDERAL OR STATE AMBIENT AIR QUALITY STANDARD (INCLUDING RELEASING EMISSIONS THAT EXCEED QUANTITATIVE THRESHOLDS FOR OZONE PRECURSORS)

IMPACT ANALYSIS

NSAQMD's approach to assessing cumulative impacts dictates that a project's contribution to cumulative impacts to regional air quality would be considered potentially significant if the project's impact would be individually significant (i.e., exceeds the NSAQMD's quantitative thresholds). For a project that would not individually cause a significant impact, the project's contribution to any cumulative impact may be considered less than significant, provided that the project is consistent with all applicable regional air quality plans.

Implementation of the proposed project would result cannabis cultivation for personal use on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. The cultivation activities of up to six plants would be the equivalent to a small garden. On an individual project basis, cultivation for personal use would be less than significant. Impacts in this regard would not occur and mitigation is not required.

The proposed also would provide for commercial and non-remuneration cultivation under a CCP and an ACP. A CCP would be used for project with less than 2,500 sf of combined indoor, mixed-light, or outdoor, cannabis canopy and an ACP for cultivation between 2,500 sf and 10,000 sf of canopy. Although cannabis cultivation facilities are expected to be phased in over a period of time, the project has been analyzed for a worst-case scenario and under the assumption the proposed NCCO would be implemented as part of one project. Because the proposed project at total buildout would result in a significant air quality impact, and would conflict with applicable air quality plans, it is considered to contribute to significant cumulative air quality impacts.

MITIGATION MEASURES

Implement mitigation measure AIR-1.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and Unavoidable.

Although implementation of mitigation measure AIR-1 would amend the proposed NCCO is expected to reduce emissions, because the exact equipment chosen would be on a project by project basis and at this time is unknown. The level of exceedance of NSAQMD's thresholds as shown in Tables 4.3-9 and 4.3-10 are substantial, it would be speculative to conclude emissions could be reduced to below NSAQMD's for the total buildout of the proposed NCCO. For these reasons, the proposed project would have a significant and unavoidable cumulatively considerable contribution to increasing criteria pollutants for which the region is in nonattainment.

IMPACT 4.3-4: EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS

IMPACT ANALYSIS

All proposed commercial cannabis cultivation facilities under either a CCP for facilities with a canopy with less than 2,500 sf or a ADP for cultivation facilities with between 2,5000 to 10,000 sf of canopy would require a setback of at least 1,000 from any sensitive receptor. The nature of the proposed NCCO is that individual commercial cultivation activities would be dispersed throughout Nevada County on parcels zones AE, AG, and FR. Cannabis cultivation for individual use of up to six plants would be allowed on parcels zoned R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ. Based on the air quality analysis, it was determined that on an individual level, the operation of even the most intensive cultivation facility would not exceed NSAQMD Level C significance thresholds (see Table 4.3-8 above). Further, the primary air toxic associated with the proposed project is the emissions of diesel particulate matter (DPM) from the truck that may be used during construction and operations. The proposed Project would generate few truck trips at each individual cultivation facility. For these reasons, the proposed project would have a less than significant impacts on sensitive receptors.

MITIGATION MEASURE

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less Than Significant Impact.

IMPACT 4.3-5: CREATE OBJECTIONABLE ODORS AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE

IMPACT ANALYSIS

A detailed odor analysis for the proposed Project was described above under Odors Impact Assessment and summarized in Tables 4.3-13, 4.3-14 and 4.3-15. The analysis was based on the proposed project allowing up to 10,000 sf of commercial cannabis canopy and the constituents that would be admitted to the air column and that would be considered to have an ODT which is the concentration of a compound that may be detectable by fifty percent (%) of the population.

As demonstrated in Table 4.3-14 each of the pollutants is at or exceeds the ODT at the 100-foot distance. Benzaldehyde, Mycrene, and Heptanal exceed the ODT at 1,000 feet and Mycrene and Benzaldehyde exceed the ODT at 1 mile. However, Myrcene has the highest concentration to ODT ratio at 6.23 at the 1,000-foot distance. This concentration has a probability of causing a nuisance and was analyzed further.

The concentrations detailed in Table 4.3-14 represent the max concentration that would occur during the worst one-hour period over a five-year period. Therefore, further analysis was conducted to determine how often concentrations would reach this level. *Table 4.3-15 Mycrene Concentrations* summarizes the resulting concentrations for the top 10 hours over a five-year period for Myrcene and summarizes the 98th through 75th percentile concentrations at a 1,000-foot distance.

Based on the results from this analysis, a 1,000 foot setback was found to be sufficient to avoid an odor nuisance from the proposed project to sensitive receptors and for these reasons the proposed project would have a less than significant odors impact in this regard.

Although the 1,000-foot setback in regard to sensitive receptors was less than significant. Based on the scope and scale of the proposed project, future commercial cannabis cultivation facilities would have the potential to be located in proximity to groups of people situated in relative close proximity who may find potential odors unpleasant. During the growth and maturation phases, the cannabis plant; however, can produce distinctive odors that may some receptors may find to be intrusive. The proposed NCCO includes setback from property lines of 100 feet, but this may not be a sufficient distance to fully insulate off-site areas from potential odors. In addition, this measure relied on the dispersion and dilution in the air however this does not preclude facilities from resulting in the emission of odors. Therefore, if a cultivation facility is located in close enough proximity to off-site residents or other land uses, constituents from the cultivation site could intrude to these areas and result in objectionable odors to residents or users. To reduce this impact mitigation measures AIR-2 would amend the proposed NCCO to prohibit burning of cannabis and other plant materials. Although this would reduce the effects of odors, this impact would remain significant. There is no feasible mitigation that could be implemented to reduce the impacts to less than significant levels. Impacts would be significant and unavoidable.

MITIGATION MEASURE

MM AIR-2 Prohibit burning of cannabis and other vegetation. Amend the NCCO to prohibit all commercial and non-remuneration operations to from burning any cannabis or other vegetative materials. The following language shall be added to the proposed NCCO: “The burning of any part of the cannabis plant or plant materials that is considered excess or waste is prohibited from being burned.”

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are significant and unavoidable.

IMPACT 4.3-6: GENERATE GREENHOUSE GAS EMISSIONS, EITHER DIRECTLY OR INDIRECTLY, THAT MAY HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT, BASED ON ANY APPLICABLE THRESHOLD OF SIGNIFICANCE

IMPACT ANALYSIS

The proposed project would permit construction for cannabis cultivation for both commercial and non-remuneration purposes. Cultivation of cannabis less than 2,500 sf of canopy would require a CCP and ADP for cultivation between 2,500 sf to 10,000 sf canopy. The proposed NCCO also would allow for cultivation for personal use of up to six plants on parcels zoned R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ. Cultivation for personal use would be similar to that of a personal garden and would be considered similar to other typical uses for day to day household operations. Impacts in this regard would be less than significant.

Regarding construction and operations for commercial and non-remuneration, GHG emissions were assessed using CalEEMod (as described above) and the estimated GHG emissions are summarized in Tables 4.3-11. The NSAQMD does not have adopted GHG thresholds; it is typical to reference thresholds applied within other air districts. In this case, many air districts use 10,000 metric tons per year threshold for determining whether a project’s GHG impacts are significance. Other air districts use a project’s ability to reduce emissions by 29% of Year 2005 emissions. Applying either of these proxy thresholds would result in the proposed project, at total buildout, exceeding either method for assessing significance of the GHG emissions. For these reasons, the proposed Project would have potentially significant GHG impacts.

MITIGATION MEASURE

Implement mitigation measures AIR-1.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and Unavoidable.

Although implementation of mitigation measure AIR-1 is expected to reduce emissions, because the exact equipment chosen would be on a project by project basis and at this time is unknown, and the level of exceedance of NSAQMD's thresholds as shown in Tables 4.3-9 and 4.3-10 are substantial, it would be speculative to conclude emissions could be reduced to below NSAQMD's for the total buildout of the proposed NCCO. For these reasons, the proposed project would have a significant and unavoidable GHG impact.

IMPACT 4.3-7: CONFLICT WITH ANY APPLICABLE PLAN, POLICY OR REGULATION OF AN AGENCY ADOPTED FOR THE PURPOSE OF REDUCING THE EMISSIONS OF GREENHOUSE GASES

IMPACT ANALYSIS

CARB Scoping Plan

The latest CARB Climate Change Scoping Plan (2017) outlines the state's strategy to return reduce state's GHG emissions to return to 40 percent below 1990 levels by 2030 pursuant to SB 32. The CARB Scoping Plan is applicable to state agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

The proposed project would permit construction for cannabis cultivation for both commercial and non-remuneration purposes. Cultivation of cannabis less than 2,500 sf of canopy would require a CCP and ADP for cultivation between 2,500 sf to 10,000 sf canopy. The proposed NCCO also would allow for cultivation for personal use of up to six plants on parcels zoned R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ. Cultivation for personal use would be similar to that of a personal garden and would be considered similar to other typical uses for day to day household operations. Impacts in this regard would be less than significant.

Regarding the potential for commercial and non-remuneration, GHG emissions shown in Table 4.3-11 above include reductions associated with statewide strategies such as the Pavley I motor vehicle emission standards, the Low Carbon Fuel Standard (LCFS), and the 2016 Title 24 Energy Efficiency Standards. However, the modeling does not incorporate reductions from the Pavley II (LEV III) Advanced Clean Cars Program (extends to model year 2025), the Renewable Portfolio Standards (RPS), Green Building Code Standards for indoor water use, or the California Model Water Efficient Landscape Ordinance (outdoor water), or the latest 2019 Title 24 Energy Efficiency Standards (effective January 1, 2020). Therefore, actual emissions would be lower than those shown in Table 4.3-11 with the implementation of all of the statewide reduction strategies. Furthermore, under the proposed project it is expected that some new buildings would be developed for indoor cultivation and that these buildings would achieve the latest Building Energy Efficiency Standards. In addition, it is expected that this would be done pursuant to Chapter 16.58 (Green Building Ordinance) of the Cupertino Municipal Code, and that projects would be required to build to LEED or an alternative reference standard. The proposed project would also be constructed in conformance with CALGreen, which requires high-efficiency water fixtures for indoor

plumbing and water efficient irrigation systems. The proposed project would not conflict any statewide strategies to reduce GHG emissions. Therefore, impacts would be less than significant in this regard.

MITIGATION MEASURE

No Mitigations Measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less Than Significant Impact.

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4.4 BIOLOGICAL RESOURCES

This section addresses biological resources known or with potential to occur in Nevada County (County) and describes potential effects of project implementation on those resources. Biological resources include common vegetation and habitat types, sensitive plant communities, and special status plant and animal species. The analysis includes a description of the existing environmental conditions, the methods used for assessment, the potential direct and indirect impacts of project implementation, and mitigation measures recommended to address impacts determined to be significant or potentially significant. Federal, state, and local regulations that pertain to biological resources are summarized.

The information presented in this Environmental Impact Report (EIR) section is based on review of existing and available information and is regional in scope. Data, analysis, and findings provided in this section are programmatic for broad application under the proposed ordinance, rather than site-specific.

Comments were received from the California Department of Fish and Wildlife (CDFW), the South Yuba River Citizens League (SYRCL), the California Department of Forestry and Fire Protection (Cal Fire), the California Department of Food and Agriculture (CDFA), and the Native American Heritage Commission (NAHC) in response to the Notice of Preparation regarding biological resources of concern that could be adversely affected by the project. Comments generally pertained to impacts to sensitive habitats (e.g., rivers, streams, wetlands, forest habitat) and species (e.g., rare plants, anadromous fish, endangered wildlife species).

4.4.1 ENVIRONMENTAL SETTING

This environmental setting section contains information of the following existing biological resources:

- project location;
- land cover types and associated biological habitat uses;
- special status species;
- sensitive natural communities;
- waters of the United States (including wetlands);
- wildlife movement corridors; and
- habitat conservation plans.

LAND COVER TYPES

There are 28 different land cover types within the County (*Figures 4.4-1: Tree-Dominated Habitat, 4.4-2: Shrub-Dominated Habitat, 4.4-3: Herbaceous Dominated Habitat, 4.4-4: Aquatic Habitat, and 4.4-5, Developed and Non-Vegetated Habitat*; CDFW 2018a). Over 23 percent (144,247 acres) of the County contains Sierran mixed conifer habitat, approximately 9 percent (54,330 acres) contains montane hardwood habitat, and approximately 8 percent (48,309 acres) contains red fir (*Abies magnifica*) and white fir (*Abies concolor*), and just under 4 percent (24,550 acres) contains urban land cover types. The County contains a significant amount of late-successional (i.e., forest with multi-layered tree canopy, large-diameter trees, complex understory, and coarse woody debris) and old growth forest (i.e., forest usually 180-220 years old with large trees, large snags, and complex structure that has not undergone

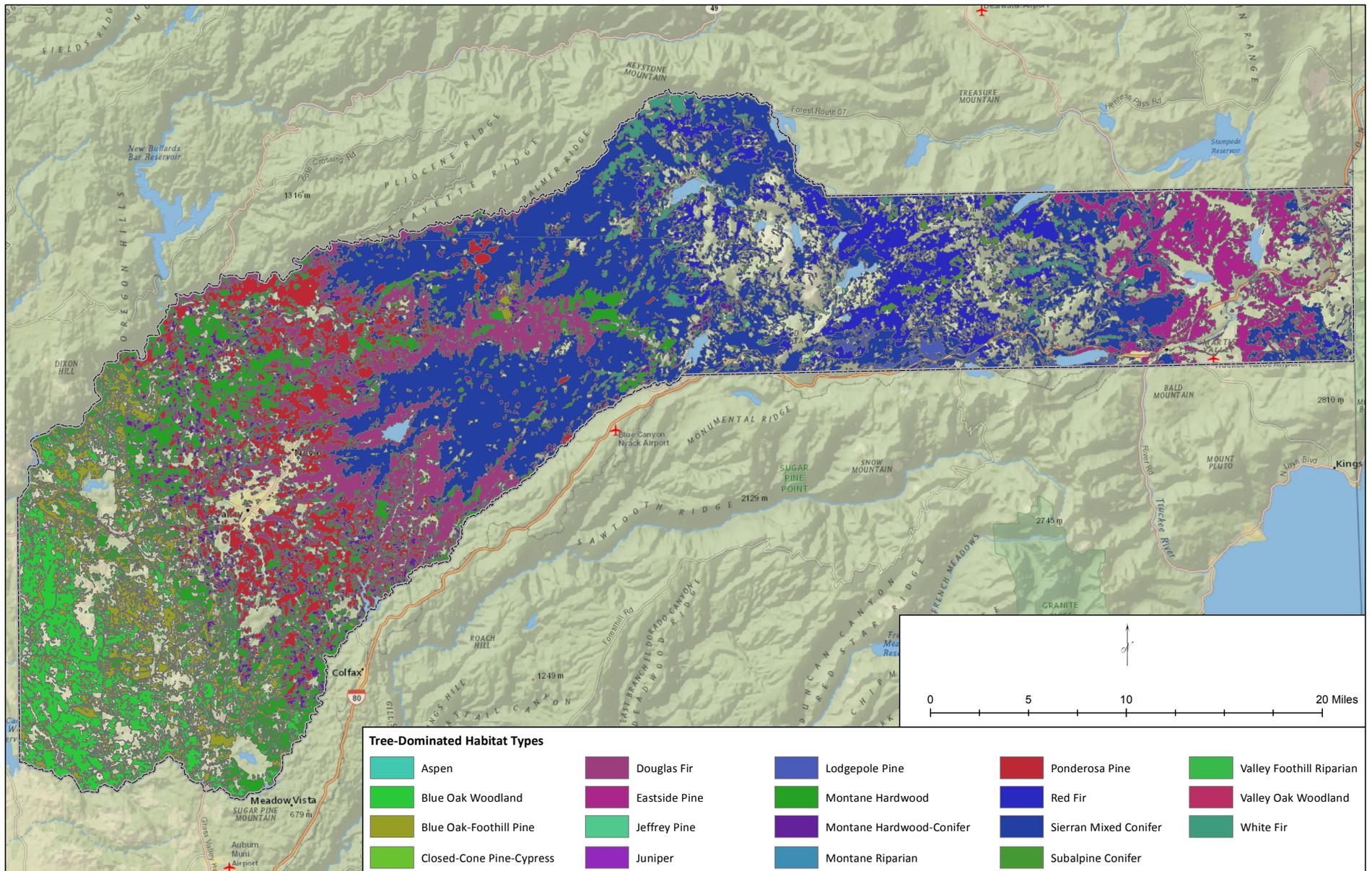
significant disturbance). Total acreages of each habitat type are presented in *Table 4.4-1, Habitat Types within Nevada County*, and land cover types are described below in order of abundance (CDFW 2018a).

Table 4.4-1: Habitat Types within Nevada County

Habitat Type	Size (acres)
Sierran Mixed Conifer	144,247
Montane Hardwood	54,330
Red Fir and White Fir	48,309
Douglas Fir	45,515
Chaparral	43,018
Ponderosa Pine	42,498
Blue Oak Woodland	40,145
Blue Oak-Foothill Pine	32,192
Grassland	28,923
Eastside Pine	28,172
Montane Hardwood-Conifer	24,927
Barren	24,472
Urban	22,559
Aquatic (Lacustrine and Riverine)	11,552
Sagebrush	7,057
Agriculture	5,311
Lodgepole Pine	4,995
Bitterbrush	4,245
Riparian	3,840
Subalpine Conifer	2,611
Wet Meadow	1,521
Valley Oak Woodland	1,434
Jeffrey Pine	1,239
Fresh Emergent Wetland	396
Closed-Cone Pine-Cypress	193
Aspen	53
Low Sage	4
Juniper	4

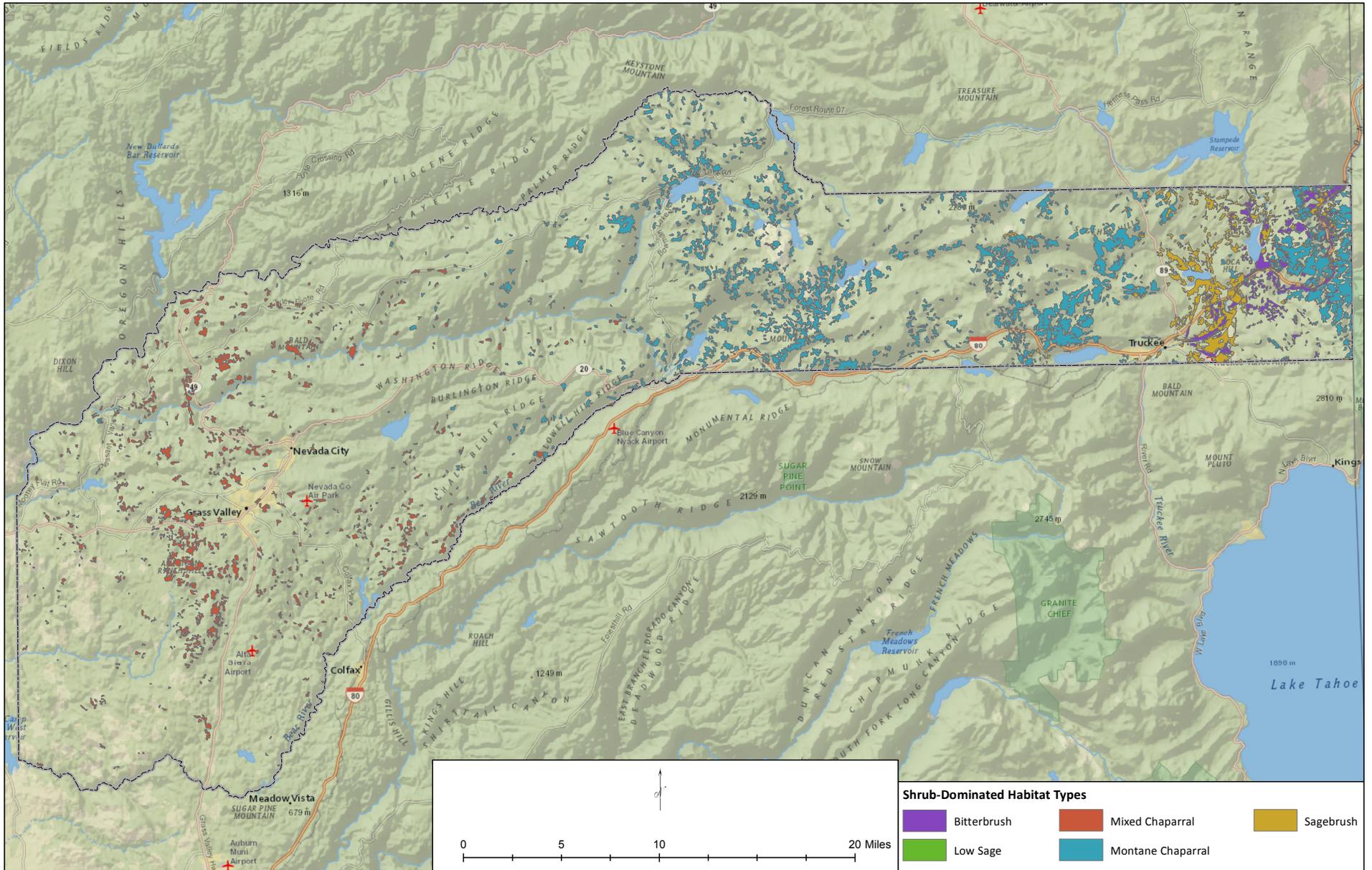
SIERRAN MIXED CONIFER

A Sierran Mixed Conifer habitat supports a variety of coniferous tree species and often includes several hardwood species. In Nevada County, this habitat is located in the interior and eastern portions and is dominated by ponderosa pine, but incense cedar (*Calocedrus decurrens*), Douglas-fir, and sugar pine (*Pinus lambertiana*) are also present on most sites. Hardwoods include California black oak (*Quercus kelloggii*) and Pacific madrone (*Arbutus menziesii*). The understory is often shrubby and common species are toyon (*Heteromeles arbutifolia*), white-leaf manzanita (*Arctostaphylos viscida*), and coffeeberry (*Frangula californica*). Many of these shrubs would be absent in the presence of periodic fires. Many of these Sierran Mixed Conifer areas exhibit evidence of recent or historic timber harvesting or fuels reduction treatments that have reduced tree stem density or cleared the understory shrub layer.



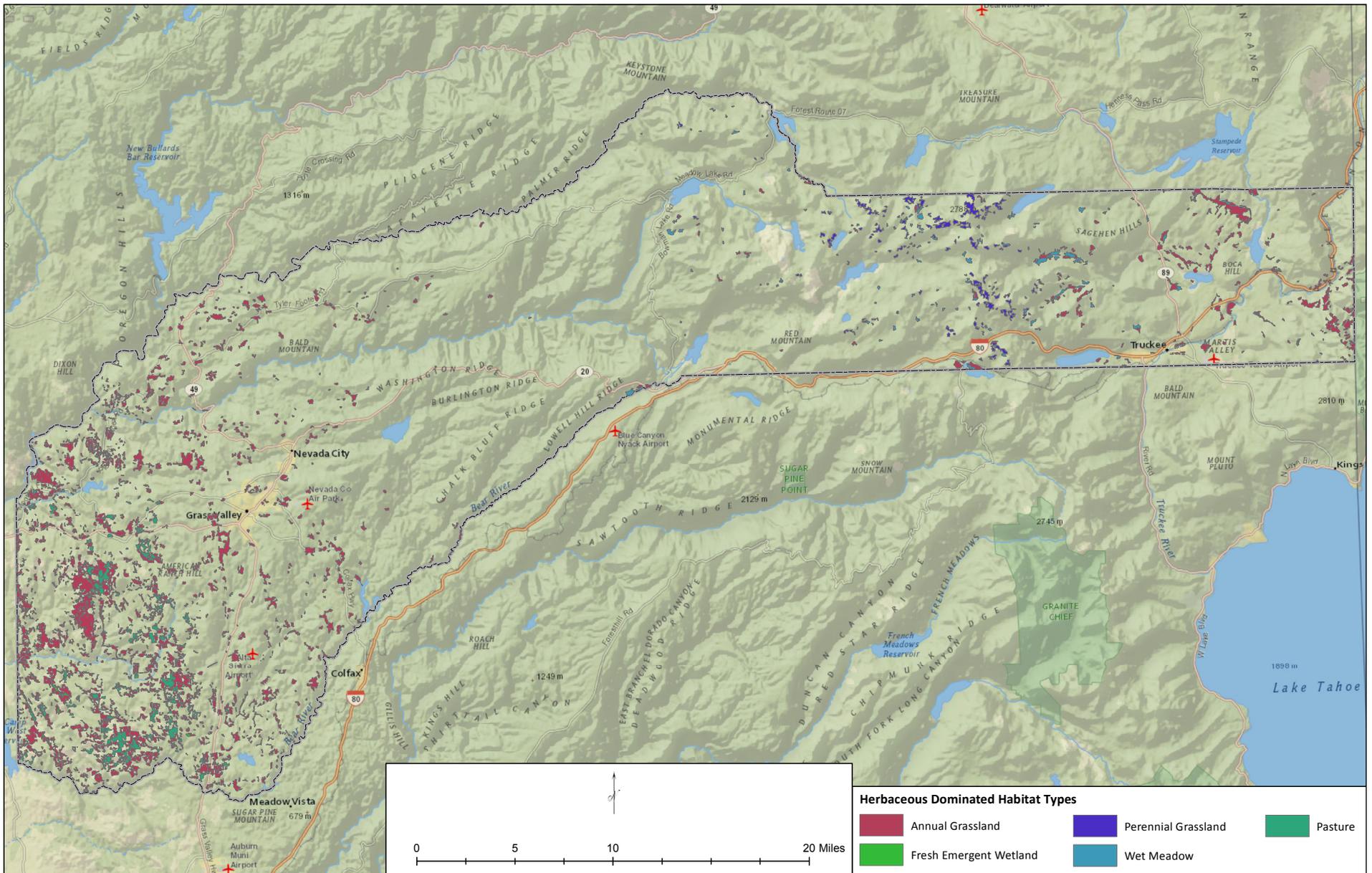
Source: CalFire. 2018. FRAP Mapping: FRAP GIS Data

FIGURE 4.4-1: Tree-Dominated Habitat
Nevada County Cannabis EIR



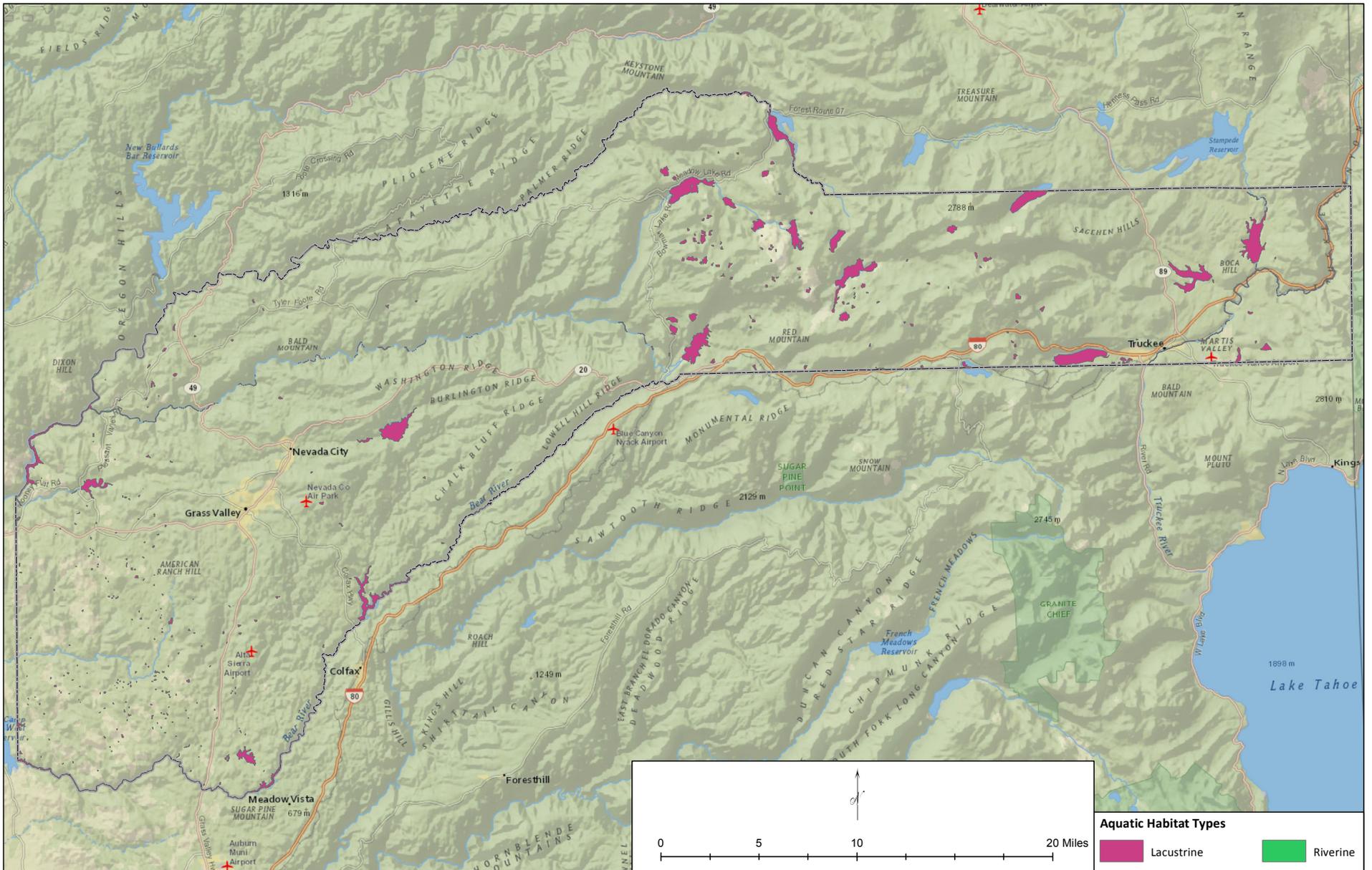
Source: CalFire. 2018. FRAP Mapping; FRAP GIS Data

FIGURE 4.4-2: Shrub-Dominated Habitat
Nevada County Cannabis EIR



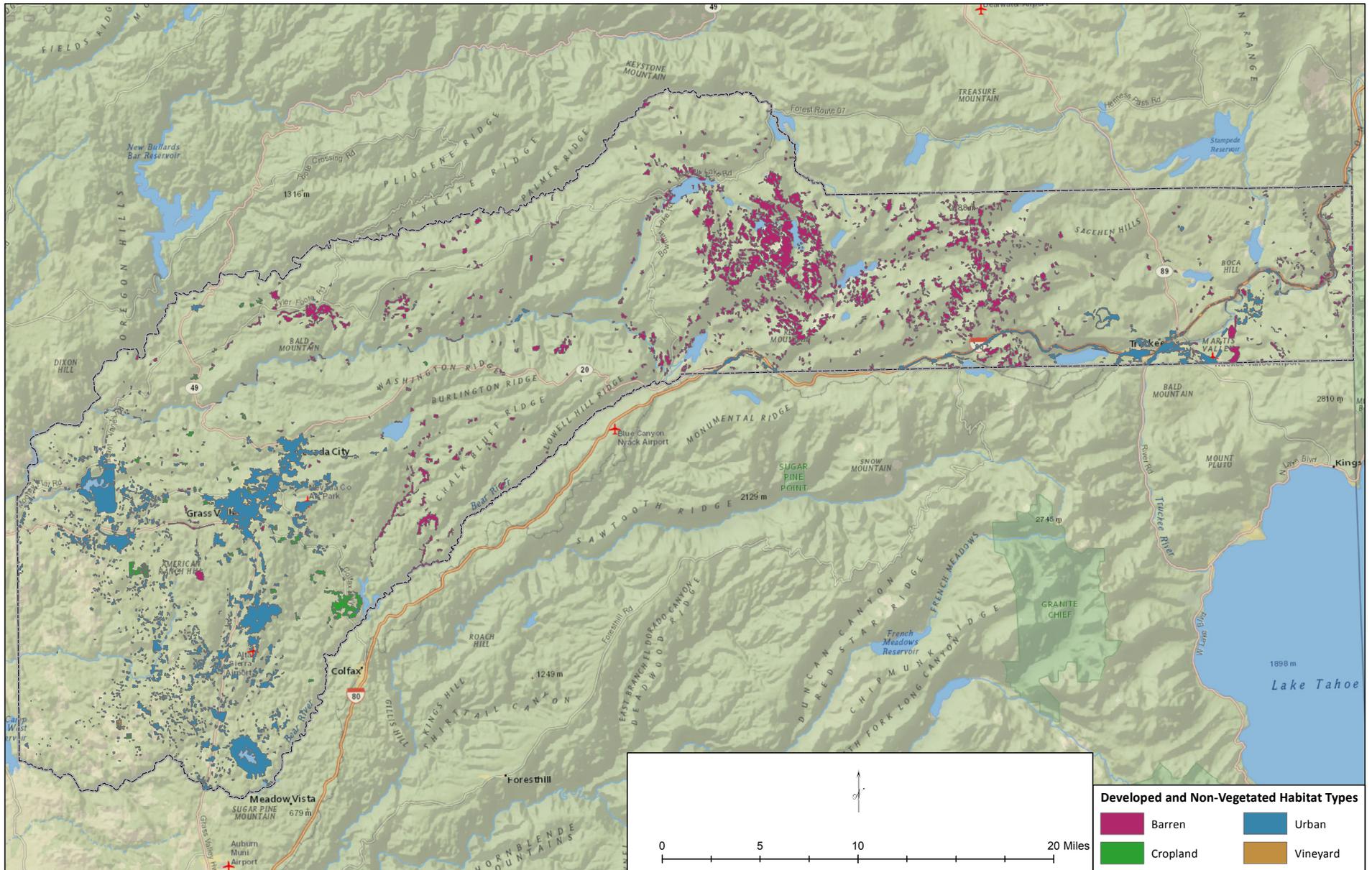
Source: CalFire. 2018. FRAP Mapping: FRAP GIS Data

FIGURE 4.4-3: Herbaceous Dominated Habitat
Nevada County Cannabis EIR



Source: CalFire. 2018. FRAP Mapping: FRAP GIS Data

FIGURE 4.4-4: Aquatic Habitat
Nevada County Cannabis EIR



Source: CalFire. 2018. FRAP Mapping; FRAP GIS Data

FIGURE 4.4-5: Developed and Non-Vegetated Habitat
Nevada County Cannabis EIR

MONTANE HARDWOOD

Montane hardwood habitats in Nevada County are dominated by broad-leaved hardwood tree species; primarily canyon live oak on canyon slopes, and huckleberry oak (*Q. vacciniifolia*) at higher elevations. Other species associated with montane hardwood habitat include white fir, Jeffrey pine (*P. jeffreyi*), Douglas fir, tanoak (*Notholithocarpus densiflorus*), Pacific madrone, bay laurel (*Umbellularia californica*), black oak, knobcone pine (*P. attenuata*), foothill pine (*P. sabiniana*), Oregon white oak (*Q. garryana*), and coast live oak (*Q. agrifolia*). Montane hardwood habitat in Nevada County is widespread and intergrades with Sierran mixed conifer and Douglas fir habitat within the County. Wildlife species that use acorns as a primary food source include Steller's jay (*Cyanocitta stelleri*), acorn woodpecker (*Melanerpes formicivorus*), California quail (*Callipepla californica*), western gray squirrel (*Sciurus griseus*), black bear (*Ursus americanus*), and mule deer (*Odocoileus hemionus*).

RED FIR AND WHITE FIR

Red fir and white fir forest habitats are predominately monotypic (contain only one species), and intergrade into each other on an elevational gradient. These habitats occur largely within the interior of Nevada County, as well as near the California – Nevada state line. Red fir habitat is used by northern goshawk (*Accipiter gentilis*), and both red and white fir habitats provide large snags, which are used by many wildlife species.

DOUGLAS FIR

Douglas fir forest composition varies depending on soil, moisture, topography, and disturbance of the habitat (e.g., history of logging). Douglas fir forests in dry habitats often contain canyon live oak (*Q. chrysolepis*), tanoak, Pacific madrone, sugar pine, ponderosa pine (*P. ponderosa*), and black oak. In wetter habitats, Douglas fir can be associated with species like Pacific yew (*Taxus brevifolia*) and Port Orford cedar (*Chamaecyparis lawsoniana*). Douglas fir habitat is widespread throughout the County, primarily in the interior portion of Nevada County. Many wildlife species can be found within Douglas fir forests in Nevada County, including bird species (e.g., northern spotted owl [*Strix occidentalis caurina*], varied thrush [*Ixoreus naevius*], chestnut-backed chickadee [*Poecile rufescens*]), amphibians (e.g. coast giant salamander [*Dicamptodon tenebrosus*], northwestern salamander [*Ambystoma gracile*], Ensatina [*Ensatina* sp.]), and various mammal species (e.g. fisher [*Pekania pennanti*], dusky-footed woodrat [*Neotoma fuscipes*], Douglas squirrel [*Tamiasciurus douglasii*]).

CHAPARRAL

Chaparral habitat within Nevada County includes mostly montane chaparral (32,631 acres), and approximately 10,386 acres of mixed chaparral. Chaparral habitat is located throughout Nevada County. Plant assemblages for this habitat type vary based on elevation and geographic area; however, chaparral habitat generally includes manzanita, various ceanothus species (*Ceanothus* sp.), huckleberry oak, chinquapin, boxleaf silk tassel (*Garrya buxifolia*), and birch leaf mountain mahogany (*Cercocarpus betuloides*). Chaparral provides important foraging habitat for mammals (e.g., deer and rabbits), as well as for many bird species. The physical structure of chaparral habitat also provides protection, cover, and nesting habitat for many wildlife species.

PONDEROSA PINE

Ponderosa pine habitat is located within the western interior portion of Nevada County. Plant assemblages for this habitat type vary based on elevation and geographic area; however, typical tree associates include

white fir, incense-cedar, Coulter pine (*P. coulteri*), Jeffrey pine, sugar pine, Douglas-fir, bigcone Douglas-fir (*Pseudotsuga macrocarpa*), canyon live oak, California black oak, Oregon white oak, Pacific madrone and tanoak. Associated shrubs include manzanita, ceanothus (*Ceanothus spp.*), mountain-misery (*Chamaebatia foliolosa*), Pacific dogwood (*Cornus nuttallii*), hairy yerba-santa (*Eriodictyon trichocalyx*), yellowleaf silktassel (*G. flavescens*), bitter cherry (*Prunus emarginata*), California buckthorn (*Fragula californica*), poison-oak (*Toxicodendron diversilobum*), Sierra gooseberry (*Ribes roezlii*). Grasses and forbs include slimleaf brome (*Bromus marginatus*), Orcutt brome (*B. orcuttianus*), smallflower melicgrass (*Melica imperfecta*), bracken fern (*Pteridium aquilinum*), bush morning-glory (*Ipomoea leptophylla*), rhomboid clarkia (*Clarkia rhomboidea*), Sierra iris (*Iris hartwegii*), Inyo bush lupine (*Lupinus excubitus*), and summer lupine (*L. formosus*). Ponderosa pine sometimes is a transitional or migratory habitat for deer and can be extremely important to deer nutrition in migration holding areas. A mixture of early and late successional stages closely interspersed probably will provide good general wildlife habitat but riparian zones, deer migratory routes and holding areas require special consideration during management planning. Special status species such as the Sierra Nevada red fox (*Vulpes necator*) can be found within this habitat.

BLUE OAK WOODLAND

The dominant species in blue oak woodland is the blue oak. Other trees found in blue oak woodland include interior live oak, California buckeye (*Aesculus californica*), and foothill or gray pine. The understory in blue oak woodlands is often herbaceous, but can include a number of shrubs. Non-native grasses form the most common understory plants, but buckbrush, poison oak, and white-leaf manzanita may be common.

BLUE OAK-FOOTHILL PINE WOODLAND

This habitat type differs from blue oak woodland by having a greater proportion of foothill pines intermixed with blue oak and interior live oak. The blue oak-foothill pine woodland community occurs on one of the sites in the Lake of the Pines area. This habitat typically has mixed species tree and shrub groupings with annual grassland in small openings. Canopy cover is generally low and trees are mature. Overstory is dominated by foothill pine and blue oak, but interior live oak and California buckeye may also be present. The shrub layer, where present, is comprised of white-leaf manzanita, poison oak, and buckbrush. Non-native annual grasses and forbs occur in a small-scale mosaic of openings.

GRASSLAND

Grassland habitat within the County includes both annual and perennial grassland types, and occurs within the western and eastern portions of the County. Annual grasses include wild oats (*Avena sp.*), soft chess (*Bromus hordeaceus*), riggut brome (*Bromus diandrus*), Chinook brome (*Bromus laevipes*), and wild barley (*Hordeum sp.*). Perennial grasses include species such as California oatgrass (*Danthonia californica*), American dune grass (*Elymus mollis*), and Kentucky bluegrass (*Poa pratensis*). While dominated by grasses, grassland habitats are often interspersed with forbs species. Grasslands provide habitat for many wildlife species, including garter snakes (*Thamnophis sp.*), western fence lizard (*Sceloporus occidentalis*), voles (*Microtus sp.*), mice (*Reithrodontomys sp.* and *Peromyscus sp.*), and various bird species. Areas where valley oak grow within the grassland community, typically contain exceptional specimens with a diameter at breast height (dbh) of over 40 inches. These oaks meet Nevada County criteria for a Landmark Tree.

EASTSIDE PINE

Eastside pine habitat is located within the far eastern portion of Nevada County. Ponderosa pine is the dominant tree with less representation by Jeffrey pine, lodgepole pine (*P. contorta*), white fir, incense-cedar, Douglas-fir, California black oak and western juniper (*Juniperus occidentalis*). Undergrowth varies depending on site conditions, but typically may include one or more of the following shrubs: big sagebrush (*Artemisia tridentata*), antelope bitterbrush (*Purshia tridentata*), manzanita, ceanothus, rubber rabbitbrush (*Ericameria nauseosa*), creambush oceanspray (*Holodiscus discolor*) and mountain snowberry (*Symphoricarpos oreophilus*). Prominent herbaceous plants include mule ears (*Wyethia mollis*), arrowleaf balsamroot (*Balsamorhiza sagittata*), Idaho fescue (*Festuca idahoensis*), pinegrass (*Calamagrostis rubescens*), bluebunch wheatgrass (*Pseudoroegneria spicata*) and bottlebrush squirreltail (*Elymus elymoides*). Eastside pine stands often form important migratory and winter range for deer. Higher elevation stands with grassy understories near water may be extremely important deer fawning areas and migratory holding areas. Important wildlife species in the eastside pine habitat include the bald eagle (*Haliaeetus leucocephalus*) and American peregrine falcon (*Falco peregrinus*) and the Sierra Nevada red fox.

MONTANE HARDWOOD-CONIFER

Montane hardwood-conifer habitats contain at least one-third conifer and one-third broad-leaved hardwood trees. Species assemblages often include ponderosa pine, Douglas fir, incense cedar (*Calocedrus decurrens*), black oak, tanoak, Pacific madrone, and Oregon white oak (*Q. garryana*). Other potential species within this habitat type include golden chinquapin (*Chrysolepis chrysophylla*), canyon live oak, white fir, red alder (*Alnus rubra*), western red cedar (*Thuja plicata*), western hemlock (*Tsuga heterophylla*), and knobcone pine (*P. attenuata*). Montane hardwood-conifer habitat is found predominately in the western portion of the County. Species assemblages likely vary widely depending on location within Nevada County.

BARREN

Barren habitat is devoid of vegetation and can include rocky outcroppings, open sandy beaches, mudflats, river banks, canyon walks, or areas associated with urbanization. Within the County, barren habitats are present along the major rivers and streams, as well as along the edges of lakes, at the higher elevations in the interior of the County, and adjacent to urban areas. Barren habitats vary widely in their composition and wildlife associations are also variable. Barren, vertical cliffs along river banks can provide habitat for bank swallows. Mudflats and open sandy beaches provide foraging and nesting habitat for shorebirds, including the federally threatened western snowy plover.

URBAN

In Nevada County, urban habitat makes up less than four percent of the total land cover within the county, and occurs sporadically within incorporated towns and unincorporated communities, including Grass Valley, Nevada City, Lake of the Pines, Truckee, Floriston, Kingvale, Soda Springs, and Norden. Urban habitat includes urban landscaping, lawns, parks, and green zones. Common urban wildlife species include rock pigeon (*Columba livia*), house sparrow (*Passer domesticus*), European starling (*Sturnus vulgaris*), and racoon (*Procyon lotor*). Because much of the urban areas in Nevada County are located adjacent to more natural habitats, species such as gray fox (*Urocyon cinereoargenteus*), mule deer, and a variety of resident and migratory songbirds are also common within suburban areas.

SAGEBRUSH

Sagebrush habitat is located within the far eastern portion of Nevada County. Often the habitat is composed of pure stands of big sagebrush, but many stands include other species of sagebrush, rabbitbrush, horsebrush (*Tetradymia spp.*), gooseberry (*Ribes spp.*), western chokecherry (*Prunus virginiana*), curlleaf mountain mahogany (*Cercocarpus ledifolius*), and bitterbrush. Plant assemblages for this habitat type vary based on elevation, soil types, and geographic area. On low flats with shallow soils and restricted drainage low sagebrush (*A. arbuscula*) is dominant. Where the soil remains saturated through the spring, silver sagebrush (*A. cana*) dominates. Black sagebrush (*A. nova*) dominates sites with soils high in gravel and carbonates. In communities not fully occupied by sagebrush, various amounts of herbaceous understory are found. Idaho fescue, bluebunch wheatgrass, several species of needlegrass, squirreltail, Sandberg bluegrass (*Poa secunda*), and Great Basin wildrye (*Leymus cinereus*) are among the more common grasses found in the habitat. Sagebrush provides habitat for special status species such as peregrine falcon, bald eagle, and Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*).

AQUATIC

Aquatic habitat in Nevada County includes all rivers, creeks, other tributaries, and lakes. These habitats occur throughout the County, adjacent to many different habitat types.

The County includes portions of the Truckee River, South Yuba River, Deer Creek, Dry Creek, and their tributaries. Nevada County also contains numerous reservoirs and lakes including Scotts Flat Reservoir, Boca Reservoir, Lake Spaulding, Lake Wildwood, Bowman Lake, Fordyce Lake, Independence Lake, Donner Lake, French Lake, and Meadow Lake. Several special status fish species occur within Nevada County watersheds, including chinook salmon (*Oncorhynchus tshawytscha*), steelhead (*O. mykiss irideus*), and Lahontan cutthroat trout. Habitat along rivers, streams, and lakes provide habitat for special status amphibian and reptile species, such as foothill yellow-legged frog (*Rana boylei*), California red-legged frog (*Rana draytonii*), Sierra Nevada yellow-legged frog (*Rana sierrae*), southern long-toed salamander (*Ambystoma macrodactylum sigillatum*), and western pond turtle (*Emys marmorata*), as well as nesting bald eagle and osprey.

AGRICULTURAL

Agricultural land types within Nevada County consist of pasture, croplands, and vineyards. Agricultural land is largely concentrated within the western portion of the County along the valley floor. The majority of agricultural land in Nevada County is used for pasture for livestock, and for cropland. Vineyards make up a very small portion of the total agricultural land in the County and are located near urban areas. Migrating waterfowl and shorebirds forage within pasture land in the County, including Aleutian cackling goose (*Branta hutchinsii*), greater white-fronted goose (*Anser albifrons*), tundra swan (*Cygnus columbianus*), marbled godwit (*Limosa fedoa*), long-billed curlew (*Numenius americanus*), sandpipers (*Calidris sp.*), and willet (*Tringa semipalmata*).

LODGEPOLE PINE

Lodgepole pine habitat can be found within the eastern portion of the County. Lodgepole pine overwhelmingly dominates the habitat with occasional associates include aspen (*Populus spp.*) and mountain hemlock (*Tsuga mertensiana*). Within the County, lodgepole stands are associated with meadow edges and streams, where the understory consists of grasses, forbs, and sedges. Lodgepole pine forests typically lack understory vegetation, and because of this, do not support a wide variety of wildlife species.

BITTERBRUSH

Bitterbrush habitat is located within the far eastern portion of Nevada County. Antelope bitterbrush often occurs as a codominant with big sagebrush or rubber rabbitbrush. It is also found with gray horsebrush (*Tetradymia canescens* var. *inermis*), Douglas rabbitbrush (*Chrysothamnus viscidiflorus*), Mormon tea (*Ephedra nevadensis*), curlleaf mountain mahogany, and desert peach (*Prunus andersonii*). Overstory species found in bitterbrush habitats are ponderosa or Jeffrey pine, lodgepole pine, or western juniper. Understory herbaceous plants vary greatly in composition and density; examples include Idaho fescue, bottlebrush squirreltail, bluebunch wheatgrass, eriogonum, and phlox. Some of the more characteristic wildlife species found in bitterbrush habitat include the western fence lizard (*Sceloporus occidentalis*), gray flycatcher (*Empidonax wrightii*), Brewer's blackbird (*Euphagus cyanocephalus*), green-tailed towhee (*Pipilo chlorurus*), jackrabbits, least chipmunk (*Tamias minimus*), Belding's ground squirrel (*Uroditellus beldingi*), kangaroo rats, and badger (*Taxidea taxus*).

RIPARIAN

Riparian habitat within Nevada County includes mostly montane riparian (2,387 acres), and approximately 1,453 acres of valley foothill riparian. Riparian habitat occurs throughout the County adjacent to aquatic habitat. Characteristic species of montane riparian habitat include black cottonwood (*Populus trichocarpa*), bigleaf maple (*Acer macrophyllum*), Pacific dogwood, boxelder (*Acer negundo*), and bay laurel. Valley foothill riparian habitat also contains western sycamore (*Platanus racemosa*), white alder (*Alnus rhombifolia*), and Oregon ash (*Fraxinus latifolia*). Riparian habitat provides very important habitat for wildlife species and often supports a great diversity of species. Sensitive species that utilize riparian habitat include foothill yellow-legged frog, California red-legged frog, bank swallow (*Riparia riparia*), willow flycatcher (*Empidonax traillii*), yellow warbler (*Setophaga petechia*), and yellow-breasted chat (*Icteria virens*).

SUBALPINE CONIFER

Subalpine conifer habitat typically includes open conifer forests with little to no understory vegetation at high elevations. Trees within subalpine conifer habitats are typically shorter than trees in other forest habitats. Common conifer species include mountain hemlock, western white pine (*P. monticola*), and lodgepole pine. Wildlife associations are like other conifer habitats in the County. Subalpine conifer habitat within Nevada County is present in the eastern interior of the County.

WET MEADOW

Wet meadow habitat is present in the eastern interior portion of the County in association with aquatic features, such as rivers and creeks. Many different plant species can be associated with wet meadow habitats, including sedges (*Carex* sp.), rushes (*Juncus* sp.), bulrush (*Scirpus* sp.), willow (*Salix* sp.), and various grasses. Mule deer and elk often feed in wet meadows, and waterfowl and other bird species also use the habitat. Special status amphibian species, such as foothill yellow-legged frog and California red-legged frog can also be found within wet meadow habitat.

VALLEY OAK WOODLAND

Valley oak (*Quercus lobata*) is the dominant species in this habitat. Tree associates include California sycamore, black walnut (*Juglans hindsii*), interior live oak (*Quercus wislizeni*), boxelder (*Acer negundo*), and blue oak. The shrub understory consists of poison-oak, blue elder (*Sambucus cerulea*), California wild grape (*Vitis californica*), toyon, California coffeeberry, and California blackberry (*Rubus ursinus*). Various sorts of wild oats, brome, barley, ryegrass, and needlegrass dominate the ground cover. Wildlife

associations are like other oak woodland habitats in the County. Valley oak woodland habitat within Nevada County is present in the far western portion of the County.

JEFFERY PINE

Jeffery pine habitat is scattered through the interior portion of Nevada County. Jeffrey pine is the dominant species found in the upper tree layer. It usually forms pure stands, but may have as its associates ponderosa pine, Coulter pine, sugar pine, lodgepole pine, white fir, red fir, incense-cedar, and black cottonwood (*Populus trichocarpa*). Dominant species composition of the second tree layer consists of aspen on moist sites, California black oak on mesic sites, and western juniper on dry sites. Shrub species composition varies between geographical regions. In the Sierra Nevada huckleberry oak, manzanita, and mountain misery dominate the shrub layer. Species common to the shrub layer of Jeffrey pine stands along the east slope of the Sierra Nevada include squirreltail, blue wildrye (*Elymus glaucus*), slender hairgrass (*Deschampsia elongata*), western needlegrass (*Stipa occidentalis*), woolly wyethia (*Wyethia mollis*), and pennyroyal (*Mentha pulegium*). Wildlife associations are like other conifer habitats in the County.

FRESHWATER EMERGENT WETLAND

Approximately 396 acres of freshwater emergent wetland habitat are present in the far western portion of the County. Freshwater emergent wetland habitat can support sedges, rushes, bulrush, and cattail. Many wildlife species utilize this productive habitat; see “Riparian” and “Aquatic” descriptions above.

CLOSED-CONE PINE-CYPRESS

Closed-cone pine-cypress habitat occurs sporadically and sparsely within the interior of Nevada County. The dominant cypress species within these habitats is MacNab cypress (*Hesperocyparis macnabiana*) and the dominant closed-cone pine species include Bishop pine (*P. muricata*), knobcone pine, and lodgepole pine (*Pinus contorta*). Various wildlife species use this habitat for foraging and cover, and great horned owl (*Bubo virginianus*) and red-tailed hawk (*Buteo jamaicensis*) have been known to nest within closed-cone pine habitats.

ASPEN

Aspen habitat occurs sporadically and sparsely within the far eastern portion of Nevada County. Aspen stands are typically composed of clones representing one or more genetic lines. Associated subdominant tree species may include willows (*Salix* spp.), alders (*Alnus* spp.), black cottonwood, lodgepole pine, Jeffrey pine, ponderosa pine, red fir, white fir, Douglas-fir, and Engelmann spruce (*Picea engelmannii*). Important understory shrubs include sagebrush, snowberry, western chokecherry, and western serviceberry (*Amelanchier alnifolia*). Aspen stands are habitats favored by a variety of cavity-nesting birds, such as bluebirds (*Sialia currucoides* and *S. mexicana*), sapsuckers (*Sphyrapicus* spp.), downy woodpeckers (*Picoides pubescens*), and chickadees (*Poecile* spp.). Snags are important to cavity nesters in these stands, but live aspens are easily and therefore commonly drilled by excavating species. On the eastern slopes of the Sierra Nevada, aspen stands adjoining sagebrush and other shrub habitats apart from forested sites often provide nesting cover for northern goshawks (*Accipiter gentilis*).

LOW SAGE

The low sage habitat may be dominated by either low sagebrush or black sagebrush, often in association with Douglas rabbitbrush, antelope bitterbrush, or big sagebrush; black sagebrush is also commonly associated with winterfat (*Krascheninnikovia lanata*) and Mormon tea. Western juniper may be sparsely

scattered in stands dominated by low sagebrush, and Utah juniper (*Juniperus osteosperma*) and singleleaf pinyon (*Pinus monophylla*) are sometimes scattered in stands dominated by black sagebrush. Common grass species include Sandberg bluegrass, bluebunch wheatgrass, bottlebrush squirreltail, Thurber's needlegrass (*Achnatherum thurberianum*), and Idaho fescue. The abundance and distribution of associated plants is highly influenced by soils and precipitation. Wildlife associations are like the sagebrush and bitterbrush habitats in the County.

JUNIPER

Soil depth, type and moisture influence composition of plants in juniper habitats. Associated tree and shrub species, depending in part on species of juniper and its distribution, include white fir, Jeffrey and ponderosa pine, singleleaf pinyon, curl leaf mountain-mahogany, antelope bitterbrush, and big sagebrush. Wildlife associations are like the sagebrush, and bitterbrush habitats in the County.

SPECIAL STATUS SPECIES

Special status species are plants and animals that are legally protected under the California Endangered Species Act (CESA; Fish and Game Code, Section 2050 et seq.), federal Endangered Species Act (ESA), or other regulations, as well as species considered sufficiently rare by the scientific community to qualify for such listing. For this program EIR, special status species are defined as:

- species listed or proposed for listing as threatened or endangered under the ESA (50 Code Fed. Regs., Section 17.12) for listed plants, (50 Code Fed. Regs., Section 17.11) for listed animals, and various notices in the Federal Register for proposed species;
- species that are candidates for possible future listing as threatened or endangered under the ESA (75 Code Fed. Regs., Section 69222, USFWS 2018; NOAA Fisheries 2018a);
- species that are listed or proposed for listing by the State of California as threatened or endangered under the CESA of 1984 (14 Cal. Code Regs., Section 670.5);
- plants considered by CDFW and the California Native Plant Society (CNPS) to be “rare, threatened, or endangered in California” (Rare Plant Ranks 1A, 1B, 2A, and 2B; CDFW 2018b; CNPS 2018);
- species that meet the definition of rare or endangered under the State CEQA Guidelines, Section 15380;
- animals fully protected in California (Fish and Game Code, Section 3511 for birds, Section 4700 for mammals, and Section 5050 for reptiles and amphibians); or
- animal species of special concern to CDFW (CDFW 2018b).

SPECIAL STATUS WILDLIFE

A total of 27 special status wildlife species have potential to occur within Nevada County (*Figure 4.4.6: Special Status Wildlife Species Occurrences; Table 4.4-2*). See Appendix D for a complete list of species that may occur within Nevada County but have not been observed or for species that have no status but may occur within Nevada County.

SPECIAL STATUS PLANTS

A total of 36 special status plant species have been identified as occurring within Nevada County (*Figure 4.4-7: Special Status Plant Species Occurrences; Table 4.4-3*). See Appendix D for a complete list of species that may occur within Nevada County but have not been observed.

Table 4.4-2: Special Status Wildlife Species Known to Occur in Nevada County and their Potential for Occurrence

Species	Regulatory Status ¹		Habitat	Potential Areas for Occurrence within Nevada County
	Federal	State		
Invertebrates				
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	T	--	Vernal pools and seasonal wetlands.	Although this species has never been observed in Nevada County, suitable habitat is present throughout.
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	E	--	Vernal pools, seasonal wetlands, and ephemeral stock ponds.	Although this species has never been observed in Nevada County, suitable habitat is present throughout.
Fish				
Lahontan cutthroat trout <i>Oncorhynchus clarkii henshawi</i>	T	--	Native to the drainages of the Truckee River, Humboldt River, Carson River, Walker River, Quinn River and several smaller rivers in the Great Basin of North America.	Species known to occur within the Yuba River and tributaries in interior northern portion of County; also known to occur within Independence Lake and its tributaries.
Central Valley steelhead DPS <i>Oncorhynchus mykiss</i>	T	--	The Sacramento and San Joaquin Rivers and their tributaries, excluding San Francisco and San Pablo Bays and their tributaries, and coastal marine waters off California.	Species may be found in the far western portion of the County within the Yuba River to Englebright Dam
Central Valley spring-run chinook salmon <i>Oncorhynchus tshawytscha</i>	T	T	The Sacramento and San Joaquin Rivers and tributaries March to July, Young move to rearing areas in and through the Sacramento and San Joaquin Rivers, Delta, and San Pablo and San Francisco Bays.	Species may be found in the far western portion of the County within the Yuba River to Englebright Dam

Table 4.4-2: Special Status Wildlife Species Known to Occur in Nevada County and their Potential for Occurrence

Species	Regulatory Status ¹		Habitat	Potential Areas for Occurrence within Nevada County
	Federal	State		
Amphibians				
Southern long-toed salamander <i>Ambystoma macrodactylum sigillatum</i>	--	SSC	Inhabits alpine meadows, high mountain ponds and lakes.	Species may be found in suitable aquatic habitat at higher elevations in the interior portion of the County.
Foothill yellow-legged frog <i>Rana boylei</i>	--	CT, SSC	Found in or near rocky, perennial streams in a variety of habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadow types.	Species may be found within suitable aquatic and riparian habitat on western side of the Sierra Nevada foothills.
California red-legged frog <i>Rana draytonii</i>	T	SSC	Found in permanent and semi-permanent aquatic habitats, such as creeks and ponds, with emergent and submergent vegetation. May aestivate in rodent burrows or cracks during dry periods.	Species may be found within suitable aquatic and riparian habitat on the western side of the Sierra Nevada foothills.
Sierra Nevada yellow-legged frog <i>Rana sierrae</i>	E	T	Lakes, ponds, marshes, meadows, and streams at high elevations—typically ranging from about 4,500 to 12,000 feet, but can occur as low as about 3,500 feet in the northern portions of their range	Species may be found within suitable aquatic and riparian habitat at higher elevations along the eastern slopes of the Sierra Nevada foothills.
Reptiles				
Western pond turtle <i>Emys marmorata</i>	--	SSC	Thoroughly aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches with aquatic vegetation.	Species may be found in suitable aquatic habitat in the western portion of the County.

Table 4.4-2: Special Status Wildlife Species Known to Occur in Nevada County and their Potential for Occurrence

Species	Regulatory Status ¹		Habitat	Potential Areas for Occurrence within Nevada County
	Federal	State		
Coast horned lizard <i>Phrynosoma blainvillii</i>	--	SSC	Found in scrubland, grassland, coniferous forests, and broadleaved woodland, especially in lowland areas along sandy washes with scattered low shrubs. Also requires open areas for basking and patches of fine, loose soil for burying prey.	Species may be found in suitable habitat at lower elevations on the western slopes of the Sierra Nevada foothills.
Birds				
Cooper's hawk <i>Accipiter cooperii</i>	--	WL	Frequents landscapes where wooded areas occur in patches and groves. Often uses patchy woodlands and edges with snags for perching. Dense stands with moderate crown-depths used for nesting.	Species may be found in suitable habitat at lower elevations in the western portion of the County.
Northern goshawk <i>Accipiter gentilis</i>	--	SSC	Prefers middle and higher elevations, and mature, dense conifer forests. Casual in winter along north coast, throughout foothills, and in northern deserts, where it may be found in pinyon-juniper and low-elevation riparian habitats.	Species may be found in suitable habitat in the interior and eastern portions of the County; particularly at higher elevations in the Sierra Nevada foothills.
Long-eared owl <i>Asio otus</i>	--	SSC	Dense, mixed forests and tall shrublands, usually next to open spaces. Often nests in an abandoned crow, magpie, or hawk nest, occasionally in a natural tree cavity.	Species may be found in suitable habitat in the far western portion of the County.
Black swift <i>Cypseloides niger</i>	--	SSC	Open sky over mountains, coastal cliffs. Forages widely over any kind of terrain but is still very local in its occurrence, probably limited to regions with suitable nesting sites. Nests on ledges or in crevices in steep cliffs, either along coast or near streams or waterfalls in mountains.	Species may be found in suitable habitat primarily in the eastern portion of the County. Summer resident in Nevada County.

Table 4.4-2: Special Status Wildlife Species Known to Occur in Nevada County and their Potential for Occurrence

Species	Regulatory Status ¹		Habitat	Potential Areas for Occurrence within Nevada County
	Federal	State		
Willow flycatcher <i>Empidonax traillii</i>	--	E	Bushes, willow thickets, brushy fields, upland copses. Breeds in thickets of deciduous trees and shrubs, especially willows, or along woodland edges. Often near streams or marshes.	Species may occur within suitable riparian breeding habitat primarily in the eastern portion of Nevada County.
Bald eagle <i>Haliaeetus leucocephalus</i>	DL	E, FP	Requires large, old-growth trees or snags in remote, mixed stands near large bodies of water, or free-flowing rivers with abundant fish.	This species may occur in suitable old-growth habitat in the interior and eastern portions of the County, in association with large bodies of water such as Independence Lake.
Yellow-breasted chat <i>Icteria virens</i>	--	SSC	Require dense riparian thickets of willows, vine tangles, and dense brush associated with streams, swampy ground and the borders of small ponds.	Species may occur within suitable riparian breeding habitat primarily in the western portion of Nevada County.
California black rail <i>Laterallus jamaicensis coturniculus</i>	--	T, FP	Salt and freshwater marshes with dense cover. Interior populations known from Sierra Nevada foothills. Typical inland habitat is irrigation-fed wetlands >0.25-acre.	Species may occur within suitable aquatic habitat within the western portion of the County.
Osprey <i>Pandion haliaetus</i>	--	WL	Associated strictly with large, fish-bearing waters, primarily in ponderosa pine through mixed conifer habitats.	This species may occur in suitable pine habitat in the interior and eastern portions of the County, in association with large bodies of water such as Independence and Donner Lake.
Yellow warbler <i>Setophaga petechia</i>	--	SSC	Breeds in riparian vegetation throughout California; populations in Sacramento and San Joaquin valleys are declining. Common in eastern Sierran riparian habitats below 8,000 feet.	Species may occur within suitable riparian breeding habitat primarily in the western portion of Nevada County.

Table 4.4-2: Special Status Wildlife Species Known to Occur in Nevada County and their Potential for Occurrence

Species	Regulatory Status ¹		Habitat	Potential Areas for Occurrence within Nevada County
	Federal	State		
Mammals				
Sierra Nevada mountain beaver <i>Aplodontia rufa californica</i>	--	SSC	High-elevation, steep, moist habitat; abundance of willow (<i>Salix</i> spp.), alder (<i>Alnus</i> spp.), and fir (<i>Abies concolor</i> and <i>A. magnifica</i>).	Species may occur at higher elevations within the County in association with aquatic, riparian, wet meadow, and fir habitats.
Townsend’s big-eared bat <i>Corynorhinus townsendii</i>	--	SSC	Requires caves, mines, tunnels, buildings, or other human-made structures for roosting. May use separate sites for night, day, hibernation, or maternity roosts. Hibernation sites are cold, but not below freezing. Roosting sites are the most important limiting resource.	Species may occur within areas that contain suitable roosting habitat throughout the County.
California wolverine <i>Gulo gulo</i>	PT	T, FP	Found in mixed conifer, red fir, and lodgepole habitats, and probably use subalpine conifer, alpine dwarf-shrub, wet meadow, and montane riparian habitats. Elevations mostly fall in the range of 4,300-7,300 feet.	Species may occur within suitable habitat at higher elevations in the eastern portion of the County.
Sierra Nevada snowshoe hare <i>Lepus americanus tahoensis</i>	--	SSC	Occurs in riparian communities characterized by thickets of deciduous trees and shrubs such as willows and alders.	Species may occur within suitable riparian habitat in the eastern portion of the County.
Fisher – West Coast DPS <i>Pekania pennanti</i>	--	T, SSC	Large areas of mature, dense forest stands with snags and greater than 50% canopy closure.	Although an uncommon permanent resident in the Sierra Nevadas, this species may be found in suitable habitat in the interior portion of the County.

Table 4.4-2: Special Status Wildlife Species Known to Occur in Nevada County and their Potential for Occurrence

Species	Regulatory Status ¹		Habitat	Potential Areas for Occurrence within Nevada County
	Federal	State		
Sierra Nevada red fox <i>Vulpes vulpes necator</i>	C	T	Found in a variety of habitats, including alpine dwarf-shrub, wet meadow, subalpine conifer, lodgepole pine, red fir, aspen, montane chaparral, montane riparian, mixed conifer, and ponderosa pine at elevations ranging from 4,500 to 11,500 feet in California.	Species may be found in suitable habitat at higher elevations in the interior portions of the County.

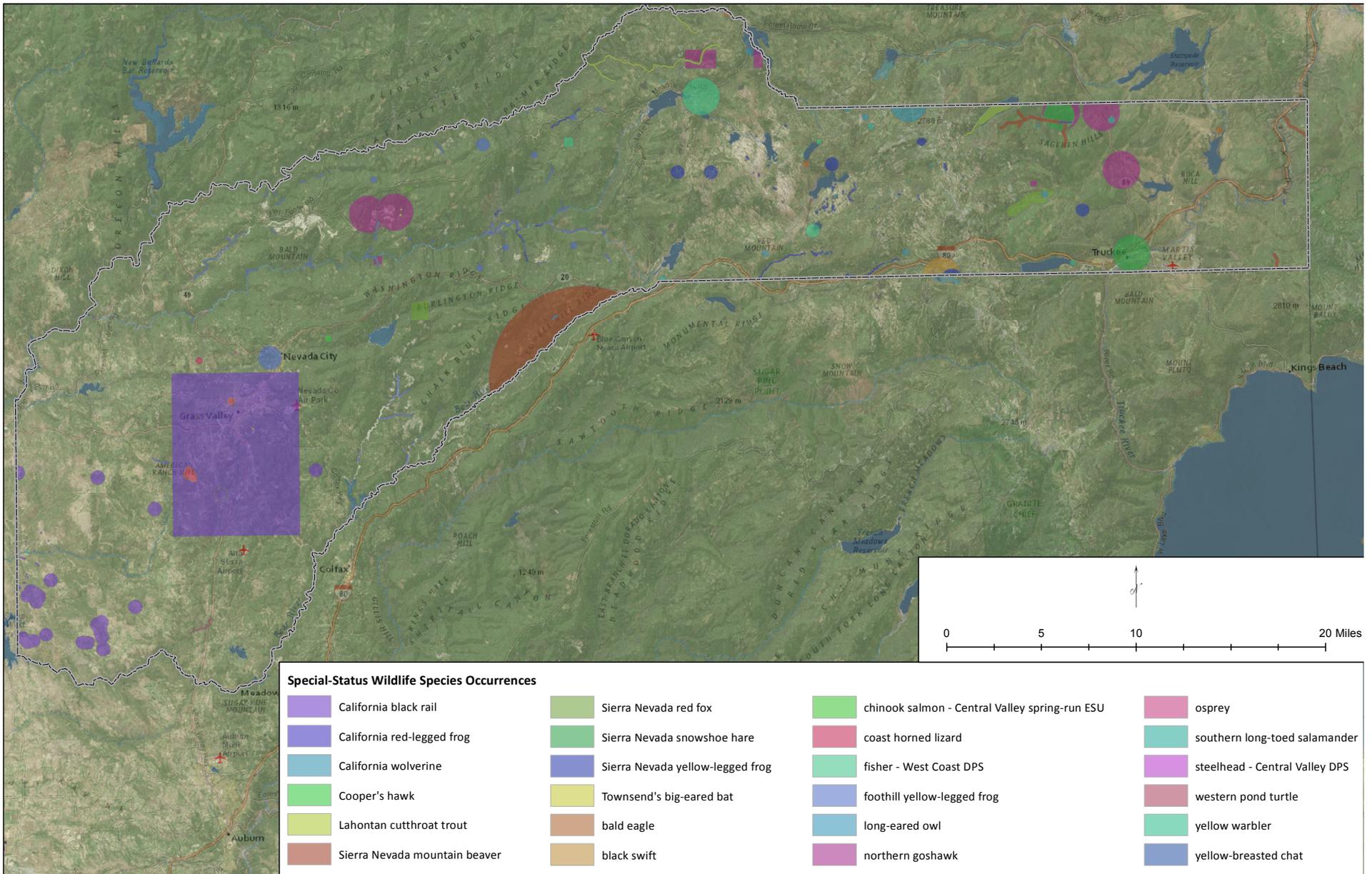
¹ Status explanations:

Federal

- C = proposed candidate for listing under the federal Endangered Species Act.
- E = listed as endangered under the federal Endangered Species Act.
- T = listed as threatened under the federal Endangered Species Act.

State

- E = listed as endangered under the California Endangered Species Act.
- T = listed as threatened under the California Endangered Species Act.
- CT= candidate for listing as threatened under the California Endangered Species Act.
- SSC = state species of special concern



Source: CDFW. 2018. Spotted Owl Observations

FIGURE 4.4-6: Special-Status Wildlife Species
Nevada County Cannabis EIR

Table 4.4-3: Special Status Plant Species Known to Occur in Nevada County and their Potential for Occurrence

Species	Regulatory Status ¹			Habitat	Potential Areas for Occurrence within Nevada County
	Federal	State	CNPS		
Threetip sagebrush <i>Artemisia tripartita</i> ssp. <i>tripartita</i>	--	--	2B.3	Openings in upper montane coniferous forest with rocky, volcanic soils.	This species may be found in suitable forest habitat at higher elevations in the eastern portion of the County.
Austin's astragalus <i>Astragalus austiniae</i>	--	--	1B.3	Rocky soils in alpine boulder and rock fields; subalpine coniferous forest.	This species may be found in suitable habitat at higher elevations in the eastern portion of the County.
Upswept moonwort <i>Botrychium ascendens</i>	--	--	2B.3	Mesic areas in lower montane coniferous forests; meadows and seeps.	This species may be found in suitable habitat at higher elevations in the eastern portion of the County.
Scalloped moonwort <i>Botrychium crenulatum</i>	--	--	2B.2	Bogs and fens; meadows and seeps; freshwater marshes and swamps; mesic areas in lower and upper montane coniferous forests.	This species may be found in suitable habitat at higher elevations in the eastern portion of the County.
Common moonwort <i>Botrychium lunaria</i>	--	--	2B.3	Meadows and seeps; mesic areas in subalpine and upper montane coniferous forest.	This species may be found in suitable habitat at higher elevations in the eastern portion of the County.
Mingan moonwort <i>Botrychium minganense</i>	--	--	2B.2	Bogs and fens; edges of meadows and seeps; mesic areas in lower and upper montane coniferous forests.	This species may be found in suitable habitat at higher elevations in the eastern portion of the County.
Stebbins' morning-glory <i>Calystegia stebbinsii</i>	E	E	1B.1	Openings in chaparral and cismontane woodlands with gabbroic or serpentine soils.	This species may be found at lower elevations on the western side of the Sierra Nevada foothills.
Davy's sedge <i>Carex davyi</i>	--	--	1B.3	Mesic areas in subalpine and upper montane coniferous forests.	This species may be found in suitable habitat at higher elevations in the eastern portion of the County.
Woolly-fruited sedge <i>Carex lasiocarpa</i>	--	--	2B.3	Bogs and fens; margins of freshwater marshes and swamps.	This species may be found in suitable habitat at higher elevations in the interior portion of the County.

Table 4.4-3: Special Status Plant Species Known to Occur in Nevada County and their Potential for Occurrence

Species	Regulatory Status ¹			Habitat	Potential Areas for Occurrence within Nevada County
	Federal	State	CNPS		
Mud sedge <i>Carex limosa</i>	--	--	2B.2	Bogs and fens; meadows and seeps; marshes and swamps; mesic areas in lower and upper montane coniferous forests.	This species may be found in suitable habitat at higher elevations in the interior and eastern portions of the County.
Chaparral sedge <i>Carex xerophila</i>	--	--	1B.2	Chaparral, cismontane woodland, and lower montane coniferous forests with serpentine and/or gabbroic soils.	This species may be found at lower elevations on the western side of the Sierra Nevada foothills.
Fell-fields claytonia <i>Claytonia megarhiza</i>	--	--	2B.3	In crevices between rocks in alpine boulder and rock fields; subalpine coniferous forest with rocky or gravelly soils.	This species may be found in suitable habitat at higher elevations in the interior and eastern portions of the County.
Northern coralroot <i>Corallorhiza trifida</i>	--	--	2B.1	Edges of meadows and seeps; mesic areas in lower montane coniferous forest	This species may be found in suitable habitat at higher elevations in the northern interior portion of the County.
English sundew <i>Drosera anglica</i>	--	--	2B.3	Bogs and fens; meadows and seeps.	This species may be found in suitable habitat at higher elevations in the eastern portion of the County.
Starved daisy <i>Erigeron miser</i>	--	--	1B.3	Rocky areas in upper montane coniferous forest.	This species may be found in suitable habitat at higher elevations in the interior and eastern portions of the County.
Donner Pass buckwheat <i>Eriogonum umbellatum</i> var. <i>torreyanum</i>	--	--	1B.2	Volcanic, rocky soils in upper montane coniferous forest; meadows and seeps.	This species may be found in suitable habitat at higher elevations in the interior and eastern portions of the County.
Pine Hill flannelbush <i>Fremontodendron decumbens</i>	E	R	1B.2	Rocky, gabbroic or serpentine soils in chaparral and cismontane woodland.	This species may be found at lower elevations on the western side of the Sierra Nevada foothills.

Table 4.4-3: Special Status Plant Species Known to Occur in Nevada County and their Potential for Occurrence

Species	Regulatory Status ¹			Habitat	Potential Areas for Occurrence within Nevada County
	Federal	State	CNPS		
Plumas Ivesia <i>Ivesia sericoleuca</i>	--	--	1B.2	Vernally mesic, usually volcanic soils in Great Basin scrub and lower montane coniferous forest; meadows and seeps; vernal pools.	This species may be found in suitable habitat at higher elevations in the eastern portion of the County.
Finger rush <i>Juncus digitatus</i>	--	--	1B.1	Openings in cismontane woodland and lower montane coniferous forest; vernal pools with xeric conditions.	This species may be found at lower elevations on the western side of the Sierra Nevada foothills.
Santa Lucia dwarf rush <i>Juncus luciensis</i>	--	--	1B.2	Chaparral; Great Basin scrub; lower montane coniferous forest; meadows and seeps; vernal pools.	This species may be found in suitable habitat at mid elevations in the eastern portion of the County.
Cantelow's lewisia <i>Lewisia cantelovii</i>	--	--	1B.2	Mesic, granitic, sometimes serpentine seeps in broadleaved upland forest, chaparral, cismontane woodland, and lower montane coniferous forest.	Species may be found in suitable habitat at mid elevations in the Sierra Nevada foothills in the western portion of the County.
Long-petaled lewisia <i>Lewisia longipetala</i>	--	--	1B.3	Granitic soils in alpine boulder and rock fields; mesic rocky areas in subalpine coniferous forest.	This species may be found in suitable habitat at higher elevations in the eastern portion of the County.
Inundated bog club-moss <i>Lycopodium inundatum</i>	--	--	2B.2	Bogs and fens in coastal areas; mesic areas in lower montane coniferous forest.	Species may be found in suitable habitat at mid elevations in the Sierra Nevada foothills in the western portion of the County
Broad-nerved hump moss <i>Meesia uliginosa</i>	--	--	2B.2	Bogs and fens; meadows and seeps; damp soil in subalpine and upper montane coniferous forest.	This species may be found in suitable habitat at higher elevations in the eastern portion of the County.
Hiroshi's flapwort <i>Nardia hiroshii</i>	--	--	2B.3	Meadows and seeps with damp soil and granitic bedrock.	This species may be found in suitable habitat in the eastern portion of the County.

Table 4.4-3: Special Status Plant Species Known to Occur in Nevada County and their Potential for Occurrence

Species	Regulatory Status ¹			Habitat	Potential Areas for Occurrence within Nevada County
	Federal	State	CNPS		
Stebbins' phacelia <i>Phacelia stebbinsii</i>	--	--	1B.2	Meadows and seeps; cismontane woodland; lower montane coniferous forest.	Species may be found in suitable habitat at mid elevations in the Sierra Nevada foothills in the western portion of the County.
Sierra bluegrass <i>Poa sierrae</i>	--	--	1B.3	Openings in lower montane coniferous forest.	Species may be found in suitable habitat at mid elevations in the Sierra Nevada foothills in the western portion of the County.
White-stemmed pondweed <i>Potamogeton praelongus</i>	--	--	2B.3	Deepwater marshes and swamps; lakes.	Species may be found in suitable habitat at mid to high elevations in the interior and eastern portions of the County.
Alder buckthorn <i>Rhamnus alnifolia</i>	--	--	2B.2	Mesic areas in lower and upper montane coniferous forest; meadows and seeps; riparian scrub.	Species may be found in suitable habitat at high elevations in the eastern portion of the County.
White beaked rush <i>Rhynchospora alba</i>	--	--	2B.2	Bogs and fens; meadows and seeps; freshwater marshes and swamps.	Species may be found in suitable habitat at low to mid elevations in the interior portion of the County.
Brownish beaked rush <i>Rhynchospora capitellata</i>	--	--	2B.2	Mesic areas in lower and upper montane coniferous forest; meadows and seeps; marshes and swamps.	Species may be found in suitable habitat at low to mid elevations in the western portion of the County.
Tahoe yellow cress <i>Rorippa subumbellata</i>	--	E	1B.1	Decomposed granitic beaches in lower montane coniferous forest; meadows and seeps.	Presumed extirpated in Nevada County however suitable habitat is present at mid elevations in the eastern portion of the County.

Table 4.4-3: Special Status Plant Species Known to Occur in Nevada County and their Potential for Occurrence

Species	Regulatory Status ¹			Habitat	Potential Areas for Occurrence within Nevada County
	Federal	State	CNPS		
Water bulrush <i>Schoenoplectus subterminalis</i>	--	--	2B.3	Bogs and fens; marshes and swamps; montane lake margins.	Species may be found in suitable habitat at low to mid elevations in the interior portion of the County.
Marsh skullcap <i>Scutellaria galericulata</i>	--	--	2B.2	Mesic areas in lower montane coniferous forest; meadows and seeps; marshes and swamps.	Species may be found in suitable habitat at low to mid elevations in the eastern portion of the County.
Scadden Flat checkerbloom <i>Sidalcea stipularis</i>	--	E	1B.1	Montane freshwater marshes and swamps.	Species may be found in suitable habitat at low elevations in the Sierra Nevada foothills in the western portion of the County.
True's mountain jewelflower <i>Streptanthus tortuosus ssp. truei</i>	--	--	1B.1	Partial shade on steep rocky slopes in lower montane coniferous forest.	Species may be found at low elevations in the Sierra Nevada foothills.

¹ Status explanations:

-- = no listing.

Federal

E = listed as endangered under the federal Endangered Species Act.

T = listed as threatened under the federal Endangered Species Act.

State

E = listed as endangered under the California Endangered Species Act.

R = listed as rare under the California Endangered Species Act.

T = listed as threatened under the California Endangered Species Act.

California Native Plant Society

1A = List 1A species: extirpated in California, rare or extinct elsewhere

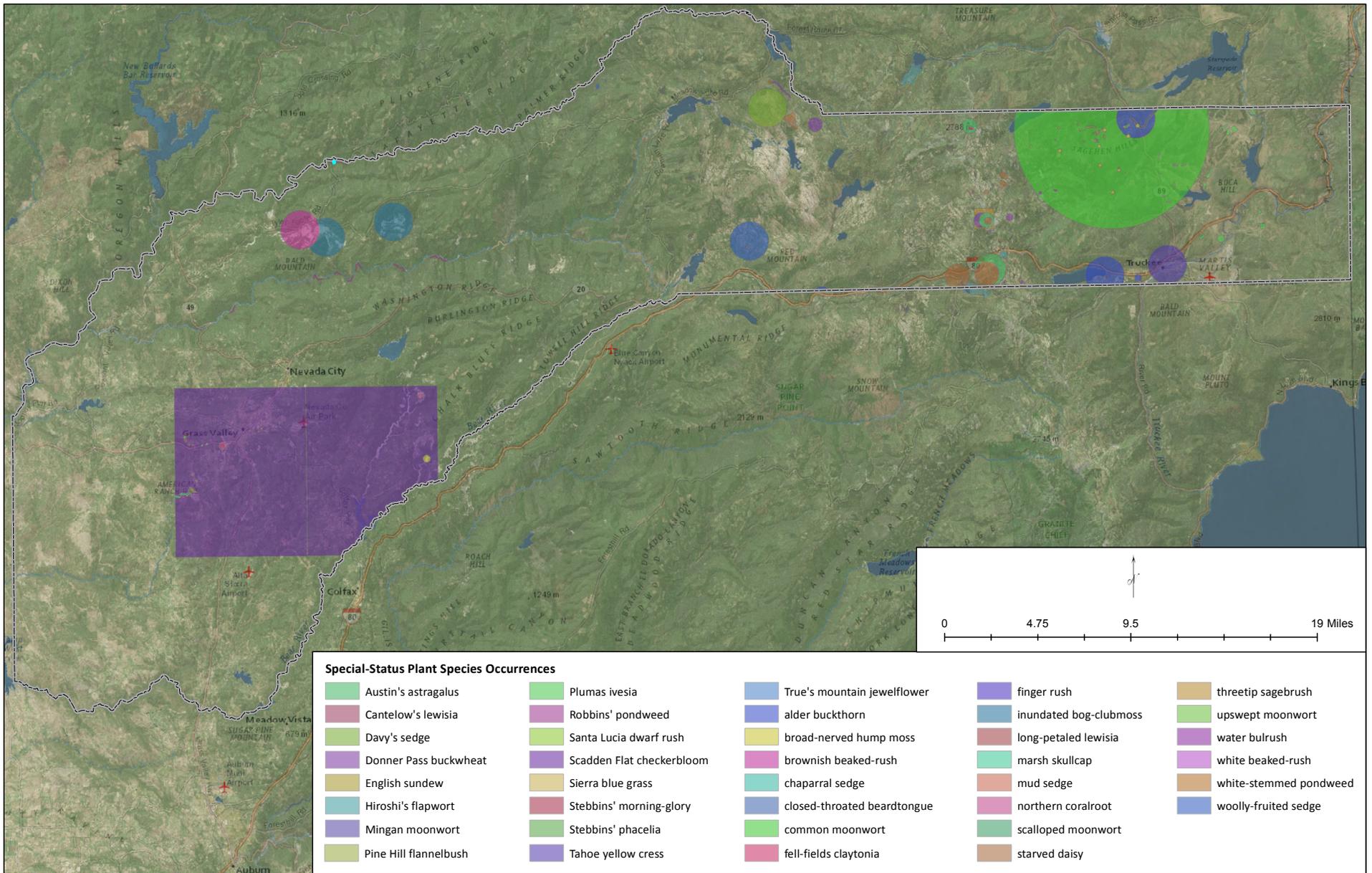
1B = List 1B species: rare, threatened, or endangered in California and elsewhere.

2B = List 2B species: rare, threatened, or endangered in California but more common elsewhere.

0.1 = Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)

0.2 = Moderately threatened in California (20%-80% occurrences threatened/moderate degree and immediacy of threat)

0.3 = Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)



Source: CDFW. 2018. Spotted Owl Observations

FIGURE 4.4-7: Special-Status Plant Species
Nevada County Cannabis EIR

CRITICAL HABITAT

Critical habitat is a term defined and used in ESA. It refers to specific geographic areas designated by USFWS or NOAA Fisheries that contain features essential to the conservation of an endangered or threatened species and that may require special management and protection. Critical habitat for four species, including two fish and two amphibians, is present within Nevada County (USFWS 2018c; NOAA Fisheries 2018b; *Figure 4.4-8, Critical Habitat – Fish Species*, and *Figure 4.4-9, Critical Habitat – Wildlife Species*).

Chinook salmon

Approximately 0.54 miles of critical habitat for Central Valley spring-run chinook salmon occurs in Nevada County, and includes the upper Yuba River and Deer Creek.

Steelhead

Approximately 0.62 miles of critical habitat for Central Valley steelhead occurs in Nevada County, and includes the upper Yuba River and Deer Creek.

California red-legged frog

There are approximately 8,285 acres of critical habitat for California red-legged frog in Nevada County. Critical habitat is located in the eastern portion of the County, south of the South Yuba River and north of State Route (SR) 20, approximately 3 miles northeast of Nevada City.

Sierra Nevada yellow-legged frog

There are approximately 8,285 acres of critical habitat for California red-legged frog in Nevada County. Critical habitat is located in the eastern interior and eastern portion of the County. Critical habitat includes all suitable riparian and aquatic habitat, including Bowman Lake, French Lake, Meadow Lake, Fordyce Lake and all associated creeks, rivers, tributaries and sloughs.

Sensitive Natural Communities

Sensitive habitat types include those that are of special concern to CDFW, or that are afforded specific consideration through CEQA, Section 1602 of the California Fish and Game Code, the Porter-Cologne Act, and Section 404 of the Clean Water Act (CWA), as discussed in *Section 4.4.2: Regulatory Setting*, below. Sensitive habitats may be of special concern to regulatory agencies and conservation organizations for a variety of reasons, including their locally or regionally declining status, or because they provide important habitat to common and special status species.

CDFW maintains a list of plant communities that are native to California. Within that list, CDFW identifies special status plant communities (i.e., sensitive natural communities), which it defines as communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. These communities may or may not contain special status species or their habitat. Special status plant communities are tracked in the California Natural Diversity Data Base (CNDDDB). Four sensitive natural communities were reported in the CNDDDB and occur within the County (*Figure 4.4-10, Sensitive Natural Communities*).

Darlingtonia Seep

Darlingtonia seep habitat is present in Nevada County south of Celina Ridge, about three miles southeast of Graniteville. This habitat contains features like other wetland habitats and also contains accumulated

organic material, including moss from the genus *Sphagnum*. *Darlingtonia* seeps are formed in cold, highly acidic, permanently waterlogged soils and are low in available nutrients (Sawyer et al. 2009). Peat tends to accumulate without decomposing completely and occasionally the soil is pure peat. *Darlingtonia californica*, California's only native pitcher plant, can only be found in *Darlingtonia* seeps. The elevation range for this habitat is between 4,000 and 6,000 feet.

Fen

Fen habitat is present in Nevada County, sparsely scattered throughout the Sierra Nevada Mountains. The state rarity ranking for fen habitat is S1.2, or threatened, with less than 2,000 acres remaining in California. Fens are dominated by a dense grown of low-growing, herbaceous perennials and low shrubs (Sawyer et al. 2009). Peat accumulates in cold, poorly drained areas. Fens have nutrient-rich water creating a diverse and rich flora. Fens can be found anywhere from sea level to 6,000 feet in elevation.

Great Basin Cutthroat Trout/Paiute Sculpin Stream

In Nevada County, this natural community has only been identified in two rivers in the northeastern portion of the County; upper Sagehen Creek from upstream of the SR 89 crossing to the headwaters of Sagehen Creek, and upper Prosser Creek from about a half mile upstream of SR 89 to the headwaters of Prosser Creek (includes both north and south fork of Prosser Creeks (CDFW 2018b)). These tributaries are not included within designated critical habitat for any species.

Great Basin Sucker/Dace/Redside Stream with Cutthroat Trout

In Nevada County, this natural community has only been identified in two rivers in the northeastern portion of the County; Prosser Creek, above the Prosser Reservoir from the inlet to a half mile upstream of the SR 89 crossing, and lower Sagehen Creek from SR 89 to Stampede Reservoir (CDFW 2018b). These tributaries are not included within designated critical habitat for any species.

WETLANDS AND WATERS OF THE U.S. AND STATE

Nevada County contains over 23,000 wetland and riverine features as mapped by the USFWS (2018d). These features include freshwater emergent wetlands, freshwater forested/shrub wetlands, freshwater ponds and lakes, and riverine features such as rivers, creeks, and streams (*Figure 4.4-11, Wetlands*).

The County includes significant portions of the Truckee River, South Yuba River, Deer Creek, Dry Creek, and their tributaries. Nevada County also contains numerous reservoirs and lakes including Scotts Flat Reservoir, Boca Reservoir, Lake Spaulding, Lake Wildwood, Bowman Lake, Fordyce Lake, Independence Lake, Donner Lake, French Lake, and Meadow Lake.

INVASIVE PLANT SPECIES AND NOXIOUS WEEDS

An invasive plant is one that is not native to a region, but rather is introduced, and tends to crowd out native vegetation and thereby adversely affect the wildlife that feeds on it. There are many invasive plant species in Nevada County and they occur throughout several different habitat types (Nevada County 2018). Aggressive noxious weeds such as yellow star-thistle (*Centaurea solstitialis*), Scotch broom (*Cystisus scoparius*), Spanish broom (*Spartium junceum*), spotted knapweed (*Centaurea maculosa*), French broom (*Genista monspessulana*), and Scotch thistle (*Onopordum acanthium*) can invade grasslands and pastures, excluding native grassland species. Riparian and wetland habitats in the County are adversely affected by invasive plants such as purple loosestrife (*Lythrum salicaria*), red sesbania (*Sesbania*

punicea), giant reed (*Arundo donax*), leafy spurge (*Euphorbia esula*), and perennial peppergrass (*Lepidium latifolia*), excluding native aquatic and riparian species.

INVASIVE WILDLIFE SPECIES

The introduction of nonnative wildlife species can be detrimental to native species assemblages. Nonnative wildlife species distribution and abundance in Nevada County is relatively unknown but likely includes bullfrog (*Lithobates catesbeianus*), crayfish (*Procambarus clarkii*), and red-eared sliders (*Trachemys scripta elegans*), which are common in most of California's waterways. Brown-headed cowbirds (*Molothrus ater*) have become permanent residents in many areas within the Sierra Nevada. Willow flycatcher (*Empidonax traillii*) is listed as endangered due to loss of riparian habitat and nest parasitism by brown-headed cowbirds (CDFW 2018). Several invasive invertebrate species, such as Asian clam (*Corbicula* spp.) and New Zealand mud snail (*Potamopyrgus antipodarum*), could potentially occur in Nevada County as this species has been observed in the Yuba River since 2016 (CDFW 2018c).

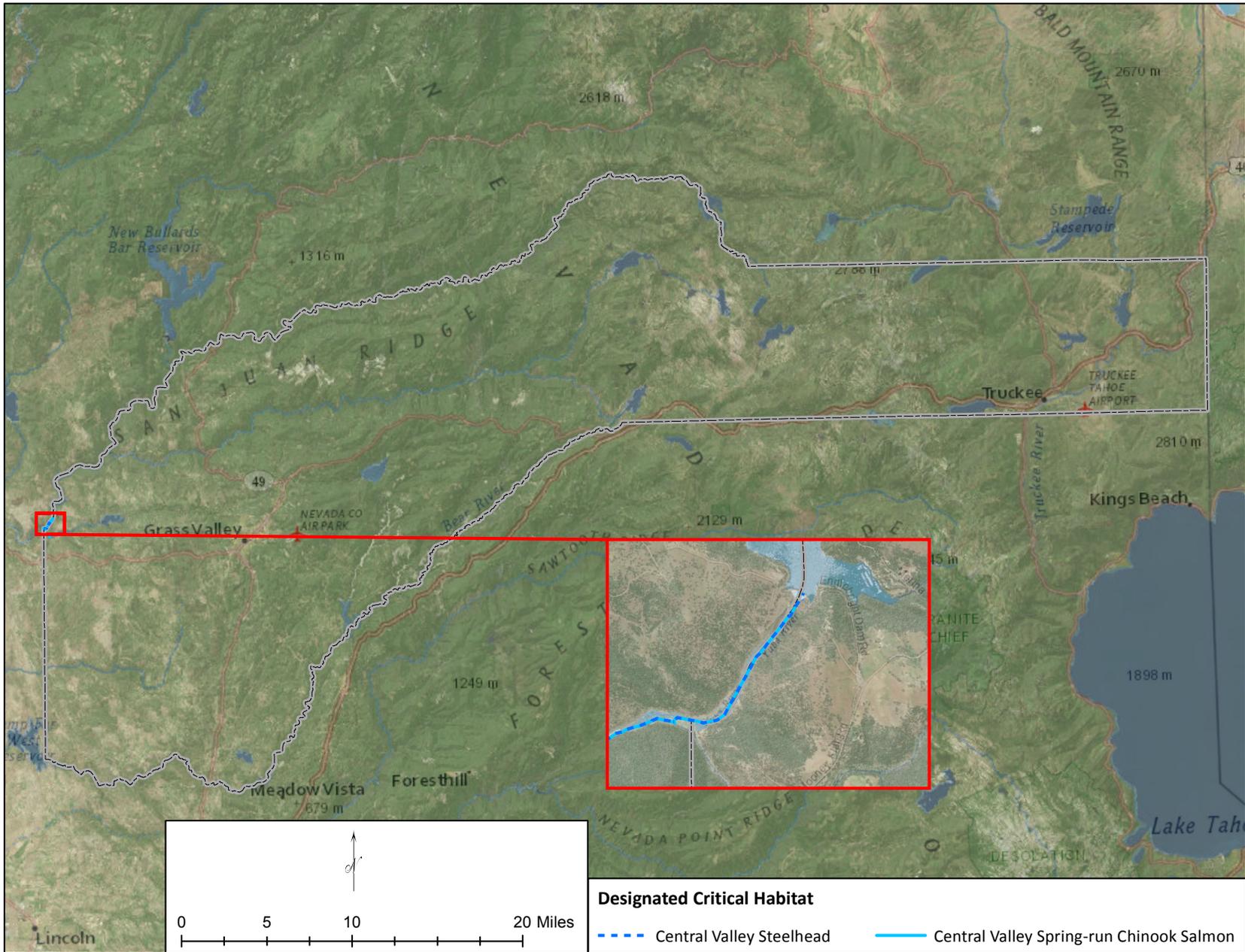
WILDLIFE MOVEMENT CORRIDORS

Nevada County contains several large areas of relatively undisturbed wildlife habitat, including protected forest within the Tahoe National Forest. While the Truckee River, South Yuba River, Deer Creek and Deer Creek are dammed, the dams do not affect the habitat connectivity within the County, as most major dams are located within Yuba County (SYRCL 2018).

Critical mule deer winter and summer habitat is present in the County (CDFW 2018d). Some of these important areas were mapped as Essential Connectivity Areas (ECA) for the California Essential Habitat Connectivity Project, which was commissioned by the California Department of Transportation (Caltrans) and CDFW with the purpose of making transportation and land-use planning more efficient and less costly, while helping reduce dangerous wildlife-vehicle collisions (Spencer et al., 2010); refer to *Figure 4-4.12, Habitat Connectivity*. The ECAs were not developed for the purposes of defining areas subject to specific regulations by CDFW or other agencies. As shown in *Figure 4-4.12: Habitat Connectivity*, ECAs occur within large portions of Nevada County, especially within the northern interior portion of the County. The ECAs are not regulatory delineations and are identified as lands likely important to wildlife movement between large, mostly natural areas at the statewide level. The ECAs form a functional network of wildlands that are important to the continued support of California's diverse natural communities.

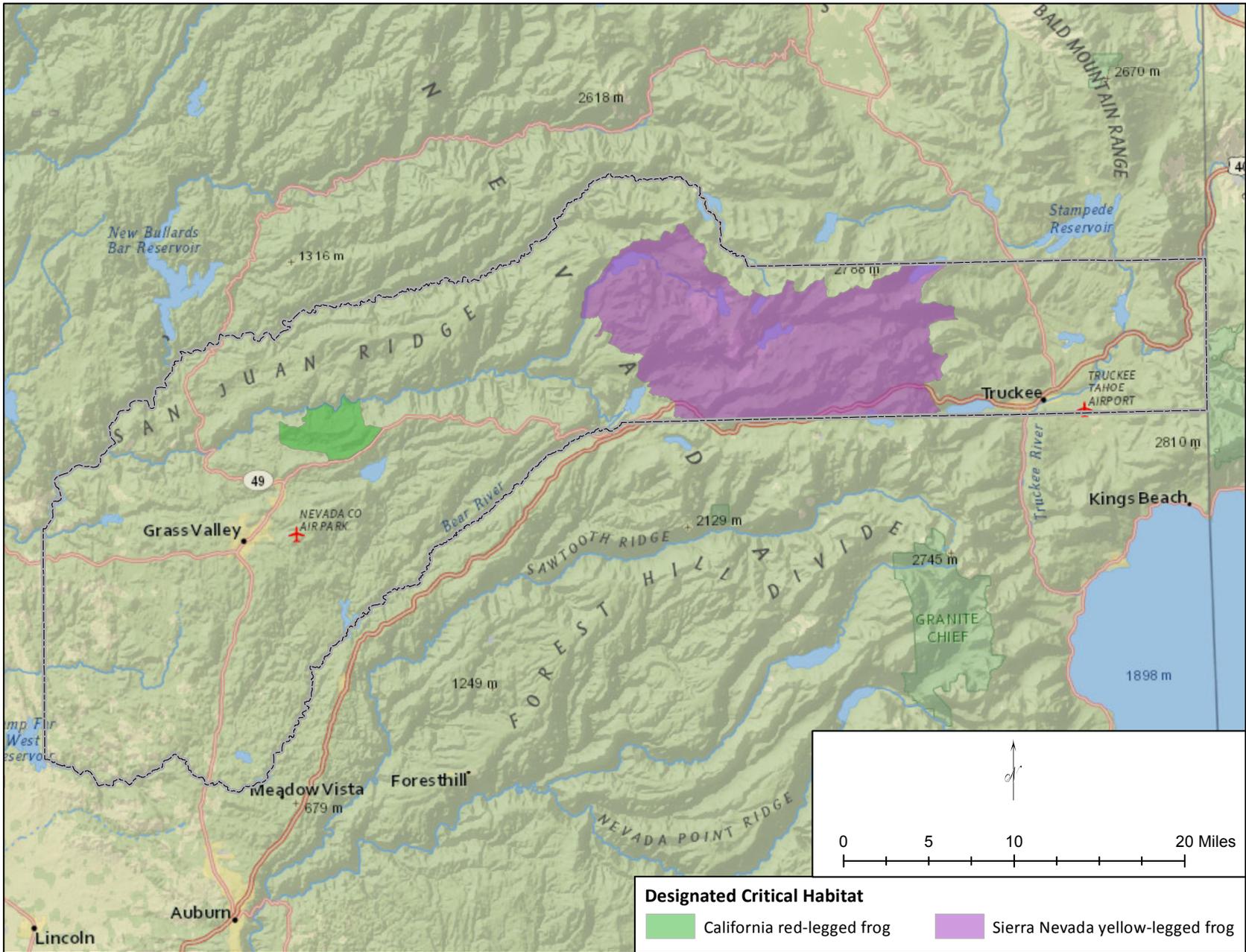
EXISTING STRESSORS ON BIOLOGICAL RESOURCES IN NEVADA COUNTY

Historic and modern development in Nevada County that has resulted in adverse effects to natural resources in the region includes timber harvest (beginning in the mid-19th century), watershed alteration because of dam construction, mining, agricultural activities, urban development, and introduction of invasive plant and wildlife species. More recently, illegal cannabis cultivation operations within public and private lands have led to illegal water diversions, unpermitted removal of sensitive vegetation, and direct mortality to protected species from exposure to rodenticides and insecticides (Gabriel et al. 2013). The magnitude of impacts from illegal cannabis operations to wildlife and plant species are difficult to fully quantify due to the clandestine nature of the sites.



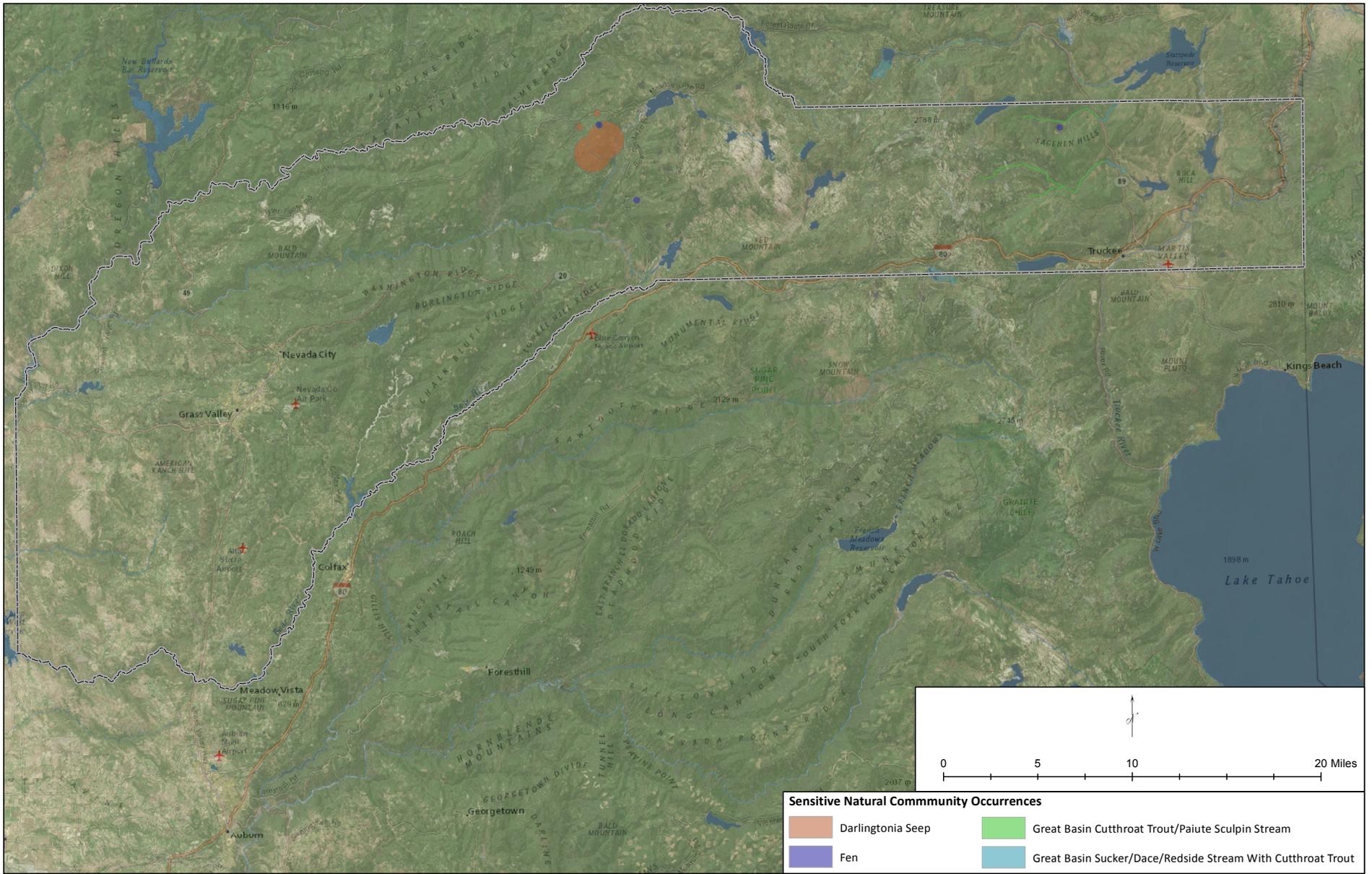
Source: NOAA Fisheries. 2018. Maps and GIS Data

FIGURE 4.4-8: Critical Habitat – Fish Species
Nevada County Cannabis EIR



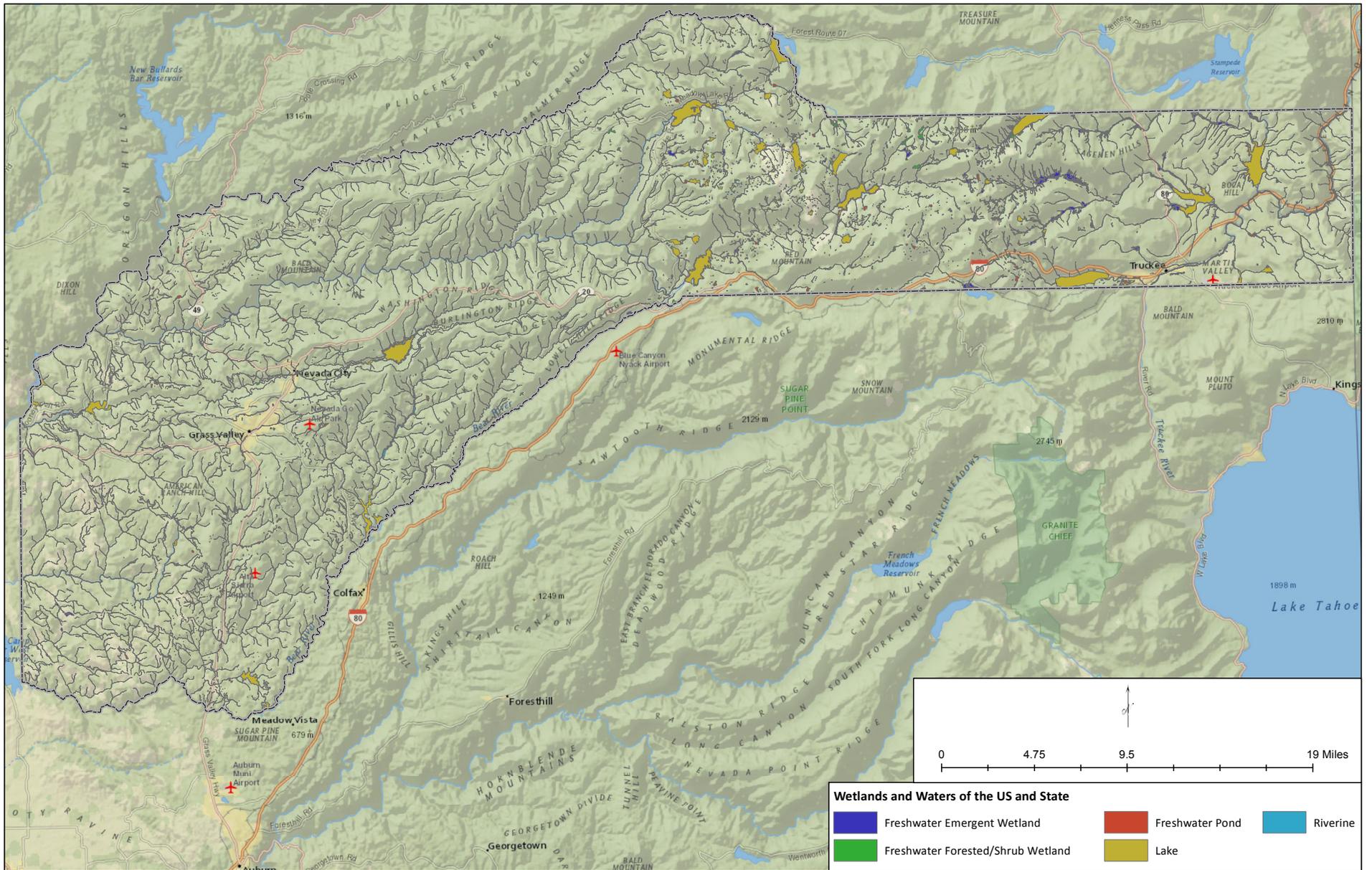
Source: U.S Fish and Wildlife Service (USFWS). 2018. Critical Habitat Portal

FIGURE 4.4-9: Critical Habitat – Wildlife Species
 Nevada County Cannabis EIR



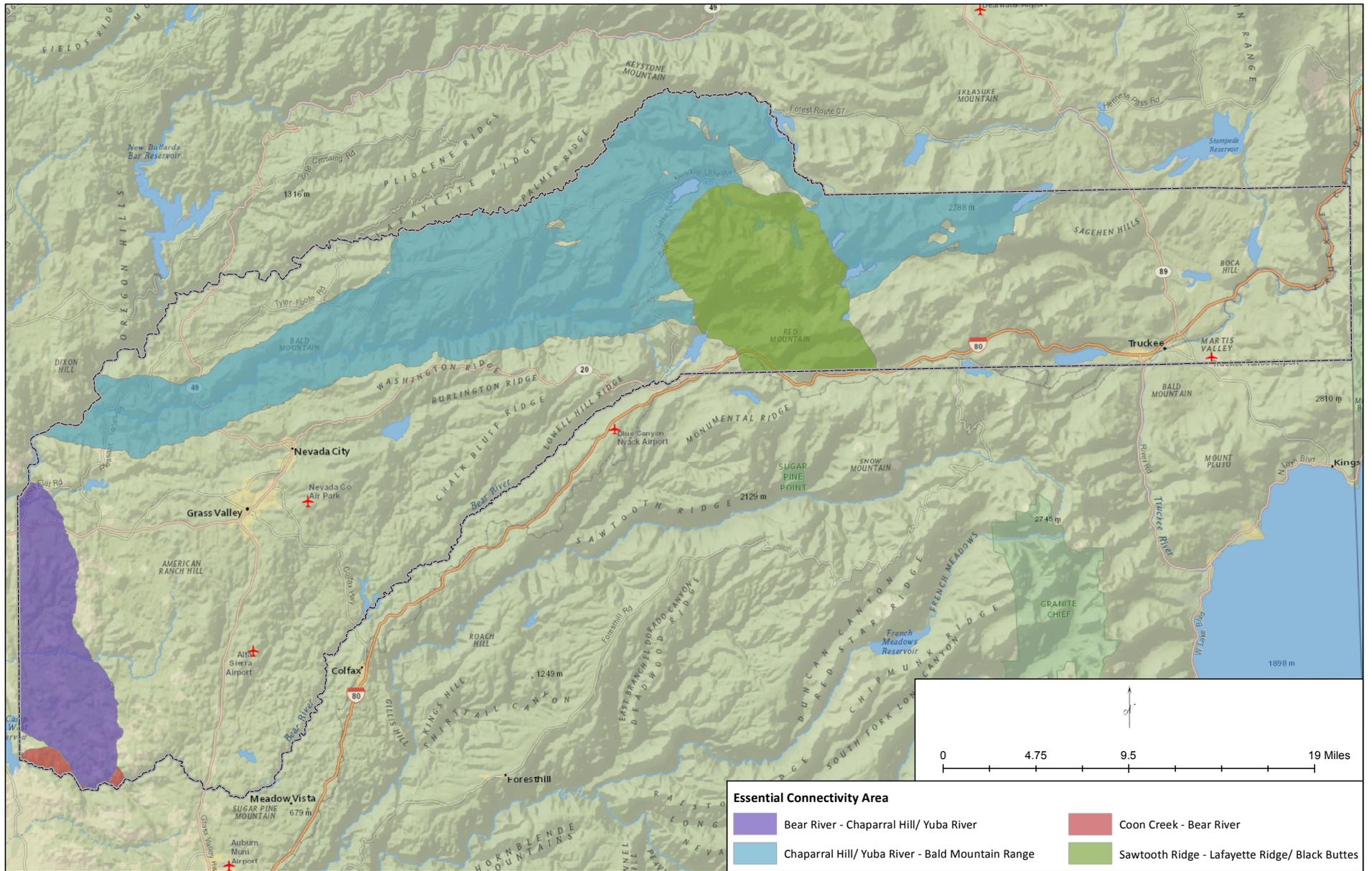
Source: U.S Fish and Wildlife Service (USFWS). 2018. Critical Habitat Portal

FIGURE 4.4-10: Sensitive Natural Communities
Nevada County Cannabis EIR



Source: 4.4-11: U.S Fish and Wildlife Service (USFWS). 2018. National Wetlands Inventory Wetlands Mapper

FIGURE 4.4-11: Wetlands
Nevada County Cannabis EIR



Source: CDFW. 2018. California Essential Habitat Connectivity Project

FIGURE 4.4-12: Habitat Connectivity
Nevada County Cannabis EIR

4.4.2 REGULATORY SETTING

FEDERAL

FEDERAL CANNABIS ENFORCEMENT

As explained in *Section 3.0: Project Description*, although state law has decriminalized cannabis, it is not legal under Federal law. The U.S. Department of Justice (USDOJ) issuance of memoranda provides further guidance related to federal law enforcement and cannabis activities within jurisdictions that have legalized cannabis. In these areas, cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

FEDERAL ENDANGERED SPECIES ACT

Under the federal Endangered Species Act (ESA), the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as threatened or endangered (16 United States Code [USC] Section 1533[c]). Pursuant to the requirements of the ESA, an agency reviewing a proposed Project within its jurisdiction must determine whether any federally listed threatened or endangered species may be present in the Project site and determine whether the Project will result in “take” of any such species. In addition, the agency is required to determine whether the Project is likely to jeopardize the continued existence of any species proposed to be listed under the ESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC Section 1536[3], [4]).

Section 7 of the ESA provides a means for authorizing incidental take of federally endangered or threatened species that result from federally conducted, permitted, or funded Projects. Similarly, Section 10 authorizes incidental take of federally endangered or threatened species that result from non-federal Projects.

FEDERAL MIGRATORY BIRD TREATY ACT

The federal Migratory Bird Treaty Act (MBTA) (16 USC, Sec. 703, Supp. I, 1989) prohibits killing, possessing, or trading migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, bird nests, and eggs. The MBTA is administered by the United States Fish and Wildlife Service (USFWS) and special permits from the agency are generally required for the take of any migratory birds. This act applies to all persons and agencies in the U.S., including federal agencies.

FEDERAL CLEAN WATER ACT

The Clean Water Act’s (CWA) purpose is to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” Section 404 of the CWA prohibits the discharge of dredged or fill material into “waters of the United States” without a permit from the United States Army Corps of Engineers (Corps). The definition of waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes and wetlands. Wetlands are defined as those areas “that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3 7b). The U.S. Environmental Protection Agency (EPA) also has authority over wetlands and may override a Corps permit.

Substantial impacts on wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB).

STATE

CALIFORNIA ENDANGERED SPECIES ACT

Under the California Endangered Species Act (CESA), CDFW has the responsibility for maintaining a list of threatened and endangered species designated under state law (California Department of Fish and Game Code (CFGF) Section 2070). Pursuant to the requirements of CESA, an agency reviewing a proposed Project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the Project site and determine whether the proposed Project will result in take of any such species. Under CESA, "take" is defined as the action of or attempt to "pursue, hunt, shoot, capture, collect, or kill." The CDFW may authorize the incidental take of a state-listed species under Section 2081 of the CFGF. For species that are listed as threatened or endangered under both the ESA and CESA, and for which an incidental take permit has been issued in accordance with Section 10 of the ESA, CDFW may authorize take after certifying that the incidental take permit is consistent with CESA, pursuant to Section 2080.1 of the CFGF.

CALIFORNIA DEPARTMENT OF FISH AND GAME CODE

The CDFW provides protection from take for state-listed and non-listed species. The CFGF defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CFGF Section 2080 prohibits take of a species listed as endangered or threatened under the CESA and CFGF Section 2081 allows CDFW to issue an incidental take permit in accordance with Title 14 California Code of Regulations (CCR) Sections 783.4(a) and (b), and CFGF Section 2081(b). Eggs and nests of all birds are protected from take under CFGF Section 3503. Raptors and raptor nests or eggs are protected from take under CFGF Section 3503.5. Migratory birds are expressly prohibited from take under CFGF Section 3513 and species designated by CDFW as fully protected species are protected from take under CFGF Sections 3511, 4700, 5050, and 5515.

PORTER-COLOGNE WATER QUALITY CONTROL ACT

The Porter-Cologne Water Quality Control Act (Porter-Cologne) imposes stringent controls on any discharges into the "waters of the state" (California Water Code § 13000, et seq.). Waters of the state are defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code § 13050(e)). Pursuant to Porter-Cologne, the State Water Resources Control Board (SWRCB) has the ultimate authority over state water rights and water quality policy. However, Porter-Cologne also establishes nine RWQCBs to oversee water quality at the local/regional level. Under Porter-Cologne, the state retains authority to regulate discharges of waste into any waters of the state, regardless of whether the USACE has concurrent jurisdiction under Section 404 of the CWA. This applies specifically to isolated wetlands considered non-jurisdictional by the USACE.

CALIFORNIA PUBLIC RESOURCES CODE 21083.4: IMPACTS TO OAK WOODLANDS

Counties are required to evaluate impacts to oak woodlands as part of the environmental analysis conducted in compliance with CEQA. If a county determines that there may be a significant effect to oak

woodlands, the county shall require one or more of the following oak woodlands mitigation alternatives to mitigate the significant effect of the conversion of oak woodlands:

1. Conserve oak woodlands, through the use of conservation easements.
2. (A) Plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees.

(B) The requirement to maintain trees pursuant to this paragraph terminates seven years after the trees are planted.

(C) Mitigation pursuant to this paragraph shall not fulfill more than one-half of the mitigation requirement for the project.

(D) The requirements imposed pursuant to this paragraph also may be used to restore former oak woodlands.
3. Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of Section 1363 of the CFGC, for the purpose of purchasing oak woodlands conservation easements, as specified under paragraph (1) of subdivision (d) of that section and the guidelines and criteria of the Wildlife Conservation Board. A project applicant that contributes funds under this paragraph shall not receive a grant from the Oak Woodlands Conservation Fund as part of the mitigation for the Project.

NATIVE PLANT PROTECTION ACT

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code Sections 1900-1913) was created with the intent to “preserve, protect and enhance rare and endangered plants in this state.” The NPPA is administered by the CDFW. The Fish and Game Commission has the authority to designate native plants as “endangered” or “rare” and to protect endangered and rare plants from take. The CESA provides further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

CALIFORNIA STREAMBED ALTERATION NOTIFICATION/AGREEMENT

Section 1602 of the California Fish and Game Code requires that a Streambed Alteration Application be submitted to the CDFW for “any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.” The CDFW reviews the proposed actions and, if necessary, submits a proposal for measures to protect affected fish and wildlife resources to the developer. The final proposal that is mutually agreed upon by the CDFW and the developer is the Streambed Alteration Agreement. Often, projects that require a Streambed Alteration Agreement also require a permit from the Corps under Section 404 of the Clean Water Act. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

State Water Resources Control Board – Statewide General Order WQ 2017-00230DWQ

The current General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities Order (General Order) is undergoing updates at the time of publication of this Draft EIR. As of July 1, 2019 all cannabis dischargers, specifically; any person or entity engaged in developing land for cannabis cultivation, providing access to land for cultivation activities, or any person or entity engaged in the legal cultivation of cannabis that discharges or threatens to discharge waste, and growers and land developers that prepare sites to allow cannabis

cultivation activities to occur will be subject to the Statewide General Order (this would supersede the current Central Valley Regional Water Quality Control Board Order R5-2015-0113). Generally speaking, the requirements of the General Order would apply to cannabis cultivation activities that are greater than 2,000 square feet. Among other requirements, the Statewide General Order contains the following minimum riparian setbacks:

Common Name	Setback Distance
Perennial watercourses, waterbodies (e.g., lakes, ponds), or springs.	150 feet
Intermittent watercourses or wetlands	100 feet
Ephemeral watercourses	50 feet
Man-made irrigation canals, water supply reservoirs, or hydroelectric canals that support native aquatic species	Established Riparian Vegetation Zone
All other man-made irrigation canals, water supply reservoirs, or hydroelectric canals	N/A

Source: California Water Boards, 2018.

LOCAL

NEVADA COUNTY GENERAL PLAN

The County of Nevada General Plan includes a Wildlife and Vegetation Element, which contains several goals, objectives and policies designed to preserve and protect biological resources within the County.

- Goal 13.1 Identify and manage significant areas to achieve sustainable habitat.
- Objective 13.1 Discourage intrusion and encroachment by incompatible land uses in significant and sensitive habitats.
- Policy 13.1 Where significant environmental features, as defined in Policy 1.17, are identified during review of projects, the County shall require all portions of the project site that contain or influence said areas to be retained as non-disturbance open space through clustered development on suitable portions of the project site, or other means where mandatory clustering cannot be achieved.

The intent and emphasis of such open space designation and non-disturbance is to promote continued viability of contiguous or inter-dependent habitats by avoiding fragmentation of existing habitat areas and preserving movement corridors between related habitats. Vegetation management for the benefit of habitat preservation or restoration shall be considered consistent with the intent of this policy.

- Policy 13.2 As part of the Comprehensive Site Development Standards, include standards to minimize removal of existing vegetation and require installation and long-term maintenance of landscaping in setbacks and buffer areas. These standards shall be applicable to all discretionary projects and to all ministerial projects other than a single-family residence located on an individual lot. Tree removal may be allowed where necessary to comply with public right-of-way development or

dedication, or development of required site access and public utilities. Individual trees or groups of trees shall be protected during construction to prevent damage to the trees and their root systems. Vegetation in proximity to structures shall conform to applicable fire protection standards.

Policy 13.2A

Project review standards shall include a requirement to conduct a site-specific biological inventory to determine the presence of special status species or habitat for such species that may be affected by a proposed project. The results of the biological inventory shall be used as the basis for establishing land use siting and design tools required to achieve the objective of no net loss of habitat function or value for special status species.

Where a Habitat Management Plan is deemed appropriate, the Plan shall be prepared to comply with the requirements of the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA). The plan shall provide the background data, impact analysis, and mitigation programs necessary to obtain a FESA Section 10(a) and CESA Section 2081 permit authorizing incidental take of federal and state listed threatened and endangered species that occur in areas proposed for future development. Prior to implementation of an adopted Habitat Management Plan, project developers proposing the development of a project that would impact a federal or state listed species, or a species that is proposed for listing, shall be individually responsible for obtaining federal and state incidental take permits on a project-by-project basis.

Policy 13.2B

Development projects which have the potential to remove natural riparian or wetland habitat of 1 acre or more shall not be permitted unless:

- a. No suitable alternative site or design exists for the land use;
- b. There is no degradation of the habitat or reduction in the numbers of any rare, threatened, or endangered plant or animal species as a result of the project;
- c. Habitat of superior quantity and superior or comparable quality will be created or restored to compensate for the loss; and
- d. The project conforms with regulations and guidelines of the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, California Department of Fish and Game, and other relevant agencies.

Policy 13.3

As part of the Comprehensive Site Development Standards, require the maximum feasible use of drought-tolerant native plant species for landscaping of all new multi-family residential, commercial, industrial, and public projects. Invasive, non-native plants, as determined by a landscape architect or other similar expert, that may displace native vegetation on adjoining undeveloped lands shall not be used. Landscaping with native trees and shrubs shall be encouraged to provide suitable habitat for native wildlife, particularly in proposed open space uses of future development.

Policy 13.4

Encourage long-term sustainability and maintenance of landscaped areas.

Policy 13.4A	No net loss of habitat functions or values shall be caused by development where rare and endangered species and wetlands of over 1 acre, in aggregate, are identified during the review of proposed projects. No net loss shall be achieved through avoidance of the resource, or through creation or restoration of habitat of superior or comparable quality, in accordance with guidelines of the U.S. Fish and Wildlife Service and the California Department of Fish and Game.
Policy 13.4B	Habitat that is required to be protected, restored, or created as mitigation for a project's impacts shall be monitored and maintained in accord with a County-approved Habitat Management Plan.
Policy 13.4C	The land use designations and associated acreages identified on the proposed General Plan land use maps for Special Development Areas should be modified as necessary at the Specific Plan stage to protect sensitive natural communities and other important biotic resources.
Policy 13.4D	The County shall prepare and implement a Habitat Management Plan for rare and endangered species and wetlands habitat while allowing the preparation of individual project habitat management plans as an alternative, including an offsite ecological reserve.
Policy 13.4E	The County shall investigate establishing interagency agreements with adjoining counties where new developments could impact significant natural resource areas shared by adjoining counties. The agreements shall require notification of development projects within one mile of the County's borders and provide for review and comment by affected counties.
Policy 13.4H	Non-development buffers shall be maintained adjacent to perennial stream corridors through the use of clustering, the designation of a Planned Development, or the implementation of other siting and design tools. Buffers shall be sufficient in size to protect the stream corridor for movement, as well as provide some adjacent upland habitat for foraging.
Objective 13.2	Minimize impacts to corridors to ensure movement of wildlife.
Objective 13.3	Provide for the integrity and continuity of wildlife environments.
Objective 13.6	Discourage significant adverse environmental impacts of land development, agricultural, forest and mining activities on important and sensitive habitats.
Objective 13.7	Identify and preserve heritage and landmark trees and groves where appropriate.
Policy 13.8	As part of the Comprehensive Site Development Standards, include measures applicable to all discretionary and ministerial projects to minimize disturbance of heritage and landmark trees and groves. These measures shall include, but are not limited to, requirements for on-site vegetation inventories and mandatory clustering of development in areas likely to support such vegetation or habitat.
Policy 13.9	Development in the vicinity of significant oak groves of all oak species shall be designed and sited to maximize the long-term preservation of the trees and the integrity of their natural setting. The County shall adopt a regulation to protect

native heritage oak trees and significant oak groves. All native oak tree species with a trunk diameter of 36 inches or greater shall be protected.

NEVADA COUNTY LAND USE AND DEVELOPMENT CODE

As part of the County's Zoning Ordinance, Nevada County has adopted Comprehensive Site Development Standards, which include requirements for protection of biological resources. These standards identify avoidance of impacts to natural resources as the preferred standard, and provide that where avoidance is infeasible, impacts should be minimized "in a reasonable fashion that strikes a balance between allowing development of the project site and protecting the resource or avoiding the constraint." Compensation for an impact may be permitted when the County determines that both avoidance and minimization are infeasible. Further, where minimization or compensation is necessary, preparation and implementation of a County-approved Management Plan may be required.

DIVISION 4.3 RESOURCE STANDARDS

Section 3.0: Project Description discusses the Comprehensive Development Standards found in Article 4 Comprehensive Site Development Standards and defined in Division 4.3 Resource Standards. In part, the purpose of the development standards is to avoid the impact of development projects on sensitive environmental resources and natural site constraints. The following discusses those standards applicable to biological resources and specific requirements related to the protection of the associated resource(s) is discussed in *Section 4.4.4: Potential Impacts and Mitigation Measures*, further below.

Section L-II 4.3.7 Deer Habitat, Major. The purpose of this section is to mitigate the impact of development on major deer migration corridors, critical winter and summer ranges, and critical fawning areas, to retain critical deer habitat as non-disturbance open space and ensure clustering of larger parcels in the western Rural Region to minimize impacts on deer habitat. Major deer habitat is defined as Major deer migration corridors, critical winter and summer ranges, and critical fawning areas as defined by the State Department of Fish and Game staff or Migratory Deer Range Maps, or as determined by a qualified biologist. The definitions of applicable terms are as follows:

Section L-II 4.3.12 Rare, Threatened and Endangered Species and Their Habitat. The purpose of this section is to avoid the impact of development on rare, threatened, endangered, and special-status species and their habitat, or where avoidance is not possible, to minimize or compensate for such impacts, and to retain their habitat as non-disturbance open space. The definitions of applicable terms are as follows:

Rare Threatened and Endangered Species. Animals and plants listed in Federal and State codes and regulations as rare, threatened or endangered.

Special Status Species. Animal and plant species that are listed, proposed, or candidates for listing as threatened, rare, endangered, fully protected, or species of concern by the Federal and/or California State governments, and plants considered by the California Native Plant Society as rare, threatened, or endangered.

Section L-II 4.3.17 Watercourses, Wetland, and Riparian Areas. The purpose of this section is to preserve the integrity and minimize the disruption of watersheds and watercourses. To preserve stream corridors and riparian habitat, ensure adequate protection of stream values, and protect stream corridors for wildlife movement and foraging. To avoid the impact of development on wetlands, or where avoidance is not possible, to minimize or compensate for such impacts, to provide for minimum setbacks to protect

resources values, and to retain wetlands as non-disturbance open space. The definitions of applicable terms are as follows: The definitions of applicable terms are as follows:

Canal. Any man-made open watercourse designed to carry water for domestic or agricultural purposes.

Riparian Area. Any man-made open watercourse designed to carry water for domestic or agricultural purposes.

Watercourses, Perennial. Natural or once natural flowing bodies of water, including natural waterways that have been channelized, which flow continuously through a bed or channel having banks. All streams, creeks, lakes, ponds and reservoirs shown on the 7.5-minute USGS maps as perennial are included in this definition unless professional evaluation determines the watercourse to be intermittent or seasonal.

Watercourses, Intermittent, or Seasonal. A body of water which flows only at certain times of the year when it receives water from ground or surface sources.

Wetlands. An area inundated or saturated by surface or groundwater at a frequency and duration to support a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetland and Riparian Mitigation Banking. The process of engaging in a transaction wherein mitigation bank credits are sold from a qualified wetland mitigation bank site to compensate for wetland and riparian impacts at the site of impact.

Nevada County Watercourse, Wetland and Riparian Ordinance

Section L-II 4.3.17 of the Nevada County Zoning Ordinance outlines the standards for preserving the integrity and minimizing disruption to watersheds and watercourses. A project shall be approved only when the project is not within the following non-disturbance buffers:

1. For all applicable projects, the developer shall have a Biological Inventory prepared by a qualified biologist, to determine whether the habitat for the defined resource, or the resource itself may be affected by a proposed project.
2. Within 100' of the high water mark of perennial streams and watercourses.
3. Within 50' from the high water mark of intermittent watercourses.
4. Within 100' of all wetlands and riparian areas.
5. Within 100' of the canal water surface on the uphill side of the canal; and within 20' of the water surface on the downhill side of the canal.
6. A project shall be approved only when it is determined by the Planning Agency that it will not adversely affect any wetlands over one acre, or riparian areas, and that it will result in no net loss of habitat functions or values of the wetlands or riparian area.
7. Project developers shall obtain appropriate authorizations from the U.S. Fish and Wildlife Service, State Department of Fish and Wildlife, and U.S. Army Corps of Engineers prior to project approval. Any provisions to avoid, mitigate, or compensate for impacts to the wetlands or riparian areas contained in such authorizations shall become conditions of project approval.
8. If the above standards effectively preclude development of the project or a revised project, or adversely affects another environmentally sensitive resource, a Management Plan, prepared by a qualified biologist or botanist, shall be prepared that avoids or minimizes impacts to the resource.

An alternative is the on-site or off-site creation, restoration, replacement, enhancement, or preservation of wetlands or riparian areas. This alternative may be preferred where the remaining protected wetlands or riparian areas are small, isolated, and of low habitat value. Such areas shall consider both site location and wetland or riparian type.

The following wetland or riparian area types shall be allowed as mitigation in descending order of general acceptability:

- a. In kind, On-site
- b. In kind, Off-site
- c. Out-of-kind, On-site
- d. Out-of-kind, Off-site

Such wetlands or riparian areas shall be maintained in perpetuity in order to compensate for the permanent effect of the project through recordation of a restrictive document. Such wetlands or riparian areas shall ensure full replacement of wetland or riparian areas lost at a minimum of not less than a 2:1 ratio.

Mitigation can involve the purchase of compensatory habitat acreage within Nevada County of comparable or superior quality within a qualified wetland or riparian area mitigation banking site in Nevada County ensuring full replacement consistent with the above standard. The bank developer shall provide assurance to the County that the created wetlands or riparian areas are permanently protected and maintained.

These standards shall not apply to open-air structures, including docks piers, boat hoists and canopies, as defined in Section 4.2.5.G.5.

Section L-II4.3.3 General Provision

As discussed in *Section 3.0: Project Description* related to the use of Resource Standards and associated management plans to protect resources, vegetation restoration would be required where the County determines that vegetation identified as an environmentally sensitive resource as defined by General Plan Policy 1.5.3, has been removed from the site in anticipation of development, or, within one year prior to submittal of a land use application, the following shall be required:

Prior to issuance of any development permits (i.e., grading or building permits), the developer shall fund a native plant restoration program to return the site to a naturally-functioning habitat. If on-site restoration is not feasible, the restoration program shall include the identification of a suitable replacement site to be reviewed and approved of by the Nevada County Planning Agency. The restoration program shall include the hiring of a specialist, selected and contracted by the County, to

1. Identify a suitable location or replacement site for the vegetation that has been removed, with the preferred location being the project site or within the vicinity of the site,
2. Prepare a restoration, monitoring, and maintenance plan;
3. Initiate the restoration, and
4. Conduct a five-year maintenance and monitoring program. The developer shall record or cause to record, a conservation easement on the selected property to preserve the restored habitat in perpetuity. The applicant shall be responsible for incurring all costs associated with the

restoration project. The restoration shall represent a 3:1 ratio of habitat restored to habitat lost. (Ord. 2090, 7/9/02).

Section L-II 4.3.15 Trees is discussed in detail in *Section 4.1: Aesthetics*. However, Section L-II 4.3.15 C(8), pertains to the protection of environmentally sensitive vegetation. Discussion of the protection measures for this resource standard is provided in Impact 4.4-1, below.

4.4.3 STANDARDS OF SIGNIFICANCE

ENVIRONMENTAL ANALYSIS

METHODOLOGY

This analysis is based on the County-wide biological resources information that is publicly available. The evaluation of the proposed project's potential effects with respect to biological resources is at the program level. This EIR sets forth research criteria and report content needed to enable a project-level evaluation of resource occurrences. Any individual projects resulting from this proposed project would be required to adhere to the research criteria and report content set forth herein and could be required to undergo a separate CEQA evaluation pertaining to project-specific details.

THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant aesthetic impact if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
- Conflict with any local policies or ordinances protecting biological resources such as a tree preservation policy or ordinances
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan, or other approved local, regional, or state HCP

AREAS OF NO PROJECT IMPACT

Special Status Species

Seven special status wildlife species that were identified as having potential to occur within the County were determined to be unlikely to occur County upon review of species range and occurrence records. These species include giant garter snake (*Thamnophis gigas*), cui-ui (*Chasmistes cujus*), delta smelt

(*Hypomesus transpacificus*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), and Layne's ragwort (*Packera layneae*; formerly *Senecio layneae*).

Giant garter snake, cui-ui, delta smelt, and Layne's ragwort are not known to occur within Nevada County. According to the Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (USFWS 2017), the majority of valley elderberry longhorn beetle have been documented below 500 feet in elevation; the majority of suitable habitat within Nevada County is above 500 feet and there are no known occurrences for this species within the County. Guidance states that areas above 500 feet with suitable habitat and known VELB occurrences in that drainage may contain VELB populations in certain circumstances. The USFWS can assist in determining the likelihood of occupancy above 500 feet. Therefore, these species are not discussed further.

Conflict with local policies or ordinances protecting biological resources such as a tree preservation policy or ordinance.

An applicant for a license or permit must comply with all local ordinances and regulations, including those intended to protect biological resources. A project applicant would provide documentation of compliance with local requirements to facilitate the application process. Standards for maintenance, management and preservation of native and indigenous trees are established in Section L-II 4.3.15 of the Nevada County Zoning Ordinance (Tree Preservation and Protection Ordinance). Please see additional discussion of tree preservation in *Section 4.1: Aesthetics*. As discussed in Section 4.1: Aesthetics, as part of the CCP and ADP process, the measures prescribed by the Nevada County Tree Preservation and Protection Ordinance, including preparation of a Management Plan for impacts to Landmark Trees and Landmark Groves and for portions of those habitat preserved onsite, would be implemented on a project by project basis as part of the County's permitting process. With the implementation **MM 4.1-1** in *Section 4.1 Aesthetics* and the standard project design and review process, it was determined that impacts in this regard would be less than significant and this issue is not discussed further.

Consistency with Habitat Conservation Plans

There are no known Habitat Conservation Plans (HCPs), Natural Community Conservation Plans (NCCPs), or other approved local, regional, or state HCPs that apply to the proposed project. Nevada County is not currently covered under any existing HCPs or NCCPs. Thus, there would be no impact and this issue is not discussed further.

4.4.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACT 4.4-1: DISTURBANCE TO OR LOSS OF SPECIAL STATUS WILDLIFE SPECIES AND HABITAT.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. If outdoor cultivation is used for personal cultivation, this would be the equivalent of a small garden and the violation of water quality standards or discharges would not occur. These impacts would be less than significant.

Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cultivation less than 2,500 sf of canopy or an ADP for cultivation between 2,500 sf and 10,000 sf of canopy. Verification that projects conform to applicable regulations for a CCP or an ADP would be made during

the plan review and approval process and could be made by the Planning Director. An Annual Cannabis Permit (ACP) also would be required and need to be renewed annually.

Potential land use conversion and development that may occur under the proposed NCCO could adversely affect several special status wildlife species, including reptiles, amphibians, nesting birds, and mammals. Project implementation may include ground disturbance, vegetation removal, and overall conversion of wildlife habitat, which could result in the disturbance or loss of individuals and reduced breeding productivity of these species. Special status wildlife species are protected under ESA, CESA, CFGC, CEQA, or other regulations. The loss of special status wildlife species and their habitat would be a potentially significant impact.

A total of 27 special status wildlife species were identified as having potential to occur in County, including vernal pool crustaceans, fish, reptiles, amphibians, nesting birds, and mammals (Table 4.4-2). Conversion of wildlife habitat, ground disturbance, and vegetation removal as part of project implementation could result in the disturbance or loss special status wildlife, if they are present. Potential effects of project implementation on special status wildlife species with potential to occur within the County are discussed below.

SPECIAL STATUS VERNAL POOL CRUSTACEANS

Vernal pool fairy shrimp and vernal pool tadpole shrimp are both listed under ESA as threatened and endangered, respectively. While neither of these species has been documented within the County, suitable aquatic habitat is scattered throughout the County (Figure 4.4-4: *Aquatic Habitat* and Figure 4.4-11: *Wetlands*). Several performance standards related to water quality are included in the proposed ordinance, such as requiring a permitted water source on the Parcel and prohibiting unpermitted drawing of surface water or discharges of water from the Parcel, and adequate material storage setbacks from streams and wetlands, which should provide protections to vernal pools. New cannabis-related development under the proposed ordinance could result in the loss of/injury to special status invertebrates, if the species occur at the site, through disturbance to suitable habitat during ground disturbance activities, such as construction of storage ponds and installation cultivation sites. This would be a potentially significant impact.

SPECIAL STATUS FISH

Three special status fish species are known to occur in the County, including Central Valley spring-run chinook salmon, Central Valley steelhead, and Lahontan cutthroat trout. Critical habitat for chinook salmon and steelhead is present within the County (Figure 4.4-8: *Critical Habitat – Fish Species*). Cannabis operations were required to comply with the either the Central Valley RWQCB Order No. R5-2015-0113 (Central Valley Order) or SWRCB General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities, which requires minimum setback areas of 50 feet from surface water, and prohibits cultivation sites on slopes greater than 35 percent to prevent erosion and degradation of water quality. It should be noted that in July 2019, all permits will be processed through and required to conform to the SWRCB General Permit for commercial cannabis cultivation. No new applications are being accepted under the Central Valley Order. Cannabis cultivators currently enrolled under the Central Valley Order may continue to operate under and comply with the requirements of their respective order until they enroll in the Cannabis General Order. All enrollees under the North Coast Order and Central Valley Order must transition the Cannabis General Order by July 1, 2019. Further information is provided in *Section 4.8 Hydrology and Water Quality*.

Additionally, although the eastern portion of the County is within the Lahontan RWQCB, this agency does not currently have an existing order in place, therefore any new cannabis cultivation operations will be required to adhere to the SWRCB General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities. In addition, several performance standards related to water quality are included in the proposed ordinance, such as requiring a permitted water source on the Parcel and prohibiting unpermitted drawing of surface water or discharges of water from the Parcel, and adequate material storage setbacks from streams and wetlands. The SWRCB General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities, as well as the County's proposed performance standards would help prevent direct effects to special status fish species because disturbance to river or stream banks and introduction of silt discharge would be avoided.

Indirect effects to special status fish would also partly be avoided because improper stream diversion would be prevented. Additionally, the SWRCB General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities prohibits surface water diversion from May 15 to October 31. These existing requirements would help prevent disturbance, both direct and indirect, to special status fish species, however, these measures alone would not entirely prevent disturbance, both direct and indirect, to special status fish species, and this impact is considered potentially significant. The reader is referred to *Section 4.8: Hydrology and Water Quality*, for a further discussion of potential alteration in surface water flows and water quality from cannabis operations.

Surface water diversions from new commercial cannabis cultivation that may occur under the proposed ordinance could adversely affect several special status fish species. Any new surface water diversions to serve a new cannabis operation in the County would be required to file for water rights with the State Water Resources Control Board in a separate regulatory process which would also be subject to CEQA compliance. Special status fish species are protected under ESA, CESA, or other regulations. The potential reduction in flows or alteration of surface water conditions in streams that support special status fish species would be a potentially significant impact.

SPECIAL STATUS AMPHIBIANS

Four special status amphibian species are known to occur in the County, and include southern long-toed salamander, foothill yellow-legged frog, California red-legged frog, and Sierra Nevada yellow-legged frog. Critical habitat for California red-legged frog and Sierra Nevada yellow-legged frog is present within the County (Figure 4.4-9: *Critical Habitat-Wildlife Species*). Several performance standards related to water quality are included in the proposed ordinance, such as requiring a permitted water source on the Parcel and prohibiting unpermitted drawing of surface water or discharges of water from the Parcel, and adequate material storage setbacks from streams and wetlands. New cannabis-related development under the proposed ordinance could result in the loss of/injury to special status amphibians, if the species occur at the site, through disturbance to suitable habitat during ground disturbance activities, such as construction of storage ponds and installation cultivation sites. This would be a potentially significant impact.

SPECIAL STATUS REPTILES

Two special status reptile species are known to occur in the County and include western pond turtle and coast horned lizard. Several performance standards related to water quality are included in the proposed

ordinance, such as requiring a permitted water source on the Parcel and prohibiting unpermitted drawing of surface water or discharges of water from the Parcel, and adequate material storage setbacks from streams and wetlands. New cannabis-related development under the proposed ordinance could result in the loss of/injury to special status reptiles, if the species occur at the site, through disturbance to suitable habitat during ground disturbance activities, such as construction of storage ponds and installation cultivation sites. This would be a potentially significant impact.

SPECIAL STATUS BIRDS

Ten special status bird species are known to occur in the County, and include Cooper's hawk, northern goshawk, long-eared owl, black swift, willow flycatcher, bald eagle, yellow-breasted chat, California black rail, osprey, and yellow warbler. The County contains suitable nesting habitat and many known nesting occurrences for these species (Figure 4.4-6: *Special Status Wildlife Species*). Suitable nesting habitat for these species can be found in forests, riparian areas along rivers and streams, and grasslands. Large portions of this habitat area are in land areas (areas designated for forestry and timber uses) where new commercial cannabis operations would be allowed under the proposed ordinance. Removal of vegetation, especially large trees and snags, riparian vegetation, as well of conversion of riparian, forest, and grassland habitats could disturb nesting birds if they are present, potentially resulting in nest abandonment, nest failure, or mortality of chicks or eggs. Additionally, human presence associated with construction of cultivation sites, roads, and cultivation activities could result in increased noise and visual disturbance to nesting birds. The potential loss of special status birds and their nests would be a potentially significant impact.

SPECIAL STATUS MAMMALS

Five special status mammal species are known to occur in the County, and include Sierra Nevada mountain beaver, California wolverine, Sierra Nevada snowshoe hare, fisher, and Sierra Nevada red fox. Suitable habitat for California wolverine, fisher, and Sierra Nevada red fox includes old growth or mature coniferous forests, with high percent canopy cover, and sufficient coarse woody debris on the forest floor. Dens for these species can include cavities within live trees or snags, rock piles, or woody debris piles. Sierra Nevada mountain beaver and snowshoe hare require riparian areas with dense vegetation. Large portions of this habitat area are in land areas (areas designated for forestry and timber uses) where new commercial cannabis operations would be allowed under the proposed ordinance. Future cannabis-related activities under the proposed ordinance could result in conversion of suitable habitat, vegetation removal, and ground-disturbance activities, which could cause the direct loss of special status mammal species. This would be a potentially significant impact.

Fishers, wolverine, foxes, and other carnivores (e.g., black bear) in the Sierra Nevada Mountains have experienced highly-publicized mortality because of exposure to rodenticides and insecticides used on illegal cannabis "trespass grow" sites (Gabriel et al. 2013). Second-generation anticoagulant rodenticides (e.g., those containing ingredients such as brodifacoum, bromadiolone, difethialone, and difenacoum) are used inappropriately and illegally within these "trespass grow" sites and carnivores can be exposed either directly (e.g., through poisoned bait), or indirectly after eating rodents, or other herbivorous mammals, that have been targeted by the poisons. Use of these rodenticides, which are restricted in California, requires licensing through the California Department of Pesticide Regulation (CDPR). The proposed ordinance would deny or revoke a license or permit for failure to properly store pesticides and other hazardous materials. In addition, the proposed ordinance would prohibit the manufacturing of hazardous materials as well as the storage of hazardous materials over the State's threshold (i.e. 55 gallons of liquid,

500 pounds of solid, or 200 cubic feet of compressed gas) and would require minimum setback distances of 100 feet from any private drinking water well, spring, water canal, creek or other surface water body, and 200 feet from any public water supply well. However, the improper application of pesticides, rodenticides, and insecticides could negatively impact special status mammal habitat and individuals through contamination and poisoning. This would be a potentially significant impact.

SPECIAL STATUS BATS

One special status bat species, and two non-listed bat species, are known to occur in the County, and include Townsend's big-eared bat, fringed myotis (*Myotis thysanodes*), and silver-haired bat (*Lasionycteris noctivagans*), respectively. These species use a variety of habitats to roost, including caves, crevices, mines, hollow trees, and buildings. Potentially suitable roosting habitat could be present within future cannabis operation sites. Tree and building removal activities could result in the direct loss of Townsend's big-eared bat, and other bat species, roosts and individuals. This would be a potentially significant impact.

EFFECTS OF GENERATOR NOISE ON SPECIAL STATUS SPECIES

The use of generators indoors is prohibited by the NCCO. Generators are often used by grow operations in rural locations where electrical hook-up is not possible. Generator sound can range from approximately 52 decibels for the low end of a residential generator, to approximately 84 decibels for the high end of an industrial generator (USFWS 2006). Effects of anthropogenic noise on wildlife species is an issue that is complex and poorly-understood. Anthropogenic noise can result in elevated stress levels in wildlife species (Hayward et al. 2011). Stress in wildlife species can cause reduced overall fitness and reduced reproductive success, which could have far-reaching consequences for special status, or ESA and CESA listed species. For example, sound disturbance to marbled murrelets, and many other bird species, can lead to a behavioral response, which can draw attention of predators (e.g., Steller's jay, common raven) to their cryptic nests (Hebert et al. 2006). While there has been concern for listed species like northern spotted owl and marbled murrelet, other avian species are also likely adversely affected by anthropogenic noise. Under the proposed ordinance, noise levels generated by cultivation shall not exceed the standards set forth in Table L-II 4.1.7 (Exterior Noise Limits) of the Nevada County Zoning Ordinance applicable to the Land Use Category and Zoning District for the Premises on which the Cultivation occurs. In rural areas, noise levels cannot exceed 75 decibels. To ensure sound is reduced to acceptable levels, Mitigation Measure BIO-1, would amend the proposed NCCO to require all projects under either a CCP or an ADP to keep all generators while they are in use, in containment sheds while in use to reduce generator noise to no greater than 50dB as measured at 100 feet from any sensitive habitat or known sensitive species. This would be a continual requirement and verified annually when the ACP is renewed. If conformance is not shown, the permit could be denied or held in abeyance until the project is in conformance. The proposed NCCO requires applicants to allow for inspections, including unannounced inspections. This would avoid adverse levels noise and avoid disturbance to wildlife species such as mammals and bats, amphibians, reptiles and birds and would reduce the impact to less than significant.

EFFECTS OF NIGHTTIME ARTIFICIAL LIGHT ON SPECIAL STATUS SPECIES

Cannabis cultivation operations under the proposed ordinance would be allowed to utilize artificial lighting systems for indoor and mixed-light cultivation. Artificial light can adversely affect many different wildlife species, especially nocturnal animals, such as bats. Bat behavior is affected by moonlight, so changes in light cycles can lead to changes in bat foraging behavior, emergence, roosting, breeding, and hibernation (Stone et al. 2015). Artificial light can also result in changes in amphibian mating behavior

(Baker and Richardson 2006). Impacting species behavior through the use of unregulated artificial lighting would be a potentially significant impact.

Land Use and Development Code Implementation

As discussed above, implementation of the proposed NCCO could result in disturbance to or loss of special status wildlife species and habitat. For all projects under both CCPs and ADPs, including the estimated existing 3,500 cannabis cultivation sites, implementation of Mitigation Measure BIO-2 would be required. Mitigation Measure BIO-2 would amend the Proposed NCCO to require all applicants to submit materials for a biological pre-screening of all project sites under both CCPs and ADPs. An Annual Cannabis Permit (ACP) also would be required and need to be renewed annually. This would ensure continued compliance with these requirements.

Project specific information would be submitted with all applications to be reviewed by the Building Department for CCPs and Planning Department for ADPs. The materials would be screened and checked for completeness and thoroughness during the initial application processing phase. Required materials for this submittal would be required to include describe site constraints showing site photographs and aerial photographs, show potentially sensitive biological resource areas. The pre-screening materials would be provided by the applicant and would contain but not be limited to: project location (site address and parcel numbers); site aerials, photographs of proposed areas of disturbance, photographs of vegetation cover, a thorough project description describing all phases of construction, all proposed structures and cultivation areas, location of any streams, rivers, or other water bodies, limits and depth of grading, any grading cut or fill in a stream, river, or other water body, any water diversions and/or source of water, water storage locations, source of electricity (if applicable).

The application also must show a site plan for the project showing areas of disturbance, the applicant may provide multiple site plans to clearly show the following; site aerials showing vegetation patterns and habitats (without snow cover), location of any water courses including ephemeral drainages and any other water bodies, all existing or proposed cultivation areas and structures, location of electric generators (if applicable), and grading plans (if applicable).

For both a CCPs and ADPs all application materials would be evaluated to determine if a subsequent Biological Inventory prepared by a qualified biologist is required. The Biological Inventory would be used to determine whether habitat for the defined resource, or the resource itself may be affected by a proposed project. The Biological Inventory would contain project background, a project description, review of CNDDDB database, potential sensitive habitats existing on site, field survey methodology and findings (if needed), mitigation to reduce impacts (if needed), level of impacts conclusion. Due to varying nature of biological conditions and variable locations of habitat types and dispersion of sensitive species, additional evaluations such as wetland delineations, protocol level surveys, nesting bird surveys, etc., may be required. If these additional screenings are required, they would be determined on a project by project basis and included as part of the project approval process or as conditions of approval.

Section L-II 4.3.12 of the Nevada County Land Use and Development Code; Rare, Threatened and Endangered Species and Their Habitat establishes resource standards to avoid the impact of development to these sensitive and special status species through the preparation of a site specific Habitat Management Plan (HMP) and would be applied to cannabis cultivation permits. Mitigation Measure BIO-2 would amend the NCCO to require HMPs for both CCP and ADP permits. The requirements of Section L-II 4.3.12 of the Nevada County Land Use and Development Code would apply on a project by project basis

and as applicable and only if determined necessary by the Qualified Biologist and to supplement findings of the Biological Inventory. If any project site has the potential to contain special status species; the project and project applicant would be required to comply with all requirements of the FESA and CESA.

A project shall be approved only when it is determined by the Planning Agency that it would not adversely affect the defined species or their habitat, and that it would result in no net loss of habitat function or value for the defined species. Project applicants shall obtain appropriate authorizations from the U.S. Fish and Wildlife Service and State Department of Fish and Game prior to County approval. For any CCP or ADP, any provisions to avoid, mitigate, or compensate for impacts to the defined species contained in such authorizations would become conditions of approval of the project.

The HMP would be prepared by a qualified biologist to comply with the requirements of the FESA and the CESA and would also include special status species. The HMP would provide the background data, impact analysis, and mitigation programs necessary to obtain a FESA Section 10(a) and CESA Section 2081 permit authorizing incidental take of federal and state listed threatened and endangered species that occur in areas proposed for future development. The objectives of the HMP would be to avoid and minimize impacts to the defined species to the fullest extent feasible and to provide for no net loss of species, including species population area and number of individuals.

The HMP to protect rare, threatened, endangered, or special status species and their habitat, may include design features such as avoiding, minimizing, and compensating as defined in Section L-II 4.3.3. Depending on the findings of the HMP, habitat restoration could be required. The ratio of habitat protected to habitat altered due to development activities and related edge effects may be determined by staff, based on recommendations from the project biologist in consultation with the CDFW and the USFWS. The HMP would be required to describe and provide a mechanism for permanent protection and maintenance of any non-disturbance area or off-site compensation areas to achieve long-term habitat goals. Funding mechanisms for long-term maintenance shall also be described.

The Planning Director (or appointed designee) would review all commercial cannabis CCP and ADP applications for completeness and conformance to the requirements of Section L-II 4.3.12 and Section L-II 4.3.3 General Provisions related to resource standards. As discussed in *Section 3.0: Project Description*, the intent of the site development standards is to avoid resource impacts and natural constraints to the maximum amount possible. Impacts are to be reduced through avoidance, minimization, or compensation. When avoidance is not a feasible to reduce impacts, a HMP may be prepared that is consistent with all County requirements.

Completion of the HMP would carry provisions to compensate for impacts that would become conditions of approval of the cultivation projects. HMP would incorporate elements to reduce impacts to special status wildlife species and habitats that may occur on existing and future project sites. Lands used as compensation for unavoidable project impacts would be acquired through fee title or conservation easements with the express purpose of maintenance as compensation for impacts to special status wildlife species and habitat in perpetuity. Holders of title or easements shall be restricted to mutually agreed upon agencies or private, non-profit conservation entities approved by the Planning Agency.

Impacts to special status wildlife species and habitat would be reduced to less than significant through avoidance and/or minimization. For commercial cannabis cultivation projects that would require habitat replacement to account for impacts to these resources, and HMP prepared by a qualified biologist and conforming to all County and professional standards, would reduce impacts to less than significant. If

potential impacts on these biological resources cannot be reduced to less than significant, no permit would be issued. Therefore, impacts on sensitive and special status wildlife species are considered less than significant with the implementation of Mitigation Measures BIO-1 and BIO-2.

MITIGATION MEASURES

MM BIO-1 Generator Noise: The proposed NCCO shall be amended to require all projects under either a CCP or an ADP to keep all generators in containment sheds while in use to reduce generator noise to no greater than 50dB as measured at 100 feet from any sensitive habitat or known sensitive species. This would be an annual requirement and verified yearly when the ACP is renewed. If conformance is not shown, the permit shall be denied or the held in abeyance until the project infraction is brought into conformance with the NCCO.

MM BIO-2 Biological Resources Pre-Screening: The proposed NCCO shall be amended to require all applicants to submit biological pre-screening materials of all project sites for both CCP and ADP applications. The materials shall include adequate information to define site constraints and show potentially sensitive biological resource areas. Materials shall include, at a minimum, project location (site address and parcel numbers); site aerials, photographs of proposed areas of disturbance (includes canopy area, accessory structures, and any related improvements [e.g., driveways, staging areas, etc.]), photographs of vegetative cover, a thorough project description describing all phases of construction, all proposed structures and cultivation areas, location of any streams, rivers, or other water bodies, limits and depth of grading, any grading cut or fill in a stream, river, or other water body, any water diversions and/or description of the source of water, water storage locations, and source of electricity (if applicable).

The applicant shall provide site plan(s) showing all areas of disturbance, multiple site plans may be used to clearly show the following; site aerials showing vegetation patterns and habitats (without snow cover), location of any water courses including ephemeral drainages and any other water bodies, all existing or proposed cultivation areas and structures, location of electric generators (if applicable), and grading plans with areas of cut and fill (if applicable).

If the pre-screening materials identify habitats known to support sensitive or special status plant or animal species, then avoidance of the sensitive or special status species shall be required. If avoidance of a special status species cannot be achieved, then a Biological Inventory shall be prepared. The Biological Inventory shall be prepared by a qualified biologist. The Biological Inventory shall contain an environmental setting, a project description, review of CNDDDB database for the project location, a description of potential sensitive habitats existing on site, field survey methodology and findings (if needed), mitigation to reduce impacts (if needed), level of impacts conclusion. Due to the varying nature of biological conditions and variable locations of habitat types and dispersion of sensitive species, additional evaluations such as wetland delineations, protocol level surveys, nesting bird surveys, etc., may be required consistent with the applicable resource standards identified in Sections L-II 4.3 of the Nevada County Land Use and Development Code. If additional avoidance or protection measures are required,

a Habitat Management Plan (HMP) consistent with the requirements of Section L-II 4.3.3 of the Nevada County Land Use and Development Code shall be prepared for both CCP and ADP permit applications. The HMPs would be implemented on a project by project basis and included as part of the project-specific approval process. If potential impacts on these biological resources cannot be reduced to less than significant, no permit shall be issued.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.4-2: DISTURBANCE TO OR LOSS OF SPECIAL STATUS PLANT SPECIES AND HABITAT.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Cultivation for personal use would be limited to a total of six plants and be done under the requirements of the proposed NCCO. Impacts in this regard would be less than significant and mitigation is not required.

Potential land use conversion and development under the proposed ordinance could result in disturbance or loss of several special status plant species, if they are present. Because the loss of special status plants can substantially affect the abundance, distribution, and viability of local and regional populations of these species, this would be a potentially significant impact and mitigation measures are required.

A total of 36 special status plants were identified as having potential to occur within the County (Table 4.4-3). These plant species occur in a wide variety of habitat types, including coniferous forests, chaparral, scrub, grasslands, wetlands, marshes, and riparian habitats.

Cannabis-related activities may include ground disturbance, vegetation removal, and conversion of wetland habitat, which could result in the direct loss of special status plants or their habitat if they are present. The loss of special status plants and their habitat can substantially affect the abundance, distribution, and viability of local and regional populations of these species. Therefore, project-related loss of special status plant species would be a potentially significant impact and mitigation measures are required.

The introduction or spread of invasive plants could adversely affect special status plant species by excluding them from suitable habitat. Invasive species have the potential to be spread during grading activities from cannabis development if they are established at the site. In addition, invasive species have the potential to be introduced to a development site if heavy equipment has not been properly decontaminated prior to use. Loss of special status plants or their habitat due to introduction or spread of invasive plant species would be a potentially significant impact and mitigation measures are required.

Land Use and Development Code Implementation

Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cannabis cultivation less than 2,500 sf and an ADP for cultivation 2,500 sf to 10,000 sf. Conformance to applicable regulations for either a CCP or an ADP would be made during the plan review and approval process and could be made by the Planning Director. The Planning Department would review all applications for completeness for CCPs and the Planning Director (or appointed designee) would review all commercial cannabis applications for ADPs. As part of the applications screening process for impacts from loss of special status plant species and habitat, Mitigation Measure BIO-2 would be applicable. An Annual

Cannabis Permit (ACP) also would be required and need to be renewed annually. This would ensure continued compliance with these requirements.

As discussed above, for project impacts that would not be reduced to less than significant through avoidance based on the site plan design, implementation of Mitigation Measure BIO-2, including use of a Biological Inventory or other environmental documentation, a site-specific HMP would be required. The HMP would be written in conformance to the requirements of Section L-II 4.3.12 and Section L-II 4.3.3 General Provisions related to resource standards. As discussed in *Section 3.0: Project Description*, the intent of the site development standards is to avoid resource impacts and natural constraints to the maximum amount possible. Impacts are to be reduced through avoidance, minimization, or compensation. When avoidance is not a feasible to reduce impacts, a HMP may be prepared that is consistent with all County requirements.

Completion of the HMP would carry provisions to compensate for impacts that would become conditions of approval of the cultivation projects. HMP would incorporate elements to reduce impacts to special status wildlife species and habitats that may occur on existing and future project sites. Lands used as compensation for unavoidable project impacts would be acquired through fee title or conservation easements with the express purpose of maintenance as compensation for impacts to special status plant species and habitat in perpetuity. Holders of title or easements shall be restricted to mutually agreed upon agencies or private, non-profit conservation entities approved by the Planning Agency.

In most cases it is expected that impacts to special status plant species and habitat would be reduced to less than significant through avoidance and/or minimization and measures listed, if needed, in the Biological Inventory or subsequent environmental documentation. For cannabis cultivation projects that would require replacement to account for impacts to these resources use of a HMP, prepared by a qualified biologist and conforming to all County and professional standards, would reduce impacts to less than significant. If potential impacts on these biological resources cannot reduced to less than significant, no permit would be issued. Therefore, impacts on sensitive and special status plant species are considered less than significant with the implementation of Mitigation Measures BIO-1 and BIO-2.

MITIGATION MEASURES

Implement Mitigation Measures BIO 1 and BIO-2

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.4-3: DISTURBANCE TO OR LOSS OF RIPARIAN HABITAT OR OTHER SENSITIVE NATURAL COMMUNITIES.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Cultivation for personal use would be limited to a total of six plants and be done under the requirements of the proposed NCCO. Impacts in this regard would be less than significant and mitigation is not required

Potential land use conversion and development that may be approved under the proposed ordinance for commercial or non-remuneration cultivation could adversely affect riparian habitat, and other sensitive natural communities if they are present on the site. Construction-related activities, including ground disturbance, old growth and mid- to late- successional stage tree removal, removal of riparian vegetation,

or disturbance of stream and river habitat would be a potentially significant impact and mitigation measures are required.

Riparian habitat within the County can be found adjacent to aquatic habitat such as streams and rivers. A total of four sensitive natural communities are also present, including two fish stream habitats (Great Basin Cutthroat Trout/Paiute Sculpin Stream and Great Basin Sucker/Dace/Redside Stream with Cutthroat Trout), and two aquatic plant communities (Darlingtonia Seep and Fen). See section “Sensitive Natural Communities” for detailed descriptions of communities. The reader is referred to *Section 4.8: Hydrology and Water Quality*, for a further discussion of potential alteration in surface water flows and volumes from cannabis operations.

Riparian habitat occurs within areas of existing and proposed new cannabis cultivation sites, including areas near the Truckee and South Yuba Rivers. Streams supporting riparian and wetland vegetation are regulated by CDFW under Section 1600-1616 of the CFGC, which provides for the protection of fish, wildlife, and native plant resources. Development could result in vegetation removal or trampling, fill of wetlands, hydrologic changes, deposition of dust or debris, soil compaction, or other disturbances that could temporarily affect the condition and function of sensitive habitats.

Development of cannabis-related uses under the proposed ordinance must comply with the SWRCB General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities, which prohibits cannabis cultivation within at least 50 feet of all surface water. Additionally, County Code contains regulations regarding development within riparian and stream habitat through the County’s General Plan and Zoning Ordinance. This would prevent some, but possibly not all impacts to riparian habitat. Additionally, any project-related construction adjacent to wetlands or other sensitive habitat could similarly indirectly or directly affect those resources unless effective best management practices (BMPs) and other appropriate resource protection measures are implemented.

Old growth forest habitat, including Sierran mixed conifer, red fir, white fir, and Douglas fir, occurs throughout the County (Figure 4.4-1: *Tree Dominated Habitat Types*). Old growth and late-successional forests include features such as very large trees, large snags, complex canopy structure (i.e., understory, midstory, overstory), and coarse woody debris (e.g., large logs) on the forest floor; all features that provide unique habitat for many wildlife species. Many special status wildlife species, including fisher, and California wolverine, use old growth forest habitat for denning and movement corridors. Loss of, or disturbance to sensitive habitats, including sensitive natural communities, riparian habitat, and old growth habitat, would be a potentially significant impact.

Land Use and Development Code Implementation

Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cannabis cultivation less than 2,500 sf. Cannabis cultivation under a CCP could have a maximum cannabis canopy of 2,500 sf and maximum accessory structure of 625 sf plus other related improvements such as driveways and staging areas. It is not anticipated that an individual project of this limited scope and scale would result in significant impacts on riparian habitats and other sensitive communities. Conformance to applicable regulations for a CCP would be made during the plan review and approval process by the Building Department. The Building Department would review all CCP applications for completeness. It is further anticipated that most proposed commercial cannabis cultivation of this size could be planned to avoid riparian and sensitive habitats.

While the majority of individual project impacts on riparian habitats or other sensitive communities are anticipated to be less than significant or not occur, considering the total number of possible CCP and ADP projects across the county, the potential for impacts would remain. To reduce the impacts, Mitigation Measure BIO-2 would amend the proposed NCCO to include a requirement for project applicants to provide screening materials for biological resources, including riparian or sensitive habitats, to determine if these habitats existed onsite. If any of these resources are located on the project site and if the proposed canopy area, accessory structure, or proposed improvements such as driveways or staging areas would adversely impact a sensitive habitat, the a Biological Inventory would be required to demonstrated the sensitive habitats have been avoided or that other impact reductions and compensatory measures consistent with Sections L-II 4.3.12 and L-II 4.3.17 of the Nevada County Land Use and Development Code have been implemented on a project-specific basis. Project impacts on riparian habitats or other sensitive communities would be reduced to less than significant through implementation of Mitigation Measure BIO-2, including the preparation of a Biological Inventory or other environmental documentation, or a site-specific HMP could be required. The HMP would be written in conformance to the requirements of Section L-II 4.3.17 of the Land Use and Development Code related to resource standards. As discussed in *Section 3.0: Project Description*, the intent of the site development standards is to avoid resource impacts and natural constraints to the maximum amount possible Impacts are to be reduced through avoidance, minimization, or compensation. Section L-II 4.3.17 of the Land Use and Development Code requires the preparation of a HMP when construction activities or disturbance is located within 100 feet of all wetlands and riparian areas. When avoidance is not a feasible to reduce impacts, a HMP may be prepared that is consistent with all County requirements.

Completion of the HMP would carry provisions to compensate for impacts that would become conditions of approval of the cultivation projects. HMP would incorporate elements to reduce impacts riparian, old growth forest habitat, and other sensitive habitats that may occur on existing and future project sites. Lands used as compensation for unavoidable project impacts would be acquired through fee title or conservation easements with the express purpose of maintenance as compensation for impacts to special status plant species and habitat in perpetuity. Holders of title or easements shall be restricted to mutually agreed upon agencies or private, non-profit conservation entities approved by the Planning Agency.

In most cases it is expected that impacts on riparian and other sensitive habitats would be reduced to less than significant through avoidance and/or minimization and measures listed, if needed, in the Biological Inventory or subsequent environmental documentation. For cannabis cultivation projects that would require replacement to account for impacts to these resources use of a HMP, prepared by a qualified biologist and conforming to all County and professional standards, would reduce impacts to less than significant. If potential impacts on these biological resources cannot reduced to less than significant, no permit would be issued. Therefore, impacts on sensitive and special status plant species are considered less than significant with the implementation of Mitigation Measures BIO-1 and BIO-2.

MITIGATION MEASURES

Implement MM BIO-2.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.4-4: DISTURBANCE TO OR LOSS OF WETLAND OR WATERS OF THE UNITED STATES.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Cultivation for personal use would be limited to a total of six plants and be done under the requirements of the proposed NCCO. Impacts in this regard would be less than significant and mitigation is not required.

Potential land use conversion and development under the proposed NCCO for cultivation for commercial or non-remuneration could adversely affect wetlands or waters of the United States, such as streams, rivers, lakes, and wetlands. This would be a potentially significant impact.

The County contains approximately 11,984 acres of aquatic habitat, including major rivers (e.g., Truckee and South Yuba) and their tributaries; lakes; as well as associated wetland habitat. Future development under the proposed ordinance must comply with the SWRCB General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities, which prohibits cannabis cultivation within at least 50 feet of all surface water features. This requirement would prevent most disturbance to surface waters such as streams, rivers, lagoons, and lakes. Additionally, County Code contains regulations regarding development within riparian and stream habitat through the County's General Plan and Zoning Ordinance. However, future cannabis operations under the proposed ordinance could result in the conversion of wetland habitat where such habitat occurs on the site. New development related to cannabis activities on the site, including vegetation removal and other ground disturbance, could result in the loss or degradation wetlands or other waters of the United States through fill or other disturbances. This would be a potentially significant impact.

Land Use and Development Code Implementation

Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cannabis cultivation less than 2,500 sf and an ADP for cultivation 2,500 sf to 10,000 sf. Conformance to applicable regulations for either a CCP or an ADP would be made during the plan review and approval process and could be made by the Planning Director. The Building Department would review all applications for completeness for CCPs and the Planning Director (or appointed designee) would review all commercial cannabis applications for ADPs. As part of the applications screening process for impacts from loss of special status plant species and habitat, Mitigation Measure BIO-2 would be applicable. An Annual Cannabis Permit (ACP) also would be required and need to be renewed annually. This would ensure continued compliance with these requirements.

To reduce impacts on wetland habitats, Mitigation Measure BIO-2 would amend the proposed NCCO to include a requirement for project applicants to provide screening materials for biological resources, including riparian or sensitive habitats, to determine if these habitats existed onsite. If any of these resources are located on the project site and if the proposed canopy area, accessory structure, or proposed improvements such as driveways or staging areas would adversely impact a sensitive habitat, then a Biological Inventory would be required to demonstrated the sensitive habitats have been avoided or that other impact reductions and compensatory measures consistent with Sections L-II 4.3.12 and L-II 4.3.17 of the Nevada County Land Use and Development Code have been implemented on a project-specific basis. If wetland impacts could not be avoided an HMP would be prepared consistent with the requirements of Section L-II 4.3.17 of the Land Use and Development Code related to resource standards. As discussed in *Section 3.0: Project Description*, the intent of the site development standards is to avoid resource impacts and natural constraints to the maximum amount possible Impacts are to be

reduced through avoidance, minimization, or compensation. Section L-II 4.3.17 of the Land Use and Development Code requires the preparation of a HMP when construction activities or disturbance is located within 50-100 feet of all wetlands watercourses depending on the size and type of wetland. When avoidance is not a feasible to reduce impacts, a HMP may be prepared that is consistent with all County requirements.

Completion of the HMP would carry provisions to compensate for impacts that would become conditions of approval of the cultivation projects. HMP would incorporate elements to reduce impacts riparian, old growth forest habitat, and other sensitive habitats that may occur on existing and future project sites. Lands used as compensation for unavoidable project impacts would be acquired through fee title or conservation easements with the express purpose of maintenance as compensation for impacts to special status plant species and habitat in perpetuity. Holders of title or easements shall be restricted to mutually agreed upon agencies or private, non-profit conservation entities approved by the Planning Agency.

Additionally, per Section L-II 4.3.17, project applicants are required to obtain appropriate authorizations from the U.S. Fish and Wildlife Service, State Department of Fish and Wildlife, and U.S. Army Corps of Engineers prior to project approval. Any provisions to avoid, mitigate, or compensate for impacts to the wetlands or riparian areas contained in the approval from those agencies would become conditions of approval for a future project.

In most cases it is expected that impacts on wetland habitats or waters of the United States would be reduced to less than significant through avoidance and/or minimization and measures listed, if needed, in the Biological Inventory or subsequent environmental documentation. For cannabis cultivation projects that would require replacement to account for impacts to these resources use of a HMP, prepared by a qualified biologist and conforming to all County and professional standards, would reduce impacts to less than significant.

MITIGATION MEASURES

Implement **MM BIO-2**

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.4-5: INTERFERENCE WITH RESIDENT OR MIGRATORY WILDLIFE CORRIDORS OR NATIVE WILDLIFE NURSERY SITES.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Cultivation for personal use would be limited to a total of six plants and be done under the requirements of the proposed NCCO. Impacts in this regard would be less than significant and mitigation is not required.

Potential land use conversion and development under the proposed NCCO for cultivation for commercial or non-remuneration could adversely affect resident or migratory wildlife corridors through habitat fragmentation, degradation of aquatic habitat (e.g., streams and rivers), or blockage of important wildlife migration paths. Impacts to movement corridors and habitat connectivity for these species would be potentially significant.

AQUATIC CORRIDORS

Aquatic wildlife movement corridors within the County include all major rivers and their tributaries. Several anadromous fish species, including steelhead, and chinook salmon, have runs within western Nevada County's rivers and streams from the spring to the fall. Adverse effects to these aquatic wildlife corridors could include degradation to streams and rivers (e.g., inadvertent fill) or improper surface water diversion which could create isolated pools which could decrease survival of young salmonids.

The SWRCB General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities, establishes water resource protection requirements for cannabis cultivation operations (such as the use of best management practices intended to protect aquatic habitat and water quality). These requirements include a setback for cultivation activities of at least 50 feet from any surface water sources. The reader is referred to *Section 4.8: Hydrology and Water Quality*, for a further discussion of potential alteration in surface water flows and water quality from cannabis operations.

Any future proposed construction of surface water diversion infrastructure or stream crossing could adversely affect resident or migratory wildlife corridors through habitat fragmentation, degradation of aquatic habitat (e.g., streams and rivers), or blockage of important wildlife migration paths. Impacts to movement corridors and habitat connectivity for these species would be potentially significant and would require approval and permits from NOAA Fisheries, CDFW, RWQCB, and the Corps. Implementation of the Land Use and Development Code requirements outlined above in Impacts 4.1-1 through 4.1-4 would sufficiently mitigate for project-related adverse effects to aquatic wildlife movement corridors and would result in less than significant impacts. No further mitigation is required.

TERRESTRIAL CORRIDORS

The County contains critical summer and winter habitat for mule deer. Mule deer occupy a variety of habitats but are most abundant in riparian habitats. Existing and proposed cannabis cultivation site locations could potentially overlap with migratory deer summer and winter ranges. Conditions within the County include existing barriers to movement for these species, including roads and highways, fencing, and urban development in unincorporated communities like Soda Springs. Future cannabis activities under the proposed ordinance would likely not significantly alter the habitat quality and connectivity within the range of these species, as most development involves fencing in the immediate vicinity of the cannabis activity, leaving adjacent areas free from barriers. Additionally, the SWRCB General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation prohibits cannabis cultivation within at least 50 feet of any surface water. By requiring compliance with the SWRCB General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation.

Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cannabis cultivation less than 2,500 sf and an ADP for cultivation 2,500 sf to 10,000 sf. Conformance to applicable regulations for either a CCP or an ADP would be made during the plan review and approval process and could be made by the Planning Director. The Building Department would review all applications for completeness for CCPs and the Planning Director (or appointed designee) would review all commercial cannabis applications for ADPs. As part of the applications screening process for impacts from loss of special status plant species and habitat, Mitigation Measure BIO-2 would be applicable. An Annual

Cannabis Permit (ACP) also would be required and need to be renewed annually. This would ensure continued compliance with these requirements.

To reduce impacts on wetland habitats, Mitigation Measure BIO-2 would amend the proposed NCCO to include a requirement for project applicants to provide screening materials for biological resources, including deer habitat, to determine if these habitats existed onsite. If any of these resources are located on the project site and if the proposed canopy area, accessory structure, or proposed improvements such as driveways or staging areas would adversely impact a sensitive habitat, then a Biological Inventory would be required to demonstrate the sensitive habitats have been avoided or that other impact reductions and compensatory measures consistent with Sections L-II 4.3.7 of the Nevada County Land Use and Development Code have been implemented on a project-specific basis. If impacts on deer habitat could not be avoided an HMP would be prepared consistent with Section L-II 4.3.7 Deer Habitat, Major of the Land Use and Development Code which establishes resource standards for all applicable projects and requires a Biological Inventory prepared by a qualified biologist, to determine whether the habitat for the defined resource, or the resource itself may be affected by a proposed project. Projects would only be approved when they are not within a major deer habitat, but could be approved if a Management Plan is prepared consistent with the following requirements:

- Is prepared by a qualified biologist;
- Avoids or minimizes impacts to deer and their habitat;
 - If the entire site is within or adjacent to habitat area, the Management Plan would require development in the least sensitive portion of the site;
- Clustering of development would be required for all projects on parcels 20 acres or greater within the North San Juan and Penn Valley areas where existing parcellation within two square miles of the project averages 20 acres or more;
- Clustering of development would be required for all projects on parcels of 40 acres or more that are within a migratory deer wintering range in rural regions west of Range 12 east line, where existing parcellation within two square miles of the project site averages 40 acres or more in size.

Activities through establishment of stream setbacks, development under the proposed ordinance would have a less-than-significant impact on migratory corridors for mule deer. No further mitigation is required. Terrestrial wildlife movement corridors within the County, or essential connectivity areas, include much of the relatively intact natural landscape blocks within the Tahoe National Forest and national and State Park lands. Forest species such as fisher, and California wolverine require large contiguous blocks of forest habitat with a high degree of canopy cover, large structural features (e.g., logs, rock piles, snags), and a dense shrub layer (Sauder and Rachlow 2014 and Zielinski et al. 2001). Home ranges can be up to 36 square miles for fisher, and up to 156 square miles for California wolverine. Future cannabis operations under the proposed ordinance could result in tree and understory vegetation removal, forest floor clearing, and overall fragmentation of suitable habitat for special status and common wildlife species. If the character of previously occupied forest habitat changes, it is likely that these species would no longer use the habitat. Fisher will avoid forest habitats without complex understory structure, which can result in decreased foraging success and increased vulnerability to predation (Sauder and Rachlow 2014). Cannabis cultivation construction activities could exclude fisher, and other sensitive mammal species, from previously occupied habitat, thus limiting the full range of the species, or limiting access to dens, burrows, or nests. Because suitable habitat for these species includes old growth habitat and large structural features like snags, the habitat, if lost, would not be replaced. This would be a potentially

significant impact. Implementation of the Land Use and Development Code requirements outlined above in Impacts 4.1-1 through 4.1-4 would sufficiently mitigate for project-related adverse effects to terrestrial wildlife movement corridors and would result in less than significant impacts. No further mitigation is required.

MITIGATION MEASURE

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

4.5 CULTURAL AND TRIBAL RESOURCES

This section of the Draft Environmental Impact Report (EIR) provides a summary of the cultural, historical, and paleontological resources located in Nevada County, the applicable federal, state, and local regulatory setting, and the analysis of the potential impacts associated with the implementation of the proposed Nevada County Cannabis Land Use Ordinance (NCCO) Project (proposed project) on cultural resources. This section also provides contextual background information on historical resources within the County, including the area's prehistoric, ethnographic, and historical settings. If needed, mitigation measures in addition to conformance with the County performance standards to address adverse impacts are included as needed.

A cultural resource is the physical or observable traces of past human activity including, prehistoric habitation and activities, historic-era sites and materials, and places used for traditional Native American observances or places with special cultural significance. Cultural resources, along with prehistoric and historic human remains and associated grave goods, must be considered under various federal, state, and local regulations, including the California Environmental Quality Act (CEQA) and the National Historic Preservation Act of 1966. The following sources provided the data to support this section:

- California Office of Historic Preservation (2018)
- National Park Service (2017)
- University of California Museum of Paleontology
- Nevada County General Plan (1995)
- Five Views, An Ethnic Historic Site Survey for California (1998)

For the purposes of the California Environmental Quality Act (CEQA), "historical resources" generally refer to cultural resources that have been determined to be significant, either by eligibility for listing in State or local registers of historical resources, or by determination of a lead agency (see definitions below). Historical resources can also include areas determined to be important to Native Americans that qualify as tribal cultural resources as defined in Public Resources Code (PRC) Section 21074 (sites, landscapes, historical, or archeological resources). Paleontological resources are also considered within this section.

4.5.1 CULTURAL RESOURCES TERMINOLOGY

Below are definitions of key cultural resources terms used in this section:

- **Alluvium:** a fine-grained sedimentary unit of soil consisting of mud, silt, and sand deposited by flowing water on floodplains, in river beds, and in estuaries.
- **Archaeological Site:** A site is defined by the National Register of Historic Places (NRHP) as the place or places where the remnants of a past culture survive in a physical context that allows for the interpretation of these remains. Archaeological remains usually take the form of artifacts (e.g., fragments of tools, vestiges of utilitarian, or non-utilitarian objects), features (e.g., remnants of walls, cooking hearths, or midden deposits), and ecological evidence (e.g., pollen remaining from plants that were in the area when the activities occurred). Prehistoric archaeological sites generally represent the material remains of Native American groups and their activities dating to

the period before European contact. In some cases, prehistoric sites may contain evidence of trade contact with Europeans. Ethnohistoric archaeological sites are defined as Native American settlements occupied after the arrival of European settlers in California. Historic archaeological sites reflect the activities of non-native populations during the Historic period.

- **Artifact:** An object that has been made, modified, or used by a human being.
- **Cultural Resource:** A cultural resource is a location of human activity, occupation, or use identifiable through field inventory, historical documentation, or oral evidence. Cultural resources include archaeological resources and built environment resources (sometimes known as historic architectural resources), and may include sites, structures, buildings, objects, artifacts, works of art, architecture, and natural features that were important in past human events. They may consist of physical remains or areas where significant human events occurred, even though evidence of the events no longer remains. Cultural resources also include places that are considered to be of traditional cultural or religious importance to social or cultural groups.
- **Ecofact:** An object found at an archaeological site that has archaeological significance but has not been technologically altered, such as seeds, pollens, or shells.
- **Ethnographic:** Relating to the study of human cultures. “Ethnographic resources” represent the heritage resource of a particular ethnic or cultural group, such as Native Americans or African, European, Latino, or Asian immigrants. They may include traditional resource-collecting areas, ceremonial sites, value-imbued landscape features, cemeteries, shrines, or ethnic neighborhoods and structures.
- **Historic period:** The period that begins with the arrival of the first non-native population and thus varies by area. Modern history in Nevada County begins in 1848, when discovery of gold in California brought the first white settlers to Penn Valley and people of all nationalities came to work the mines (Nevada County, 2018g).
- **Historical resource:** This term is used for the purposes of CEQA and is defined in the CEQA Guidelines (§15064.5) as: (1) a resource listed in, or determined to be eligible for listing in the California Register of Historical Resources (CRHR); (2) a resource included in a local register of historical resources, as defined in Public Resources Code (PRC) §5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC §5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Historical resources may also include tribal cultural resources including sites, features, places, cultural landscapes, sacred places, objects, and/or archeological resources with value to a California Native American Tribe per PRC §21074.
- **Holocene:** Of, denoting, or formed in the second and most recent epoch of the Quaternary period, which began 10,000 years ago at the end of the Pleistocene.
- **Isolate:** An isolated artifact or small group of artifacts that appear to reflect a single event, loci, or activity. Isolates typically lack identifiable context and thus have little interpretive or research

value. Isolates are not considered to be significant under CEQA and do not require avoidance mitigation (CEQA Statute §21083.2 and CEQA Guidelines §15064.5).

- **Lithic:** Of or pertaining to stone. Specifically, in archaeology, lithic artifacts are chipped or flaked stone tools, and the stone debris resulting from their manufacture.
- **Native American sacred site:** An area that has been, or continues to be, of religious significance to Native American peoples, such as an area where religious ceremonies are practiced or an area that is central to their origins as a people.
- **Paleontological Resources (Fossils):** The physical remains of plants and animals preserved in soils and sedimentary rock units/formations. Paleontological resources contribute to the understanding of past environments, environmental change, and the evolution of life.
- **Pleistocene (Ice Age):** An epoch in the Quaternary period of geologic history lasting from 1.8 million to 10,000 years ago. The Pleistocene was an epoch of multiple glaciations, during which continental glaciers covered nearly one-fifth of the earth's land.
- **Prehistoric period:** The era prior to 1848. The record of California prehistory is divided into three broad temporal periods that reflect similar cultural characteristics throughout the state: Paleoindian (ca. 11,500–8000 B.C.), Archaic (8000 B.C.– A.D. 500), and Late Prehistoric (A.D. 500– Historic Contact). Although early occupation in the High Sierra occurred at least 9,000 years ago, some evidence identifies occupation occurred during the Paleoindian Period (Nevada County, 2012).
- **Quaternary Age:** The most recent of the three periods of the Cenozoic Era in the geologic time scale of the International Commission on Stratigraphy (ICS). It follows the Tertiary Period, spanning 2.588 ± 0.005 million years ago to the present. The Quaternary includes two geologic epochs: the Pleistocene and the Holocene Epochs.
- **Stratigraphy:** The natural and cultural layers of soil that make up an archaeological deposit, and the order in which they were deposited relative to other layers.
- **Unique Archaeological Resource:** This term is used for the purposes of CEQA and is defined in the CEQA Guidelines (§15064.5) as an archaeological artifact, object, or site, about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it either contains information needed to answer important scientific research questions; has a special and particular quality such as being the oldest of its type or the best available example of its type; or, is directly associated with a scientifically recognized important prehistoric or historic event or person.
- **Unique Paleontological Resource:** This term is defined as a fossil that meets one or more of the following criteria: (1) it provides information on the evolutionary relationships and developmental trends among organisms, living or extinct; (2) it provides data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein; (3) it provides data regarding the development of biological communities or interaction between plant and animal communities; (4) it demonstrates unusual or spectacular circumstances in the history of life; or (5) the fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

CULTURAL RESOURCES IN NEVADA COUNTY

The varied environmental zones, the geological characteristics, and the geographical position of Nevada County account for a cultural resource base which is exceedingly rich and complex. This explains the relatively large number of recorded prehistoric and historic sites and the variety of types. Prehistoric site types, which have been inventoried, include villages and associated cemeteries, multi-task camps, single task-specific locales (such as bedrock mortar milling features), and special use sites (hunting blinds, petroglyphs and quarries). Historic themes within Nevada County are manifest archaeologically by site types related to mining, water management, logging, transportation, emigrant travel, ranching and agriculture, grazing, and the ice industry.

Cultural resources, including architectural resources, reflect the physical evidence of past human activity across the landscape. Areas that are considered to be potentially culturally sensitive in Nevada County are generally located less than one-quarter mile from a source of water (i.e., streams, lakes, rivers), between 400 and 3,000 feet above mean sea level (amsl) on the west side of the Sierra Nevada Mountains and between 5,000 and 6,000 feet amsl on the east side.

Nevada County's total land area is approximately 978 square miles or approximately 612,900 acres, of which approximately 70 percent (%) is privately owned and approximately 30% is public lands. Public lands are managed by the U.S. Forest Service (USFS) in the Tahoe National Forest (TNF), while other public lands are managed by the Bureau of Land Management (BLM). The Nevada County General Plan (NCGP) states that by 1991, approximately 29,300 acres had been subjected to an intensive archaeological survey on private lands, 22,769 acres on forest service lands and 482 acres on BLM lands. NCGP Volume 3. Master Environmental Inventory (1991) states that approximately 8% of the County has been subjected to archaeological surveys with 1,490 prehistoric and historic sites previously documented. The discussion of the County's existing historic resources below is based on review of the National Park Service's National Register of Historic Properties (National Register) of Nevada County, the National Park Service's California Historical Landmarks of Nevada County, the Office of Historic Preservation's (OHP's) California Historic Landmarks of Nevada County list, and the Nevada County Historic Landmark Advisory Commission.

Currently, in Nevada County there are 23 sites listed on the National Register, 18 sites that are eligible for listing in the National Register, 1 National Landmark, 20 State Landmarks, and 28 Points of Historical Interest. The California Register of Historical Resources (California Register) includes cultural resources that are listed in or formally determined eligible for listing in the National Register, as well as some California Historical Landmarks and Points of Historical Interest. These are listed below in *Table 4.5-1: Historical Resources Nevada County*. Although some of these resources are located within incorporated cities and would be outside the proposed project area of effect, to provide a full accounting and setting of the historic nature of the County, they have been included here.

Table 4.5-1: Historical Resources Nevada County

Resource Name	National Register Listed	National Register Eligible	National Landmark	California Historical Landmarks	Points of Historical Interest	City or Community
A. A. Sargent Residence, Sargent-Freeman Residence					X	Nevada City
Aaron Baruh House					X	Nevada City
Alpha Hydraulic Diggings				X		Washington
American Hill Diggings					X	Nevada City
Archeological Site 05-17-55-72		X				City Unavailable
Archeological Site 4-Nevada-251						North Columbia
Archeological Site CA-NEV-407		X				City Unavailable
Archeological Site FS-05-17-57-232		X				City Unavailable
Archeological Site FS-05-17-57-280		X				City Unavailable
Archeological Site FS-05-17-57-281		X				City Unavailable
Archeological Site FS-05-17-57-282		X				City Unavailable
Archeological Site FS-05-17-57-73		X				City Unavailable
Archeological Site FS-05-17-57-74		X				City Unavailable
Boca Dam	X					Truckee
Boca Ice Harvest Site					X	Truckee
Bradley Hut		X				Nevada City
Bridge No. 17C-1		X				Nevada City
Bridge No. 17C-20		X				Grass Valley
Bridge No. 17C-24/Purdon Bridge		X				Nevada City
Bridge No. 17C-30						Washington

Table 4.5-1: Historical Resources Nevada County

Resource Name	National Register Listed	National Register Eligible	National Landmark	California Historical Landmarks	Points of Historical Interest	City or Community
Bridge No. 17C-6		X				Nevada City
Bridgeport Covered Bridge	X			X		French Corral
Caldwell's Upper Store Site						Nevada City
Caroline Hansen House					X	Grass Valley
Columbia Hill School					X	Nevada City
Commercial Row-Brickelltown Historic District	X					Truckee
Davis Mill	X					Nevada City
Deer Creek Bridge		X				City Unavailable
Donner Camp and Memorial State Park	X	X	X	X		Truckee
Donner Summit Bridge					X	Donner Lake
Dr. W.C. Jones Home					X	Grass Valley
Emmanuel Episcopal Church					X	Grass Valley
Empire Mine	X					Grass Valley
Empire Mine Historic District (Boundary Increase)	X			X		Grass Valley
Englebright House						Nevada City
Excelsior Ditch Ca. Nev. 207		X				City Unavailable
First Manufacturing Site of The Pelton Wheel				X		Nevada City
First Transcontinental Railroad				X		Truckee
Foote's Crossing					X	North San Juan
Gilmore Air Field					X	Grass Valley
Grass Valley Public Library	X					Grass Valley
Holbrooke Hotel				X		Nevada City

Table 4.5-1: Historical Resources Nevada County

Resource Name	National Register Listed	National Register Eligible	National Landmark	California Historical Landmarks	Points of Historical Interest	City or Community
Home of Lola Montez				X		Grass Valley
Home of Lotta Crabtree				X		Grass Valley
Idaho-Maryland Mine Site					X	Grass Valley
Kruger House	X					Truckee
Malakoff Diggins-North Bloomfield Historic District	X					North Bloomfield
Marsh, Martin Luther, House	X				X	Nevada City
Meadow Lake Petroglyphs	X					French Lake
Mount St. Mary's Academy and Convent	X			X		Grass Valley
National Exchange Hotel	X			X		Nevada City
Nevada Brewery	X					Nevada City
Nevada City Downtown Historic District	X					Nevada City
Nevada City Firehouse No. 2	X					Nevada City
Nevada City Free Public Library	X					Nevada City
Nevada Theatre	X			X		Nevada City
North Bloomfield Mining and Gravel Company				X		Nevada City
North San Juan Methodist Episcopal Church					X	North San Juan
North Star House	X					Grass Valley
North Star Mine Powerhouse				X		Nevada City
Old Bear River Bridge					X	Grass Valley
Old Main Post Office		X				Grass Valley
Old North San Juan School Site					X	North San Juan

Table 4.5-1: Historical Resources Nevada County

Resource Name	National Register Listed	National Register Eligible	National Landmark	California Historical Landmarks	Points of Historical Interest	City or Community
Omega Hydraulic Diggings and Townsite				X		Washington
Ott's Assay Office	X					Nevada City
Overland Emigrant Trail				X		Grass Valley
Pioneer Cemetery					X	Nevada City
Plaza Grocery					X	Nevada City
Red Dog Townsite	X				X	Nevada City
Roote Cellar on Mexican War Land Grant					X	Grass Valley
Sargent, Aaron A., House	X					Nevada City
Searls Historical Library					X	Nevada City
Site of One of the First Discoveries of Quartz Gold in California				X		Grass Valley
South Yuba Canal Office				X		Nevada City
The Little Town of Rough and Ready				X		Rough and Ready
The Lone Grave						Nevada City
The Red Castle					X	Nevada City
The Union-Grass Valley Newspaper					X	Grass Valley
The World's First Long-Distance Telephone Line				X		French Corral
Town of Washington					X	Washington
Truckee Jail					X	Truckee
Western Skisport Museum					X	Truckee
William Morris Stewart House					X	Nevada City
You Bet Townsite					X	Nevada City
Source: National Park Service 2017; Office of Historic Preservation 2018 Note: This list does not reflect resources listed in the California Register of Historical Resources by consensus determination						

DESIGNATED LANDMARKS

The Nevada County Historical Landmarks Commission's (Commission) purpose is to "promote the general welfare of Nevada County and its citizens through official recognition, recording, marking, preserving and promoting the historical resources of Nevada County." The Commission developed an interactive map, with the support of the Nevada County Geographical Information Systems unit, that provides detailed information on each of the landmarks and is currently available online (Commission 2017). As of 2017, the Commission has recognized and designated 196 landmarks in Nevada County, including 50 California historical landmarks. See *Table 4.5-2: Nevada County Designated Landmarks*, below.

Table 4.5-2: Nevada County Designated Landmarks

Geographic Area	Number of Designated Landmarks
West County	9
South County	11
East County	5
East Donner	13
Grass Valley	40
Glenbrook	7
Graniteville	2
Nevada City	65
North San Juan	5
North Bloomfield	2
Truckee	21
Washington	8
West Donner	8
Total	196
Source: Nevada County Historical Landmarks Commission, 2017.	

ETHNIC HISTORIC SITES

California's five largest minorities from 1848 to 1898 were Native American, African American, Chinese American, Japanese American, and Mexican American. In order to improve representation of these ethnic minority properties, OHP prepared *Five Views: An Ethnic Historic Site Survey for California* (2004). The survey identified eight ethnic historic sites in Nevada County and are listed in *Table 4.5-3: Ethnic Historic Sites in Nevada County*, below.

Table 4.5-3: Ethnic Historic Sites in Nevada County

Geographic Area	Resource Name
Grass Valley	African Methodist Episcopal Church Site
Nevada City	African Methodist Episcopal Church Site
Nevada County	Alexander Street
Nevada County	Colored School Site
Nevada County	Kentucky Ridge Colony Site
Nevada County	Nevada City Chinese American Cemetery
Nevada County	Old Chinese Herb Shop
Nevada County	Wells Fargo Co./Chinese Laundry
Source: Office of Historic Preservation (OHP). Five Views: An Ethnic Historic Site Survey for California. 2004.	

PREHISTORIC SETTING

Until relatively recent years, the study of Sierran archaeology lagged far behind the central valley and coastal areas in terms of developing a regional chronology and basic understanding of the prehistory of the area. In 1953, however, scientists began to synthesize Sierran archaeology and proliferated major archaeological projects due to work on water projects and other cultural resource management-based research efforts. Since then, there have been several archaeological reconnaissance surveys conducted in the Auburn Reservoir area, one of which is the Spring Garden Ravine site (CA-Pla-101) that will be useful for this analysis since the site contains three well-defined strata (Ritter 1970b).

The lowest stratum (C) has been radiocarbon dated at about 1400 B.C., and contains an assemblage similar to the Martis Complex, as defined at high-elevation sites in the Sierra. The artifacts include large projectile points (mostly of basalt and slate), atlatl (dart-thrower) weights, numerous core tools, and several varieties of grinding implements. The collection looks typical to the Martis Valley, as there was an emphasis on small game hunting and plant gathering, which allowed for the existence of more permanent villages in ecologically rich areas. The next stratum (B) is less easily defined and appears to represent a transition between cultures represented by the upper and lower strata. Some of this transitional appearance may be attributable to the physical mixing of deposits; however, the basic integrity of the site is consistent with the two radiocarbon dates from stratum B (A.D. 1039±80 and 976±90). The upper stratum contains small projectile points (arrowheads), hopper mortars, and other artifacts comparable to recent archaeological collections elsewhere in the northern foothills. Stratum A is, therefore, most likely a manifestation of the ancestral Nisenan, the Indian group inhabiting the area at the time of Euro-American contact.

Ethnographic Setting

The County of Nevada and specifically the proposed project area lies within the ethnographic territory of the Nisenan, or Southern Maidu. The Nisenan occupied the upper drainages and the adjacent ridges of

the Yuba, the north, middle and south forks of the American, and at least the upper north side of the Cosumnes River. The territory is conventionally believed to extend to the crest of the Sierra to the east and the Sacramento River to the west.

Nisenan has three main dialects – Northern Hill, Southern Hill and Valley Nisenan, with three or four subdialects. The Hill Nisenan lived along the foothills of the Sierra Nevada, primarily in small villages with family groups living outside the area of the main village. The main village had a reported dance house, Tuyi, and was located in the Grass Valley area, although the exact location has not been matched to a known archaeological site. The Nisenan were socially integrated at the village or community group level, with the group participating in the decision-making process. The villages would range in size from 15 to 25 people to over 500 people in the Valley Nisenan. A headman, respected by all and residing in the major village, had the authority to call upon the smaller associated groups in times of need, although the smaller groups did not always have to obey.

The Nisenan, as with other Sierra Native American groups, moved into the higher elevations during the hot summer months. The main activity was the collecting of pine nuts and numerous other species of nuts, roots and berries. This was done primarily by women and children. The foraging groups in a locale could range from small, extended family groups, composed of a woman, her immediate female kin and their adolescent children to whole villages. The men spent most of their time hunting or fishing for a wide variety of fish and animals. Hunting was noted as often involving communal drives, with the best archers of the village posted to do the killing. Individual hunters made extensive use of decoys and imitative sounds.

Most Nisenan people never left the territory used by their own village group. However, there were, in most large villages, at least some individuals who engaged in rather extensive trade with several valley groups as well as Sierra groups, such as the Washo. The Hill Nisenan most likely acquired obsidian and basketry from the east, in exchange for acorns from the Washo, but it is presently unclear whether they were visited by the Washo or they visited the Washo or both. Presumably, the exchange network functioned in the summer and fall.

PALEONTOLOGICAL RESOURCES IN NEVADA COUNTY

Paleontological resources are the mineralized (fossilized) remains of prehistoric plants and animals and the mineralized impressions (trace fossils) left as indirect evidence of the form and activity of such organisms. The fossil yielding potential of a particular area is highly dependent on the geologic age and origin of the underlying rocks. In general, older sedimentary rocks (more than 10,000 years old) are considered most likely to yield vertebrate fossils of scientific interest. When fossils are discovered at the earth's surface, it is because the material in which the organism was fossilized has been eroded away by natural processes or exhumed by humans. These resources are considered to be nonrenewable.

As discussed in *Section 4.6: Geology and Soils*, soils within Nevada County are diverse and consistent with soils formed over very long periods of time from complex geologic and volcanic processes, as well as the introduction of vegetative organic plant materials. The area was once covered by a vast inland sea; through geologic movement and uplift, the water in the sea receded and geologic processes resulted in the formation of some of the existing rock formations. Subsequently, the area experienced intrusion by ultrabasic rock and the existing formations began a long period of erosion exposing the granite rock below. Volcanic activity resulted in ash deposits throughout the County, as well as discharges and flows of andesitic materials mostly mud flows, dust, and lava flows. During the Pleistocene era, approximately 2.5

million years ago, faulting in the eastern portion of the County formed the Sierra Nevada range. Water began to flow westward washing much of the volcanic debris downstream and cutting the deep canyons exposing the volcanic ridges and the underlying materials that are seen today (USDA, 1993).

Today, Nevada County consists of the lower and middle foothills of the Sierra Nevada Mountains and those areas within the Sierra Nevada Mountains that are defined by steeply dipping, faulted, and folded metamorphic rock that has been intruded by several types of igneous rock. Igneous rocks result from the solidification of magma (molten rock) in environments that cause magma creation. As magma reaches the surface as lava, contact with biological organisms usually results in their destruction; as such, there is no plant or animal material present to fossilize. Metamorphic rocks are created when subjected to high levels of heat and pressure, and fossils do not usually survive these extreme conditions. Rock units in which vertebrate or significant invertebrate, plant, or trace fossils have been previously recovered include sedimentary formations, low-grade metamorphic rocks, and volcaniclastic formations that are temporally (over 11,700 years old) and lithological suitable for fossil preservation.

Fossils generally occur in the Sierra Nevada in rocks that are young in age (less than 50 million years). The University of California Museum of Paleontology identifies approximately 500 vertebrate and invertebrate paleontological specimens that have been collected from geological formations dating to the Eocene (56-34 Million Years Ago), Miocene (approximately 23-5.3 Million Years Ago), Pleistocene (approximately 1.8 Million Years Ago to 11,000 Years Ago) epochs in Nevada County.

4.5.2 REGULATORY SETTING

FEDERAL

FEDERAL CANNABIS ENFORCEMENT

As explained in *Section 3.0: Project Description*, although state law has decriminalized cannabis, it is not legal under Federal law. The U.S. Department of Justice (USDOJ) issuance of memoranda provides further guidance related to federal law enforcement and cannabis activities within jurisdictions that have legalized cannabis. In these areas cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

PALEONTOLOGICAL RESOURCES PRESERVATION ACT

The Federal Paleontological Resources Preservation Act of 2002 (Act) provides protection from excavating, removing, or altering a paleontological resource located on Federal. Researchers must obtain a permit from the appropriate state or federal agency and agree to donate any materials recovered to recognized public institutions, where they will remain accessible to the public and to other researchers. The Act also imposes criminal penalties for violation of any prohibitions contained in regulations or permits issued under this Act.

NATIONAL HISTORIC PRESERVATION ACT AND THE NATIONAL REGISTER OF HISTORIC PLACES

Archaeological resources are protected through the National Historic Preservation Act (NHPA) of 1966, as amended (54 USC 300101 et seq.); and its implementing regulation, Protection of Historic Properties (36 CFR Part 800), the Archaeological and Historic Preservation Act of 1974, and the Archaeological Resources Protection Act of 1979. The NHPA authorized the expansion and maintenance of the National Register of Historic Places (NRHP), established the position of State Historic Preservation Officer (SHPO), and

provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes to preserve their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP). Prior to implementing an “undertaking” (e.g., issuing a federal permit), Section 106 of the NHPA requires federal agencies to consider the effects of the undertaking on historic properties and to afford the ACHP and the SHPO a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the National Register of Historic Places (NRHP). As indicated in Section 101(d)(6)(A) of the NHPA, properties of traditional religious and cultural importance to a tribe are eligible for inclusion in the NRHP. Under the NHPA, a resource is considered significant if it meets the NRHP listing criteria at 36 Code of Federal Regulations (CFR) 60.4.

Cultural resources, along with prehistoric and historic human remains and associated grave goods, must be considered under the National Historic Preservation Act of 1966 (NHPA). A *historic property* is defined in the National Register [54 U.S.C. §300308] as any “prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on, the National Register of Historic Places including artifacts, records, and material remains related to such a property or resource.” An *archaeological site* is defined as “a location that contains the physical evidence of past human behavior that allows for its interpretation.” The term archaeological site refers to those that are eligible for or are listed on, as well as those that do not qualify, for the National Register.

Due to the considerable variety of properties associated with the prehistoric and historic past, a broad definition of National Register criteria and significance for evaluation of cultural resources was developed by the National Park System. In order for a property to be considered historically significant, the property must be:

- a) associated with events that have made a significant contribution to the broad patterns of our history;
- b) associated with the lives of persons significant in our past;
- c) embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or possess high artistic values, or that represent a significant and distinguishable entity whose components may lack, individual distinction; or
- d) have yielded, or may be likely to yield, information important in prehistory or history.

The integrity of a historic property to convey its significance is also considered when applying the criterion. The aspects of integrity are location, setting, design, workmanship, feeling, and association. Section 106 of the NHPA provides provisions for the protection of historic properties, which is codified in Title 36 of the Code of Federal regulations (CFR) part 800, as amended.

The National Register generally excludes resources less than fifty years old. If a resource was once determined ineligible for the National Register because they were less than 50 years of age would need to be re-evaluated for eligibility after they have aged.

NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT OF 1990

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American

groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

NATIONAL HISTORIC LANDMARKS

National Historic Landmarks are districts, sites, buildings, structures, and objects designated by the Secretary of the Interior as possessing national significance in American history, architecture, archeology, engineering, and culture.

STATE

PALEONTOLOGICAL RESOURCES

No state or local agencies have specific jurisdiction over paleontological resources on private lands. No state or local agency requires a paleontological collecting permit to allow for the recovery of fossil remains discovered as a result of construction-related earthmoving on state or private land in a project site. However, if a state agency were to acquire ownership of project lands, California Public Resources Code Chapter 1.7 (“Archaeological, Paleontological, and Historical Sites”), Section 5097.5, could apply. This section of the Public Resources Code specifies that state agencies may undertake surveys, excavations, or other operations as necessary on state lands to preserve or record paleontological resources.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA is the principal statute governing environmental review of projects occurring in the State and is codified at Public Resources Code (PRC) Section 21000 et seq. CEQA requires lead agencies to determine if a proposed project would have a significant effect on the environment, including significant effects on historical or archaeological resources.

CEQA offers Guidelines on determining the significance of impacts to archaeological and historical resources. CEQA states that if a project would have significant impacts on important cultural resources, then alternative plans or mitigation measures must be considered. However, only significant cultural resources (termed “historical resources”) need to be addressed. Section 15064.5(a) of CEQA Guidelines generally defines a historical resource as:

- 1) a resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources (California Register);
- 2) a resource listed in a local register of historical resources or identified in a historical resource survey meeting the requirements in Public Resources Code (PRC) Section 5024.1(g); and
- 3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines is historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the determination is supported by substantial evidence in light of the whole record; or a resource determined by a lead agency to be “historical,” as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

The fact that a resource does not meet the three criteria outlined above does not preclude the lead agency from determining that the resource may be a historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

If a lead agency determines that an archaeological site is a historical resource, the provisions of PRC Section 21084.1 of CEQA and 14 CCR 15064.4 of the CEQA Guidelines apply. If a project may cause a substantial adverse change (defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired) in the significance of a historical resource, the lead agency must identify potentially feasible measures to mitigate these effects (14 CCR 15064.4(b)(1), 15064.4(b)(4)).

If an archaeological site does not meet the historical resource criteria contained in the CEQA Guidelines, then the site may be treated as a unique archaeological resource in accordance with the provisions of PRC Section 21083. As defined in PRC Section 21083.2 of CEQA, a unique archaeological resource is an archaeological artifact, object, or site for which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- 1) Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- 2) Has a special and particular quality such as being the oldest of its type or the best available example of its type; or,
- 3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological site meets the criteria for a unique archaeological resource as defined in PRC Section 21083.2, then the site is to be treated in accordance with the provisions of PRC Section 21083.2, which states that if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place (PRC Section 21083.1(a)). If preservation in place is not feasible, mitigation measures shall be required.

The CEQA Guidelines note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (14 CCR 15064.4(c)(4)).

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register of Historical Resources was created by an act of the State Legislature. Under the provisions of that legislation, the following resources are automatically included in the California Register (PRC Section 5024.1; Title 14 California Code of Regulations (CCR) Section 4852):

- Resources formally determined eligible for, or listed in, the National Register of Historic Places through federal preservation programs administered by the OHP, including the National Register program; the Tax Certification program; NHPA Section 106 reviews of federal undertakings;
- State Historical Landmarks numbered 770 or higher; and
- Points of Historical Interest recommended for listing in the California Register by the State Historical Resources Commission (SHPO).

The OHP is responsible for maintaining a statewide inventory of identified and evaluated historical resources. The California Historical Resources Information System (CHRIS) includes the Historical Resources Inventory (HRI), information on resources which has been acquired and managed by OHP since 1975, as well as information and records maintained and managed by regional Information Centers (ICs) located throughout California and the maintained by OHP.

The eligibility criteria for the California Register are intended to serve as the definitive criteria for assessing the significance of historical resources for purposes of CEQA. The eligibility criteria for listing in the California Register are similar to those for National Register listing but focus on the importance of the resources to California history and heritage. In general, any building, site, structure, object or historic district over 50 years in age and meeting one or more of the following criteria may be eligible for listing in the California Register:

- a) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- b) is associated with the lives of persons important in our past;
- c) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- d) has yielded, or may be likely to yield, information important in prehistory or history.

Eligibility for the California Register also depends on the integrity, or the survival of characteristics of the resource that existed during its period of significance. Eligible historical resources must meet one of the above criteria and retain enough of integrity to convey its period of historical significance. Seven aspects of integrity are evaluated with regard to location, design, setting, materials, workmanship, feeling and association.

Section 15064.5 of the State CEQA Guidelines defines “substantial adverse change” as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired. The significance of a historical resource is materially impaired when a project results in demolition or material alteration in an adverse manner of those physical characteristics of a resource that:

- convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register;
- account for its inclusion in a local register of historical resources pursuant to Public Resources Code 5020.1(k) or its identification in a historical resources survey meeting the requirements of Public Resources Code 5024.1(g), unless the public agency reviewing the effects of the proposed project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- convey its historical significance and that justify its eligibility for inclusion in the California Register, as determined by a lead agency for purposes of CEQA.

For historical buildings, CEQA Guidelines (§ 15064.5[b][3]) indicates that a project that follows the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, or the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), shall mitigate impacts to a level of less than significant. The California Register special considerations for certain property types are limited to moved buildings, structures, or objects; historical resources achieving significance within the past 50 years; and reconstructed buildings.

CALIFORNIA HISTORICAL LANDMARKS

California Historical Landmarks are buildings, structures, sites, or places that have been determined to have statewide historical significance by meeting at least one of the following criteria:

- the first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California);
- associated with an individual or group having a profound influence on the history of California; or
- a prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer or master builder.

CALIFORNIA PUBLIC RECORDS ACT, SECTIONS 6254(R) AND 6254.10

Sections 6254(r) and 6254.10 of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to “Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission.” Section 6254.10 specifically exempts from disclosure requests for “records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the Native American Heritage Commission (NAHC), another State agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a State or local agency.”

CALIFORNIA PENAL CODE, SECTION 622

Title 14 Section 622 of the California Penal Code provides misdemeanor penalties for willfully injuring, disfiguring, or destroying any monument, or objects of historic or archaeological interest located on public or private lands, but specifically excludes the landowner.

CALIFORNIA PUBLIC RESOURCES CODE, SECTION 5097.5

Section 5097.5 of the California Public Resources Code defines as a misdemeanor the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands or state lands.

CALIFORNIA HEALTH AND SAFETY CODE, SECTIONS 7050.5 AND 7052

Section 7050.5 of the California Health and Safety Code defines as a misdemeanor if a person knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law. Section 7052 defines as a felony any person who willfully mutilates, disinters, or removes from the place of interment any remains known to be human. However, alkaline hydrolyzed or cremated human remains may be removed for disposition

CALIFORNIA POINTS OF HISTORICAL INTEREST

California Points of Historical Interest are sites, buildings, features, or events in history that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. California Points of Historical Interest are recommended by the State Historical Resources Commission and are also listed in the California Register. To be eligible for designation as a Point of Historical Interest, a resource must meet at least one of the following criteria:

- the first, last, only, or most significant of its type within the local geographic region (city or county);
- associated with an individual or group having a profound influence on the history of the local area; or
- a prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in the local region of a pioneer architect, designer or master builder.

SENATE BILL (SB) 18

Senate Bill 18 (SB 18), which went into effect January 1, 2005, requires local governments (city and county) to consult with Native American tribes before making certain planning decisions and to provide notice to tribes at certain key points in the planning process. The intent is to “provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places.”

The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level, land use designations are made by a local government. The consultation requirements of SB 18 apply to general plan or specific plan processes proposed on or after March 1, 2005.

According to the Tribal Consultation Guidelines: Supplement to General Plan Guidelines published by the Governor’s Office of Planning and Research, the following are the contact and notification responsibilities of local governments:

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the Native American Heritage Commission [NAHC]) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government’s jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3).
- Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the city or county’s jurisdiction. The referral must allow a 45-day comment period (Government Code Section 65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
- Local government must send a notice of a public hearing, at least ten (10) days prior to the hearing, to tribes who have filed a written request for such notice (Government Code Section 65092).

In accordance with Senate Bill 18 and the California Tribal Consultation guidelines, the appropriate native groups were consulted with respect to the project’s potential impacts on Native American places, features, and objects. As of the writing of this report, Staff has received one comment letter from the Native American Heritage Commission (NAHC) dated 08/14/2018 in regards to the department's SB 18

request. Staff notes consultation with appropriate Native American groups per Senate Bill 18 requirements has occurred. The letter received is attached within Appendix D.

ASSEMBLY BILL (AB) 52

AB 52, which went into effect on July 1, 2015, requires CEQA lead agencies to engage in early consultation with California Native American Tribes on all projects. AB 52 creates a new CEQA resource: Tribal Cultural Resources, which include sites, features, places, cultural landscapes, sacred place, objects, or archeological resources with cultural value to a California Native American Tribe that is listed or eligible for listing in the national, California or local registers.

AB 52 requires lead agencies to consider whether a project may cause a substantial adverse change in the significance of a Tribal Cultural Resource and to consider a tribe's cultural values when determining the appropriate environmental assessment, impacts and mitigation. AB 52 can draw upon SB 18's guidelines and can be completed in tandem.

AB 52 applies to projects with a Notice of Preparation (NOP) or notice of a Negative Declaration or Mitigated Negative Declaration issued on or after July 1, 2015. Revisions to the CEQA Guidelines were adopted in 2016 in order to: (1) separate the consideration of paleontological resources from Tribal Cultural Resources and update the relevant sample questions and (2) add consideration of Tribal Cultural Resources with relevant sample questions.

PALEONTOLOGICAL RESOURCES

Consideration of paleontological resources is required by CEQA (see Appendix G of the CEQA Guidelines). Other State requirements for paleontological resource management are found in PRC Chapter 1.7, Section 5097.5, Archaeological, Paleontological, and Historical Sites. This statute specifies that State agencies may undertake surveys, excavations, or other operations as necessary on State lands to preserve or record paleontological resources.

No State or local agencies have specific jurisdiction over paleontological resources. No State or local agency requires a paleontological collecting permit to allow for the recovery of fossil remains discovered as a result of construction-related earth moving on State or private land in a project site.

LOCAL

NEVADA COUNTY GENERAL PLAN

The following goals, objectives, and policies are set forth in the NCGP to protect and preserve cultural resources.

Cultural Resources Element

- | | |
|--------------------|--|
| Goal 19.1 | Identify and protect and where economically feasible restore significant archaeological and historic resources. |
| Objective 19.1 | Encourage the inventory, protection, and interpretation of the cultural heritage of Nevada County, including historical and archaeological landscapes, sites, buildings, features, artifacts. |
| Action Policy 19.1 | Enact a Cultural Resources Ordinance to ensure effective preservation, protection and management of cultural resources. Such an ordinance might include the identification and preservation of historical, cultural, and architecturally |

significant sites and resources within Nevada County. The establishment of a county listing of significant cultural resources may be part of a Cultural Resources Ordinance. The identified cultural resources could be evaluated as to their potential significance in relation to the criteria used for both the National Register and the California Register (see 4.5.1, Regulatory Setting above).

The cultural resources ordinance specifies the mitigation procedures to be followed once a resource has been identified and determined to be significant. The preferred measure would be avoidance and/or protection of a site by project redesign or fencing, etc. If the resource is or will be impacted, a professional archaeologist/historian/ architectural historian should be contacted to set up a research design to deal with the resource

Directive Policies

- Policy 19.2 Encourage the inclusion of significant sites or districts in the Federal or State Historical Register based on the recommendation of local historical societies.
- Policy 19.3 Encourage and cooperate with the private sector in the implementation of innovative techniques intended to preserve archaeological and historic sites by gift, private conservancies and easements.
- Objective 19.2 Implement development standards, including the preservation of open space, to protect identified significant cultural sites.

Directive Policies

- Policy 19.4 Incorporate cultural and historic resource management standards in the Comprehensive Site Development Standards, for use in project review of all discretionary project permits. These standards shall provide for the use of clustering and restricted building sites as techniques for the preservation of significant cultural resources.
- Policy 19.5 In order to maintain a definition of community character and enhance local economies and tourism through adaptive reuse, include Guidelines for preservation, maintenance and enhancement of the exterior design elements of structures and districts of local historic or architectural interest, as part of the Nevada County Community Design Guidelines.
- These guidelines shall encourage and provide for the adaptive reuse of historic buildings in order to preserve such buildings and to enhance local economies. The guidelines shall be advisory in nature and integrated with the Comprehensive Site Development Standards in the project review process.
- Policy 19.6 Require all applications for discretionary project permits, and all applications for ministerial project permits except single family residences on individual lots shall be accompanied by a Site Sensitivity Literature Review, prepared by a qualified archaeologist or entity such as the North Central Information Center, Department of Anthropology, California State University at Sacramento

Where review indicates significant archaeological or historical sites or artifacts are, or are likely, present, on-site field review shall be required. If a site or artifacts are discovered, the find shall be evaluated and potential significance determined. If significant cultural resources may be directly or indirectly impacted by proposed development, appropriate mitigation shall be developed and implemented in accordance with California Environmental Quality Act standards, including Appendix K, prior to onset of ground disturbance. Avoidance of significant cultural resources shall be considered the mitigation priority. Excavation of such resources shall be considered only as a last resort when sufficient planning flexibility does not permit avoidance. On-site field review, evaluation of site significance, and development of mitigation measures, as identified above, shall be performed by a qualified professional archaeologist.

Objective 19.3 Include in the development review process consideration of historic, cultural, and Native American concerns and values.

Directive Policy

Policy 19.7 Cooperate with local historical societies and the Native American Indian community to protect significant historical, cultural and archaeological artifacts, improve access to and interpretation of unrestricted resources and archaeological history by involving them in the development review process.

Land Use Element

Goal 1.5 Within Community Regions, ensure that development reflects our small-town character, the characteristics of the land and the natural environment.

Action Policy

Policy 1.5.3 The adopted Comprehensive Site Development Standards., contained in the Land Use and Development Code (Chapter II, Article 4) are used during the “project site review process” to provide a consistent approach for addressing the presence of sensitive environmental features and/or natural constraints, clustering and provisions of open space as a part of development, the potential for land use conflicts between uses, and the potential for public health hazards.

These standards shall identify the basic requirements for site development in the County, including, at a minimum, standards to mitigate the impact of development on significant cultural resources (as may be defined based upon recommendations by the Native American Heritage Commission or recognized Native American Group, Nevada County Landmarks Commission, or the Nevada County Historical Society)

Open Space Element

Action Policy

Policy 6.9 Development standards for project design, grading, construction and use, established through the Comprehensive Site Development Standards, shall be used in project review of all discretionary project permits to determine open space requirements for each project.

These standards shall provide for consideration of non-disturbance of, and open space setbacks from identified sensitive environmental, biological, or cultural resources, e.g. 100-year floodplains, wetlands, slopes in excess of 30% (excepting access across slopes up to 30%), lakes, ponds, significant historic or archaeological sites/resources, critical wildlife areas, minimization of land disturbance, consistency with the landforms and aesthetic context of the site, temporary and permanent erosion and sedimentation controls, and vegetation retention, replacement and enhancement.

Aesthetics Element

Directive Policy

Policy 18.2 The County may adopt Specific Design Guidelines for areas within Community Regions, Rural Places, and Rural Centers to provide for the maintenance of community identity, scenic resources and historic sites and areas.

The Specific Design Guidelines may include, but not be limited to standards which reflect and retain the historic character of the area by requiring designs consistent with historic buildings, areas and sites related to a project.

COMMUNITY AREA PLANS

Projects located within the following community planning areas would be subject to the cultural, archaeological, historic architectural, and historical resource protection goals, policies, and programs of that plan.

LOMA RICA DRIVE INDUSTRIAL AREA PLAN

Site Development Standards

Resource Standards within the Zoning Regulations address environmentally sensitive resources that may occur within the Loma Rica Drive Industrial Area Plan, including steep slopes, watercourses and wetlands, landmark oaks, and sensitive species. Undeveloped lands may require special studies for sensitive biological resources and/or cultural resources, if a proposed site has not been previously disturbed. Special studies have been completed for the English Mountain Park.

Policy 18.2 The County may adopt Specific Design Guidelines for areas within *Community Regions, Rural Place, and Rural Centers* to provide for the maintenance of community identity, scenic resources and historic sites and areas.

NORTH SAN JUAN RURAL CENTER AREA PLAN

The NCGP encourages the use of Area Plans in rural regions to allow for more specific treatment of rural areas. The San Juan Ridge Community vision statement includes recognizing the historic character of North San Juan and provides a framework of goals, policies, and programs to encourage and guide development that retains the historic character of the area. The North San Juan Rural Center Area Plan contains extensive design goals and guidelines for the historic-commercial core, the mixed-use corridor, the Office Professional Block, and the Business Park sites. Design Goal 1 is to retain community identity and integrity by ensuring new and re-use development contributes to the historic, compact, mixed-use identity of North San Juan. Design Goal 1 is followed by 22 detailed Guidelines, the majority of which

relate to the preservation of the historic character of existing buildings (North San Juan Rural Center Area Plan 2010: 39-42).

Land Use and Development Goals

- Goal 3.3 Promote economic development and job creation by respecting the historic development pattern of the Rural Center.
- Goal 3.5 Preserve the unique historic and cultural resources on North San Juan.

Land Use and Development Policies

- Policy 3.1 Limit future expansion of the Rural Center to only those sites that have historically contributed to community services and activity.
- Policy 3.6 Encourage the preservation of existing historic resources, where feasible, by educating property owners on the value of rehabilitation and/or restoration of existing structures rather than new construction.
- Policy 3.7 Demolition of historic structures should be avoided unless the structure is beyond repair or if the structure poses a public safety hazard. Any character-defining feature of historic structures should be retained and incorporated into new structures.
- Policy 3.8 Encourage and assist property with the registration of historic landmarks.
- Policy 3.9 Preserve and enhance the visual and historic assets of the Rural Center by implementing area-specific design guidelines to supplement the Western Nevada County Design Guidelines.

Land Use and Development Programs

- Program 3.1 Establish a Rural Center Combining District that recognizes the historic development patterns of Rural Centers, by providing flexible development standards that promote the efficient use of land.
- Program 3.5 Preserve and enhance the visual and historic assets of the Rural Center by implementing area-specific design guidelines to supplement the Western Nevada County Design Guidelines.

SODA SPRINGS AREA PLAN

The Soda Springs Area Plan serves as the comprehensive land use and zoning plan for the Donner Summit region and community of Soda Spring and embodies the expressed goals of residents, business owners, and elected officials and establishes concrete and achievable actions.

- Goal NCR-3: Increase public awareness and understanding of the culture and history of Donner Summit and its importance to the economic vitality of Soda Springs.
- Policy NCR-3.1: Foster a community sense of stewardship and personal responsibility for all historic and cultural resources.
Stewardship
- Policy NCR-3.2: Whenever possible, encourage public accessibility of historically eligible structures and sites, even if only for temporary or special events.
Public Visitation

Policy NCR-3.3: <i>Partnerships Cooperate with the Donner Summit</i>	Cooperate with the Donner Summit Historical Society, other local historical organizations, and historians to identify significant historical and cultural resources, and to educate the public on the positive benefits of historic preservation.
Goal NCR-4:	Identify, protect, enhance, and where feasible restore significant archeological, cultural, and historical resources on Donner Summit including historic landscapes, sites, buildings, features and artifacts.
Policy NCR-4.1: <i>Historic Register</i>	Encourage the inclusion of significant archaeological and cultural resources in the National Register or California Register based on the recommendation of the local historical society or a qualified professional.
Policy NCR-4.2: <i>Signage</i>	Encourage consistent interpretive signage for historical and cultural resources such as the Donner Summit Historical Society's 20-mile museum.
Policy NCR-4.3: <i>Preserve</i>	Preserve the history and scenery of Donner Summit as the portal to California and as a primary recreational and economic resource. Encourage innovative techniques to preserve archaeological and historic sites by gift, private conservancies and easements.
Policy NCR-4.4: <i>Archeological Investigations</i>	Nevada County shall require archeological investigations for all applicable discretionary projects, in accordance with CEQA regulations, for areas not previously surveyed and/or that are determined sensitive for cultural resources. The County shall require the preservation of discovered archeologically significant resources (as determined based on local, State, and Federal standards by a qualified professional) in place if feasible, or provide mitigation (avoidance, excavation, documentation, curation, data recovery, or other appropriate measures) prior to further disturbance.

NEVADA COUNTY LAND USE AND DEVELOPMENT CODE

The Nevada County Land Use and Development Code is Title III in Chapter V Buildings of the Nevada County Code. The Purpose of Chapter V, is for providing minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures, regulated equipment, grading and construction activities that result in a land disturbance on private property within this jurisdiction. As it would pertain to the proposed project and existing and future cultivation activities, various sections of Code pertain to the protection of cultural resources. This includes the following:

Section. L-V 11.4 Procedure, which requires recognition of the potential for inadvertent discovery of resources or human remains that may occur during ground disturbing activities and require for the coroner and Native American Organizations.

Section L-V 11.3 Criteria- To qualify as other clearing and grading of land for agricultural operations that may be exempted from grading permit requirements pursuant to this Article, all of the following criteria must be met:

1. The land to be cleared and/or graded is zoned for agricultural use as:
 - a. "AG" (General Agriculture), or

- b. "AE" (Agricultural Exclusive), or
 - c. "RA" (Residential Agriculture) where the parcel is 3 acres or more in size and the General Plan designation is Rural;
2. The clearing and/or grading is exclusively for agricultural purposes not associated with buildings that require a building permit;
 3. Any vegetation removal or soil disturbance is outside any floodplain, watercourse, wetland or riparian area and any non-disturbance buffer for those areas as defined in Section L-II 4.3;
 4. The work occurs on slopes of thirty percent (30%) or less;
 5. The work does not disturb cultural resources;

Section L-II 4.3.3 General Provisions

A. Resource and Constraint Information.

1. Where required within each subsection of this Section, project applications shall provide for the professional site-specific inventory and analysis of the resources and constraints identified in this Section. Inventories and analyses shall be funded by the applicant but prepared by independent consultants approved by, or under the direction of, County staff. This evaluation shall include recommended mitigation and/or alternatives necessary to avoid or lessen impacts. Based on this evaluation, the County shall determine the acceptable level of resource impact and constraint avoidance of the project. All of the following resources and constraints shall be reviewed:
 - a. Important agricultural lands.
 - b. Avalanche hazard.
 - c. Significant cultural resources.

DIVISION 4.3 RESOURCE STANDARDS

Section 3.0 Project Description discusses the Comprehensive Development Standards found in Article 4 Comprehensive Site Development Standards and defined in Division 4.3 Resource Standards. In part, the purpose of the development standards is to avoid the impact of development projects on sensitive environmental resources and natural site constraints. The following discusses those standards applicable to geology and soils.

Section L-II 4.3.6 addresses significant cultural resources that are considered fragile, irreplaceable, and vital to the public education, economic prosperity, and cultural enrichment of all citizens and serve to preserve and enhance the historical character of the County. The purpose of this section is to establish development standards for the preservation, protection and management of the County's unique natural, paleontological, archaeological, historical, architectural, cultural, traditional cultural resources. Definitions of the terms used in the discussion of these resources are provided as follows:

1. For all applicable projects, the County shall direct the project applicant to initiate a North Central Information Center (NCIC) records search to provide the most current information about the sensitivity of the property to contain cultural resources and to assess the need for a cultural resource study. If the NCIC does not recommend a cultural resource study and if there are no

recorded or known cultural properties or traditional cultural areas, the project applicant shall submit NCIC correspondence documenting such to the County, with the land use application.

Should the NCIC recommend a cultural resource study, the applicant shall retain a qualified professional to conduct a cultural resource study of the project area. This study shall document the presence or likelihood of potentially significant cultural resources. When the NCIC or the qualified professional decides that there is a high likelihood that Native American archaeological sites and/or spiritual and non-physical sites may be encountered during the inventory phase, a qualified Native American Consultant shall be consulted to incorporate their views regarding the potential importance of Native American sites in the project area. The study shall be submitted to the County with the land use application.

If no cultural resources are inventoried, or if no potentially significant cultural resources will be impacted by the project, the qualified professional will prepare a report documenting these findings to be submitted to the County.

2. Projects shall only be approved when they do not remove or disturb cultural resources, unless a Management Plan is prepared consistent with paragraph 3 below or other standards are met consistent with paragraph 4 below. Preservation and avoidance are the first priority.
3. If the above standard effectively precludes development of the project or adversely affects another environmentally-sensitive resource, a Cultural Resource Management Plan shall be prepared by a qualified professional. The Plan shall provide for the analysis and determination of the significance of the cultural resource according to the importance standards listed in CEQA. It shall describe the results of a cultural resource investigation, illustrate potential conflicts with project design, assess impacts to resources, evaluate their significance, and attempt to design measures to mitigate impacts to insignificant levels. Plans shall follow the guidelines established in the State Office of Historic Preservation "Archaeological Resource Management Reports: Recommended Contents and Format." The Plan shall document the results of work performed during the inventory, evaluation and/or mitigation phases of study. Research designs shall follow the guidelines established in the State Historic Preservation Office "Guidelines for Archaeological Research Designs." Alterations made to a cultural resource or structure for its rehabilitation, preservation, restoration, or relocation shall be in accordance with the "Secretary of the Interior's Standards for Rehabilitation," prepared by the National Park Service, and the "State Historic Building Code."

If the cultural resource is determined not significant, or if the resource's potentially important information is recovered at the evaluation phase of research, the qualified professional's report documenting these findings shall be submitted to the County.

When sufficient planning flexibility, including density reduction or a revised project, does not permit avoidance of impacts to potentially significant cultural resources, measures for mitigating impacts to the resource, which allow maximum protection of the resource and/or maximum preservation of knowledge contained within the resource, shall be further developed by the qualified professional and implemented prior to the onset of project activities and as part of the condition of project approval.

Where Native American resources are involved, a qualified Native American Consultant shall be consulted to determine the potential importance of Native American resources in the project area

and the appropriateness of mitigation measures. A report from the Native American Consultant, summarizing their findings should be a component of the final report. Upon completion of mitigation, the qualified professional will prepare a report documenting these findings to be submitted to the County.

4. If preservation of a significant cultural resource is not possible, data recovery of an appropriate sample of the cultural resource, as determined by the qualified professional, shall be accomplished. Scientific data recovery may include: collection of surface artifacts, archaeological excavation, intensive recordation, photo/video documentation, etc. For traditional cultural properties, other specialized means of mitigation may need to be implemented in consultation with the affected parties. Artifacts generated out of data recovery shall be permanently housed at an institution operating in accordance with the State guidelines for the curation of archaeological collections and in cooperation with local Native American entities.
5. A condition of approval shall include a provision for cultural resources discovered during development construction. Any person who, in the process of project activities, discovers any cultural resources and/or human remains within the project area, shall cease from all project activities within at least 200 feet of the discovery. A qualified professional shall be notified to assess any discoveries and develop appropriate management recommendations for cultural resource treatment. In the event that human remains are encountered, the sheriff-coroner shall be notified immediately upon discovery. In the event that Native American human remains are encountered, the Native American Heritage Commission or the most likely descendants of the buried individual(s) who are qualified to represent Native American interests shall be contacted. Specific treatment of Native American human remains shall occur consistent with State law.
6. The locations of cultural resources are confidential and are not circulated as part of public documents but are used for planning purposes only. This class of information is exempted from public access by the California Public Records Act (PRC 6254.10). It is unlawful, prohibited and a misdemeanor for any person to willfully disclose, sell or furnish to any person any map or record describing the nature of location of cultural resources, any copy thereof, or any information pertaining thereto, which has been prepared or maintained by the NCIC of Nevada County.

4.5.3 STANDARDS OF SIGNIFICANCE

ENVIRONMENTAL ANALYSIS

METHODOLOGY

The impact analysis is based on the known county-wide cultural and paleontological resources information that is publicly available. The evaluation of the proposed project's potential effects on cultural and paleontological resources, and the potential for human remains, is at the program level. This EIR sets forth the research criteria and report content needed to enable a project-level evaluation of a cultural or paleontological resource. Any individual projects resulting from this proposed project would be required to undergo a separate CEQA evaluation pertaining to project-specific details and would be required to adhere to the research criteria and report content set forth herein.

Pertaining to tribal cultural resources, these are discussed and evaluated in *Section 4.16: Tribal Cultural Resources*.

THRESHOLDS OF SIGNIFICANCE

According to the 2018 Appendix G of the CEQA Guidelines, there could be a significant impact on cultural resources if the proposed project would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to as defined in § 15064.5?
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?
- Disturb any human remains, including those interred outdoors of dedicated cemeteries.
- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code (PRC) Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:
 - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k); or
 - A resource determined by the lead agency in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 52024.1. In applying the criteria set forth in subdivision (c) of PRC Section 52024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

Under CEQA, a substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired. Under Section 106, adverse effects are effects that damage the qualities that make an historic property eligible for the National Register, or the ability of that property to convey the significance that makes it eligible.

4.5.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

This section describes the methodology used in conducting the impact analysis using the thresholds of significance for historical, archaeological, paleontological, and human remains and includes relevant mitigation measures. The proposed NCCO distinguishes between personal use cannabis cultivation and commercial use cannabis cultivation. Commercial cannabis cultivation would be allowed in three zone classifications: AG (General Agricultural), AE (Agriculture Exclusive), and FR (Forest). The proposed NCCO would not allow cultivation within 1,000 feet of sensitive land uses, as defined in *Section 3: Project Description*. For personal use cannabis cultivation of up to six cannabis plants is allowed in eight zone classifications for indoor cultivation only: R-1 (Single Family); R-2 (Medium Density); R-3 (High-Density); R-A (Residential Agriculture); AG (General Agricultural); AE (Agriculture Exclusive); FR (Forest); and TPZ (Timber Production Zone). The proposed NCCO would prohibit personal outdoor cultivation within areas designated as residential (R-1, R-2, R-3, and R-A).

PROJECT IMPACTS

IMPACT 4.5-1: CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A HISTORICAL RESOURCE.

As discussed in *Section 4.5.1: Environmental Setting*, currently in Nevada County there are 23 sites listed on the National Register, 18 sites that are eligible for listing in the National Register, 1 National Landmark, 20 State Landmarks, and 28 Points of Historical Interest, as shown in *Table 4.5-1: Historical Resources Nevada County*. The California Historical Resources Information System (CHRIS) North Central Information Center (NCIC) is the primary repository for resource records and study reports for Nevada County. The NCIC maintains the records regarding the confidential locations of the sites listed on, or eligible for, the California Register.

Under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain a CCP for projects with less than 2,500 sf of cannabis canopy or an ADP for projects with between 2,500 sf and 10,000 sf of canopy. An ACP also would be required and would need to be renewed annually.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, indoors or outdoors, could only occur on a property with a legally permitted residence and in that residence or a permitted accessory structure. These cultivation activities are small in scale, would not change the setting of a residential project site such that cultural resource would be affected and impacts in this regard would not occur.

Ground disturbing activities at existing and future commercial cultivation sites or in areas where new structures are constructed could result in disturbance to cultural resources. In addition, ground disturbing activities may also occur at sites where existing structures need improvements in order to house commercial cannabis cultivation. The implementation of the proposed NCCO could result in future activities that could be located on a property with an historical resource. These future activities could result in damage to, or destruction of, historic district, site, building, structure, thereby resulting in a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines.

The proposed NCCO, as stated above, includes standards and conditions for existing and future cannabis cultivation for commercial uses. Mitigation has been added to amend the proposed NCCO. Mitigation Measure CUL-1, would require all applicants to submit a records search request to the North Central Information Center (NCIC) regarding the potential for historical and archaeological resources within the project site. The NCIC is one of nine California Historical Resources Information System (CHRIS) information centers (ICs) affiliated with the California Office of Historic Preservation (OHP). NCIC manages a portion of the CHRIS inventory of cultural resources site records and reports and is applicable to Nevada County.

CHRIS will provide confidential records searches for authorized users such as professional archaeologists, but they also provide non-confidential records searches, or "sensitivity letters," to members of the public.

CHRIS notes that these searches often correspond with local government permit applications, which may ultimately require a "cultural resources report," "archaeological report," or "NCIC records check." In the case of the proposed project, this would be a first step to determine if additional study would be required.

For all applicable cannabis cultivation projects, this under both CCPs and ADPs, the County would direct the project applicant to initiate an NCIC record search to provide the most current information about the sensitivity of the property to contain cultural resources and to assess the need for a cultural resource study. If the NCIC does not recommend a cultural resource study and if there are no recorded or known cultural properties or traditional cultural areas, the project applicant shall submit NCIC correspondence documenting such to the County, with the land use application.

Should the NCIC recommend a cultural resource study, the applicant shall retain a qualified professional to conduct a cultural resource study of the project area. This study shall document the presence or likelihood of potentially significant cultural resources. When the NCIC or the qualified professional decides that there is a high likelihood that Native American archaeological sites and/or spiritual and non-physical sites may be encountered during the inventory phase, a qualified Native American Consultant shall be consulted to incorporate their views regarding the potential importance of Native American sites in the project area. The study shall be submitted to the County with the land use application.

If no cultural resources are inventoried, or if no known potentially significant cultural resources will be impacted by the project, the qualified professional will prepare a report documenting these findings to be submitted to the County. In order to reduce impacts to unknown or buried cultural or historical resources the proposed NCCO will be amended to include Mitigation Measure CUL-2 to include an inadvertent discovery protocol. This measure will inform applicants of the process to follow should cultural or historical resources be located during ground disturbing activities.

In addition, some ADP projects would be required to conform the Standards contained in Section L-II 4.3.6 Significant Cultural Resources. These standards include the following requirements, (which would be implemented as needed on a project by project bases as determined by the Planning Director or designee:

- Projects shall only be approved when they do not remove or disturb cultural resources, unless a Management Plan is prepared consistent with paragraph 3 below or other standards are met consistent with paragraph 4 below. Preservation and avoidance are the first priority.
- If the above standard effectively precludes development of the project or adversely affects another environmentally-sensitive resource, a Cultural Resource Management Plan shall be prepared by a qualified professional. The Cultural Resource Plan shall provide for the analysis and determination of the significance of the cultural resource according to the importance standards listed in CEQA. It shall describe the results of a cultural resource investigation, illustrate potential conflicts with project design, assess impacts to resources, evaluate their significance, and attempt to design measures to mitigate impacts to insignificant levels. Plans shall follow the guidelines established in the State Office of Historic Preservation "Archaeological Resource Management Reports: Recommended Contents and Format." The Plan shall document the results of work performed during the inventory, evaluation and/or mitigation phases of study. Research designs shall follow the guidelines established in the State Historic Preservation Office "Guidelines for Archaeological Research Designs." Alterations made to a cultural resource or structure for its rehabilitation, preservation, restoration, or relocation shall be in accordance with the "Secretary

of the Interior’s Standards for Rehabilitation,” prepared by the National Park Service, and the “State Historic Building Code.”

If the cultural resource is determined not significant, or if the resource’s potentially important information is recovered at the evaluation phase of research, the qualified professional’s report documenting these findings shall be submitted to the County.

When sufficient planning flexibility, including density reduction or a revised project, does not permit avoidance of impacts to potentially significant cultural resources, measures for mitigating impacts to the resource, which allow maximum protection of the resource and/or maximum preservation of knowledge contained within the resource, shall be further developed by the qualified professional and implemented prior to the onset of project activities and as part of the condition of project approval.

Where Native American resources are involved, a qualified Native American Consultant shall be consulted to determine the potential importance of Native American resources in the project area and the appropriateness of mitigation measures. A report from the Native American Consultant, summarizing their findings should be a component of the final report. Upon completion of mitigation, the qualified professional will prepare a report documenting these findings to be submitted to the County.

- If preservation of a significant cultural resource is not possible, data recovery of an appropriate sample of the cultural resource, as determined by the qualified professional, shall be accomplished. Scientific data recovery may include: collection of surface artifacts, archaeological excavation, intensive recordation, photo/video documentation, etc. For traditional cultural properties, other specialized means of mitigation may need to be implemented in consultation with the affected parties. Artifacts generated out of data recovery shall be permanently housed at an institution operating in accordance with the State guidelines for the curation of archaeological collections and in cooperation with local Native American entities.
- A condition of approval shall include a provision for cultural resources discovered during development construction. Any person who, in the process of project activities, discovers any cultural resources and/or human remains within the project area, shall cease from all project activities within at least 200 feet of the discovery. A qualified professional shall be notified to assess any discoveries and develop appropriate management recommendations for cultural resource treatment. In the event that human remains are encountered, the sheriff-coroner shall be notified immediately upon discovery. In the event that Native American human remains are encountered, the Native American Heritage Commission or the most likely descendants of the buried individual(s) who are qualified to represent Native American interests shall be contacted. Specific treatment of Native American human remains shall occur consistent with State law.
- The locations of cultural resources are confidential and are not circulated as part of public documents but are used for planning purposes only. This class of information is exempted from public access by the California Public Records Act (PRC 6254.10). It is unlawful, prohibited and a misdemeanor for any person to willfully disclose, sell or furnish to any person any map or record describing the nature of location of cultural resources, any copy thereof, or any information pertaining thereto, which has been prepared or maintained by the NCIC of Nevada County.

In the case of an ADP, if a Cultural resources study for the project site is complete and that report satisfies all of the listed requirements for a Management Plan, the recommendations in that report may be used in place of the Management Plan.

Land Use and Development Code Implementation

Section 3.0 Project Description describes the intent of the site development standards, which is to avoid resource impacts and natural constraints to the maximum amount feasible through avoidance, minimization, or compensation. When avoidance is not a feasible to reduce impacts, as discussed above, Management Plan would be prepared that is consistent with all County requirements.

the Management Plan for cultural resources would carry provisions to compensate for impacts that would become conditions of approval of cannabis cultivation projects. The Management Plan would provide consideration for all potential cultural resources that may occur on existing and future project sites. In most cases it is expected that impacts to cultural resources would be reduced to less than significant through avoidance and/or minimization. For cannabis cultivation projects that would require the preparation of such a Management Plan, the plan would be prepared by a qualified archeologist and would conform to all County and professional standards. Implementation and use of a CRMP for cultural resources is feasible and would reduce impacts to less than significant and no additional mitigation is required.

MITIGATION MEASURES:

CUL-1: Prior to project approval of either a CCP or an ADP, the project applicant, to the satisfaction of the County Planning Department shall submit a Non-Confidential Records Search to NCIC to determine the sensitivity of potential commercial cannabis cultivation site to disturb historic, cultural, or tribal resources. The applicant shall submit the sensitivity letter with the CCP or ADP. Upon receipt, should the County find the NCIC recommends a cultural resource study, the applicant shall retain a qualified professional to conduct a cultural resource study of the project area. No permit shall be issued until the completion of such report, and if needed, until recommended mitigation is implemented, or a plan has been submitted to the County for implementation.

CUL-2: The proposed NCCO shall be amended to include a Cultural Resources Inadvertent Discovery Protocol (IDP) for projects that require grading or ground disturbance. The IDP shall include requirements that if subsurface archaeological features or deposits are discovered during construction or ground disturbance all activities within 50-feet of the find shall cease and the County shall be notified immediately. A qualified archeologist shall be retained by the County to assess the find and shall have the authority to prescribe all appropriate protection measures to future work.

If buried human remains are discovered during construction or ground disturbance all activities shall cease and the County shall be notified immediately. The County shall notify the coroner to examine the remains. If the remains are determined to be of Native American origin, the Native American Heritage Commission shall be notified, and all sections detailed in Section 5097.98 of the California Public Resources Code shall be followed.

LEVEL OF SIGNIFICANCE AFTER MITIGATION:

Less Than Significant.

IMPACT 4.5-2: CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF AN ARCHAEOLOGICAL RESOURCE.

As discussed above in *Section 4.5.1: Environmental Setting*, previous archaeological surveys indicate that the following archaeological site types may be encountered throughout portions of Nevada County:

Prehistoric archaeological site types

- prehistoric artifacts and buried deposits of prehistoric debris and artifacts
- villages and associated cemeteries (surface and subsurface)
- multi-task camps (surface and subsurface)
- single task-specific locales (such as bedrock mortar milling features)
- special use sites (hunting blinds, petroglyphs and quarries)

Historic archaeological site types

- historic artifact features and buried deposits of historic debris and artifacts
- mining [tailings, adits (entrance to an underground mine)]
- water management (water conveyance systems, penstocks, reservoirs)
- logging (narrow-gauge railroad segments, work camps)
- transportation (roads and trails)
- ranching and agriculture (fences, corrals, water troughs)

The proposed NCCO, as stated above, would enable a process by which future cannabis cultivation for both personal commercial uses could occur legally within the County. Future ground disturbing activities associated with the proposed project would occur at outdoor cultivation sites or in areas where new structures are constructed. Due to the scope and scale of personal cannabis cultivation of up to six plants, the potential for ground disturbing activities or improvements for to disturb or damage unknown cultural resources is remote. These impacts are considered less than significant.

Ground disturbing activities for commercial cannabis cultivation under a CCP for cultivation of less than 2,500 sf or canopy or for projects under an ADP for cultivation between 2,500 sf to 10,000 sf of canopy have the potential of occurring at sites where known or unknown buried cultural resources exist or in a location where existing structures may have historic or historical value. Accordingly, implementation of the proposed NCCO would result in future activities that could be located on a property with an archaeological resource.

While it is expected that most existing and future commercial cannabis cultivation sites would not contain significant archaeological resources either buried or know that would be affected by the proposed activities, due to past uses and areas known to contain cultural resources, some may contain such resources. Cannabis cultivation activities could result in discovery and recovery of these resources; however, it is more likely that archaeological resources as defined in CEQA Guidelines Section 15064.5 would be damaged or destroyed. Therefore, where ground disturbance on sites where unknown or buried resources do exist would occur, such disturbances could result in destruction, loss, or damage to such resources and these impacts would be considered significant.

As discussed in Impact 4.5-1. Above, Mitigation Measure CUL-1 and Mitigation Measure CUL-2 would be implemented. In the same way as described above, a sensitivity letter from CHRIS would be obtained and submitted with the application package for either a CCP or ACP. During the planning and review process the potential for historical or cultural or tribal resources would be verified, and subsequent study would be required. In the case of an ADP, if the subsequent archaeological study was not sufficient to satisfy the requirements of Section L-II 4.3.6 Significant Cultural Resources, a subsequent Management Plan, consistent with the requirements and adequate to preserve historical and archaeological resources would be required.

Land Use and Development Code Implementation

Section 3.0: Project Description describes the intent of the site development standards, which is to avoid resource impacts and natural constraints to the maximum amount feasible through avoidance, minimization, or compensation.

When avoidance is not a feasible to reduce impacts, a Management Plan for cultural resources for projects under an ADP would be prepared that is consistent with all County requirements. The Management Plan would carry provisions to compensate for impacts that would become conditions of approval of cannabis cultivation for an ADP. The Management Plan would provide consideration for all potential cultural resources that may occur on existing and future project sites. In most cases it is expected that impacts to cultural resources would be reduced to less than significant through avoidance and/or minimization. For cannabis cultivation projects that would require a Management Plan, the plan would be prepared by a qualified archeologist and would conform to all County and professional standards. Implementation and use of the Management Plan for cultural resources is feasible and would reduce impacts to less than significant and no additional mitigation is required.

MITIGATION MEASURES

Implement MM CUL-1 and MM CUL-2

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

IMPACT 4.5-3: DIRECTLY OR INDIRECTLY DESTROY A UNIQUE PALEONTOLOGICAL RESOURCE OR SITE OR UNIQUE GEOLOGIC FEATURE

The Society of Vertebrate Paleontology, a national scientific organization of professional vertebrate paleontologists, has established standard guidelines that outline acceptable professional practices in the conduct of paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, specimen preparation, analysis, and curation. The criteria for determining sensitivity of paleontological resources follows the standard assessments based off a rock unit's potential for having significant paleontological resources. The Paleontological Resource Assessment Criteria are:

- *High Potential* - Rock units in which vertebrate or significant invertebrate, plant, or trace fossils have been previously recovered and Rock units that include sedimentary formations, low-grade metamorphic rocks, and volcanoclastic formations that are temporally (over 11,700 years old) and lithological suitable for fossil preservation.
- *Low Potential* - Rock units that have been previously determined by scientific consensus to have a low probability to yield significant paleontological resources.

- *No Potential* - Certain rock units have no potential to preserve organisms in the fossil record, such as high-grade metamorphic rocks, intrusive igneous rocks, and most volcanic rocks.
- *Undetermined Potential* - Unknown or undetermined sensitivity indicates that the rock unit has not been sufficiently studied or lacks good exposures to warrant a definitive rating.

As mentioned previously, igneous and metamorphic rocks result from the solidification of magma (molten rock) in environments that cause magma creation. As magma reaches the surface as lava, contact with biological organisms usually results in their destruction; as such, there is no plant or animal material present to fossilize. Therefore, there is no potential for encountering fossils in the igneous rocks in the Sierra Nevada Mountains. However, fossils generally occur in the Sierra Nevada in rocks that are young in age (less than 50 million years). The University of California Museum of Paleontology identifies approximately 500 vertebrate and invertebrate paleontological specimens that have been collected from geological formations dating to the Eocene (56-34 Million Years Ago), Miocene (approximately 23-5.3 Million Years Ago), Pleistocene (approximately 1.8 Million Years Ago to 11,000 Years Ago) epochs in Nevada County.

Under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain a CCP for cannabis cultivation with less than 2,500 sf of canopy and an ADP for cultivation with between 2,500 sf and 10,000 sf of canopy. An ACP also would be required and need to be renewed annually.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, indoors or outdoors, could only occur on a property with a legally permitted residence and in that residence or a permitted accessory structure. These cultivation activities are small in scale, would not require deep excavations, and would not change the setting of a residential project site such that paleontological resource would be affected and impacts in this regard are considered less than significant and no mitigation is required.

Ground disturbing activities for commercial cannabis cultivation under a CCP for cultivation of less than 2,500 sf or canopy or for projects under an ADP for cultivation between 2,500 sf to 10,000 sf of canopy have the potential of occurring at sites where known or unknown buried unique paleontological resource or unique geologic feature exist that may have historic or historical value. Accordingly, implementation of the proposed NCCO would result in future activities that could be located on a property with these unknown resources.

While it is expected that most existing and future commercial cannabis cultivation sites would not contain significant paleontological or geologic features either buried or know that would be affected by the proposed activities, some existing and future cultivation sites may contain such resources. Cannabis cultivation activities could result in discovery and recovery of these resources; however, it is possible that such resources would be damaged or destroyed. Therefore, where ground disturbance on sites where unknown or buried resources do exist would occur, such disturbances could result in destruction, loss, or damage to the resources. These impacts would be considered significant.

In order to reduce impacts to unknown or buried paleontological or unique geologic resources the proposed NCCO will be amended to include Mitigation Measure CUL-3 to include an inadvertent discovery protocol for these resources.

MITIGATION MEASURES

MM CUL-3: The proposed NCCO shall be amended to include a Paleontological and Unique Geologic Resources Inadvertent Discovery Protocol (IDP) for projects that require grading or ground disturbance. The IDP shall include requirements that if subsurface paleontological features or unique geologic features are discovered during construction or ground disturbance all activities within 50-feet of the find shall cease and the County shall be notified immediately. A qualified paleontologist shall be retained by the County to assess the find and shall have the authority to prescribe all appropriate protection measures to future work.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

IMPACT 4.5-4: DISTURB ANY HUMAN REMAINS, INCLUDING THOSE INTERRED OUTSIDE OF DEDICATED CEMETERIES.

Human burials can occur outside of dedicated cemeteries or burial sites and include Native American or historic-era graves. Ground disturbing construction activities could uncover previously unknown human remains, which could be culturally or historically significant.

California law recognizes the need to protect interred human remains, particularly Native American burials and associated sacred items, from vandalism and inadvertent destruction. The procedures for the treatment of discovered human remains are contained in Sections 7050.5 and 7052 of the California Health and Safety Code and Section 5097 of the California Public Resources Code.

The proposed NCCO, as stated above, would provide standards and conditions for future cannabis cultivation for both personal and commercial uses. Future ground disturbing activities associated with the proposed project would occur at outdoor cultivation sites or in areas where new structures are constructed. In addition, ground disturbing activities may also occur at sites where existing structures need improvements in order to house commercial cannabis cultivation. The implementation of the proposed NCCO could result in future activities that could be located on a property with unknown human remains. The incorporation of the above-listed Mitigation Measures CUL-1 and CUL-2, as well as Development Standards under Section L-II 4.3.6 Significant Cultural Resources discussed in Impact 4.5-1 for some projects under an ADP are expected to reduce impacts to human remains at the future project-level as well as secondary or accidental impacts. With conformance to these standards of development, implemented and included as a part of the proposed project as required by the County Land Use and Development Code, impacts would be less than significant and no additional mitigation is required.

MITIGATION MEASURES

Mitigation Measure CUL-1 and CUL-2

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

IMPACT 4.5-5: CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A TRIBAL CULTURAL RESOURCE, DEFINED IN PRC SECTION 21074, THAT IS LISTED OR ELIGIBLE FOR LISTING IN THE CALIFORNIA REGISTER OF HISTORICAL RESOURCES, OR IN A LOCAL REGISTER OF HISTORICAL RESOURCES AS DEFINED IN PRC SECTION 5020.1(K).

As of the publishing of this EIR, no comment letters were received from the Native American Heritage Commission, the Susanville Indian Rancheria; Tsi Akim Maidu United Auburn Indian Community of the Auburn Rancheria; and two representatives of the Washoe Tribe of Nevada and California, and no requests for a copy of this EIR or concerns regarding the potential of impacts to resources were made.

No other comments have been received with respect to the proposed project's potential impacts on Native American places, features, and objects. As discussed in *Section 4.5.1: Environmental Setting*, the prehistoric and archaeological setting of Nevada County consists of a diverse history throughout the region. Artifacts that date from 1,4000 BC, typical to the Martis Valley, have been found and indicating a hunter-gatherer system, but that eventually grew into an existence of more permanent villages in ecologically rich areas. The people who inhabited these areas are most likely ancestral to the Nisenan, the Indian group inhabiting the area at the time of Euro-American contact.

As discussed above, the cultivation for personal use would occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. These activities would be small in scale, would not change the environmental setting of a residential project site and do not have the potential to affect a tribal resource would be affected and impacts in this regard would not occur.

As discussed in Impact 4.5-1, above Mitigation Measures CUL-1 and CUL-2, as well as Development Standards under Section L-II 4.3.6 Significant Cultural Resources discussed in Impact 4.5-1 for some projects under an ADP. The inclusion of the resource protections that would be placed on these projects would reduce project-specific impacts to that is listed or eligible for listing in the California Register of Historical Resources, or in a Local Register of Historical Resources as Defined in PRC Section 5020.1(k). Project level evaluation would identify these properties and require measures to reduce minimize impacts to less than significant. In addition, the following federal and state level regulations would offer further protections to these resources.

SUMMARY OF APPLICABLE EXISTING REGULATIONS AND POLICIES RELATED TO TRIBAL CULTURAL RESOURCES

- Section 106 of the NHPA and NRHP protect tribal cultural resources through guidelines, processes, and providing criteria that must be met to determine a resources significance.
- Native American Grave Protection and Repatriation Act sets provisions for the intentional removal and inadvertent discovery of human remains and clarifies the ownership of human remains.
- CEQA and the CRHR protect tribal cultural resources through guidelines, processes, and providing criteria that must be met to determine a resources significance.
- Public Resources Code 5097.91 and 5097.98 relate to the NAHC, tribal cultural resources, Native American human remains, and guidance on inventory and preservation of these resources.
- SB 18 and AB 52 relate to Native American Tribal consultation and preservation of tribal cultural resources.

MITIGATION MEASURES

Implement MM CUL-1 and MM CUL-2.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant.

IMPACT 4.5-5: CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A TRIBAL CULTURAL RESOURCE, DEFINED IN PRC SECTION 21074, THAT IS A RESOURCE DETERMINED BY NEVADA COUNTY TO BE SIGNIFICANT PURSUANT TO CRITERIA SET FORTH IN PRC SECTION 5024.1(C).

As discussed in Impact 4.5-4 above, cultivation for personal use would occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. These activities would be small in scale, would not change the environmental setting of a residential project site and do not have the potential to affect a tribal resource would be affected and impacts in this regard would not occur.

As discussed in Impact 4.5-1 Mitigation Measure CUL-1 and Mitigation Measure CUL-2, as well as Development Standards under Section L-II 4.3.6 Significant Cultural Resources discussed in Impact 4.5-1 for some projects under an ADP. The inclusion of the resource protections that would be placed on these projects would effectively reduce project-specific impacts to resource defined in PRC Section 21074, that is a Resource Determined by Nevada County to be Significant Pursuant to Criteria Set Forth in PRC Section 5024.1(c). Project level evaluation would identify these properties and require measures to reduce minimize impacts to less than significant.

SUMMARY OF APPLICABLE EXISTING REGULATIONS AND POLICIES RELATED TO TRIBAL CULTURAL RESOURCES

Refer to Impact 4.5-4, above, for a summary of applicable existing regulations and policies related to tribal cultural resources.

MITIGATION MEASURES

No mitigation measure is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant.

4.6 GEOLOGY AND SOILS

This section describes the geologic and seismic conditions within the proposed project area and evaluates the potential geologic hazards, and/or seismic impacts that could result from implementation of the Nevada County Cannabis Ordinance (proposed NCCO or proposed project). In addition to regional geologic and seismic hazards, the potential effects related to local hazards, such as risks related to underlying geologic materials and soils, are also evaluated at a programmatic level. Mitigation measures for potential impacts are identified where applicable. The California Department of Division of Mines and Geology, the Nevada County General Plan Safety Element in Chapter 10 and the General Plan Soils Element in Chapter 12, among other sources were used to develop this section.

4.6.1 ENVIRONMENTAL SETTING

REGIONAL SETTING

Nevada County is within the Sierra Nevada Mountains, a geologic block approximately 400 miles long and 80 miles wide which extends in a north-south band along the eastern portion of California. The terrain of Nevada County is distinctly characterized by two features of the Sierra Nevada Mountains. The western third of the County is comprised of rolling foothills which form a transition between the low-lying Sacramento Valley to the west and the mountains to the east. The eastern two-thirds of the County is comprised of the steep terrain and exposed granite of the Sierra Nevada Mountains itself.

The geologic substructure of the county can be divided into three very broad groups, which are reflected in the surface soils:

- Western Foothills. This area, extending from the Yuba County border to just northeast of the Grass Valley/Nevada City area, is generally comprised of metavolcanic and granitic formations.
- Central Portion. The area extending northeast of the Grass Valley/Nevada City area to the upper mountainous area near Bowman Lake Road is generally comprised of sedimentary, metasedimentary and **volcanic** formations.
- Eastern Portion. This portion of the County through the high Sierra to the Nevada state line is generally comprised of volcanic and granitic formations.

GEOLOGIC SETTING

Nevada County is a seismically active region, within the Sierra Nevada Mountains and foothills influenced heavily by uplift and faulting within the Mesozoic Sierra Nevada batholith, one of the largest and most complex masses of granitic rock in the world. These movements create fractures or faults in the earth's crust to accommodate compressional strain, and many of the faults, which remain active today, have uplifted and tilted the range to the west, producing a spectacularly rugged eastern escarpment and a gently inclined western slope. The proposed project is located in a geologically complex and diverse area that has the potential for earthquake induced hazards. Earthquakes are produced in Nevada County and throughout the state from sudden movements along faults, described in detail below, generating ground motion when the accumulated stress within the rocks is released as waves of seismic energy.

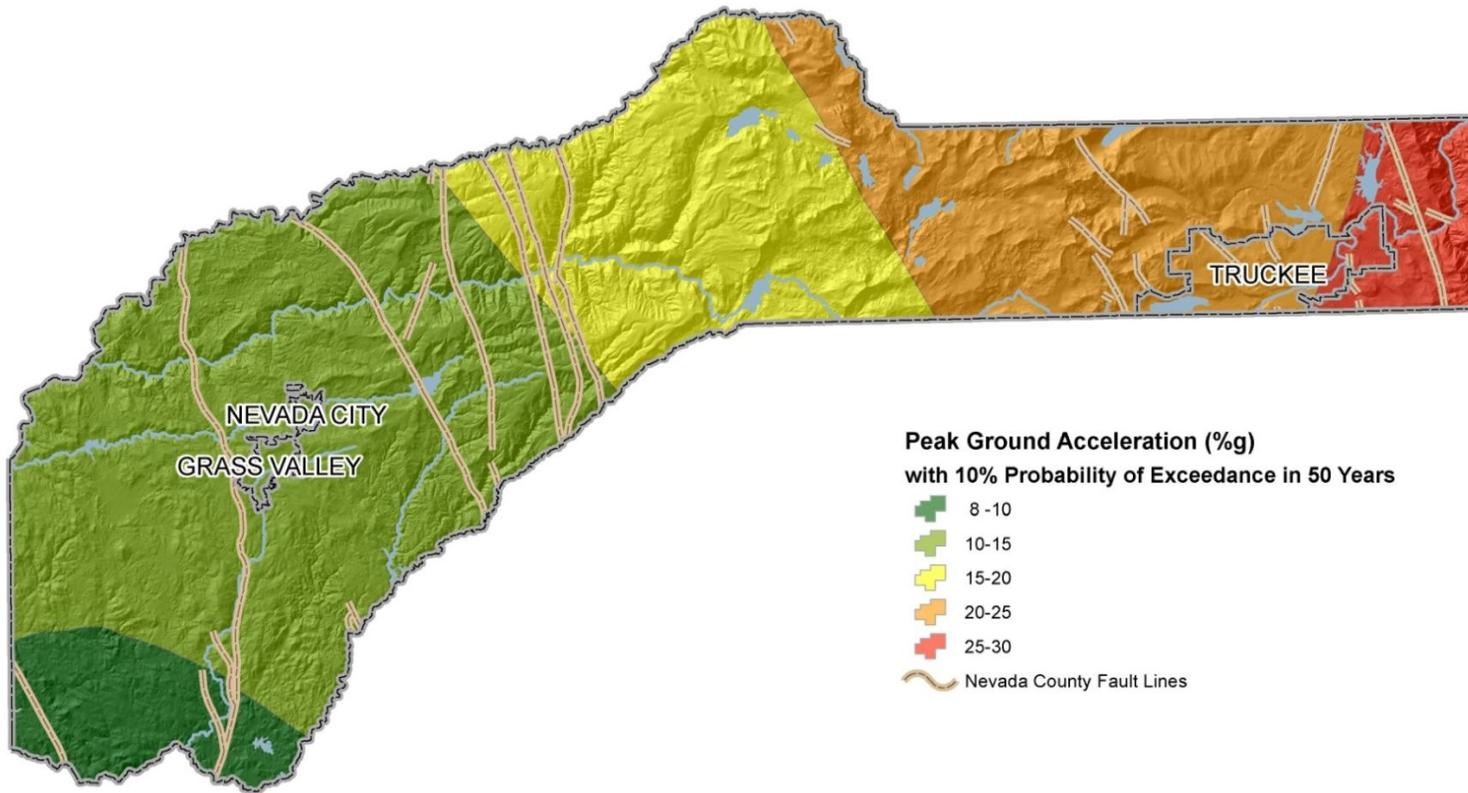
FAULTS AND SEISMIC HISTORY

A fault is a fracture in the crust of the earth along which land on one side has moved relative to land on the other side. Most faults are the result of repeated displacement over a long period of time. A fault is defined as "a planar or gently curving fracture in the earth's crust across which there has been relative displacement." When movement occurs along a fault, the energy generated is released as waves, which causes groundshaking. Groundshaking intensity varies with the magnitude of the earthquake, the distance from the epicenter, and the type of rock or sediment through which seismic waves move (City of Grass Valley, 2018). The mountain system rose to its current elevation, primarily by westward tilting along normal faults located along the eastern escarpment (DeCourten, 2018). Generally, the greater the number of faults within an area, the greater the risk of seismic activity. *Figure 4.6-1: Seismic Hazard Map*, from the Nevada County Local Hazard Mitigation plan, shows the generalized location of faults within the County and peak ground acceleration (%g) with 10% probability of exceedance in 50 years. Peak ground is a measure of the strength of the shaking measured at a given point. It measures the speed or velocity the ground and particles are moving. Generally, the greater the speed at which the ground moves, the greater the felt ground motion will be.

The geologic structures that dominate the Sierra Nevada are the Foothills fault system on the west, and the active Sierra Nevada Frontal fault zone on the east. The Foothill Fault System is a broad zone of northwest trending east dipping normal faults formed along the margin of the Great Valley and the Sierra Nevada geologic provinces on the western flank of the Sierra Nevada and southern Cascade mountain ranges. The faults of the Foothills fault system are all remnants of ancient fault zones associated with Mesozoic deformation of the western Sierra Nevada. Most of the faults do not offset Tertiary units, and therefore are not considered to be active by the state of California ((Nevada County, 2013). In contrast, the faults of the Sierra Nevada Frontal fault system, located more than 40 miles (65 kilometers) to the northeast, have higher average slip rates (typically about 1 mm/year) [California Department of Parks & Recreation (CDPR), 2009].

The Bear Mountains fault zone and the Melones fault contain numerous, individual faults, strands and fault segments. Some of the individual faults in the northwest-trending Bear Mountains and Melones fault zones have been reactivated in late Cenozoic time (last 5 million years), but they have a very low average slip-rate (typically less than 0.01 mm/year). The central part of the fault zone is split into branches including the Malones Fault Zone to the east, the Cleveland Hill fault to the northwest, and the Spenceville Fault to the west and the Wolf Creek Fault Zone (Highway 49 lineament) in the western portion of the county (Nevada County, 2013). These faults are late quaternary faults and exhibit displacement during the past 700,000 years. Other individual faults and zones in this area include, Big Bend-Wolf Creek Fault Zone, the Swain Ravine fault zone, the Wolf Creek-Grass Valley fault zone, the Gillis Hills fault zone, Bear Mountains Fault Zone, Grass Valley Fault, Weimar Fault Zone, and the Giant Gap fault on the eastern portion of the fault zone just east of the town of Alta. The primary fault trends and most recent fault activity within these areas are described below: *Figure 4.6-2: Nevada County Fault Map*, shows the names and locations of major faults within the County.

Seismic Hazard Map



Source: U.S. Geological Survey (USGS)

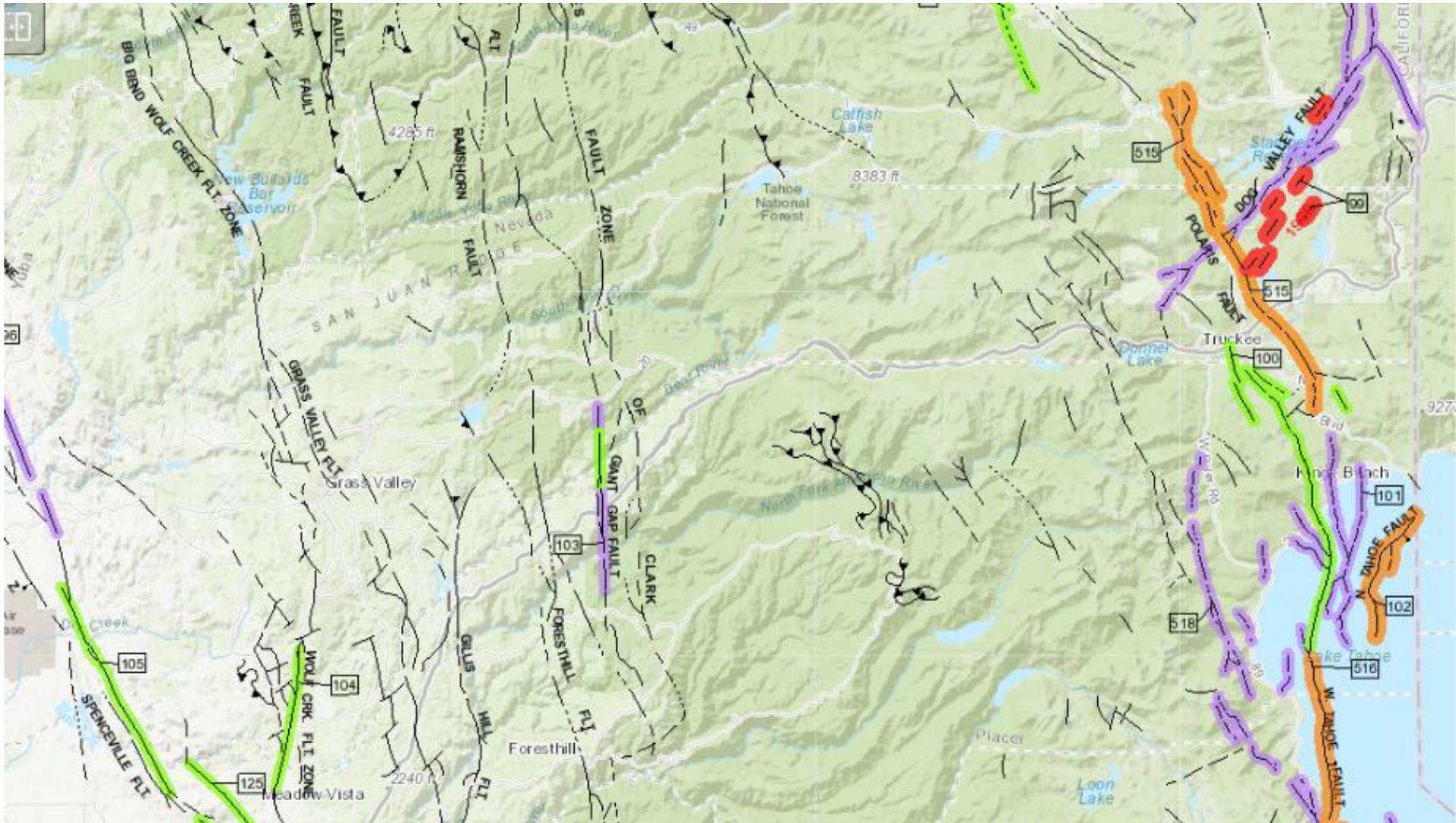
0 1 2 4 6 8 10 Miles

Every reasonable effort has been made to assure the accuracy of the maps and data provided; nevertheless, some information may not be accurate. The County of Nevada assumes no responsibility arising from use of this information.

THE MAPS AND ASSOCIATED DATA ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, either expressed or implied, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Before making decisions using the information provided on this map, contact the Nevada County Public Counter staff to confirm the validity of the data provided.

Data Source: <http://www.usgs.gov/>
Coordinate System: NAD 1983 StatePlane California 8 FIPS 5402

FIGURE 4.6-1: Seismic Hazard Map
Nevada County Cannabis EIR



Source:

FIGURE 4.6-2: Nevada County Fault Map
 Nevada County Cannabis EIR

The Swain Ravine Fault

The Swain Ravine Fault is part of the western trend of the Bear Mountains fault zone. This zone includes a number of faults that trend from the southeast to northwest, and includes the Deadman near Auburn, Spenceville, Prairie Creek, and Cleveland Hills fault into the Oroville area. The northern portion of the Swain Ravine fault is identified as having possible late Quaternary activity due to its close association with the Cleveland Hills fault and Oroville earthquake. The late Quaternary portion of the Swain Ravine fault is located approximately 10 miles northwest of the boundary with Yuba County [California Department of Parks and Recreation (CDPR), 2009].

The Wolf Creek Fault

Another part of the Bear Mountains fault zone, but with a more northerly trend from Auburn toward Grass Valley, where it aligns with the Grass Valley fault (which includes several fault splays in the Grass Valley area), and then with the Big Bend-Wolf Creek fault zone north of the Middle Fork Yuba River. A short, approximately 3-mile segment of the Wolf Creek fault has been identified as having possible late Quaternary activity. The Wolf Creek fault follows Wolf Creek through Grass Valley (CDPR, 2009).

The Gillis Hill Fault

A north-south trending zone located between the Wolf Creek and Melones fault zones in west-central Nevada County (CDPR, 2009).

The Weimar Fault Zone

A group of faults that appears to extend from the southern part of the Gillis Hill fault zone northwestward to the Grass Valley fault zone in the Grass Valley area. The Weimar fault has been identified as one of the major ore-bearing block boundaries at the Idaho-Maryland Mine, north of the Empire Mine (CDPR, 2009).

The Melones Fault

The Melones fault zone follows a northerly trend from the South Fork American River, passing through Alta and Downieville, and then possibly connecting with the northwest trending Mohawk Valley fault zone at the Middle Fork Feather River (CDPR, 2009).

Cleveland Hill Fault

According to the California Department of Conservation (CDOC) Fault Activity Map, the closest historically active fault with surface displacement to the western portion of Nevada County is the Cleveland Hill Fault, which is located approximately 16 miles northwest of the boundary with Yuba County. The Cleveland Hill Fault was active in 1975 and is associated with ground rupture during the Oroville earthquakes (Holdrege & Kull, 2018).

The eastern portion of the County in and around the area of Truckee has a number of potentially active faults and recently active faults. These faults and zones, generally trend in northeasterly and northwesterly direction and extend north into Sierra County and south into the Lake Tahoe basin. The faults include the Polaris Fault, the Dog Valley Fault/Fault Zone, the Dollar Point Fault, and unnamed faults. (Town of Truckee, 2008).

Polaris Fault

The Polaris Fault has exhibited movement within the 11,700 years and the Dog Valley Fault within the Dog Valley Fault Zone has portions that are Quaternary faults but the age is undifferentiated. This fault zone

also contains approximately seven smaller unnamed fault segments that extend in the northeasterly directed from their intersection with the Polaris fault north of Truckee extending into Sierra County.

The Polaris fault was not recognized until 2011 when the United States Geological Survey (USGS) located the right-lateral strike-slip fault for a length of approximately 22 miles. The fault may represent a significant seismic hazard to the greater Truckee-Lake Tahoe and Reno-Carson City region. Based on evaluations the fault has a minimum tectonic slip rate of 0.4 to 0.1 millimeter (mm) per year, a range of surface-rupture lengths and depths to the base of the seismogenic zone, and an estimated maximum earthquake magnitude (M) between 6.4 and 6.9 (USGS, 2012).

The Dog Valley Fault

The Dog Valley Fault extends in toward Truckee from Dog Valley (approximately 20 miles northeast of Truckee) and southwest to near Donner Lake with several small trace faults are also located within the Truckee town limits. A 1986 study by the California Bureau of Reclamation concluded that the Dog Valley Fault could result in a maximum credible earthquake of 6.75 (Town of Truckee, 2008). The southern end of the Mohawk Valley fault is located approximately six miles north of the Nevada County border with Sierra County and trends in a southeasterly direction along in the similar orientation as the Polaris Fault. The Mohawk valley fault has the potential to generate maximum credible earthquake of 7.0 magnitude.

GEOLOGIC HAZARDS

STRONG GROUND SHAKING

Seismicity is the geographic and historical distribution of earthquakes, including their frequency, intensity, and distribution. Geologic hazards associated with ground failure that can be induced from seismic events (earthquake shaking) include surface rupture, ground shaking, liquefaction, landslides, subsidence, expansive soils, tsunamis and seiches, and soil erosion. In addition, in the higher elevations of the county, during the winter or times with snow cover, a seismic event could result in an avalanche.

As described above, the county is underlain by a number of fault systems, some of which are active including the unnamed fault that is part of the Dog Valley Fault system near Truckee and the Cleveland Hill Fault which is within Yuba County. In addition, other fault activity makes Nevada County a historically active seismic area. Accordingly, the NCGP designates seismic constraints within the western, central, and eastern county parts of the county. Western County was identified as having low constraints; Central County was identified as moderately constrained, and Eastern County was identified as having high constraints due to recent seismic activity. The Nevada County General Plan (NCGP) provides information on faults and seismicity as well as policies and implementation measures related to geologic hazards. Because of the numerous geologic features within the County, all development within the County is subject to geologic hazards.

Induced Seismicity

The majority of earthquakes that occur each year are the result of natural causes; however, some earthquakes can result from human activity and are called induced-seismic events or induced earthquakes. Naturally occurring earthquakes result of the buildup of stresses and pressure caused by the lateral or vertical movement of blocks or plates moving against the other. When the plates move suddenly the built-up energy is released and an earthquake can occur. Human activities that can result in induced seismic events include injection and withdrawal of fluids such as hydraulic fracturing, impoundment of reservoirs, mining and controlled explosions (including underground).

Ground shaking. Northern California is a seismically active region, and the County and cultivation sites may be subject to seismic shaking generated from a variety of regional sources. The intensity of seismic shaking, or strong ground motion, during an earthquake depends on the distance of a site to the epicenter of the earthquake, the magnitude of the earthquake, and the geologic conditions underlying and surrounding the area. Earthquakes occurring on faults closest to a site would have the potential to generate the largest ground motions. The maximum credible earthquake magnitudes represent the largest earthquakes that could occur on the given fault based on the current understanding of the regional tectonic structure. As discussed above, there are a number of faults within and near the County that could result in an earthquake felt in the project area.

Fault Rupture. Surface rupture occurs when movement on a fault breaks through to the surface of the earth. Fault rupture may occur suddenly during an earthquake or slowly in the form of fault creep. Where fault rupture is a sudden deformation, fault creep is a slow and more or less continuous movement on faults due to ongoing deformation that tend not to produce large earthquakes (USGA, 2018). Fault rupture almost always follows preexisting faults, which are zones of weakness. Surface rupture occurs when movement on a fault deep within the earth breaks through to the surface. The Alquist-Priolo Earthquake Fault Zone Map prepared by the California Geological Survey (CGS 2010) indicates that the project site is not located within a designated Alquist-Priolo Earthquake Fault Zone. However, Nevada County is underlain by numerous faults and fault zones including faults in the eastern county area with a history of recent movement. In addition, while most of the faults and fault zones in the County are classified as Pre-Quaternary faults (i.e., older than 1.6 million years) and do not show recognized Quaternary displacement they are not necessarily inactive.

Expansive Soil

Expansive soils are characterized by their ability to undergo significant volume change (i.e., to shrink and swell) as a result of variations in moisture content. Changes in soil moisture can result from rainfall, landscape irrigation, utility leakage, roof drainage, and/or perched groundwater. Expansive soils are typically very fine-grained and have a high to very high percentage of clay. Expansion and contraction of expansive soils in response to changes in moisture content can lead to differential and cyclical movements that can cause damage and/or distress to structures and equipment.

Landslides

Earthquake motions can induce substantial stresses in slopes, causing earthquake-induced landslides or ground cracking when the slope fails. Earthquake-induced landslides can occur in areas with steep slopes that are susceptible to strong ground motion. Slope failures, commonly referred to as landslides, include many phenomena that involve the downslope displacement and movement of material, triggered either by static (i.e., gravity) or dynamic (i.e., earthquake) forces. Exposed rock slopes undergo rockfalls, rockslides, or rock avalanches, while soil slopes experience soil slumps, rapid debris flows, and deep-seated rotational slides. Slope stability can depend on several complex variables, including the geology, structure, topography, slope geometry, and amount of groundwater present, as well as external processes such as climate and human activity. Landslides are generally grouped into the following categories:

Falls – falling of soil or rock masses where a sliding surface does not occur;

Flows – surface material breaks up and moved down and slope and flows as a viscous fluid;

Creeps – slow downslope movements of an earth mass; and

Transitional or Rotational Slides – Movements of earth that involve a distinct rupture or zone of weakness separating the earth slide.

Nevada County has a history of mining including hydraulic mining which used jets of water to break down gold-laden gravel banks and wash the materials through gold separating devices (Central Pacific Railroad, 2004). Any area adjacent to a hydraulically mined area is subject to landslide activity. Uphill instability is increased by removal of the toe of the slope and a landslide can be triggered by seismic activity, heavy rainfall, overloading, grading activities, etc.

Liquefaction

Seismic ground shaking of relatively loose, granular soils that are saturated or submerged can cause the soils to liquefy and temporarily behave as a dense fluid. Liquefaction is caused by a sudden temporary increase in pore water pressure due to cyclic loading during earthquakes. Liquefaction most often occurs in areas underlain by young alluvium subject to shallow groundwater conditions and strong, long duration earthquakes. The effects of liquefaction can include the temporary loss of soil shear strength (and therefore, its bearing capacity), regional or localized settlement, lateral gliding of large blocks on liquefied layers at depth, and the extrusion of large volumes of liquefied sand (as sand volcanoes).

Lateral Spreading

Lateral Spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or “free” face such as an open body of water, channel, or excavation. In soils, this movement is generally due to failure along a weak plane (soil structure) and may often be associated with liquefaction. Because there are no creeks or open bodies of water within or immediately adjacent to the proposed project site, the probability of lateral spreading occurring at the site during a seismic event is estimated to be low.

Slumps or Land Subsidence

Land subsidence can occur in various ways. Land subsidence is the gradual, local settling or shrinking of the earth’s surface with little or no horizontal motion. Subsidence is normally the result of gas, oil, or water extraction; hydro-compaction; and/or peat oxidation and not the result of landslide or ground failure. Subsidence also can occur during an earthquake. Movement that occurs along faults can be horizontal or vertical or have a component of both. As a result, a large area of land can subside drastically during an earthquake. Land subsidence can also be caused during liquefaction.

Corrosion

Many factors can affect the corrosion potential of soil. In general, soil resistivity, which is a measure of how easily electrical current flows through soils, is the most influential factor. Chloride and sulfate ion concentrations and pH appear to play secondary roles in affecting corrosion potential. High chloride levels tend to reduce soil resistivity and break down otherwise protective surface deposits, which can result in corrosion of buried metallic improvements or reinforced concrete structures. Sulfate ions in the soil can lower the soil resistivity and can be highly aggressive to Portland cement concrete (PCC) by combining chemically with certain constituents of the concrete, principally tricalcium aluminate. The sulfate exposure to PCC is considered negligible for the native subsurface materials within the proposed project site.

Acidity is also an important factor of soil corrosivity. The lower the pH, the more acidic the environment, and the higher the soil corrosivity will be with respect to buried metallic structures. As soil pH increases above 7 (the neutral value), the soil is increasingly more alkaline and less corrosive to buried steel

structures due to protective surface films which form on steel in high pH environments. A pH between 5 and 8.5 is generally considered relatively passive from a corrosion standpoint.

Avalanche

Avalanche hazard areas are generally located on high, mountainous slopes and terrain at elevations above 7,000 feet. The most important factor necessary to release an avalanche is heavy snowfall. A rapidly increasing snow layer is unable to stabilize or bond with the old layer of snow or the ground below it, so that after a certain amount of time the new snow layer will simply slide off as an avalanche.

In the United States, there are no national standards. Local jurisdictions have standards that fit local political and economic conditions (Mears & Wilbur Engineering, 2014). The Nevada County General Plan defines four avalanche hazard zones based on the Nevada County Master Environmental Inventory. These zones range from no hazard to high hazard.

High hazard areas are those where avalanches that could damage standard wood-frame structures and/or bury automobiles are expected to occur with a probability of one chance in twenty per year. (Nevada County, 1991) Identified high hazard areas within Nevada County include portions of the Donner Lake, Tahoe-Donner, and Soda Springs areas.

Moderate Hazard areas are those where avalanches could damage standard wood-frame structures and/or bury automobiles and are expected to occur with a probability of less than one change per twenty per year, but more than one chance in one hundred per year;

Low hazard areas are those where avalanches could damage standard wood-frame structures and/or bury automobiles and are expected to occur with a probability of less than one chance in one hundred per year; and No hazard areas are those where barring cataclysmic or unprecedented events, avalanches will not occur.

Tsunamis and Seiches

A tsunami is a sea wave of local or distant origin that results from large-scale seafloor displacements associated with large earthquakes, major submarine slides, or exploding volcanic islands. These waves can move at a rate exceeding 500 miles per hour. In smaller closed water bodies like inland seas and lakes, a seiche, or a sloshing of the water may occur from earthquakes or underwater landslides (USGS, 2018).

SOILS

Soil within Nevada County are diverse but consistent with soils formed over very long periods of time from complex geologic and volcanic processes, as well as the introduction of vegetative organic plant materials. The area was once covered by a vast inland sea but through geologic movement and uplift the water in the sea flowed out of the region and geologic processes resulted in the formation of some of the existing rock formations. Subsequently, the area was experienced intrusion by ultrabasic rock, the existing formations began a long period of erosion exposing the granite rock below. Volcanic activity resulted in ash deposits throughout the county, as well as discharges and flows of andesitic materials mostly mud flows, dust, and lava flows. During the Pleistocene era, approximately 2.5 million years ago, faulting in the eastern portion of the county formed the Sierra Nevada Mountains. Water began to flow westward which washed much of the volcanic debris downstream and cut the deep canyons exposing the volcanic ridges and cutting into the underlying materials and seen today (USDA, 1993).

The current soils seen in the County have been strongly influenced by the above listed geologic processes which formed the parent materials but also was contributed to by organic materials which leads to the

existing diversity in soil configurations. The results in soils within the different County localities differing in their appearance, composition, management requirements, and productivity. Generally, there are five factors that cause differences in soils including: topographic relief, drainage, physical and mineralogical composition of parent materials, climate under which the soil material accumulated, biological activities including plants and animals in and on the soils, and length of time of the formational forces. These activities, have resulted in the existing land forms and had a strong influence on the formation of the existing soils patterns now observed throughout the county. The characteristics of different soil types result in varying potential capabilities and constraints in terms of permeability, suitability for intensive development, erosion hazards, or agricultural and timber capabilities (USDA, 1993).

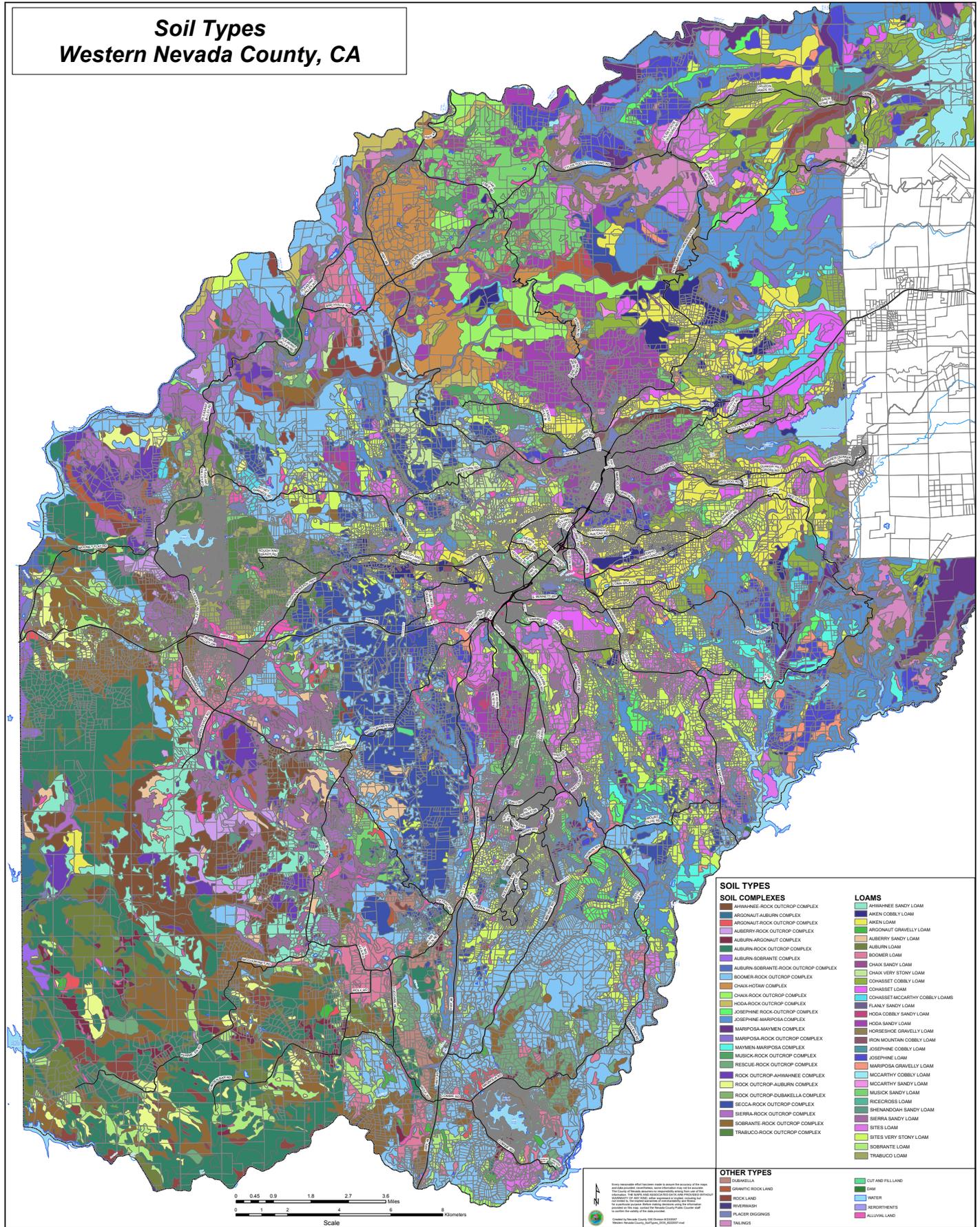
Today, the Nevada County area consists of the lower and middle foothills of the Sierra Nevada mountain range and those areas within the mountains that are the sheer and defined by steeply dipping, faulted, and folded metamorphic rock that has been intruded by several types of igneous rock. Overlying the bedrock in many places are mantles of river gravel and organic debris. From the steeper mountains, the foothills descend to the valley with an average slope of 3.0 to 3.5 percent and generally trend northwest to southeast. The upper parts of the major streams and river are more deeply gouged by river canyons and drainageways with less cutting in the rolling foothills. The area is drained by the Bear River on the south and the South and Middle Yuba Rivers to the north, which flow to the Feather River and then the Sacramento river to the south.

Because of the varying degrees of influence from the current topography and associated soil-forming factors, many different kinds of soil have formed within the county and there is a great deal of variation in soil capability from location to location. *Figure 4.6-3: Soil Types in Western Nevada County*, Soils are classified based on their specific characteristics and interrelationships. Soils are initially grouped into narrow classes, which can number in the thousands, and then grouped into progressively fewer and broader classes so that information can be applied to larger geographic ranges. According to the Nevada County Resource Conservation District there are a total of 29 soils series, including cut and fill and alluvial lands within the county. The soil series include Ahwahnee; Aiken; Alluvial lands, Argonaut; Auberry; Auburn; Boomer; Chaix; Chaix thick solum variant; Cohasset, Dubakella; Dubakella shallow variant; Hoda; Horshoe; Hotaw; Iron Mountain; Josephine; Mariposa; Maymen; McCarthy; Musick; Rescue; Secca; Shenandoah; Sierra; Sites; Sobrante; and Trabuco. Each soil series is further broken into more and more specific categories such as family's, groups, and subgroups based on characteristics such as horizon depths, coarseness and particle size, presence of organic matter, etc.

Ahwahnee Series - The Ahwahnee Series consists of well-drained soils underlain by weathered granodiorite. These soils are undulating to steep and are on mountainous uplands. Slopes are 20 to 50 percent. The vegetation is mostly annual grasses and forbs, oak, and scattered areas of digger and ponderosa pine. Elevation ranges from 400 to 1,600 feet. The annual rainfall is 28 to 45 inches, and the average annual air temperature is about 60°F. The frost-free season is 235 to 260 days.

Aiken Series - The Aiken series consists of well-drained soils underlain by cobble andesitic tuff and conglomerate. These soils are on tabular volcanic ridges and colluvial side slopes. The soils on ridges are undulating to steep, and those on side slopes are strongly sloping to steep. Slopes are 2 to 50 percent. The vegetation is conifer-hardwood forest and an understory of brush, forbs, and sparse grass. Elevation ranges from 2,000 to 4,000 feet. The annual rainfall is 48 to 58 inches, and the average annual air temperature is about 56°F. The frost-free season is 140 to 230 days.

**Soil Types
Western Nevada County, CA**



Source:

FIGURE 4.6-3: Soil Types in Western Nevada County
Nevada County Cannabis EIR

Alluvial Lands - Alluvial Land, Clayey (Ao) - Alluvial land, clayey is a miscellaneous land type consisting of narrow areas of alluvial material deposited along small stream channels and drainage ways. This moderately well drained to poorly drained material formed in fine-textured alluvium derived dominantly from metabasic and granitic rock. This land type is nearly level to strongly sloping. Slopes are 0 to 15 percent. Elevation ranges from 300 to 3,500 feet.

Alluvial Land, Loamy (Am) - Alluvial land, loamy is a miscellaneous land type consisting of narrow areas of recent alluvial material that has been deposited along stream channels and drainage ways. These well-drained areas formed in loamy material from different rock sources. They are nearly level to strongly sloping. Slopes range from 0 to 15 percent. Elevation ranges from 300 to 4,000 feet

Argonaut Series - The Argonaut series consists of well-drained soils underlain by metabasic or basic rock. These soils are gently sloping to moderately steep and are on uplands. Slopes are often concave and range from 2 to 30 percent. The vegetation is mostly annual grasses and forbs, and areas of oak, digger pine, and brush. Wiregrass, sedge, and some stipa are also present. Elevation ranges from 300 to 2,500 feet. The annual rainfall is 26 to 50 inches, and the average annual air temperature is about 60°F. The frost-free season is 235 to 260 days.

Auberry Series - The Auberry series consists of well-drained soils underlain by weathered granodiorite. These soils are moderately sloping to steep and are on the middle and lower parts of the foothills. Slopes are 5 to 50 percent. The vegetation is mostly annual grasses and firs and oak, but scattered areas are in ponderosa and digger pine. Elevation ranges from 400 to 1,600 feet. The annual rainfall is 20 to 40 inches, and the average annual air temperature is about 60°F. The frost-free season is 235 to 260 days.

Auburn Series - The Auburn series consists of well-drained soils underlain by weathered diabase rock. These soils are undulating to steep and are on mountainous uplands of the middle and lower parts of foothills. Slopes are 2 to 50 percent. The vegetation is mostly annual grasses and forbs and oak, but scattered areas of digger pine and brush are also present. Elevation ranges from 300 to 1,800 feet. The annual rainfall is 26 to 35 inches, and the average annual air temperature is about 60°F. The frost-free season range from 235 to 265 days.

Boomer Series - The Boomer series consists of well-drained soils underlain by weathered basic rock. These soils are located on gently rolling hills to steep slopes on mountainous uplands. Slopes are 5 to 50 percent. The vegetation is ponderosa pine, black and live oak, brush, and forbs and annual grasses. Elevation ranges from 1,000 to 2,200 feet. The annual rainfall is 30 to 45 inches. Summer thundershowers occur infrequently. The average annual air temperature is 56° to 58°F. The frost-free season ranges from 200 to 260 days.

Chaix Series - The Chaix series consists of well-drained soils underlain by weathered granodiorite. These soils are on mountainous uplands. Slopes are 5 to 75 percent. The vegetation is mostly ponderosa pine, incense cedar, black oak, canyon live oak, bear clover, manzanita, ceanothus, and annual grasses. Elevation ranges from 1,200 to 3,000 feet. The annual rainfall is 35 to 50 inches, and the average annual air temperature is 56° to 58°F. The frost-free season ranges from 175 to 225 days.

Chaix Series, Thick Solum Variant - The Chaix series, thick solum variant, consists of well-drained soils underlain by weathered gabbrodiorite or gabbrodioritelike rock. These soils are gently rolling to steep and are on uplands of the middle part of the foothills. Slopes are 5 to 50 percent. The vegetation is open stands of ponderosa pine, digger pine, manzanita, ceanothus, blue oak, live oak, scattered black oak, and grasses. Elevation ranges from 1,300 to 2,400 feet. The annual rainfall is 35 to 55 inches. Summer thundershowers

occur infrequently. The average annual air temperature is 55° to 58°F. The frost-free season ranges from 150 to 230 days.

Cohasset Series - The Cohasset series consists of well-drained soils underlain by cobbly andesitic conglomerate. These soils are on tabular volcanic ridges and colluvial side slopes. The soils on ridges are undulating to hilly, and those on side slopes are strongly sloping to very steep. Slopes are 2 to 75 percent. The vegetation is conifer-hardwood forest and an understory of brush, forbs, and sparse grass. Elevation ranges from 2,000 to 4,000 feet. The annual rainfall is 48 to 58 inches, and the average annual air temperature is about 56°F. The frost-free season is 140 to 230 days.

Cut and Fill Land - Cut and fill land (Ct) is a miscellaneous land type consisting of areas that have been altered by methods other than mining so that the soil characteristics have been completely eliminated. These cut and fill, or dozed, areas have been used largely as logging deck yards or lumber stock yards. In places the subsoil, or parent, rock is exposed. Deep accumulations of bark are present where logs have been stored before cutting. These areas commonly show much evidence of equipment traffic. Slopes are 0 to 50 percent.

Dubakella Series - The Dubakella series consists of well-drained soils underlain by ultrabasic rock. These soils are gently rolling to steep on mountainous uplands. Slopes are 5 to 50 percent. The vegetation is mostly digger pine, manzanita, yerba santa, ceanothus, live oak, blue oak, cypress, and squirrel tail, and forbs. Elevation ranges from 2,200 to 2,700 feet. The annual rainfall is 46 to 54 inches, and the average annual air temperature is about 56°F. The frost-free season is 150 to 235 days.

Hoda Series - The Hoda series consists of well-drained soils underlain by weathered granodiorite. These soils are moderately sloping to very steep and are on mountainous uplands. Slopes are 5 to 75 percent. The vegetation is mostly ponderosa pine, incense cedar, black oak, madrone, sweet birch, manzanita, Scotch broom, and annual grasses and forbs. Elevation ranges from 2,000 to 4,000 feet. The annual rainfall is 40 to 55 inches, and the average annual air temperature is about 55°F. The frost-free season is 145 to 250 days

Horseshoe Series - The Horseshoe series consists of well-drained soils underlain by stratified sand and gravel. These soils are rolling to hilly and are on terraces of tertiary river gravel deposits. Slopes are 9 to 30 percent. The vegetation is conifer-hardwood forest and an understory of brush, forbs, and sparse grass. Elevation ranges from 1,580 to 4,000 feet. The annual rainfall is 40 to 60 inches, and the annual average air temperature is about 55°F. The frost-free season is 140 to 230 days.

Hotaw Series - The Hotaw series consists of well-drained soils underlain by weathered granodiorite. These moderately sloping to steep soils are on mountainous uplands. Slopes are 5 to 50 percent. The vegetation is mostly ponderosa pine, Douglas-fir, incense cedar, manzanita, ceanothus, blue oak, live oak, other brush species, and forbs. Elevation ranges from 1,700 to 2,500 feet. The annual rainfall is 45 to 55 inches, and the average annual air temperature is 54° to 59°F. The frost-free season ranges from 180 to 230 days.

Iron Mountain Series - The Iron Mountain Series consists of somewhat excessively drained soils underlain by weathered andesitic conglomerate. The soils are undulating to steep and are on mountainous uplands. Slopes are 2 to 50 percent. The vegetation is mixed conifer and hardwood and an understory of brush and grasses and forbs. Elevation ranges from 2,500 to 4,600 feet. The annual rainfall is 45 to 55 inches; and the average annual air temperature is about 54°F. The frost-free season is 140 to 230 days.

In hierarchy above the soil series, a soil can be classified by its general association within a landscape. In Nevada County there are nine soil associations that define a distinctive proportional pattern of soils. These

associations normally consist of one or more major soils and at least one minor soil and are named for the major soils. The soils in one association may occur in another although they may be found in a different pattern. While use of the soil associations may not be particularly useful for siting of a specific land use because the soils in one association may differ in slope, depth, stoniness, drainage and other characteristics, soil associations are useful to provide a general idea of the soils in an area and to determine large tracts that may be useful for a certain land uses. The nine soil associations and a brief description of each is presented below.

Josephine Series - The Josephine series consists of well-drained soils underlain by vertically tilted slate, shale, and contact metamorphic rock. These soils are gently rolling to very steep and are on mountainous uplands. Slopes are 5 to 75 percent. The vegetation is mostly mixed conifer and hardwood and shrubs. Elevation ranges from 2,000 to 4,500 feet. The annual rainfall is 45 to 55 inches, and the average annual air temperature is about 55°F. The frost-free season is 135 to 235 days.

Mariposa Series - The Mariposa series consists of well-drained soils underlain by slightly weathered slate and shale. These soils are undulating to very steep and are on mountainous uplands. Slopes are 2 to 75 percent. The vegetation is mostly ponderosa pine, sugar pine, Douglas-fir, black oak, live oak, manzanita, and forbs. Elevation ranges from 2,000 to 4,000 feet. The annual rainfall is 40 to 60 inches, and the average annual air temperature is about 56°F. The frost-free season is 140 to 235 days.

Maymen Series - The Maymen series consists of well-drained soils underlain by shattered and fractured slate. These soils are on mountainous uplands, generally along major drainageways. Slopes are 2 to 75 percent. The vegetation is mostly ponderosa pine, knobcone pine, incense cedar, manzanita, ceanothus, other shrub species, and forbs. Elevation ranges from 2,000 to 4,000 feet. The annual rainfall is 45 to 55 inches, and the average annual air temperature is 54° to 59°F. The frost-free season is 140 to 235 days.

McCarthy Series - The McCarthy series consists of well-drained soils underlain by weathered andesitic conglomerate. These soils are gently rolling to very steep and are on mountainous uplands and volcanic flows. Slopes are 5 to 75 percent. The vegetation is mostly ponderosa pine, Douglas-fir, incense cedar, sugar pine, black oak, manzanita, ceanothus, and bear clover. Elevation ranges from 2,800 to 4,600 feet. The annual rainfall is 48 to 55 inches, and the average annual air temperature is 48° to 51°F. The frost-free season is 140 to 200 days.

Musick Series - The Musick series consists of well-drained soils underlain by weathered granodiorite. These soils are moderately sloping to steep and are on mountainous uplands. Slopes are 5 to 50 percent. The vegetation is mostly ponderosa pine, incense cedar, black oak, madrone, Scotch broom, poison oak, manzanita, ceanothus, and annual grasses and forbs. Elevation ranges from 2,000 to 3,500 feet. The annual rainfall is 44 to 55 inches, and the average annual air temperature is 52° to 56°F. The frost-free season is 145 to 250 days.

Rescue Series - The Rescue series consists of well-drained soils underlain by weathered basic rocks. These soils are gently rolling to hilly and are on mountainous uplands of the lower and middle part of foothills. Slopes are 5 to 30 percent. The vegetation is annual grasses and forbs, and blue oak, live oak, poison oak, digger pine, and scattered ponderosa pine. Elevation ranges from 500 to 2,000 feet. The annual rainfall is 28 to 45 inches, and the average annual temperature is about 60°F. The frost-free season is 225 to 260 days.

Rock Land Series - Rock land (Rn) is a miscellaneous land type consisting of extremely rocky or stony basic, metabasic, metamorphosed, ultrabasic, and sedimentary rock material on hilly or steep mountainous

areas. This land type extends throughout a slide area but is most commonly adjacent to major drainage ways, such as the Bear River. It is undulating to extremely steep. Elevation ranges from 400 to 4,500 feet. Slopes range from 2 to 75 percent but are mostly more than 30 percent. Rock outcrops cover 50 to 90 percent of the surface area. In places a very shallow mantle of soil is between the outcrops. This soil material is less than 10 inches deep. Also, small isolated areas of shallow to moderately deep soils are scattered among the rock outcrops in places. These are generally Auburn, Oubakella, Iron mountain, Maymen, Mariposa, or Sobrante soils. Vegetation consists of such brush plants as chamise, scrub oak, manzanita, yerba santa, and poison oak and sparse understory of annual grasses and forbs. In places scattered blue oak, live oak, and conifer are present in pockets of soil.

Secca Series - The Secca series consists of moderately well-drained soils underlain by metabasic or basic rock. These soils are undulating to steep and are on mountainous uplands. Slopes are 2 to 50 percent. The vegetation is mostly manzanita, ceanothus, blue oak, and grasses and forbs. Scattered digger pine and a few ponderosa pine are also present. Elevation ranges from 1,700 to 3,000 feet. The annual rainfall is 35 to 55 inches, and the average annual air temperature is 57° to 58°F. The frost-free season is 230 to 255 days.

Shenandoah Series - The Shenandoah series consists of somewhat poorly drained soils underlain by the weathered granitic rock. These soils are undulating to rolling. Slopes are 2 to 15 percent and are generally concave. The vegetation is mostly oak, live oak, digger pine, wire grass, an annual grasses and sedges. Elevation ranges from 600 to 1,800 feet. The annual rainfall is 30 to 40 inches, and the average annual air temperature is about 61°F. The frost-free season is 240 to 260 days.

Sierra Series - The Sierra series consists of well-drained soils underlain by weathered granodiorite. These soils are undulating to steep and are on the lower and middle parts of foothills. Slopes are 2 to 50 percent. The vegetation is mostly annual grasses and forbs, and blue oak, live oak, manzanita, and scattered or open stands of ponderosa pine. Elevation ranges from 400 to 2,000 feet. The annual rainfall is 28 to 38 inches, and the average annual air temperature is about 60°F. The frost-free season is 240 to 260 days.

Sites Series - The Sites series consists of well-drained soils underlain by tilted meta-sedimentary and metabasic rock. These soils are undulating to steep. Slopes are 2 to 50 percent. The vegetation is mostly mixed conifer and hardwood and shrubs. Elevation ranges from 2,000 to 4,000 feet. The annual rainfall is 40 to 60 inches, and the average annual air temperature is about 55°F. The frost-free season is 140 to 240 days.

Sobrante Series - The Sobrante series consists of well-drained soils underlain by slightly weathered metabasic rock. These soils are undulating to steep and are on the lower and middle parts of foothills. Slopes are 2 to 50 percent. The vegetation is mostly annual grasses and forbs and blue oak, live oak, poison oak, and other brush species. Elevation ranges from 500 to 2,000 feet. The annual rainfall is 28 to 45 inches and the average annual air temperature is about 60°F. The frost-free season is 240 to 260 days.

Trabuco Series - The Trabuco series consists of well-drained soils underlain by weathered granodiorite. These soils are gently rolling to steep and are on the middle part of foothills. Slopes are 5 to 50 percent. The vegetation is mostly live oak, blue oak, digger pine, ceanothus, poison oak, manzanita, and annual grasses and forbs. Elevation ranges from 800 to 1,800 feet. The annual rainfall is 35 to 40 inches, and the average annual air temperature is 60° or 61°F. The frost-free season is 235 to 260 days.

The general soil types present potential constraints to agricultural use, construction locations, septic uses and effluent disposal due to slow permeability, steep slopes, and soil depth. While conditions vary greatly

within the County, there are locations which may require application of specific measures to ensure effective use of certain areas. These same constraints may limit the suitability of soils for installation of pipelines and subsurface infrastructure or may require the use of site-specific measures. Erosion hazard is variable but generally increases near major rivers and with steeper slopes and is increased by more intensive development. Although the soils are generally poor for intensive agriculture use, ranging from Class II and up, the moderate to high elevation soils are an excellent resource for timber growth. (Nevada County, 1995 GP Soils)

4.6.2 REGULATORY SETTING

Geologic resources and geotechnical hazards are governed primarily by local jurisdictions, although federal and state laws would apply to existing and future cannabis cultivation development under the proposed project. In addition, the California Environmental Quality Act (CEQA) is the major environmental statute that guides the design and construction of projects on non-federal lands in California. This statute sets forth a specific process of environmental impact analysis and public review. The open space element, safety element, and soils elements the county general plan contains policies for the protection of geologic features and avoidance of hazards. Relevant and potentially relevant statutes, regulations, and policies are discussed below.

FEDERAL

As explained in *Section 3.0: Project Description*, although state law has decriminalized cannabis, it is not legal under Federal law. The U.S. Department of Justice (USDOJ) issuance of memoranda provides further guidance related to federal law enforcement and cannabis activities within jurisdictions that have legalized cannabis. In these areas cannabis activities continue to be illegal at the federal level and subject to the prosecutorial discretion of the federal government.

CLEAN WATER ACT (CWA)

The Clean Water Act (CWA) (U.S. Government Code [USC], Title 33, Section 1251 et seq.), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain nonpoint source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402).

Projects that involve disturbance of one acre of soil or more or are part of a common plan that in total disturbs more than one acre, are required to obtain NPDES coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activity (General Permit), Order No. 2009-0009-DWQ. The General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which includes Best Management Practices (BMPs) to protect stormwater runoff, including measures to prevent soil erosion. Requirements of the federal CWA and associated SWPPP requirements are described in further detail in Section 3.8, Hydrology and Water Resources.

EARTHQUAKE HAZARDS REDUCTION ACT

The National Earthquake Hazards Reduction Program (NEHRP) was established by the U.S. Congress when it passed the Earthquake Hazards Reduction Act of 1977, Public Law (P.L.) 95–124. At the time of its creation, Congress' stated purpose for NEHRP was "to reduce the risks of life and property from future

earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program.” Congress recognized that earthquake-related losses could be reduced through improved design and construction methods and practices, land use controls and redevelopment, prediction techniques and early-warning systems, coordinated emergency preparedness plans, and public education and involvement programs. Since NEHRP’s creation, it has become the federal government’s coordinated long-term nationwide program to reduce risks to life and property in the United States that result from earthquakes. Four basic NEHRP goals are as follows:

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation
- Improve techniques for reducing earthquake vulnerabilities of facilities and systems
- Improve earthquake hazards identification and risk assessment methods, and their use
- Improve the understanding of earthquakes and their effects.
- Congress has recognized that several key federal agencies can contribute to earthquake mitigation efforts. Today, there are four primary NEHRP agencies:
 - Federal Emergency Management Agency (FEMA) of the Department of Homeland Security.
 - National Institute of Standards and Technology (NIST) of the Department of Commerce (NIST is the lead NEHRP agency).
 - National Science Foundation (NSF).
 - USGS of the Department of the Interior.

Congress completed a review of NEHRP, resulting in the NEHRP Reauthorization Act of 2004, PL 108–360. PL 108–360 directed that NEHRP activities be designed to develop effective measures for earthquake hazard reduction; promote the adoption of earthquake hazards reduction measures by government agencies, standards and codes organizations, and others involved in planning and building infrastructure; improve the understanding of earthquakes and their effects through interdisciplinary research; and, develop, operate, and maintain both the Advanced National Seismic System (ANSS) and the George E. Brown, Jr. Network for Earthquake Engineering Simulation (NEES). In a major new initiative, PL 108–360 also directed that NEHRP support development and application of performance-based seismic design (PBSD).

STATE

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONING ACT

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) was passed in 1972 to regulate development and construction of buildings intended for human occupancy to avoid the hazard of surface fault rupture. The purpose of the Alquist Priolo Act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults (those having evidence of surface displacement within about the last 11,000 years). It requires the State Geologist to delineate earthquake fault zones around the surface traces of active faults and publish maps showing these zones. Under the Alquist-Priolo Earthquake Fault Zoning Act, the State Mining and Geology Board is authorized to represent the state’s interests in establishing professional guidelines and standards for geological and geophysical investigations and reports produced by the California Geological Survey, public sector agencies, and private practitioners. The Board is also authorized to develop specific criteria through regulations that

shall be used by affected lead agencies in complying with the provisions of the Act so as to protect the health, safety and welfare of the public.

This Act (Public Resources Code, Chapter 7.5, Section 2621-2630) is intended to provide policies and criteria to assist cities, counties and state agencies in the exercise of their responsibilities to prohibit the location of developments and structures for human occupancy across the trace of active faults as defined by the Board. Further, it is the intent of this Act to provide the citizens of the state with increased safety and to minimize the loss of life during and immediately following earthquakes by facilitating seismic retrofitting to strengthen buildings, including historical buildings, against ground shaking [California Department of Conservation(CDOC), 2017].

THE SEISMIC HAZARDS MAPPING ACT OF 1990

In accordance with Public Resources Code, Chapter 7.8, Division 2, the California Department of Conservation, Division of Mines and Geology [now the California Geological Survey (CGS)] is directed to delineate Seismic Hazard Zones. The purpose of the act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards, such as those associated with strong ground shaking, liquefaction, landslides, other ground failures, or other hazards caused by earthquakes. Cities, counties, and state agencies are directed to use seismic hazard zone maps developed by CGS in their land use planning and permitting processes. In accordance with the Seismic Hazards Mapping Act, site-specific geotechnical investigations must be performed prior to permitting most urban development projects within seismic hazard zones.

THE CALIFORNIA BUILDING CODE

The State of California provides minimum standards for building design through the CBC. The CBC is based on the International Building Code (IBC), which is used widely throughout the United States (generally adopted on a state-by-state or district-by-district basis) and has been modified for conditions within California. On January 1, 2014, a revised version of the CBC took effect. In accordance with the CBC, generally, a grading permit is required if more than 50 cubic yards of soil are moved during implementation of a proposed project. Chapter 16 of the CBC contains definitions of seismic sources and the procedure used to calculate seismic forces on structures. Chapter 18 of the CBC contains standards and regulations relating to soil stability, design standards for seismic safety, and construction standards for building foundations. Specific regulations in Section 1803 require geotechnical investigations or preliminary soil reports as a condition of building permit approval. Section 1804 provides regulations on the siting of structures and site grading based on the soils and slope stability of a site. Section 1808 establishes regulations for the design and construction of building foundations, with emphasis on stability (i.e., issues pertaining to shifting soils, seismic overturning, and expansive soils) and design loads.

LOCAL

NEVADA COUNTY GENERAL PLAN

The Nevada County General Plan has multiple sections that address geologic and soils conditions. This includes Chapter 10: Safety which describes the interface of the natural and manmade environments and recognizes that potential safety hazards such as avalanches, landslides, earthquakes, floods, and wildfires may exist. This Safety element also recognizes other potential safety hazards such as those associated with airport operations and transport of hazardous materials. These two issues are discussed in additional detail in Chapter 4.7 Hazards and Hazardous Materials. The Safety element recognizes that each hazard can affect development within the County but that through emergency planning, land use planning and

implementation of development standards, hazards may be reduced. In part, the General Plan implements these measures through goals and policies meant to ensure the safety of the public, minimize risk to structures, and mitigate hazards. Goals and Policies that related to geology and soils include the following.

- Goal EP-10.1 Provide a coordinated approach to hazard and disaster response preparedness.
- Policy EP-10.1.3 Coordinate with the State Office of Emergency Services for wildfire, awareness of implementation of state programs. The local earthquake preparedness plan shall be coordinated with regional plans for earthquake preparedness through the local and State Office of Emergency Services.
- Policy EP-10.1.4 Provide for adequate evacuation routes in areas of high fire hazard, high potential for dam failure, earthquake, seiches, avalanche, flooding or other natural disaster.
- Goal GH-10.2 Minimize injury and property damage due to geologic and seismic hazards.
- Policy GH-10.2.1 Ensure that new construction meets current structural and safety standards.
- Policy GH-10.2.2 Continue to cooperate with the State Department of Conservation – California Geological Survey, the State Office of Emergency Services and other appropriate federal, state and local agencies and incorporate the most current data concerning the following as the basis for the County's Site Development Standards, and project site plan review:
- a. geologic hazards; and
 - b. seismic hazard data for sensitive land uses such as schools, medical facilities, high-density residential uses, and intensive commercial uses. The project review shall consider the need to mitigate development in such areas in accordance with federal, state and local standards.
- As part of the project site review process, require sufficient soils and geologic investigations to identify and evaluate the various geologic and seismic hazards that may exist for all proposed development, including subdivisions. Such investigations shall be required within an area determined to be seismically active by the State Department of Conservation – California Geological Survey, or within an area having potential geologic hazards, including slope instability and excessive erosion.
- Policy GH-10.2.1.3 Carry out the requirements of the California Building Code, particularly with regard to seismic design.
- Policy GH-10.2.1.4 Require that underground utility lines, particularly water and natural gas mains, be designed to withstand seismic forces.
- Policy SF-10.6.4 Land use patterns and development standards shall minimize hazards resulting from flooding, earthquake, slope failure, avalanche, and other natural occurrences.

Chapter 12 Soils Element

The Soils Element notes that the soils types found in the County present potential constraints on future development in terms of permeability, erosion potential, soil depths, and suitability for installation of

subsurface infrastructure. Goals, objectives, and policies applicable to the proposed project from the soils element include the following:

- Goal 12.1 Minimize adverse impacts of grading activities, loss of soils and soil productivity.
- Objective 12.1 Minimize earth movement and disturbance.
- Policy 12.1 Enforce Grading Ordinance provisions for erosion control on all new development projects by adopting provisions for ongoing monitoring of project grading. Project site inspection shall be required prior to initial site disturbance and grading to ensure all necessary control measures, including proper staking and tree protection measures, are in place. The installation, maintenance, and performance of erosion and sedimentation control measures shall be monitored by County or District staff (or their designee) and completely funded by a project applicant. All County projects shall comply with this policy.
- Policy 12.2 Enforce Grading Ordinance requirements for grading or vegetation removal not associated with a development project. Exempted from this requirement are actions necessary for evaluation of soils and other environmental characteristics, and for control of fire fuels, and for agricultural and timber production.
- Policy 12.3 Cooperate and encourage those activities dealing with techniques and practices to minimize erosion in cooperation with Nevada County Resource Conservation District, including provision of educational materials for the general public regarding techniques and practices to minimize erosion from construction activities.
- Objective 12.2 Minimize erosion due to road construction and maintenance.
- Policy 12.4 Require erosion control measures as an element of all County contracts, discretionary projects, and ministerial projects.
- Policy 12.5 Encourage the efforts of the Resource Conservation District and other related agencies to educate and assist the general public about techniques and practices to minimize private road maintenance related erosion.

LOCAL HAZARD MITIGATION PLAN

The Disaster Mitigation Act of 2000 (DMA 2000), PL-106-390 requires that each State develop a hazard mitigation plan, in order to receive future disaster mitigation funding following a disaster. California completed its most recent “State of California Multi-Hazard Mitigation Plan” in 2010. The requirements also call for the development of local or county plans for that particular county to be eligible for post-disaster mitigation funding. The purpose of these requirements is to encourage state and local government to engage in systematic and nationally uniform planning efforts that will result in locally tailored programs and projects that help minimize loss of life, destruction of property, damage to the environment and the total cost of disasters before they occur. The Nevada County Operational Area Emergency Services Council prepared the Local Hazard Mitigation Plan for Nevada County, for the years 2011 to 2016.

Nevada County specifically includes and adopts the most recent State of California Multi-Hazard Mitigation Plan where the State’s plan relates to issues pertaining to Nevada County. However, in the

interest of not duplicating State efforts, Nevada County in its plan refers to the State where the State has identified an issue or provided information that supplements Nevada County's plan.

The Code of Federal Regulations (CFR) Section 201.6(c)(3) outlines the process for localities in developing their mitigation strategies. Specifically, the Local Hazard Mitigation Plan must "include a mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools." These strategies should be built on an assessment of hazard risks and vulnerabilities.

NEVADA COUNTY LAND USE AND DEVELOPMENT CODE

The Nevada County Land Use and Development Code is Title III in Chapter V Buildings of the Nevada County Code. The Purpose of Chapter V, is for providing minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures, regulated equipment, grading and construction activities that result in a land disturbance on private property within this jurisdiction. As it would pertain to the proposed project and existing and future cultivation activities, Chapter V contains 15 different articles related to conformance with applicable California building, plumbing, electrical, fire, and mechanical codes; grading and grading for agriculture; and rooftop solar installations, and shall apply, to the extent permitted by law, to all construction in the unincorporated Nevada County

DIVISION 4.3 RESOURCE STANDARDS

Section 3.0 Project Description discusses the Comprehensive Development Standards found in Article 4 Comprehensive Site Development Standards and defined in Division 4.3 Resource Standards. In part, the purpose of the development standards is to avoid the impact of development projects on sensitive environmental resources and natural site constraints. The following discusses those standards applicable to geology and soils and specific requirements related to the protection of the associated resource(s) is discussed in *4.6.4 Potential Impacts and Mitigation Measures*, further below.

Section L-II 4.3.5 Avalanche Hazards. This section defines these zones as areas where avalanches that could damage standard wood-frame structures and/or bury automobiles are expected to occur with a probability of one chance in 20 per year (red zone), less than one chance in 20 per year but more than one chance in 100 per year (blue zone), or less than one chance in 100 per year (yellow zone).

Section L-II 4.3.8 Earthquake Faults & Seismically Sensitive. In part, this section refers to areas are defined as those within a seismic hazard zone or have the potential to suffer ground rupture from active faults.

Section L-II 4.3.13 Steep Slopes/High Erosion Potential. This section has the purpose to preserve the natural, topographic, and aesthetic characteristics of steep slopes (slopes 30% or greater), and to minimize soil erosion, water quality impacts, earth movement and disturbance, and the adverse impact of grading activities, while providing for reasonable use of private property. Areas of high erosion potential are those with highly erodible soils based on United States Soil Conservation Service (USSCS) and United States Forest Service (USFS).

4.6.3 STANDARDS OF SIGNIFICANCE

ENVIRONMENTAL ANALYSIS

The interface of the natural and manmade environments creates potential safety hazards associated with landslides, earthquakes and associated hazards such as liquefaction, subsidence, and ground rupture, floods, and avalanches (in the higher elevations of the County). Each of these hazards has particular characteristics that affect the future development of the County. Some of these safety hazards can be minimized with emergency planning, while other hazards are reduced by development standards and land use planning.

THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact to geology and soils if it would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42;
 - Strong seismic ground shaking;
 - Seismic-related ground failure, including liquefaction; or,
 - Landslides;
- Result in substantial soil erosion or loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; or,
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water.

4.6.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACT 4.6-1: EXPOSE PEOPLE OR STRUCTURES TO SUBSTANTIAL ADVERSE EFFECTS, INCLUDING THE RISK OF LOSS, INJURY, OR DEATH INVOLVING THE RUPTURE OF A KNOWN EARTHQUAKE FAULT.

Nevada County is located in a seismically active region of California although the County is not mapped on the Alquist-Priolo Earthquake Fault Zone Map prepared by the California Geological Survey (CGS 2010). However, Nevada County is underlain by numerous faults and fault zones. While most of the faults and fault zones are classified as Pre-Quaternary faults (i.e., older than 1.6 million years) and do not show recognized Quaternary displacement they are not necessarily inactive. In addition, Nevada County has experienced recent seismic activity on an unnamed fault near the Dog Valley Fault Zone in the vicinity of Truckee. As a result, while surface rupture from a known fault is unlikely to occur, the existing and future

cultivation sites would likely experience moderate ground shaking as a result of earthquakes occurring on off-site faults. As explained in Section 4.12, Population and Housing, the proposed project is not anticipated to result in a substantial population increase in the number of residents or employees in the County who would be exposed to the dangers or effects of the rupture of a known earthquake fault.

Under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain an Administrative Development Permit (ADP) and an Annual Cannabis Permit (ACP). The ACP would need to be renewed annually.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, and would require to registration with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, either indoors or outdoors, could only occur on a property with a legally permitted residence. Accordingly, all residential and accessory structures used for indoor cultivation would be required to be properly permitted and conform to all applicable building requirements to ensure that it was or is built to be structurally sound and not constructed over a known fault. Although fault rupture could occur over an area proposed for outdoor personal use cultivation, the cultivation activity itself would not alter the geologic setting of the site and would not result in or induce seismic ground shaking and associated fault rupture. Therefore, verification of proper permitting would ensure that all structures on the properties proposed to contain the cultivation sites would not and have not been not be constructed on a known earthquake fault. Impacts in this regard would be less than significant and mitigation is not required.

Cannabis cultivation for commercial or non-remuneration, would require processing of a Commercial Cannabis Permit (CCP) for cultivation areas less than 2,500 sf of canopy and an ADP for cultivation 2,500sf to 10,000 sf. An ADP could be used for cultivation activities up to 10,000 sf of canopy, which is the maximum allowed under the proposed NCCO. Conformance to applicable regulations for an ADP could be made by the Planning Director.

Some commercial cannabis cultivation activities under a CCP may occur in areas that are considered seismically active and at risk of fault rupture. All cannabis cultivation projects under a CCP would be required to comply with all applicable building code requirements. Conformance with the CBC as well as all County building codes would ensure that habitable structures are not constructed in an area that would be subject to fault rupture. This would include prohibiting cultivation in areas that could exacerbate the dangers of an existing fault hazard. This would ensure that impacts in this regard are less than significant.

As part of the ADP process, the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with federal, State, and local laws and regulations, including, but not limited to the most recent CBC (CCR Title 24), Alquist-Priolo Act, Nevada County General Plan (NCGP), and the Nevada County Land Use and Development Code Title III - Chapter V Buildings. More specifically, conformance with the Alquist-Priolo Earthquake Fault Zoning Act, would require that no structure intended for human occupancy as well as any other structure, tank, pond, or other storage reservoir, or any other cannabis-related appurtenance including sheds, or greenhouses, be constructed or erected within 50 feet of any active faults designated and mapped pursuant to this Act.

In regard faults and Alquist Priolo Zone or ground rupture, conformance to the development standards contained in Section L-II 4.3.8 Earthquake Faults & Seismically Sensitivity would be required for cultivation projects under an ADP. All projects found to be within a Seismically Active Area, defined as an area

determined to be within a seismic hazard zone or to have the potential to suffer ground rupture would be required to conform to the applicable development standards. These standards include denial of the project unless a management plan, prepared by a certified engineering geologist or civil engineer can minimize safety impacts associated with the project. At a minimum, the Management Plan would be required to include a Geotechnical Report that includes the following:

- Existing soils and geologic conditions, including location and chronology of local faults and epicenters, relationship of the site to said faults and epicenters, and other environmental factors, including rainfall, slopes, water table, vegetation, etc. that might affect soils and geologic conditions;
- Conclusions of potential seismic hazards relative to the specific intended land use; and
- Recommended construction and/or land use restrictions that will avoid the hazard or lessen the hazard to an acceptable level, including construction techniques, building heights, site preparation measures, building setbacks, etc.

Where the Management Report determines that a seismic hazard does exist, conclusions and recommendations to lessen the seismic hazard shall be incorporated into the conditions of approval of the project. Where the Report determines that the seismic hazard cannot be lessened to an acceptable level, the project shall be denied. Therefore, compliance to federal, State, and local laws, regulations, and policies would reduce potential impacts to cannabis-related facilities from adverse effects, including the risk of loss, injury, or death involving the rupture of a known earthquake fault. Although some grading and leveling of surfaces may occur to create flats on which the permitted cultivation of up to 10,000 sf of canopy could occur, these activities and subsequent on-going cultivation activities would not change the geologic setting of the site and would not result in or induce fault rupture.

MITIGATION MEASURES

Mitigation would not be required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.6-2: EXPOSE PEOPLE OR STRUCTURES TO SUBSTANTIAL ADVERSE EFFECTS, INCLUDING THE RISK OF LOSS, INJURY, OR DEATH INVOLVING STRONG SEISMIC GROUND SHAKING.

Given the high seismicity of Nevada County and the northern California region as a whole, moderate to severe ground shaking associated with earthquakes can be expected throughout County. As a result, the existing and future cultivation project sites would likely experience strong ground shaking resulting from moderate to strong earthquakes during the lifetime of the proposed project. Earthquake-related ground shaking may cause concrete slabs, building walls, and pavement at the sites to crack, potentially threatening the integrity of the structures and the safety of the people present at the time of the earthquakes. As explained in Section 4.12, Population and Housing, the proposed project is not anticipated to result in a substantial population increase in the county and the proposed project would not result in a considerable increase of the number of residents or employees within the County that would be exposed to strong seismic ground shaking.

Under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. For all commercial and non-remuneration cultivation, applicants

would be required to apply for and obtain a CCP for cannabis cultivation 2,500 sf or less and an ADP for cannabis cultivation 2,500 sf to 10,000 sf. An ACP would need to for all projects and would be renewed annually.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, either indoors or outdoors, could only occur on a property with a legally permitted residence. Accordingly, all residential and accessory structures used for indoor cultivation would be required to be properly permitted and conform to all applicable building requirements to ensure that it was or is built to be structurally sound and not constructed over a known fault. Although strong seismic ground shaking could occur, these cultivation activities would not alter the geologic setting of the site and would not result in or induce seismic ground shaking. Therefore, verification of proper permitting would ensure the structures on these cultivation sites would be and have been properly constructed so that the risk of loss, injury, or death from seismically induced ground shaking would not be substantial. Impacts in this regard would be less than significant in this regard and mitigation would not be required.

Some commercial cannabis cultivation activities under a CCP may occur in areas that are considered seismically active and at risk of fault rupture. All cannabis cultivation projects under a CCP would be required to comply with all applicable building code requirements. Conformance with the CBC as well as all County building codes would ensure that all habitable structures used for cultivation purposes comply with the most recent requirements to reduce the adverse effects, including the risk of loss, injury, or death from strong seismic ground shaking. This would include prohibiting cultivation in areas that could exacerbate an existing seismic hazard. This would ensure that impacts in this regard are less than significant.

Cannabis cultivation for commercial or non-remuneration for projects under and ADP would require processing as part of the design and review process to ensure conformance to applicable regulations and could be made by the Planning Director.

As part of the ADP process, the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with federal, State, and local laws and regulations, including, but not limited to the most recent CBC (CCR Title 24), Alquist-Priolo Act, Nevada County General Plan (NCGP), and the Nevada County Land Use and Development Code Title III - Chapter V Buildings. More specifically, during the plan review process the county would ensure that existing structures comply with all applicable building codes, and that plans for all new structures conform to the design requirements of the California Building Code seismic design standards and Nevada County Building Code. Compliance to federal, State, and local laws, regulations, and policies would ensure the risks of strong seismic ground shaking are not increased and also would reduce potential impacts to cannabis-related facilities from adverse effects of strong seismic ground shaking to less than significant.

Existing cannabis cultivation projects that are part of the estimated 3,500 currently operating in the County also would have to apply for a CCP or and ADP depending on their cannabis canopy size and parcel acreage. To obtain a permit, these applicants would be required to show that their operations and all structures conform to Nevada County Building Codes and federal, State, and local laws, regulations, and policies related to geotechnical issues. It is anticipated that some operations would not be fully compliant

and that these cultivators would be required to bring their facilities into compliance. This would be considered a reduction in existing risk and be a beneficial effect of the proposed project.

MITIGATION MEASURES

Mitigation would not be required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.6-3: EXPOSE PEOPLE OR STRUCTURES TO SUBSTANTIAL ADVERSE EFFECTS, INCLUDING THE RISK OF LOSS, INJURY, OR DEATH INVOLVING SEISMIC-RELATED GROUND FAILURE, INCLUDING LIQUEFACTION.

Seismically induced ground motions have the potential to initiate secondary events such as liquefaction, which could also threaten the integrity of the structures and safety of the people present on the sites. Liquefaction occurs when saturated, loose materials (e.g., sand or silty sand) are weakened and transformed from a solid to a near-liquid state as a result of increased pore water pressure. A site's susceptibility to liquefaction is a function of depth, density, groundwater level, and magnitude of an earthquake. For liquefaction to occur, the soil must be saturated (i.e., shallow groundwater) and relatively loose. The surface effects of liquefaction can cause structural distress or failure due to ground settlement, lurching, loss of bearing capacity in the foundation soils, and the buoyant rise of buried structures or utilities, and development of lateral spreads. Sites with potentially liquefiable soils and groundwater table within the upper 50 feet are generally considered to be most susceptible to liquefaction) (Caltrans, 2014). Groundwater levels can fluctuate between wet and dry years, as well as from site to site and proximity to surface water features such as rivers, streams, and lakes. As explained in Section 4.12, Population and Housing, the proposed project is not anticipated to result in a substantial population increase in the county and the proposed project would not result in a considerable increase of the number of residents or employees within the County that would be exposed to liquefaction.

Under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain an ADP and an ACP. The ACP would need to be renewed annually.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, either indoors or outdoors, could only occur on a property with a legally permitted residence. Accordingly, all residential and accessory structures used for indoor cultivation would be required to be properly permitted and conform to all applicable building requirements to ensure that it was or is built to be structurally sound. Although seismically induced liquefaction could still occur, these cultivation activities would not change the geologic setting of the site and would not result in or induce liquefaction. Therefore, verification of proper permitting would ensure the structures on these cultivation sites would be and have been properly constructed so that the risk of loss, injury, or death from seismically induced ground shaking and liquefaction would not be substantial. Impacts in this regard would be less than significant in this regard and mitigation would not be required.

Some commercial cannabis cultivation activities under a CCP may occur in areas that are at risk of ground failure and liquefaction. All cannabis cultivation projects under a CCP would be required to comply with all applicable building code requirements. Conformance with the CBC as well as all County building codes would ensure that all habitable structures used for cultivation purposes comply with the most recent requirements to reduce the adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. This would include prohibiting cultivation in areas that could exacerbate hazards in an existing liquefaction zone. This would ensure that impacts in this regard are less than significant.

Cannabis cultivation for commercial or non-remuneration from 2,500 sf to 10,000 sf, would require processing of an ADP. Conformance to applicable regulations for an ADP would be made during the planning and review process and could be made by the Planning Director.

As part of the ADP process, the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with federal, State, and local laws and regulations, including, but not limited to the most recent CBC (CCR Title 24), Alquist-Priolo Act, Nevada County General Plan (NCGP), and the Nevada County Land Use and Development Code Title III Chapter V Buildings. As discussed above, all existing and future commercial cultivation projects would be subject to a design review process at which time the project would be evaluated for conformance with applicant building codes. Compliance to federal, State, and local laws, regulations, and policies would reduce potential impacts to cannabis-related facilities from adverse effects of liquefaction induced by strong seismic ground shaking. Additionally, although some grading and leveling of surfaces may occur to create flats on which the permitted cultivation of up to 10,000 sf of canopy could occur, these activities and subsequent on-going cultivation activities would not change the geologic setting of the site and would not result in or induce liquefaction or other seismically induced ground failure resulting in an increased risk of loss, injury, or death. Impacts would be less than significant, and mitigation is not required.

Existing cannabis cultivation projects that are part of the estimated 3,500 currently operating in the County also would have to apply for a CCP or and ADP depending on their cannabis canopy size and parcel acreage. To obtain a permit, these applicants would be required to show that their operations and all structures conform to Nevada County Building Codes and federal, State, and local laws, regulations, and policies related to geotechnical issues. It is anticipated that some operations would not be fully compliant and that these cultivators would be required to bring their facilities into compliance. This would be considered a reduction in existing risk and be a beneficial effect of the proposed project.

MITIGATION MEASURES

Mitigation would not be required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.6-4: EXPOSE PEOPLE OR STRUCTURES TO SUBSTANTIAL ADVERSE EFFECTS, INCLUDING THE RISK OF LOSS, INJURY, OR DEATH INVOLVING LANDSLIDES.

Unstable or potentially unstable slopes are those areas susceptible to slides, falls, creeps, or flows, and are influenced by topography, climate, geology, and hydrology. The California Department of Conservation provides landslide mapping based on the 7.5-minute quadrangles for some parts of the state. However, not all portions of the state, to include all of Nevada County are mapped. This does not

mean that those areas not mapped are not susceptible to landslides. Nevada County contains a diverse landscape from the valley floor to Sierra Nevada Mountains and landslides can and do occur within Nevada County. Landslides can occur in connection with natural processes such as earthquakes, volcanic eruptions, wildfires, and floods. Landslides in Nevada County are influenced by factors such as the strength of the underlying materials including rocks and soils, surface and groundwater conditions, surface vegetation, and rainfall. Landslides are normally associated with areas of steep slopes generally greater than 30 percent. Slopes greater than 30 percent are present within Nevada County especially within the central and eastern portion of the County within the foothills and Sierra Nevada Mountains.

Avalanche hazard areas are generally located on high, mountainous slopes and terrain at elevations above 7,000 feet. Although it is unlikely due to lack of proper season long growth conditions that commercial cultivation would occur within an area prone to avalanches, it is possible that an indoor or mixed-light cultivation area may be existing or proposed. If unstable snow conditions exist above these locations and the snow becomes destabilized, this could result in hazardous conditions to people and structures in the path of the potential avalanche.

Under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain an ADP and an ACP. The ACP would need to be renewed annually.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, indoors or outdoors, could only occur on a property with a legally permitted residence and in that residence or a permitted accessory structure. Although landslides in these areas could occur, these cultivation activities are small in scale, would not change the geologic setting of the site, and would not be expected to induce a landslide.

In addition, verification of proper permitting would ensure the structures on these cultivation sites would be and have been properly constructed so that the risk of loss, injury, or death from being constructed in a landslide hazard zone would not occur. Therefore, impacts in regard to landslides and avalanche hazards would be less than significant in this regard.

Some commercial cannabis cultivation activities under a CCP may occur in areas that are at risk landslides. All cannabis cultivation projects under a CCP would be required to comply with all applicable building code requirements. Conformance with the CBC as well as all County building codes would ensure that all habitable structures used for cultivation purposes comply with the most recent requirements to reduce the adverse effects, including the risk of loss, injury, or death from land sliding. This would include prohibiting cultivation in areas that could exacerbate and existing landslide hazard. This would ensure that impacts in this regard are less than significant.

Cannabis cultivation for commercial or non-remuneration, would require processing of an ADP. An ADP could be used for cultivation activities less than 2,500 sf of canopy. Conformance to applicable regulations for an ADP is considered a discretionary approval and could be made by the Planning Director.

Some commercial cannabis cultivation may occur in areas with steep slopes that could more be prone to land sliding and avalanche hazards. As part of ADP process, the sites proposed for use for commercial or

non-remuneration cultivation would be required to provide proof of compliance with federal, State, and local laws and regulations, including, but not limited to the most recent CBC (CCR Title 24), Alquist-Priolo Act, Nevada County General Plan (NCGP), and the Nevada County Land Use and Development Code Title III - Chapter V Buildings.

In regard to avalanches, conformance to the development standards contained in Section L-II 4.3.5 Avalanche Hazards would be required. The development standard requires an Avalanche Hazard Study be prepared by a recognized and qualified avalanche hazard expert when a project is located within an avalanche hazard zone and shall be required to comply with restrictions defined in the Potential Snow Avalanche Area Combining District.

As discussed above, all the existing 3,500 cannabis cultivation operations and future commercial cultivation projects would be subject to a design review process at which time the project would be evaluated for conformance with applicant building codes. This would include verification that the project is not located in a landslide hazard zone. Compliance to federal, State, and local laws, regulations, and policies would reduce potential impacts to cannabis-related facilities from adverse effects of building structures or authorizing cultivation in existing structures within a landslide hazard zone, or within an area that would exacerbate and existing landslide hazard. As a result, impacts would be less than significant.

MITIGATION MEASURES

Mitigation would not be required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.6-5: RESULT IN SUBSTANTIAL SOIL EROSION OR LOSS OF TOPSOIL.

Soils within the county are categorized in a total of 29 soil different series and are further delineated into approximately 95 soil types. The erosion potential of the various soil types ranges from slow to rapid depending on their constituents, vegetative cover, rainfall, the slopes on which they are located, as well as other variables. Existing and future cultivation areas would be permitted within unincorporated county areas that would differ in soil types resulting in different erosion potentials based on the specific cultivation area. Other factors such as removal of vegetation or potential grading and earthwork could expose the topsoil and underlying soils to erosive forces and the potential for soil erosion from wind or stormwater runoff could be increased.

Under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain a CCP for cultivation less than 2,500 sf and an ADP for cultivation 2,500 sf to 10,000 sf. An ACP also would be required and need to be renewed annually.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. Outdoor cultivation for personal use would only be allowed on R-A parcels five acres and greater and on AG, AE, FR, TPZ, greater than two acres. The outdoor area needed to cultivate six cannabis plants would be a relatively small area and similar in size to a small garden. The potential for substantial soil loss through erosion in these areas is minimal. Although there is potential for minimal soil loss from outdoor personal

use cultivation in the area used to grow the six plants, the impacts would be less than significant. While plants are small more bare soil would be exposed, however, as the plants grow and mature, the potential for soil loss would be further reduced. Indoor cultivation of cannabis for personal use would not result in any off-site soil erosion and impacts would not occur. Therefore, the potential for loss of top soil from person use cultivation is less than significant and mitigation is not to be required.

Commercial cannabis cultivation would be expected to be distributed throughout the County and would likely occur on some lands within steep slopes or soils prone to erosion. Cultivation occurring in outdoor areas and in greenhouses, if not properly managed could contribute to and exacerbate soil erosion and loss of topsoil's. Additionally, implementation of the proposed project could potentially result in an increase of cultivated cannabis in undisturbed areas requiring ground disturbance, including clearing, grading, and construction of support structures such as sheds and greenhouses. Operational activities associated with soil tilling, watering, weed control, road maintenance, and other activities may contribute to erosion impacts.

If these areas are not properly stabilized during construction the soil loss and erosion by wind and storm water runoff could be substantial. Within existing and future cultivation sites, erosion would be an ongoing process that would continue primarily within high wind areas and following periods of intense rainfall. While cultivation would not be allowed in or adjacent to streams, drainages, washes, wetlands, or other naturally occurring areas such as ponds or lakes conduct or contain volumes of water cultivation may be occurring in these areas now. These areas, as well as future cultivation that is not properly contained could result in erosion to these habitats and downstream waters.

Some cannabis cultivators currently operate or could be proposed in areas of steep slopes that could be prone to erosion when soil is disturbed. In regard to projects with steep slopes and soils with high erosion potential, conformance to the development standards contained in Section L-II 4.3.13 Steep Slopes/High Erosion Potential would be required. As discussed in that section, this resource standard would apply to all development permits, use permits, and subdivisions. Therefore, both CCPs and ADPs would be required to conform to the requirements of this code. Additionally, an ACP also would be required and need to be renewed annually. This would confirm compliance on a yearly basis.

As defined, development, including access in an area with steep slopes or high erosion potential shall only be approved as provide in the listed section. Development would be allowed on steep slopes subject to a grading permit pursuant to Section L-V 3.25 of the Land Use and Development Code (Grading Ordinance). If the amount of disturbance does not require a grading permit, limited development shall be subject to an Erosion and Sediment Control Plan, approved by the Building Department. Limited development in reference to the above would only apply to the following, some of which may be applicable to existing and future projects or may be needed to satisfy permitting standards or conditions needed for project approval.

- Utility trenching, including, but not limited to, water, electric, gas, sewer and phone lines;
- Crop and tree planting;
- Water wells and sewage disposal systems for allowed on-site uses;
- Only one single-family residence, including driveway will be allowed per parcel on a steep slope or approved by the Nevada County Planning Agency prior to October 12, 1981, subject to a grading permit pursuant to Section L-V 3.25 of the Land Use Development Code and following:

- Lot pad grading shall be limited in size to a maximum 5,000 square feet, to allow for the construction of the primary single-family residence, a garage, a yard, and parking area;
- Cut or fill slopes shall be designed and constructed to not exceed a vertical height of 10 feet;
- Slopes created by grading shall not exceed a ratio of 2:1 (horizontal to vertical), unless a steeper slope is certified by a geotechnical engineer to be stable;
- Structures are designed to “fit” or step up the natural slope by using split pads, stepped footings and grade separations;
- All outdoor light fixtures on steep slopes shall be fully shielded to prevent the light source of lens from being visible from adjacent properties and roadways. Mercury vapor light fixtures, floodlights and spotlights shall be prohibited; and
- Driveway access shall comply with Article 3, Chapter XVI of the Nevada County Land Use and Development Code, Driveways.

If a project is proposed in an area that is within a defined area, it may be allowed subject to the approval of a Management Plan pursuant to Section 4.3.3.C of Chapter II Zoning Regulations and the following:

- The Management Plan shall consist of an Erosion and Sediment Control Plan, prepared by a licensed geotechnical or civil engineer, engineering geologist, or certified soil erosion control specialist. The Management Plan shall comply with the erosion control standards of LUDC Chapter V: Buildings, Article 3: Uniform Building Code Amendments, and shall provide for, at a minimum, the structural control of flowing water and vegetative measures necessary to stabilize the soil surface. If the entire site is within a high erosion area, the Management Plan shall provide for the development of the project on the least sensitive portion of the site. Where seeding is deemed necessary in order to stabilize the soil surface, only native seed mixes shall be used. Where native seed mixtures are not available, then non-seed measures such as straw wattles, chips, erosion control blankets and weed-free straw shall be used.
- The Management Plan shall be approved, provided the following findings can be made:
 - That the proposed development ensures the preservation of the natural and topographic character of the slope; and
 - The aesthetic quality of the slope is ensured, including the preservation of significant rock outcroppings and native plant materials; and
 - That alternatives to development on steep slopes are not feasible; and
 - That disturbance of steep slopes is minimized to the greatest extent possible; and
 - That water quality problems created by sedimentation and/or excessive vegetation removal are minimized.

In addition, all grading within the defined area that requires a grading permit would include an evaluation by a registered geotechnical engineer who would provide a written determination as to whether a design level, geotechnical investigative report is recommended. If recommended by the geotechnical engineer, a design level geotechnical investigative report, prepared by a registered geotechnical engineer, would be included with the grading permit. The report would include, but not be limited to, comments on slope stability, retaining wall design, foundation design, and other impacts associated with the disturbance of steep slopes. The report would explain how the design of the project addresses those issues.

Lastly, the Development Standards require that fuel modification be provided and maintained on steep slopes in accordance with the section.

In addition to the listed development standards, erosion on the estimated 3,500 existing cannabis cultivation operations as well as future cannabis cultivation sites would be controlled using standard construction practices and best management practices (BMPs) throughout the life of the projects. Accordingly, all existing and future projects would be evaluated to ensure that where and when required, bare soil is stabilized during the earthwork needed to create the planting/garden sites. Individual projects would be evaluated, and based on their size and location compliance with the Federal CWA, as well as regulations of the State Water Resources Control Board (SWRCB), including preparation of a Stormwater Pollution Prevention Plan (SWPPP), which would include existing and future project site-specific BMPs for erosion and sediment control, or a Water Resources Protection Plan (WRPP) would be prepared and implemented depending on the cultivation area, water sources, and proximity to water sources.

Adherence to these applicable state and local regulations, codes and requirements, identified above, would ensure that impacts associated with construction and operational related soil erosion would be less than significant.

MITIGATION MEASURES

Mitigation would not be required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.6-6: BE LOCATED ON A GEOLOGIC UNIT OR SOIL THAT IS UNSTABLE, OR THAT WOULD BECOME UNSTABLE AS A RESULT OF THE PROJECT, AND POTENTIALLY RESULT IN ON- OR OFF-SITE LANDSLIDE, LATERAL SPREADING, SUBSIDENCE, LIQUEFACTION, OR COLLAPSE.

If not properly screened, cannabis cultivation could occur on lands or geologic units that are unstable or that would become unstable as a result of cultivation activities. This could result in cultivation areas occurring within areas subject to geologic hazards, including landslides, lateral spreading, subsidence, liquefaction, or collapse. Liquefaction and landslides, are discussed in Impacts 4.6-3 4.6-4, above and through the permitting process and implementation of mitigation, found to be less than significant.

Lateral spreading and collapse also could occur during a ground shaking event within the County and could affect cultivation sites occurring as a result of the proposed project. Subsidence, also could occur as a result of seismic ground motions but also as a result of water drawdown in areas underlain by softer and porous alluvium and fill materials.

Under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain a CCP for cultivation less than 2,500 sf and an ADP for cultivation between 2,500 to 10,000 sf. An ACP would be required for all cultivation projects and need to be renewed annually.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, either indoors or outdoors, could only occur on a property with a legally permitted residence. Accordingly, all residential and accessory structures used for indoor cultivation

would be required to be properly permitted and conform to all applicable building requirements to ensure that it was or is built to be structurally sound. Although seismically induced lateral spreading or collapse could still occur, these cultivation activities would not change the geologic setting of the site and would not result in or induce these secondary seismic effects. Additionally, the cultivation activities in these instances would not substantially change the soil constituents over a large enough area and would not draw enough water, if groundwater is used for either indoor or outdoor cultivation, to change the existing conditions or increase the potential for these hazards to occur. Therefore, verification of proper permitting would ensure the structures on these cultivation sites would be and have been properly constructed so that the risk of loss, injury, or death from seismically induced ground shaking and liquefaction would not be substantial. Impacts would be less than significant in this regard and mitigation would not be required.

Some commercial cannabis cultivation activities under a CCP or ADP may occur in areas that are at risk landslides. All cannabis cultivation projects under both permits would be required to comply with all applicable building code requirements. As part of the application process, the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with federal, State, and local laws and regulations, including, but not limited to the most recent CBC (CCR Title 24), Alquist-Priolo Act, Nevada County General Plan (NCGP), and the Nevada County Land Use and Development Code Title III - Chapter V Buildings. As discussed above, all existing and future commercial cultivation projects would be subject to a design review process at which time the project would be evaluated for conformance with applicant building codes. It is expected that compliance to federal, State, and local laws, regulations, and policies would reduce potential impacts to cannabis-related facilities from adverse effects, including the risk of loss, injury, or death from lateral spreading or subsidence.

Although some grading and leveling of surfaces may occur to create flats on parcels with the estimated 3,500 cannabis cultivation operations the permitted cultivation could occur, these activities and subsequent on-going cultivation activities would not change the geologic setting of the site and would not result in or induce lateral spreading or subsidence. Adherence to these applicable state and local regulations, codes and requirements, as identified above and in more detail in Section 4.8 Hydrology and Water Quality, would ensure that impacts associated with construction and operational related soil erosion would be less than significant.

MITIGATION MEASURES

Mitigation would not be required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.6-7: BE LOCATED ON EXPANSIVE SOIL, AS DEFINED IN TABLE 18-1-B OF THE UNIFORM BUILDING CODE (1994), CREATING SUBSTANTIAL RISKS TO LIFE OR PROPERTY.

Existing and future cultivation activities under the proposed project could occur in areas that contain expansive soils and soils that are listed on Table 18-1-B of the uniform building code. These types of soils are not typically suitable for use within proposed paved areas, building footprints, or any other improvements which may be susceptible to swell or expansive soil induced distress without mitigation.

Under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain a CCP for cultivation less than 2,500 sf or an ADP for cultivation between 2,500 to 10,000 sf. An ACP would be required for all cultivation projects and would need to be renewed annually.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, indoors or outdoors, could only occur on a property with a legally permitted residence and in that residence or a permitted accessory structure. Although there are expansive soils located within the county these cultivation activities would not substantially change the soils underlying the cultivation area leading to or exacerbating any existing soil characteristics that would lead to expansion. Additionally, verification of proper permitting would ensure the structures on these cultivation sites would be and have been properly constructed so that the risk of loss, injury, or death from being constructed on an expansive soil would not occur. Therefore, impacts in this regard would be less than significant and mitigation would not be required.

Some commercial cannabis cultivation activities under a CCP or ADP may occur in areas that are at risk landslides. All cannabis cultivation projects, including those of the estimated 3,500 existing cannabis cultivation operations, under both permit types, CCPs and ADPs, would be required to comply with all applicable building code requirements. As part of the application process, the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with federal, State, and local laws and regulations, including, but not limited to the most recent CBC (CCR Title 24), Alquist-Priolo Act, Nevada County General Plan (NCGP), and the Nevada County Land Use and Development Code Title III - Chapter V Buildings. Compliance to federal, State, and local laws, regulations, and policies would reduce potential impacts to cannabis-related facilities from adverse effects of being located on expansive soils. Although some grading and leveling of surfaces may occur to create flats on these parcels, grading activities and subsequent or on-going cultivation activities would not result in the creation of soils that would be more susceptible to liquefaction. In addition, issuance of a cannabis permit would not authorize the construction of any residential structures in an area affected by expansive soils. As a result, impacts would be less than significant.

MITIGATION MEASURES

Mitigation would not be required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.6-8: HAVE SOILS INCAPABLE OF ADEQUATELY SUPPORTING THE USE OF SEPTIC TANKS OR ALTERNATIVE WASTEWATER DISPOSAL SYSTEMS WHERE SEWERS ARE NOT AVAILABLE FOR THE DISPOSAL OF WASTEWATER.

The proposed project involves permitting of cannabis for personal, commercial, and non-remuneration uses. Although the proposed project does not provide for new development, the existing homes as well as new homes that would be constructed as part of planned and expected growth within the County may engage in cultivation activities. If these homes are not served by an existing or would not be served by a

permitted proposed sewer system for treatment at a downstream wastewater treatment plant, they would be expected to utilize an onsite wastewater treatment system (OWTS) such as a septic tank and leach field. Within the County, depending on location, the existing soils can present significant constraints to septic uses and effluent disposal due to slow permeability, steep slopes, and shallow soils. The 1995 General Plan EIR notes that the USSCS classifies all soil types within Nevada County as having “severe” limitation for private sewage disposal due to slope and depth of soil. The County, however, has further delineated the soils into four categories based on variations in soil depth, slope, and percolation rates. While the categories do not necessarily indicate suitability for on-site disposal system it provides a comparison of soils and constraints for use with septic systems.

All projects that will require to use of employees and proposing to utilize septic systems would be required providing an existing septic permit or, if the septic system was installed prior to permitting, or if the permit is not available, the applicant would be responsible for obtaining a back permit or reissued permit from the Nevada County Department of Health and Human Services. If a septic system is not proposed to be used, a wastewater system connected to the wastewater treatment plant, with adequate capacity, is required. If there is no existing wastewater system, or septic system installed, the applicant will be required to show a contract with a company providing portable toilets until such time a permanent system is installed.

Under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain a CCP for cultivation less than 2,500 sf or an ADP for cultivation between 2,500 to 10,000 sf. An ACP would be required for all cultivation projects and would need to be renewed annually.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, indoors or outdoors, could only occur on a property with a legally permitted residence and in that residence or a permitted accessory structure. The permitted residence either existing, or one that would be proposed, would be expected to have or provide for the construction of a permitted septic system or connection to a sewer system. Verification of proper OWTS or sewer system connection would ensure the structures on these cultivation sites would provide proper wastewater facilities for use by owners and potential employees. Therefore, impacts in this regard would be less than significant and mitigation would not be required.

Some commercial cannabis cultivation activities under a CCP or ADP may occur in areas that are at risk landslides. All cannabis cultivation projects, including those of the estimated 3,500 existing cannabis cultivation operations, under both permit types, CCPs and ADPs, would be required to comply with all applicable building code requirements including those for permitting of OWTS. As part of this application process, the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with the Nevada County Land Use and Development Code relating to OWTS. As discussed above, the permitted residence either existing, or one that would be proposed, would be required to have already installed or provide for the construction of a permitted septic system or connection to a sewer system. Verification of proper OWTS or sewer system connection would ensure the structures on these cultivation sites would provide proper wastewater facilities for use by owners and

potential employees. Therefore, impacts in this regard would be less than significant and mitigation would not be required.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant.

4.7 HAZARDS AND HAZARDOUS MATERIALS

This section of the Environmental Impact Report (EIR) describes the affected environment and regulatory setting related to hazards and hazardous materials. It also describes the impacts of hazards and hazardous materials that would result from implementation of the Nevada County Cannabis Ordinance (proposed NCCO or proposed project) and provides a qualitative evaluation of the potential for the proposed ordinance to create a significant hazard for the public or the environment, conflicts with airspace or adopted emergency response plans, and potential to expose people to wildland fires. The regulatory setting applicable hazards and hazardous materials is presented in *Section 4.7.3: Regulatory Setting*, while the project impacts and associated mitigation measures are analyzed in *Section 4.7.4: Impacts and Mitigation Measures*.

4.7.1 ENVIRONMENTAL SETTING

The project site encompasses the unincorporated areas of Nevada County. Nevada County is located in northeastern California and is bordered by Yuba and Sierra Counties to the north, the state of Nevada to the east, and Placer County to the south. Nevada County's total land area is approximately 978 square miles or approximately 612,900 acres, of which approximately 70 percent is privately owned and approximately 30 percent is public lands. The geography of Nevada County is comprised of low lying valleys to mountainous areas. Nevada County is within a portion of the Sierra Nevada range, a geologic block approximately 400 miles long and 80 miles wide that extends in a north-south band along the eastern portion of California. The western third of the County is comprised of rolling foothills, which form a transition between the low-lying Sacramento Valley on the west and the mountains to the east. The eastern two-thirds of the County is comprised of the generally steep, granitic terrain within the Sierra Nevada range.

WILDLAND FIRES

A typical fire season for Nevada County (County) ranges from May 15 to October 31, which is about 168 days, or 46 percent of the year. Peak fire season ranges from June 15 to October 15, or 122 days (33 percent) of the year. The extended wildfire season, linked to the Sierra Nevada region and the rest of California, can exceed 275 days (75 percent) of the year, and some years it can be a year-round season. It is also common to have wildfires burn during non-fire season periods in the County and throughout the state.

The interface of the natural and manmade environment creates potential safety hazards, including earthquakes (along with related seiches and dam failures), flooding and wildfires. Refer to *Section 4.6: Geology and Soils* for further information pertaining to potential impacts due to seismic hazards, and *Section 4.8: Hydrology and Water Quality* for further information on potential impacts related to flood hazards. There are several factors that influence the potential for fire hazard, including population growth, vegetation and slope, and weather. The County has a high potential for wildland fires of devastating intensity. Based on a "Fire Hazard Severity Zone" map developed by the CAL FIRE, almost all of the County has been placed in the "very high" category of severity, including the proposed project area.

Generally, vegetative areas over eight percent in slope are defined as fire hazardous. The steeper the slope, the faster the fire climbs. CAL FIRE has categorized vegetation based on fuel burning, or “fuel loading” characteristics.

These include:

- Light – flammable grass and annual herbs
- Medium – scrub brush of lighter species
- Heavy – timber, woodland, and heavier brush species

Weather also plays a critical role in determining fire hazard. According to the CAL FIRE, summers with little precipitation and low relative humidity dry out vegetation, which increases the amount of fuel available for burning. The drying winds of the winter months also contribute to fire hazard in the County.

SCHOOLS

Children are particularly susceptible to emissions from hazardous materials. A number of local governments have established restrictions on where cannabis businesses are allowed, especially near schools. There are 29 schools within the nine school districts in Nevada County (Nevada County, 2018). *Section 4.13: Public Services*, provides a full list of the school district and location of the schools within Nevada County.

AIRPORTS AND HELIPORTS

The Federal Aviation Administration (FAA) identifies 10 public and private airport and heliport facilities within Nevada County. The two public airports are Nevada County Airport, located at 13083 John Bauer, and Truckee-Tahoe Airport, located at 10356 Truckee Airport Road. The airports range in size and with some being public use and others private. They offer a wide variety of services such as hangar space, pilot license lessons, local aerial tours, helicopter rides, and skydiving classes. *Table 4.7-1: Airports and Heliports in Nevada County* shows the airports, location, and status as public or private.

Table 4.7-1: Airports in Nevada County

Airport	Location	Public/Private
Alta Sierra Airport	18575 Norlene Way, Grass valley	Private
Grass Valley Service Center Heliport	343 Sacramento Street, Auburn, CA	Private
Nevada County Air Park Airport	Grass Valley	Public
Shaws Hill Heliport	Grass Valley	Private
Sierra Nevada Memorial Hospital Heliport	Sierra Nevada Memoria Hospital 155 Glasson Way	Private
Jackson Lake Heliport	Jackson Lake	Private
Milhouz Ranch Airport	North San Juan	Private
Limberlost Ranch Airport	Rough and Ready	Private
Tahoe Forest Hospital Heliport	Truckee	Private
Truckee-Tahoe Airport	Truckee	Public
Source: FAA, 2018		

HAZARDOUS MATERIALS*HAZARDOUS WASTE AND SUBSTANCES SITES*

The State of California Hazardous Waste and Substances Site List (also known as the Cortese List) is a planning document used by state and local agencies and by private developers to comply with California Environmental Quality Act (CEQA) requirements in providing information about the location of hazardous materials sites. The California Department of Toxic Substances Control (DTSC) is responsible for preparing a portion of the information that comprises the Cortese List, through its EnviroStor database.

A review of the EnviroStor database indicated two hazardous sites within unincorporated Nevada County that require no further action (Homefacts, 2018). These sites include one military site and one evaluation site within the County (DTSC 2018). For the purposes of this project, the cities of Grass Valley, Nevada City, and Truckee were not analyzed as the proposed Nevada County Commercial Cannabis Cultivation Ordinance would not apply to these incorporated areas. *Table 4.7-2: Known Regulated Hazardous Sites within the County* list the known hazardous sites within the County.

Table 4.7-2: Known Regulated Hazardous Sites within the County

Site/Facility/Project Type	Number of Sites
Cleanup Program Site	10
Leaking Underground Storage Tanks (LUST) Cleanup Site	22
Waste Discharge Requirement (WDR) Site	1
Military Site	1
Evaluation Site	1
Source: California Department of Toxic Substances Control, 2018; California Environmental Protection Agency State Water Resources Control Board, 2018.	

LEAKING UNDERGROUND STORAGE TANKS

Leaking underground storage tanks (LUST) are a significant source of petroleum impacts to groundwater and can also result in potential threats to health and safety. The State Water Resources Control Board (SWRCB) records soil and/or groundwater contamination caused by LUSTs in its Geotracker database. An inquiry through SWRCB's Geotracker database identified 22 LUST sites within Nevada County (SWRCB 2018). Of the 22 sites listed, only one site is still active. The Floriston Waste Treatment Facility located between two tunnels on Floriston Road is a Waste Discharge Requirement (WDR) site that operates under WDRs issued by the SWRCB or a RWQCB. WDRs address non-designated waste discharges that are typically applied to land.

TRANSPORTATION OF HAZARDOUS SUBSTANCES

Interstate 80 (I-80), the Southern Pacific Railroad, and the Southern Pacific pipeline are the three major transportation routes by which tons of hazardous materials are transported through Nevada County (Nevada County 1995, p. 370). (Note: The Southern Pacific and Union Pacific railroads merged in 1996;

Union Pacific Railroad is the name by which the company is now known.) The Federal Motor Carrier Safety Administration (FMCSA) designates I-80 also is identified from the Nevada Border to the City of Oakland as a National Hazardous Materials Route (FMCSA, 2018). The Union Pacific railroad tracks roughly parallel I-80, and the underground hydrocarbon pipeline runs adjacent to the Union Pacific railway tracks (OES 2006, p. 60). Hazardous materials are also transported along State Routes (SR) 20, 49, 89, 174, and 267.

HAZARDOUS MATERIALS AND AGRICULTURE

Agriculture production activities, which include cattle, timber, pasture/rangeland, vegetables, wine grapes, and nursery flowers, occur throughout the County. Refer to *Section 4.2: Agricultural Resources* for a detailed discussion of agricultural land within the County. Agricultural activities generally involve the use of regulated hazardous materials, which include commercial pesticides. The Nevada County Agricultural Commissioner's Office regulates the use of pesticides in Nevada County by requiring submittal of a Pesticide Use Report for pesticide is applied which requires an operator identification number or a restricted materials permit (Nevada County, 2018). Pesticide use is carefully regulated under state law and consistent with guidelines issued by the California Department of Pesticide Regulation (DPR). DPR has published legal pest management guidance for cannabis growers in California, which include a list of active ingredients which can be used on cannabis and the pests that these active ingredients target (DPR 2017).

Unpermitted cannabis cultivation and manufacturing operations occur in agricultural areas. In addition, and as discussed in additional detail in 4.7.2 Regulatory Setting, below, Hazardous Materials Business Plans (HMBPs) would be required for all commercial cannabis cultivation. Since the operations are currently unregulated, existing cannabis activities involve unknown varieties and amounts of pesticides and hazardous materials.

4.7.2 REGULATORY SETTING

FEDERAL

Hazardous materials are defined and regulated in the United States primarily by laws and regulations administered by the U.S. Environmental Protection Agency (EPA), the U.S. Occupational Safety and Health Administration (OSHA), the U.S. Department of Transportation (DOT), and the U.S. Nuclear Regulatory Commission (NRC). Each has its own definition of a "hazardous material." OSHA's definition includes any substance or chemical which is a "health hazard" or "physical hazard," including: chemicals which are carcinogens, toxic agents, irritants, corrosives, sensitizers; agents which act on the hematopoietic system; agents which damage the lungs, skin, eyes, or mucous membranes; chemicals which are combustible, explosive, flammable, oxidizers, pyrophorics, unstable-reactive or water-reactive; and chemicals which in the course of normal handling, use, or storage may produce or release dusts, gases, fumes, vapors, mists or smoke which may have any of the previously mentioned characteristics. EPA incorporates the OSHA definition, and adds any item or chemical which can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment. (40 CFR 355 contains a list of over 350 hazardous and extremely hazardous substances (Institute of Hazardous Materials Management [IHMM, 2018])

U.S. ENVIRONMENTAL PROTECTION AGENCY (U.S. EPA)

The U.S. Environmental Protection Agency (U.S. EPA) was established in 1970 to consolidate in one agency a variety of federal research, monitoring, standard-setting, and enforcement activities to ensure

environmental protection. The U.S. EPA's mission is to protect human health and to safeguard the natural environment - air, water, and land - upon which life depends. The U.S. EPA works to develop and enforce regulations that implement environmental laws enacted by Congress, is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and tribes the responsibility for issuing permits and for monitoring and enforcing compliance. Where national standards are not met, the U.S. EPA can issue sanctions and take other steps to assist the states and tribes in reaching the desired levels of environmental quality.

CLEAN WATER ACT

The Clean Water Act (CWA) (33 U.S.C. Section 1251 et seq., formerly the Federal Water Pollution Control Act of 1972), was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). In California, NPDES permitting authority is delegated to, and administered by, the nine Regional Water Quality Control Boards (RWQCBs). The proposed project is within the jurisdiction of both the Central Coast RWQCB and the San Francisco Bay RWQCB.

Section 402 of the Clean Water Act authorizes the California SWRCB to issue NPDES General Construction Storm Water Permit (Water Quality Order 99-08-DWQ), referred to as the "General Construction Permit." Construction activities can comply with and be covered under the General Construction Permit provided that they:

- Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving off-site into receiving waters;
- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation; and
- Perform inspections of all BMPs.

NPDES regulations are administered by the RWQCB. Projects that disturb one or more acres are required to obtain NPDES coverage under the Construction General Permits.

As part of the CWA, the U.S. EPA oversees and enforces the Oil Pollution Prevention regulation contained in Title 40 of the CFR, Part 112 (Title 40 CFR, Part 112), which is often referred to as the "SPCC rule" because the regulations describe the requirements for facilities to prepare, amend, and implement Spill Prevention and Countermeasures (SPCC) Plans. A facility is subject to SPCC regulations if a single oil (or gasoline, or diesel fuel) storage tank has a capacity greater than 660 gallons, the total aboveground oil storage capacity exceeds 1,320 gallons, or the underground oil storage capacity exceeds 42,000 gallons, and if, due to its location, the facility could reasonably be expected to discharge oil into or upon the "Navigable Waters" of the United States.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

OSHA's mission is to ensure the safety and health of America's workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual

improvement in workplace safety and health. OSHA staff establishes and enforces protective standards and reaches out to employers and employees through technical assistance and consultation programs. OSHA standards are listed in Title 29 CFR Part 1910.

While Cal/OSHA has a broad range of workplace safety regulations, several Cal/OSHA regulations apply to workplaces in the cannabis industry. All employers in the cannabis industry, including those who cultivate, manufacture, distribute, sell, and test marijuana products, must take steps to protect their employees from all health and safety hazards associated with their work. Among other requirements for Cannabis cultivators, all employers in California are required to have an effective written Injury and Illness Prevention Program (IIPP). The IIPP must include procedures to identify and correct health and safety hazards in the workplace and provide effective training so employees can perform work safely. Other Occupational health and safety regulations that may apply to cultivators who utilize employees includes safety related training and facility design related to electric hazards, exposure to airborne contaminants, flammable liquids and gasses, hazard communication, hazardous energy, heat illness prevention, machine hazards, personal protective equipment, point of operation hazards, pressure vessels, prohibition of smoking in the workplace, repetitive motion injuries, sanitation and pest control, slips, trips, falls, and use of ladders.

Labor Code section 147.61 required Cal/OSHA to convene an advisory committee to evaluate whether industry-specific regulations need to be developed for employers licensed under the Medicinal and Adult-Use Cannabis Regulation and Safety Act (hereafter called “cannabis establishments”). In particular, Cal/OSHA and the advisory committee were to consider whether specific requirements are needed to address employee exposure to secondhand marijuana smoke where on-site consumption of marijuana is permitted and the potential risks of combustion, inhalation, armed robbery, or repetitive strain injuries. The advisory committee was to present its findings and recommendations to the Occupational Safety and Health Standards Board (Standards Board) by October 1, 2018.

On September 7, 2018, Cal/OSHA presented the memorandum regarding the advisory committee’s findings and recommendations on the need to develop industry-specific regulations for marijuana (cannabis) establishment. The memorandum that,

“Existing regulations currently address the potential risks of combustion, inhalation of harmful substances other than secondhand marijuana smoke, armed robbery, and repetitive strain injuries and the lack of sufficient training for employees. Employers in the cannabis industry are already covered by these regulations. Therefore, regulations to address these hazards and deficiencies in the cannabis industry are not needed at this time”

This recommendation is consistent with other regulations including National Institute for Occupational Safety and Health (NIOSH), Colorado, and the State of Washington. Additionally, the memorandum provides that if Cal/OSHA later finds that the existing regulations in these areas are insufficient to protect employees in the cannabis industry, Cal/OSHA will recommend that the Standards Board undertake rulemaking to adopt additional requirements (Cal/OSHA, 2018).

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (CERCLA)

The Comprehensive Environmental Response, Compensation, and Liability Act/Superfund Amendments and Reauthorization Act (CERCLA), commonly known as Superfund (42 U.S. Code Section 9601 et seq.), was enacted by Congress on December 11, 1980, to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. This law (U.S. Code Title 42, Chapter 103) provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment, and to clean up abandoned or uncontrolled hazardous waste sites for which no responsible party could be identified. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites; provides for liability of persons responsible for releases of hazardous waste at these sites; and, created a tax on the chemical and petroleum industries to be contributed to a trust fund to provide for cleanup when no responsible party can be identified.

CERCLA also enables the revision of the National Contingency Plan (NCP). The NCP (Title 40, Code of Federal Regulation [CFR], Part 300) provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The NCP also established the National Priorities List (NPL). CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986. SARA increased the focus on human health problems posed by hazardous waste releases, stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites, and encouraged greater citizen participation in making decisions on how sites should be cleaned up.

RESOURCE CONSERVATION AND RECOVERY ACT

The Federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act (RCRA) of 1976 (RCRA) (42 U.S. Code Section 6901 et seq.) established a program administered by the U.S. EPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the “cradle to grave” system of regulating hazardous wastes. It sets national goals for protecting human health and the environment from the potential hazards of waste disposal, conserving energy and natural resources, reducing the amount of waste generated, and ensuring that wastes are managed in an environmentally sound manner. Under the RCRA, owners and operators of hazardous waste treatment, storage, and disposal facilities must follow a set of standards (e.g., facility design and operation, contingency planning and emergency preparedness, and recordkeeping) to minimize risk and impacts on human health and the environment, codified in Title 40 of the Code of Federal Regulations (CFR), Part 264. Commercial cannabis cultivators would be subject to RCRA to the extent that they generate hazardous waste or store hazardous materials in USTs (California Department of Food and Agriculture 2017).

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT—TOXIC RELEASE INVENTORY

The Emergency Planning and Community Right-to-Know Act (EPCRA) was passed in 1986 in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals and to reduce the likelihood of such a disaster in the United States. These requirements covered emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. Key provisions of EPCRA

include: Section 313 established the Toxic Release Inventory (TRI), which is a publicly-available database containing information on disposal and other releases of toxic chemicals from industrial facilities

Inventory (TRI); Section 304 Emergency Notification, which requires facilities must immediately report accidental releases of EHSs and “hazardous substances” defined under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Sections 311 and 312 which requires facilities handling or storing any hazardous chemicals to submit Material Safety Data Sheets (MSDSs) (or Safety Data Sheets, SDSs) to state and local officials and local fire departments; Section 313 Toxic Releases Inventory, which requires facilities to complete and submit a toxic chemical release inventory form (Form R) annually; and Section 322 Trade Secrets, which allows facilities to withhold the specific chemical identity from the reports filed under sections 303, 311, 312 and 313 of EPCRA if the facilities submit a claim with substantiation to EPA (EPA, 2018).

FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT

Pesticides are regulated under the Federal Insecticide, Fungicide, and Rodenticide Act by USEPA. This includes labeling and registration of pesticides as to how they may be used. USEPA delegates pesticide enforcement activities in California to the California Department of Pesticide Regulation (CDPR), under Title 3 of the California Code of Regulations and the California Food and Agriculture Code. CDPR registers pesticides for use in California, and licenses pesticide applicators and pilots, advisors, dealers, brokers, and businesses.

Currently, no pesticides are registered for use on cannabis. Therefore, commercial cultivators are limited to only using pesticides that are exempt from residue-tolerance requirements and are either: (1) registered and labeled for a use that is broad enough to include use on cannabis (e.g., unspecified green plants), or (2) exempt from registration requirements as a minimum-risk pesticide under Section 25(b) of the Federal Insecticide, Fungicide, and Rodenticide Act.

HAZARDOUS MATERIALS TRANSPORTATION ACT

The U.S. Department of Transportation (USDOT) has developed regulations in CFR Titles 10 and 49 pertaining to the transport of hazardous substances and hazardous wastes. The Hazardous Materials Transportation Act is administered by the Research and Special Programs Administration of the USDOT. The act provides the USDOT with a broad mandate to regulate the transport of hazardous materials, with the purpose of adequately protecting the nation against risk to life and property that is inherent in the commercial transportation of hazardous materials. USDOT regulations that govern the transportation of hazardous materials are applicable to any person who transports, ships, causes to be transported or shipped, or who is involved in any way with the manufacture or testing of hazardous materials packaging or containers.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION WORKER SAFETY REQUIREMENTS

The Occupational Safety and Health Administration (OSHA) is responsible for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for handling hazardous substances and addressing other potential industrial hazards. OSHA also establishes criteria by which each state can implement its own health and safety program. The Hazard Communication Standard (CFR Title 29, Part 1910) requires that workers be informed of the hazards associated with the materials they handle. These standards include exposure limits for a wide range of

specific hazardous materials, including pesticides, as well as requirements that employers provide personal protective equipment (i.e., protective equipment for eyes, face, or extremities; protective clothing; respiratory devices) to their employees wherever it is necessary (i.e., when required by the label instructions) (29 CFR Section 1910.132). Workers must be trained in safe handling of hazardous materials, use of emergency response equipment, and building emergency response plans and procedures. Containers must be labeled appropriately, and material safety data sheets must be available in the workplace. Commercial cannabis operations would be required to comply with OSHA regulations and standards, including worker personal protective equipment requirements (California Department of Food and Agriculture 2017).

NATIONAL WEATHER SERVICE (NWS)

Under extreme fire weather conditions, the NWS issues Red Flag Warnings for all affected areas. A Red Flag Warning means warm temperatures, very low humidity, and stronger winds are expected to combine to produce an increased risk of fire danger (NWS, 2018). The National Weather Service issues Red Flag Warnings & Fire Weather Watches to alert fire departments of the onset, or possible onset, of critical weather and dry conditions that could lead to rapid or dramatic increases in wildfire activity.

A Red Flag Warning is issued for weather events which may result in extreme fire behavior that will occur within 24 hours. A Fire Weather Watch is issued when weather conditions could exist in the next 12-72 hours. A Red Flag Warning is the highest alert. During these times extreme caution is urged by all residents, because a simple spark can cause a major wildfire. A Fire Weather Watch is one level below a warning, but fire danger is still high (CAL FIRE, 2012).

FEDERAL AVIATION ADMINISTRATION (FAA)

The FAA regulates aviation at regional, public, private, and military airports. The FAA regulates objects affecting navigable airspace and structures taller than 200 feet according to Federal Aviation Regulation 14 CFR Part 77. The U.S. and California Departments of Transportation also require the proponent to submit FAA Form 7460-1, Notice of Proposed Construction or Alteration. According to 14 CFR Part 77.5, notification allows the FAA to identify potential aeronautical hazards in advance, thus preventing or minimizing any adverse impacts on the safe and efficient use of navigable airspace. Any structure that would constitute a hazard to air navigation, as defined in 14 CFR Part 77, requires issuance of a permit from the California Department of Transportation's Aeronautics Program. The permit is not required if the FAA aeronautical study determines that the structure has no impact on air navigation.

As described in 14 § CFR 77.9 (Construction or alteration requiring notice), each sponsor who proposes any of the following construction or alteration scenarios shall notify the FAA in the form and manner as follows:

If requested by the FAA, or if you propose any of the following types of construction or alteration, you must file notice with the FAA of:

- (a) Any construction or alteration that is more than 200 ft. AGL at its site.
- (b) Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:

- (1) 100 to 1 for a horizontal distance of 20,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway more than 3,200 ft. in actual length, excluding heliports.
 - (2) 50 to 1 for a horizontal distance of 10,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway no more than 3,200 ft. in actual length, excluding heliports.
 - (3) 25 to 1 for a horizontal distance of 5,000 ft. from the nearest point of the nearest landing and takeoff area of each heliport described in paragraph (d) of this section.
- (c) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a) or (b) of this section.
- (d) Any construction or alteration on any of the following airports and heliports:
- (1) A public use airport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications;
 - (2) A military airport under construction, or an airport under construction that will be available for public use;
 - (3) An airport operated by a federal agency or the DOD.
 - (4) An airport or heliport with at least one FAA-approved instrument approach procedure.
- (e) You do not need to file notice for construction or alteration of:
- (1) Any object that will be shielded by existing structures of a permanent and substantial nature or by natural terrain or topographic features of equal or greater height, and will be located in the congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation;
 - (2) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device meeting FAA-approved siting criteria or an appropriate military service siting criteria on military airports, the location and height of which are fixed by its functional purpose;
 - (3) Any construction or alteration for which notice is required by any other FAA regulation.
 - (4) Any antenna structure of 20 feet or less in height, except one that would increase the height of another antenna structure.

Per 14 CFR 77.7, notification requirements include sending one executed form set of FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area within which the construction or alteration will be located. The notice

required must be submitted at least 45 days before the earlier of the following dates: (1) the date the proposed construction or alteration is to begin, or (2) the date an application for a construction permit is to be filed.

STATE

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

The Cal/EPA and the State Water Resources Control Board (SWRCB) establish rules governing the use of hazardous materials and the management of hazardous waste. Applicable state and local laws include the following:

- Public Safety/Fire Regulations/Building Codes
- Hazardous Waste Control Law
- Hazardous Substances Information and Training Act
- Underground Storage of Hazardous Substances Act
- Department of Toxic Substances Control

Within Cal/EPA, the DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the state agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law (HWCL).

DEPARTMENT OF TOXIC SUBSTANCE CONTROL (DTSC)

DTSC is a department of Cal EPA and is the primary agency in California that regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of the Federal RCRA and the California Health and Safety Code (primarily Division 20, Chapters 6.5 through 10.6, and Title 22, Division 4.5). Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. Government Code Section 65962.5 (commonly referred to as the Cortese List) includes DTSC-listed hazardous waste facilities and sites, Department of Health Services (DHS) lists of contaminated drinking water wells, sites listed by the SWRCB as having UST leaks and have had a discharge of hazardous wastes or materials into the water or groundwater, and lists from local regulatory agencies of sites that have had a known migration of hazardous waste/material.

CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION (CAL FIRE)

The California Department of Forestry and Fire Protection (CAL FIRE) has mapped fire threat potential throughout California. CAL FIRE ranks fire threats based on the availability of fuel and the likelihood of an area burning (based on topography, fire history, and climate). The rankings include no fire threat, moderate, high, and very high fire threats.

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

The California Occupational Safety and Health Administration (Cal/OSHA) is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than Federal regulations. The employer is required to monitor worker

exposure to listed hazardous substances and notify workers of exposure (8 CCR Sections 337-340). The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings.

CALIFORNIA HEALTH AND SAFETY CODE – HAZARDOUS WASTE AND HAZARDOUS MATERIALS

Division 20, Chapter 6.5 addresses hazardous waste control and contains regulations on

hazardous waste management plans, hazardous waste reduction, recycling and treatment, and hazardous waste transportation and hauling. Under Chapter 6.5, Article 6, persons generating hazardous wastes that are to be transported for off-site handling, treatment, storage, or disposal must complete a hazardous waste manifest before transport, indicating the facility to which the waste is being shipped for treatment, disposal, or other purposes. Under Chapter 6.95, Article 1, areas and businesses that have a threshold amount of hazardous materials on site (55 gallons of liquid; 500 pounds of solid for businesses) must have plans in place for emergency response to an accidental release of materials. These Hazardous Materials Business Plans (HMBPs) and Hazardous Materials Area Plans (HMAPs) must include at least the following:

- A listing of the chemical name and common names of every hazardous substance or chemical product handled by the business;
- The category of waste, including the general chemical and mineral composition, of every hazardous waste handled by the business;
- The maximum amount of each hazardous material or mixture containing a hazardous material that is present on site;
- Sufficient information on how and where the hazardous materials are handled by the business to allow fire, safety, health, and other appropriate personnel to prepare adequate emergency responses to potential releases of the hazardous materials;
- Emergency response plans and procedures in the event of a reportable release or threatened release of a hazardous material; and
- Training for all new employees and annual training, including refresher courses, for all employees on safety procedures in the event of a release or threatened release of a hazardous material.

Under Chapter 6.95, Article 2, operators of stationary sources of hazardous materials are required (if they are deemed an accident risk) to prepare risk management plans, detailing strategies to reduce the risk of accidental hazardous material release and submit them to the California Emergency Management Agency. Cannabis cultivators that store hazardous materials (e.g., pesticides, fuel) exceeding the threshold quantity would be required to prepare an HMBP (California Department of Food and Agriculture, 2017).

CALIFORNIA ACCIDENTAL RELEASE PREVENTION PROGRAM

The goal of the California Accidental Release Prevention Program (CCR Title 19, Division 2, Chapter 4.5) is to reduce the likelihood and severity of consequences of any releases of extremely hazardous materials. Any business that handles regulated substances (chemicals that pose a major threat to public health and safety or the environment because they are highly toxic, flammable, or explosive, including ammonia, chlorine gas, hydrogen, nitric acid, and propane) must prepare a risk management plan. The risk management plan is a detailed engineering analysis of the potential accident factors present at a business and the measures that can be implemented to reduce this accident potential. The plan must provide safety information, hazard data, operating procedures, and training and maintenance requirements. The list of regulated substances is found in Article 8, Section 2770.5 of the program regulations.

CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION GUIDANCE

California Department of Pesticide Regulation (CDPR) oversees state pesticide laws, including pesticide labeling, and is vested by USEPA to enforce federal pesticide laws in California. CDPR also oversees the activities of the county agricultural commissioners related to enforcement of pesticide regulations and related environmental laws and regulations locally.

As identified in 3 CCR Division 6, CDPR evaluates proposed pesticide products and registers those pesticides that it determines can be used safely. In addition, CDPR oversight includes:

- Licensing of pesticide professionals;
- Site-specific permits required before restricted-use pesticides may be used in agriculture;
- Strict rules to protect workers and consumers;
- Mandatory reporting of pesticide use by agricultural and pest control businesses;
- Environmental monitoring of water and air; and
- Testing of fresh produce for pesticide residues.

The regulations require that employers of pesticide workers provide protective clothing, eyewear, gloves, respirators, and any other required protection, and require employers to ensure that protective wear is worn according to product labels during application. The regulations also require that employers provide field workers with adequate training in pesticide application and safety; communicate pesticide-related hazards to field workers; ensure that emergency medical services are available to field workers; and ensure adherence to restricted-entry intervals between pesticide treatments (3 CCR Section 6764). Under the Medical Cannabis Regulation and Safety Act and Adult Use of Marijuana Act, CDPR requires that the application of pesticides or other pest control in connection with the indoor or outdoor cultivation of cannabis complies with 3 CCR Division 6 (commencing with Section 11401) of the Food and Agricultural Code and its implementing regulations (Business and Professions Code 19332[f]).

PESTICIDE USE IN CANNABIS CULTIVATION

In accordance with the Medical Cannabis Regulation and Safety Act and Adult Use of Marijuana Act, CDPR is required to develop guidelines for the use of pesticides in the cultivation of cannabis and establish limits for residue levels in harvested cannabis and cannabis products. However, CDPR is preempted by federal law from registering a pesticide for sale and use that is not first registered by USEPA. As discussed above, USEPA has not registered any pesticides for use on cannabis. Federal law also prohibits CDPR from establishing maximum pesticide tolerances for any cannabis that is used in food.

PESTICIDE CONTAMINATION PREVENTION ACT

The Pesticide Contamination Prevention Act (Sections 13145–13152 of the Food and Agricultural Code) requires CDPR to:

- Obtain environmental fate and chemistry data for agricultural pesticides before they can be registered for use in California;
- Identify agricultural pesticides with the potential to pollute groundwater;
- Sample wells to determine the presence of agricultural pesticides in groundwater;
- Obtain, report, and analyze the results of well sampling for pesticides by public agencies;
- Formally review any detected pesticide to determine whether its use can be allowed; and

- Adopt use modifications to protect groundwater from pollution if formal review indicates that continued use can be allowed.

The act requires CDPR to develop numerical values for water solubility, soil adsorption coefficient, hydrolysis, aerobic and anaerobic soil metabolism, and field dissipation of pesticides to protect groundwater, based in part on data submitted by pesticide registrants.

The act also states that CDPR shall establish a list of pesticides that have the potential to pollute groundwater, called the Groundwater Protection List. Any person who uses a pesticide that is listed on the Groundwater Protection List is required to file a report with the county agricultural commissioner, and pesticide dealers are required to make quarterly reports to CDPR of all sales of pesticides on the list to persons not otherwise required to file a report. The Pesticide Contamination Prevention Act ensures that pesticides allowed for use in California, including those that may be used in cannabis cultivation, will have been studied by CDPR for their potential to contaminate groundwater and the environment.

CALIFORNIA EDUCATION CODE

Sections 17071.13, 17072.13, 17210, 17210.1, 17213.1-3, and 17268 of the California Education Code became effective January 1, 2000. Together, they establish requirements for assessments and approvals regarding toxic and hazardous materials that school districts must follow before receiving final site approval from the Department of Education and funds under the School Facilities Program. For example, the site approval package must include written determinations regarding the presence of hazardous wastes or pipelines carrying hazardous substances on the site (the adopted CEQA document is often used for these purposes). In addition, Section 17213(b) requires the local education agency to consult with the applicable air district to identify facilities within 0.25 mile of the proposed site that might reasonably be anticipated to emit hazardous air emissions or handle hazardous materials, substances, or wastes and prepare written findings that either there are no such facilities, the facilities do not pose a health risk, or corrective measures will be taken (consistent with Section 21151.8 of the Public Resources Code). The code also requires that a Phase I Environmental Site Assessment (ESA) is conducted according to the American Society of Testing and Materials standards (ASTM E-1527-2000) and transmitted to DTSC.

HAZARDOUS MATERIALS TRANSPORTATION REGULATIONS

The California Highway Patrol (CHP) and the California Department of Transportation (Caltrans) have primary responsibility for enforcing federal and state hazardous materials regulations and responding to transportation emergencies. CHP enforces materials and hazardous waste labeling and packing regulations that prevent leakage and spills of material in transit and provide detailed information to cleanup crews in the event of an incident. Vehicle and equipment inspection, shipment preparation, container identification, and shipping documentation are all part of the responsibility of the CHP. CHP conducts regular inspections of licensed transporters to assure regulatory compliance. The California Department of Transportation has emergency chemical spill identification teams at locations throughout the state.

CONSTRUCTION GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY

The state requires that projects disturbing more than 1 acre of land during construction file a Notice of Intent with the RWQCB to be covered under the statewide General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. Construction activities subject to the

General Construction Permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce non-stormwater discharges to storm sewer systems and other waters. A stormwater pollution prevention plan (SWPPP) must be developed and implemented for each site covered by the permit. The SWPPP must include best management plans designed to prevent construction pollutants from contacting stormwater.

LOCAL

NEVADA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

The Nevada County Department of Environmental Health (DEH) manages most hazardous materials regulation and enforcement in the County. Large cases of hazardous materials contamination or violations are referred to the RWQCB and the DTSC.

The DEH maintains the County Hazardous Waste Management Plan (CHWMP), which addresses existing and projected hazardous waste generation from the residential, commercial and industrial sectors. Types of treatment and disposal for such wastes are identified and possible locations for treatment and disposal facilities are discussed. The CHWMP also addresses emergency response programs, contaminated sites, and educational and administrative programs related to hazardous wastes. The County CHWMP has been adopted locally but was not accepted by the DTSC. The CHWMP provides criteria that, when implemented, would minimize safety hazards associated with the use, transport, storage and disposal of hazardous materials in the County.

The DEH also provides guidance on removal of septic tanks within the County. The DEH requires a Tank Abandonment Permit to be obtained prior to the removal, relocation, or replacement of septic tanks. The DEH also requires septic tanks to be properly closed and abandoned in accordance with DEH requirements.

NEVADA COUNTY FIRE PROTECTION

According to the Nevada County General Plan, the County is protected by multiple fire protection agencies, including eight local fire districts, one water district, two City fire departments, CAL FIRE, the Bureau of Land Management (BLM), and the US Forest Service (USFS). In Western Nevada County, the following fire districts and departments provide fire protection services, or support for the cities and unincorporated areas of the County:

- Grass Valley City Fire Department
- Higgins Fire Protection District
- Nevada City Fire Department
- Nevada County Consolidated Fire District
- North San Juan Fire Protection District
- Ophir Hill Fire Protection District
- Peardale-Chicago Park Fire Protection District
- Penn Valley Fire Protection District
- Rough and Ready Fire Protection District
- Washington County Water District (supports local volunteer fire department)

- Fire protection services are determined by jurisdiction and responsibilities. In general, local fire districts and city departments provide emergency medical services, other emergency responses, and fire protection for structures within their respective jurisdictions. Many fire districts are staffed with volunteers. CAL FIRE provides wildland fire protection services on private, non-federal lands for the purpose of life, property and resource protection. USFS and BLM provide wildland fire protection services on federal lands in Federal Responsibility Areas for watershed and resource protection. Various agreements between the fire protection agencies enable cooperative fire protection services. The Grass Valley Emergency Command Center, a cooperative facility between the USFS and CAL FIRE, provides emergency dispatching services through cooperative agreements with all the fire districts and cities within Nevada County.

NEVADA COUNTY OFFICE OF EMERGENCY SERVICES

The Office of Emergency Services (OES) is responsible for coordinating with County departments, local cities, and special districts to mitigate against, prepare for, respond to, and recover from disasters. OES is responsible for designing and conducting simulated disaster preparedness and response exercises and evaluating emergency staff training. OES is also responsible for maintaining the County Emergency Operations Center (EOC) in a state of readiness. To fulfill the OES mission requirements, the following programs are continuously managed: Hazard Identification, Risk Assessment, and Mitigation; Planning; Direction, Control and Coordination; Resource Management; Training and Exercises; and Home and Family Emergency Preparation Information.

NEVADA COUNTY AIRPORT LAND USE COMPATIBILITY PLAN

The Nevada County Airport is located at 13083 John Bauer Avenue. The Nevada County Airport Land Use Compatibility Plan (ALUCP) was adopted by the Nevada County Airport Land Use Commission (ALUC) on September 21, 2011. The plan sets compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners in their design of new development. The influence area extends 1.7 miles from the airport's runway. The plan is used by the ALUC staff to define compatibility for noise, safety, airspace protection, and overflight as it pertains to newly proposed projects in the vicinity of the Nevada County Airport.

TRUCKEE TAHOE AIRPORT LAND USE COMPATIBILITY PLAN

The Truckee Tahoe Airport is located at 10356 Truckee Airport Road. The Truckee Tahoe ALUCP was adopted by the Truckee Tahoe ALUC on October 27, 2016. The plan sets compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners in their design of new development. The influence area extends 3.6 miles from the airport runways. The influence area encompasses lands within

LOCAL HAZARD MITIGATION PLAN

The Disaster Mitigation Act of 2000 (DMA 2000), PL-106-390 requires that each State develop a hazard mitigation plan, in order to receive future disaster mitigation funding following a disaster. California completed its most recent "State of California Multi-Hazard Mitigation Plan" in 2010. The requirements also call for the development of local or county plans for that particular county to be eligible for post-disaster mitigation funding. The purpose of these requirements is to encourage state and local government to engage in systematic and nationally uniform planning efforts that will result in locally

tailored programs and projects that help minimize loss of life, destruction of property, damage to the environment and the total cost of disasters before they occur. The Nevada County Operational Area Emergency Services Council prepared the Local Hazard Mitigation Plan for Nevada County, for the years 2011 to 2016.

Nevada County specifically includes and adopts the most recent State of California Multi-Hazard Mitigation Plan where the State's plan relates to issues pertaining to Nevada County. However, in the interest of not duplicating State efforts, Nevada County in its plan refers to the State where the State has identified an issue or provided information that supplements Nevada County's plan.

The Code of Federal Regulations (CFR) Section 201.6(c)(3) outlines the process for localities in developing their mitigation strategies. Specifically, the Local Hazard Mitigation Plan must "include a mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools." These strategies should be built on an assessment of hazard risks and vulnerabilities.

COMMUNITY/AREA PLANS

Two communities within the unincorporated areas of the County, Lake Wildwood and Lake of the Pines, have localized defensible space/fire safety regulations. These fire safety regulations require fuels treatment around homes and vacant parcels. Additionally, the Nevada County Consolidated Fire District may enforce hazard abatement requirements on vacant parcels pursuant to Health and Safety Codes.

The South Yuba River Comprehensive Management Plan provides strategies for the management of public lands in Nevada County's Lower South Yuba River area, including support of existing fire suppression and fuel reduction strategies developed by public resource agencies, FSCs, fire districts, and others for the Yuba River watershed.

The Community Fire Plan for the North San Juan Fire Protection District area provides for brush thinning, evacuation route clearing, and other related assistance to reduce fuel loads, decrease the intensity of wildfire, and limit fire danger to structures and life. The plan promotes safe evacuation and citizen protection in the event of wildfire, ongoing public education, training of cooperative citizen teams, improvement of neighborhood fire safety, and professional assessment of fire-related infrastructure needs throughout the District.

HAZARDOUS MATERIALS BUSINESS PLAN

Businesses that handle or store hazardous materials equal or greater than the minimum reportable quantities listed below in Nevada County are required to prepare a Hazardous Materials Business Plan (HMBP). The minimum reportable quantities are:

- 55 gallons of a hazardous liquid
- 200 standard cubic feet of a compressed gas, including oxygen
- 500 pounds of a hazardous solid
- The components of an HMBP consist of at least three sections (or elements), Facility Information, Hazardous Materials Inventory, and Emergency Responses Plan. The California Environmental Protection Agency requires the HMBP be submitted online and updated annually.

NEVADA COUNTY GENERAL PLAN

The Nevada County General Plan has multiple sections that address hazards and hazardous materials. This includes Chapter 10: Safety which describes the interface of the natural and manmade environments and recognizes that potential safety hazards such as floods, wildfires may exist. This Safety element also recognizes other potential safety hazards such as those associated with airport operations and transport of hazardous materials. The Safety element recognizes that each hazard can affect development within the County but that through emergency planning, land use planning and implementation of development standards, hazards may be reduced. In part, the General Plan implements these measures through goals and policies meant to reduce risk and improve safety within the County. Goals and Policies from the Chapter 10: Safety that would be applicable to the proposed project include the following:

Goal EP-10.1 Provide a coordinated approach to hazard and disaster response preparedness.

Policy EP-10.1.1 Ensure a coordinated, interagency program for disaster preparedness that will facilitate federal and state disaster assistance by planning for the reduction of the effects of natural hazards.

Policy EP-10.1.2 The Local Hazard Mitigation Plan (LHMP), adopted by the County on July 17, 2012, in accordance with the Federal Disaster Mitigation Act of 2000 and Government Code 65302.6, shall serve as the implementation program for the coordination of hazard planning and disaster response efforts within the County.

The LHMP shall be reviewed annually by the County Office of Emergency Services and updated as necessary to ensure compliance with the Federal Disaster Mitigation Act of 2000, as it exists or as may be amended.

Policy EP-10.1.3 Coordinate with the State Office of Emergency Services for wildfire, awareness of implementation of state programs. The local earthquake preparedness plan shall be coordinated with regional plans for earthquake preparedness through the local and State Office of Emergency Services.

Policy EP-10.1.4 Provide for adequate evacuation routes in areas of high fire hazard, high potential for dam failure, earthquake, seiches, avalanche, flooding or other natural disaster.

Policy EP-10.1.5 Promote the continued effectiveness and public awareness of the Nevada County and Nevada Operational Area Emergency Operations Plan, and Community Emergency Preparedness and Evacuation Guides, through the local Office of Emergency Services, as the focus for planning for emergency evacuation of threatened populations.

Policy EP-10.1.6 Transportation routes that are designated on the General Plan Land Use Maps as Interstates, freeways, highways, and other principal arterial routes shall be considered primary evacuation routes on a countywide basis. Such routes provide the highest levels of capacity and contiguity and serve as the primary means for egress from the County.

The routes designated on the General Plan Land Use Maps as minor arterial or major collector routes shall be considered secondary evacuation routes on a

	countywide basis. These routes supplement the primary evacuation routes, and provide egress from local neighborhood and communities.
Policy EP-10.1.7	Support the development and maintenance of countywide and local emergency evacuation plans.
Policy EP-10.1.8	Recognize that the Emergency Preparedness and Evacuation Guides will be developed as supporting plans to the Nevada County and Nevada Operational Area Emergency Operations Plan.
Policy EP-10.1.9	Support the development of Community Emergency Preparedness and evacuation Guides by local community members in collaboration with the County Office of Emergency Services.
Goal AH-10.4	Ensure the safety and compatibility of land uses in the vicinity of airports and military airspace.
Policy AH-10.4.1	Maintain land use and development patterns in the vicinity of airports that reflect and are consistent with policies for the different airport land use compatibility zones within the defined Airport Influence Areas as set forth by the Nevada County and Truckee Tahoe Airport Land Use Compatibility Plans (ALUCPs).
Policy AH-10.4.2	Through appropriate zoning regulations, the County shall enforce airport ground and height safety areas, and land use compatibility standards, consistent with the ALUCPs adopted by Nevada County and Truckee Tahoe Airport Land Use Commissions, as those plans are currently in effect.
Policy AH-10.4.2	Ensure early notification to the military of proposed discretionary development projects within the Military Operation Area (MOA) by implementing California Government Code Sections 65352 (a)(5) and (6)(A), 65940, and 65944 to facilitate the exchange of project related information pertinent to military operations within the MOA.
Program AH-10.4.1	Identify the airspace used by the military in Nevada County and develop procedures to coordinate with the military the review of new development to ensure that it is compatible with military air operations.
Goal HM-10.5	Protect public health, safety, natural resources, and property through regulation of use, storage, transport, and disposal of hazardous materials.
Policy HM-10.5.1	Provide means for the identification, safe use, storage, transport, and disposal of hazardous materials.
Policy HM-10.5.2	In siting on and off-site hazardous waste management facilities, the County shall follow the criteria and mitigation measures set forth in the Nevada County Hazardous Waste Management Plan, and attendant Final Environmental Impact Report, in order to minimize safety hazards associated with hazardous material and hazardous waste incidents.
Policy HM-10.5.3	The County will encourage the cleanup of sites contaminated by mine wastes or other hazardous materials.

Policy HM-10.5.4 The County will actively promote prompt clean-up or remediation of properties contaminated by mine waste or other hazardous materials and shall not grant any discretionary or ministerial land use approvals to develop or change boundaries or reconfigure parcels believed to be contaminated unless and until the nature, extent, type and location of the contamination is determined and satisfactory arrangements are made for clean-up or remediation, in accordance with Nevada County standards or state regulations.

NEVADA COUNTY LAND USE AND DEVELOPMENT CODE

The Nevada County Land Use and Development Code Section G-IV 8.8 Hazardous Wastes discusses standards, notification requirements, and permitting and registration requirements. This section requires that no person handle, transfer, process, use, dispose of, or recover resources from hazardous wastes in a way that may be injurious or harmful to the overall public health other than by notifying the Health Department and meeting all applicant standards. The Health Department also must be notified if a material being produced may reasonably be considered to contain a hazardous waste. This section also sets forth requirements regarding the notifications and obtaining proper permits and registering for all activities related to establishing, operating a hazardous waste facility.

Related to disposal of wastes, Section G-IV 8.7 Waste Disposal requires that no person shall dump, deposit, or otherwise dispose of any hazardous waste at disposal sites. As it would pertain to the proposed project, some existing commercial cannabis operations currently use pesticides and fertilizers and would use fuels and lubricants for operations of machinery and these materials would be required to be used and handled safely.

COMPREHENSIVE SITE DEVELOPMENT STANDARDS

DIVISION 4.3 RESOURCE STANDARDS

Section 3.0: Project Description discusses the Comprehensive Development Standards found in Article 4 Comprehensive Site Development Standards and defined in Division 4.3 Resource Standards. In part, the purpose of the development standards is to avoid the impact of development projects on sensitive environmental resources and natural site constraints. The following discusses those standards applicable to geology and soils and specific requirements related to the protection of the associated resource(s) is discussed in *Section 4.7.4: Potential Impacts and Mitigation Measures*, below.

Section L-II 4.3.18 Wildland Fire Hazard Areas. This section includes regulations intended to prevent or minimize the impact of wildland fire hazards associated with development. This section used the following

Dead End Road: A road which has only one point of vehicular ingress/egress, including cul-de-sac and looped roads.

Wildland Fire Hazard Area: Those areas within the unincorporated area of Nevada County that are mapped on the CAL FIRE "Fire Hazard Severity Zone" maps which are rated for wildland fire potential.

4.7.3 STANDARDS OF SIGNIFICANCE

ENVIRONMENTAL ANALYSIS

This section discusses the potential hazards, such as airport operations and transportation of hazardous materials, and hazardous materials associated with the Nevada County Commercial Cannabis Cultivation Ordinance EIR.

THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact related to hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

4.7.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACT 4.7-1: CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH THE ROUTINE TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS.

Implementation of the proposed project would be in conformance with existing laws and regulations pertaining to hazards and hazardous materials. Conformance with applicable laws and regulations would provide a consistent, structured, and logical management procedure for the cultivation of cannabis within all unincorporated areas within the County. As part of this action, the proposed project is meant to help ensure public health and safety, and to protect the environmental by legalizing and permitting existing cultivation as well as providing a means for new cultivation to obtain approval through the procedures described in the proposed regulations. The proposed ordinance includes the following restrictions regarding hazardous materials:

The use of Hazardous Materials shall be prohibited in the Cultivation of Cannabis except for limited quantities of Hazardous Materials that are below State of California threshold levels of 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of compressed gas. Any Hazardous Materials stored shall maintain a minimum setback distance of 100 feet from any private drinking water well, spring, water canal, creek or other surface water body, and 200 feet from any public water supply well. The production of any Hazardous Waste as part of the Cultivation process shall be prohibited.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, and would require to registration with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, either indoors or outdoors, would be similar to growing a small garden and would not result in significant risk associated with the use, transports, or upset, or disposal of hazardous materials. Impacts would be less than significant.

While none of the estimated 3,500 existing or potential future cannabis cultivation projects would be operated as hazardous materials sites, the cultivation would result in the use of some hazardous materials include cleaning solvents, fertilizers, pesticides, and other materials and equipment commonly used for agricultural production and maintenance of facilities. While some materials could pose a risk in high concentrations or volumes, these common materials are not typically considered acutely hazardous. Commercial cannabis cultivation could result in direct impacts from the routine transport, use, or disposal of hazardous materials. However, cannabis cultivation would be subject to existing laws and regulations described in Section 4.7.2 Regulatory Setting to ensure the safety of the nearby public and environment. These regulations are intended to prevent hazardous materials from being transported, used, or disposed of in a way that would cause injury and harm to people and the environment. With proper use and disposal as required by local, state, and federal laws and regulations, use of hazardous materials are not expected to result in hazardous or unhealthful conditions for subject workers, neighboring land uses, and future cannabis users.

Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cultivation less than 2,500 sf and an ADP for cultivation between 2,500 sf and 10,000 sf. As part of both the CCP and ADP process and plan check and approval process, the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with existing federal, state, and local regulations. An Annual Cannabis Permit (ACP) also would be require and need to be renewed annually to verify continued compliance. If compliance is not maintained, the permit could be denied. All of the existing estimated 3,500 cannabis cultivation operations also would be required to show conformance to applicable regulation to obtain a permit. If they are not in compliance, they would have to prove compliance prior to issuance resulting in fewer cultivation sites out of compliance and reducing the potential for harmful effects. This screening process would ensure that sites with known hazardous contamination are required to remediate the issues in order to ensure safety of the future uses, surrounding public, and the environment. This would be accomplished through investigation and remediation prior to continued or new operations on the sites. Accordingly, all sites proposed for permitted cannabis operations would include a plan for safe handling of materials in their operations plan. The operations plan would undergo a review processes as part of the County's Permitting Program. This would ensure that cultivation uses are compatible with the history of the site and do not pose a substantial threat to humans or the environment from the risk of release of hazardous materials. As a result, impacts would be less than significant.

MITIGATION MEASURES

Mitigation would not be required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.7-2: CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH REASONABLY FORESEEABLE UPSET AND ACCIDENT CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS MATERIALS INTO THE ENVIRONMENT.

Accidental releases of hazardous materials are those releases that are unforeseen or that result from unforeseen circumstances, while reasonably foreseeable upset conditions are those release or exposure events that can be anticipated and planned for. Implementation of the project, in conformance with existing laws, would regulate and provide consistency with state law and to enable a structured and logical management procedure for the cultivation of cannabis within all unincorporated areas within the County. As part of this action, the proposed project would remove or reduce cannabis cultivation in residential areas and allow increased cultivation in General Agriculture (AG), Agriculture Exclusive (AE), and Forest (FR) zones, including commercial cultivation for medical purposes. While these areas would allow for existing and future commercial cannabis cultivation activities, cannabis activities would still be subject to existing laws and regulations described in *Section 4.7.2: Regulatory Setting* to ensure the safety of the nearby public and environment as discussed above in Impact 4.7-1.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, and would require to registration with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, either indoors or outdoors, would be similar to growing a small garden and would not result in significant risk to the public of the environment through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment

Potentially hazardous materials are used at some of the estimated existing 3,500 cannabis cultivation sites and would be used at future cannabis cultivation sites that would be constructed and operated under the proposed NCCO. Materials would be transported along major corridors including SR-20, SR-49, SR-89, SR-174, SR-267, and I-80 in Nevada County, as well as local roadways to reach cultivation sites. The federal Hazardous Materials Regulations (HMR) address hazardous material transportation through classification, packaging, hazard communication, emergency response information, and training requirements. HMR emergency response requirements include initial emergency actions regarding evacuation isolation of the affected area, firefighting, leaking containers, spill containment, and first aid. These requirements would also reduce the number of persons exposed to any hazmat incidents. Furthermore, hazardous materials spills on state highways are the responsibility of the California Department of Transportation (Caltrans) and the California Highway Patrol (CHP). These agencies provide on-scene management of the spill site and coordinate with the California Environmental Health Department, California Emergency Management Agency (formerly known as the California Office of Emergency Services), and applicable local agencies. As such, accidental and reasonably foreseeable hazardous materials releases associated with the transport of hazardous materials to and from cannabis sites would result in a less than significant hazard to residents of the proposed project.

MITIGATION MEASURES

No additional mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.7-3: EMIT HAZARDOUS EMISSIONS OR HANDLE HAZARDOUS OR ACUTELY HAZARDOUS MATERIALS, SUBSTANCES, OR WASTE WITHIN ONE-QUARTER MILE OF AN EXISTING OR PROPOSED SCHOOL.

Implementation of the project, in conformance with existing laws, would regulate and provide consistency with state law and to enable a structured and logical management procedure for the cultivation of cannabis within all unincorporated areas within the County. As part of this action, the proposed project is meant to help ensure public health and safety, and to protect the environmental by legalizing and permitting existing cultivation as well as providing a means for new cultivation to obtain approval through the procedures described in the proposed regulations.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, and would require to registration with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, either indoors or outdoors, would be similar to growing a small garden and would not result in significant risk associated cultivation within 0.25 miles of a school or proposed school.

As discussed in Impact 4.7-2, the proposed project would not permit and would hence help remove or reduce commercial cannabis cultivation in residential areas while permitting commercial cultivation in General Agriculture (AG), Agriculture Exclusive (AE), and Forest (FR) zones. In addition, the proposed project includes provisions against permitting a commercial cannabis cultivation site in locations within 1,000 feet of a sensitive use such as schools, bus stops, and other child-oriented facilities. This requirement would be the same for the estimated 3,500 existing cannabis cultivation sites as well as new cultivation locations. The permitting requirement would be the same and the proposed NCCO could have the effect of reducing the number of cultivation sites currently operating inside the 1,000-foot setback. Current State law requires a setback from schools, daycare centers, and youth centers. As discussed, any proposed commercial cannabis activities that are within the 1,000-foot setback would not be in conformance with this requirement and would not be approved. Prior to the construction of any project site within one-quarter mile of an existing school, all requirements of CEQA Guidelines Section 15186 and Division 20 of the Health and Safety Code would be required to be met. Based on the above and with adherence to state guidelines and regulations, a less than significant impact would occur in this regard.

MITIGATION MEASURES

No additional mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.7-4: BE LOCATED ON A SITE WHICH IS INCLUDED ON A LIST OF HAZARDOUS MATERIALS SITES COMPILED PURSUANT TO GOVERNMENT CODE SECTION

65962.5 AND, AS A RESULT, WOULD IT CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT.

The proposed project is meant to help ensure public health and safety, and to protect the environment by legalizing and permitting existing cultivation as well as providing a means for new cultivation to obtain approval through the procedures described in the proposed regulations. As discussed in Impact 4.7-2, the proposed project would remove or reduce cannabis cultivation in residential areas and allow increased cultivation in AG, AE, and FR zones, including commercial cultivation for medical purposes. There is a potential for future cannabis related facilities to be located on a site that is included in a hazardous materials list pursuant to Government Code 65962.5.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, and would require to registration with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, either indoors or outdoors, would be similar to growing a small garden and are highly unlikely to be located on a hazardous materials site.

As discussed in *Section 4.7.1: Environmental Setting*, Table 4.7-1 lists the hazardous sites located within unincorporated Nevada County compiled pursuant to Government Code Section 65962.5. Of the hazardous sites listed, the Floriston Waste Treatment Facility case remains active. Under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain a CCP for cultivation less than 2,500 sf and an ADP for cultivation 2,500 sf to 10,000 sf. An Annual Cannabis Permit (ACP) also would be required and need to be renewed annually which would ensure continued compliance or the permit could be denied.

As part of the permitting and application process, all sites, including the estimated 3,500 existing cultivation sites, that apply for permits for commercial or non-remuneration cannabis cultivation would be required to provide proof of compliance with, State, and local laws and regulations, related to hazards and hazardous materials. This would be done through the submittal of a Hazardous Materials/Waste Statement that is required as part of the CCP and ADP application process. As part of completing this statement the applicant would be required to provide a memo from the Nevada County Department of Environmental Health stating that adequate information is on file to accept the project for processing. Alternatively, the applicant must provide research or other sources of information to justify the evidence that there has been no past or potentially hazardous use on or near the project site. This could be done through a search of the Geotracker website managed by the State Water Resources Control Board that lists known hazardous materials sites. Additionally, the applicant would be required to prepare of a Hazardous Materials Business Plan (HMBP) as required by the County for businesses that store or handle hazardous materials equal or greater than the minimum reportable quantities discussed in *Section 4.7.2: Regulatory Setting*. If cultivation activities commence without proper evaluation, a significant hazard to the public or the environment could occur. Therefore, compliance to the listed requirements prior to any permit approval would reduce the potential impacts to less than significant. No mitigation is required.

MITIGATION MEASURES

No additional mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.7-5: FOR A PROJECT LOCATED WITHIN AN AIRPORT LAND USE PLAN OR, WHERE SUCH A PLAN HAS NOT BEEN ADOPTED, WITHIN TWO MILES OF A PUBLIC AIRPORT OR PUBLIC USE AIRPORT, WOULD THE PROJECT RESULT IN A SAFETY HAZARD FOR PEOPLE RESIDING OR WORKING IN THE PROJECT AREA.

According to the 2011 Nevada County ALUCP, highly noise-sensitive uses are prohibited in Compatibility Zone D*-Urban Overlay Zone. Sources of noise coming from cannabis cultivation operations would be from machinery such as generators that typically would not exceed the 55 dB CNEL contour. According to the 2011 Nevada County ALUCP and 2016 Truckee Tahoe ALUCP, development proposals for new buildings and structures are restricted to a height of no more than 100 feet within Compatibility Zone D. Hazards to flights, which are defined as physical (e.g., tall objects), visual, and electronic forms of interference to the safety of aircraft operations, and land use development that may cause the attraction of birds to increase are also prohibited. Any proposed new cannabis-related activities around public airstrips would be subject to policies and criteria set forth by applicable ALUCs when assessing land use compatibility. Cannabis cultivation operations generally would not include tall structures, glare, or other characteristics that would interfere with air traffic. Currently, there are two public airports that operate within Nevada County. All commercial cannabis-related uses provided for under the proposed project would be subject to these requirements to prevent hazards to flight. Thus, impacts would be less than significant.

MITIGATION MEASURES

No additional mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.7-6: FOR A PROJECT WITHIN THE VICINITY OF A PRIVATE AIRSTRIP, WOULD THE PROJECT RESULT IN A SAFETY HAZARD FOR PEOPLE RESIDING OR WORKING IN THE PROJECT AREA.

Implementation of the project, in conformance with existing laws, would regulate and provide consistency with state law and to enable a structured and logical management procedure for the cultivation of cannabis within all unincorporated areas within the County. As part of this action, the proposed project is meant to help ensure public health and safety, and to protect the environment by legalizing and permitting existing cultivation as well as providing a means for new cultivation to obtain approval through the procedures described in the proposed regulations. Any proposed new cannabis-related activities around private airstrips would be subject to policies and criteria set forth by applicable ALUCs when assessing land use compatibility. These criteria list the height of structures, trees, and other objects in the vicinity of an airport would impact the use of the airport. Cannabis cultivation operations generally would not include tall structures, glare, or other characteristics that would interfere with air traffic. Currently, there are eight private airports that operate within Nevada County. All commercial cannabis-related uses provided for under the proposed project would be subject to these requirements to prevent hazards to flight. Thus, impacts would be less than significant.

MITIGATION MEASURES

No additional mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.7-7: IMPAIR IMPLEMENTATION OF OR PHYSICALLY INTERFERE WITH AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN.

Implementation of the project, in conformance with existing laws, would regulate and provide consistency with state law and to enable a structured and logical management procedure for the cultivation of cannabis within all unincorporated areas within the County. As part of this action, the proposed project is meant to help ensure public health and safety, and to protect the environment by legalizing and permitting existing cultivation as well as providing a means for new cultivation to obtain approval through the procedures described in the proposed regulations.

The proposed project would be subject to the Nevada County Hazardous Waste Management Plan (HWMP) in order to minimize safety hazards associated with hazardous materials and hazardous waste incidents. The NCCFD has published the Cascade Shores Evacuation Plan, which, although tailored to the Cascade Shores area, contains applicable information to all parts of the NCCFD.

Section 8.12.080 of the City's Municipal Code states that the City Disaster Council is responsible for the development of a City Emergency Plan, which would provide for the effective mobilization of all of the resources of the City to meet any condition constituting a local emergency, state of emergency, or state of war emergency, and should provide for the organization, powers and duties, services, and staff of the emergency organization. However, a City Emergency Plan has not yet been prepared and is, therefore, not available at this time. The 2020 General Plan also addresses fire hazard reduction considerations and ways of preventing interference with emergency response or evacuation through established goals, objectives, policies and implementation strategies.

Implementation of the HWMP and the policies pertaining to hazards and hazardous materials set forth in the Nevada County General Plan and Land Use Development Code, and the implementation of the Local Hazard Mitigation Plan mitigation strategies, would ensure a less than significant impact to the adopted emergency or evacuation plans.

MITIGATION MEASURES

No additional mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.7-8: EXPOSE PEOPLE OR STRUCTURES TO A SIGNIFICANT RISK OF LOSS, INJURY OR DEATH INVOLVING WILDLAND FIRES, INCLUDING WHERE WILDLANDS ARE ADJACENT TO URBANIZED AREAS OR WHERE RESIDENCES ARE INTERMIXED WITH WILDLANDS.

As stated in the Nevada County General Plan, the region has a generally high potential for wildland fires of devastating intensity. Fire protection services are generally provided by the NCCFD, other fire departments within the unincorporated County areas, as well as through mutual aid agreements with City

fire departments such as the Grass Valley Fire Department. Also, the CAL FIRE provides fire protection for the wildland areas and is legally responsible for wildland fires during the fire season. The proposed project areas currently consist of timber, woodland, heavy brush species, grasslands, and contains areas of moderate slopes, making the project site subject to wildfires.

Based on the CAL FIRE Severity Maps, designations of “moderate,” “high” and “very high” fire severity zones occur throughout unincorporated Nevada County. The 2010 California Fire Code, Section 4906, requires that all unincorporated lands designated by the State Board of Forestry and Fire Protection as State Responsibility Areas (SRA) and are designated as “moderate,” “high,” or “very high” fire severity zones are required to maintain defensible space of a minimum of 100 feet from each side and from the front and rear of the structure, but not beyond the property line unless otherwise specified by an agency having jurisdiction over the property. Section 51182 of the California Government Code requires properties within a Local Responsibility Area, LRA, (not an SRA) designated as Very High Fire Hazard Severity Zone, to maintain defensible space of a minimum of 100 feet from each side and from the front and rear of the structure, but not beyond the property line unless otherwise specified by an agency having jurisdiction over the property. New facilities in the SRA are subject to Fire Safe regulations and the appropriate clearance of vegetation around future facilities would be inspected by CAL FIRE.

Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cultivation less than 2,500 sf and an ADP for cultivation 2,500 sf to 10,000 sf. Conformance to applicable regulations would be verified during the plan review process and could be made by the Planning Director.

As part of the CCP and ADP process, the sites proposed for use for commercial or non-remuneration cultivation including the estimated 3,500 existing cannabis cultivation sites, would be required to provide proof of compliance with federal, State, and local laws and regulations related to fire safety. The development and review process would include verification that existing and proposed cannabis cultivation conforms to all applicable fire protection related provisions of the Land Use and Development Code. Conformance to the following Chapters and requirements would be confirmed and renewal of the ACP would ensure continual compliance. If compliance is not maintained, the permit could be denied.

- Chapter II: Zoning Regulations, which establishes residential and rural base district side yard and rear yard setback standards;
- Chapter V: Article 5, Fire Safety Standards, which establish fire-safe building codes relative to building construction;
- Chapter VII: Street Addressing and Naming, which requires the naming and posting of roads and the posting of street addresses;
- Chapter XVI: Fire Safety Regulations, which establishes regulations for fuel modification, water storage, and driveway construction; and
- Chapter XVII: Road Standards, which establishes minimum standards for fire-safe road construction and maintenance.

All cannabis cultivation projects also would be required to comply with standards if they are located in high or very high fire hazard zones (unless they are found to be exempt during the development review process):

- Create defensible space by removing and reducing brush, flammable vegetation or combustible growth consistent with the provisions of Public Resources Code 4291 and the Nevada County

Defensible Space Standard described in General Plan Policy FP10.11.1.1. Defensible space treatment shall be completed, and inspected by the County Fire Marshal or his/her designee, prior to the granting of any occupancy of new structures; and

- Provide secondary access where the project is served by a dead-end road that exceeds the maximum length established by County Road Standards, Section L-XVII 3.4.I. Secondary access roads shall be improved to the Fire Standard Access Road standard and is consistent with the provisions of Chapter XVII, County Road Standards.

Section L-II 4.3.18 also recognizes the importance of ensuring emergency vehicle access to properties is will provide for adequate movement and positioning of emergency vehicles. The code requires all driveways serving new residential units, and that are between 150 feet and 800 feet in length are required to construct a turnout near the midpoint of the driveway. Driveways exceeding 800 feet in length are required to provide turnouts no more than 400 feet apart.

Lastly, all future commercial cannabis projects within the very high wildland fire hazard severity zone are required to submit a Fire Protection Plan (FPP) to be approved by the Fire Marshall and/or his/her designee. The FPP is required to include the following elements unless specific findings can be made and supported by the responsible fire agency which demonstrate that one or more of the FPP components are not necessary because of the project's location, design and/or specific site features and because the project would not add to the cumulative fire hazard within the project area.:

- Identification of the proximity to emergency responders and estimated emergency response times;
- Description of the primary and, if applicable, secondary, access road conditions;
- Identification of the project's emergency water supply or emergency water storage facilities consistent with Article 4 of Chapter XVI of the Land Use and Development Code;
- Identification of any proposed or required fire sprinkler system;
- Identification of a feasible evacuation plan and/or safe evacuation routes for use by future occupants of the project;
- Identification and use of clustered buildings and/or building sites and where feasible, the use of common driveways and access roads; and
- A Fuels Management Plan that includes:
 - Identification of the project's defensible space design, consistent with Public Resources Code 4291;
 - Identification of high fuel load areas;
 - Provisions to ensure that adequate defensible space is provided including, but not limited to, the use of increased property line setbacks or fuel modification zones or easements around newly created lots;
 - Identification of the mechanism proposed for maintaining defensible space; and
 - Use of fire-resistant plantings for all landscaping required by County Ordinance using the most current Fire-Wise Plant Book prepared by the Fire Safe Council of Nevada County, or similar publication.

As stated above, the plan review processes as part of the CCP and ADP process, the County would ensure that existing structures comply with all applicable building and fire codes, and that plans for all new structures, fuel modification zones, water and water storage, and site access conforms to all standards. In addition, the initial and yearly ACP renewal would ensure that projects maintain compliance with all listed requirements as verified by the Fire Marshall or his/her designee and the Environmental Health Department. If yearly compliance is not verified, the permit could be denied. This would reduce potential impacts from wildfires to cannabis-related facilities to less than significant.

MITIGATION MEASURES

No additional mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

4.8 HYDROLOGY AND WATER QUALITY

This section evaluates potential hydrology and water quality impacts that could result from the proposed Nevada County Cannabis Ordinance (proposed NCCO or proposed project). Mitigation measures for potential impacts are identified where applicable. Information in this section comes from County of Nevada GIS mapping analysis as well as existing federal, state, and local regulations.

4.8.1 ENVIRONMENTAL SETTING

CLIMATE

Located on the western slope of the Sierra Nevada Mountain Range, Nevada County enjoys a temperate climate with seasonal variations consisting of hot dry summers and cold wet winters. Average temperatures range from a low of 34 degrees Fahrenheit (°F) in January to a high of 91°F in July. Precipitation falls primarily from November to April in the form of both rain and snow with snow falling most winters. The majority of precipitation falls in December, January, and February. The County averages 64 inches of rain and 193 inches of snow per year.

REGIONAL HYDROLOGY

Nevada County is 978 square miles and a diversity in resources. The western portion of the County is Sacramento Valley at an elevation of 300 feet and the highest point is the peak of Mount Lola at 9,143 feet. Timber resources account for 28 percent of the County's land area and mineral resources such as lode gold, placer gold, chromite, barite and sand and gravel were mined starting in the 1800s. The County is also rich in wildlife particularly along the riparian habitats. The Sierra Nevada Mountains make up a significant portion of the County. Three major rivers within Nevada County includes Truckee River, Yuba River, and the Bear River. Five smaller streams which are also significant drainage basins include Deer Creek, Squirrel Creek, Wolf Creek, Greenhorn Creek, and Steephollow Creek. Surface water drainage within Nevada County is composed of three separate watersheds that when combined produce enough water to serve portions of both northern California and western Nevada, the three major watersheds are discussed in the following section.

WATERSHEDS

The Truckee River Basin – The project site is located within the Truckee River Hydrologic Unit (HU), one of 14 such drainage areas designated for the North Lahontan Hydrologic Basin (NLHB) in the 1995 (as amended) Lahontan RWQCB Water Quality Control Plan (LRWQCP Basin Plan). The Truckee River HU is an irregularly shaped area of approximately 257 square miles and includes the western and/or central portions of Sierra, Nevada, and Placer counties. Within Nevada County, the Truckee River Basin drains approximately 170 square miles and generally follows the south side of I-80. The Truckee river flows from Lake Tahoe in a northeastern direction through Nevada County into Pyramid Lake in the State of Nevada. According to the US Department of the Interior Bureau of Reclamation (USDIBR) the Truckee River originates at Lake Tahoe in California and flows over 105 miles north and east into Nevada where it terminates in Pyramid Lake. The Truckee River is a major source of water for western Nevada including the cities of Reno and Sparks. Along with the Carson River, the Truckee River supplies irrigation water to Reclamation's Newlands Project for approximately 57,000 acres of cropland. The Truckee River is also an

important recreation resource for residents in California and Nevada, providing boating, rafting, kayaking, fishing, hunting, and camping opportunities. All water in the Truckee River is fully appropriated with a Federal Water Master managing storage in the upper 6 feet of Lake Tahoe and the other 5 Truckee basin reservoirs in California. A new operations regime, the Truckee River Operating Agreement (TROA) was negotiated between the States of California and Nevada for the operation of Truckee River Reservoirs (the five Federal reservoirs in the Truckee River basin). The TROA is anticipated to significantly improve water management in the Truckee River basin by allowing adaptive management of Truckee reservoirs (USDIBR, 2018). The TROA is discussed in additional detail under the Regulatory Setting discussion below. *Figure 4.8-1 Truckee River Watershed*, shows this area graphically.

The Yuba River Basin – The Yuba River has three forks: North, Middle, and South. The North and Middle Yuba Rivers come together below New Bullards Bar Reservoir and form the mainstem Yuba River. *Figure 4.8-2 Yuba River Watersheds*, shows these areas graphically. The South Fork and Middle Fork of the Yuba River combined make up the largest of three watershed areas within Nevada County. The Middle Fork of the River drains approximately 86 square miles of Nevada County and the South Fork drains approximately 343 square miles of the County before connecting with the Middle Fork of the Yuba River near Englebright Reservoir. There are more than 100 jurisdictional dams or diversions in the Yuba River Watershed. The diversions convey water to local users and to users in the Bear and North Fork American River Watersheds. A large amount of water is diverted from the watershed at Lake Spaulding on the South Fork for irrigation and power generation. The South Yuba River Watershed alone supports 20 reservoirs and 20 hydroelectric dams. The Deer and Squirrel Creeks flow westward into the Yuba River.

- *North Fork of the Yuba River* – The North Yuba River rises near the eastern border of the Tahoe National Forest and flows west past the small village of Downieville, where it receives the Downie River, and Goodyears Bar. It then incorporates the flow of Canyon Creek and Slate Creek, and widens into New Bullards Bar Reservoir. After leaving the dam it joins with the Middle Yuba to form the Yuba River.
- *Middle Fork of the Yuba River* – The Middle Yuba River flows north into Jackson Meadows Reservoir, then turns west, descending steeply into a gorge, defining the boundary of Nevada County in the north and Yuba County in the south.
- *South Fork of the Yuba River* – The South Yuba originates at Donner Pass at the crest of the Sierra Nevada, near the town of Soda Springs. Gathering numerous snowfed tributaries, it runs west through a marshy, lake-filled valley, shadowed by Interstate 80.

The Bear River Basin – The Bear River originates about 20 miles west of the crest of the Sierra Nevada in northern Placer County within the boundaries of the Tahoe National Forest. The Bear River forms just below Spaulding Reservoir via the Drum Canal and is the second largest tributary to the Feather River. It flows in southwesterly direction and drains approximately 277 square miles of Nevada County. The river received flows from the Sierra Nevada Mountains and for much of its course it forms the boundary between Nevada and Placer Counties. The Bear River Watershed is located between two much larger watersheds, the Yuba to the north and American to the south. The watershed is heavily managed for water conveyance for agricultural water supply and hydropower development that serves the western foothills region and beyond. Some areas of the watershed have been degraded by historical hydraulic mining and mercury contamination. *Figure 4.8-3 Bear River Watershed*, shows this area graphically. The watershed spans four counties: Nevada, Placer, Sutter and Yuba. The Wolf, Greenhorn, and Steephollow Creeks drain into the Bear River. The Bear River discharges from Rollins Reservoir and flows southwest

into Lake Combie near the community of Meadow Vista and near an area with heavy development pressure. The Bear River turns west and is fed by Wolf Creek and then enters into Camp Far West Reservoir, the largest water body in the Bear River Watershed. The Bear joins the Feather River south of Yuba City/ Marysville (Sacramento River Watershed Program, 2018). The Bear and Yuba subbasins are located within the American River subregion, which consists of roughly 5,375 square miles and includes portions of six counties.

SURFACE WATER QUALITY

The SWRCB produces bi-annual qualitative assessments of statewide and regional water quality conditions. These assessments are focused on CWA Section 303(d) impaired water listings and priority status for assignment of total maximum daily load (TMDL) requirements. Specifically, the Section 303(d) and TMDL assessments involve prioritizing waters on the basis of water quality (i.e., impaired) status and the necessity for assigning quantitative contaminant load restrictions (i.e., TMDLs), with these data submitted to the United State Environmental Protection Agency (USEPA) for review and approval.

Yuba River Watershed

The Yuba River Watershed contains significant amount of sediment and mercury as a result of hydraulic mining that occurred in the mid to late 1900s. Mercury is present in the bottoms of rivers and reservoirs and is transported by erosion processes and potentially converted into methylmercury. Methylmercury accumulates in the food chain and becomes concentrated in larger predatory fish such as trout and bass. Recent findings and comprehensive survey of fish in the Yuba River Watershed found it meet and exceeds USEPA and FDA levels. Sediment loads can also be attributed to historical mining as well as road construction associated with rural housing development, logging, and recreation. The temperature of the water in the Yuba River Watershed is another significant water quality concern. The warming temperatures can be attributed to lack of flows due to dams, water diversions, inadequate shading by limited riparian canopy, and low instream flows. Four waterways are listed on the Clean Water Act's 303(d) list of impaired waterbodies along with Englebright and Scotts Flat Reservoirs. Another waterway is listed for copper, sediment, and zinc.

Bear River Watershed

Areas of the Bear River Watershed have been degraded by historic hydraulic mining and mercury contamination. Five waterways within the watershed are listed under the Clean Water Act Section 303(d) list of impaired waterbodies for mercury contamination. (Upper Bear River, Stepphollow Creek, Lake Combie, Wolf Creek, French Ravine, Camp Far West); Wolf Creek and French Ravine are listed for fecal coliform and bacteria, respectively (SRWP, 2018).

Truckee Watershed

However, impaired downstream waters identified in the most current (2010) approved assessment include 39 miles of the Truckee River listed for sedimentation/siltation, with sediment listed as the primary pollutant category (SWQCB 2010). An associated TMDL for the Middle Truckee River watershed was adopted by the Lahontan Region RWQCB in 2008 (through Resolution R6T 2008-0019), with a related Basin Plan Amendment approved in 2008 and SWRCB/USEPA approval issued in 2009. This TMDL identifies numeric limits for sediment discharge to the Middle Truckee River and associated tributaries, establishes discharge allocations for applicable stakeholders, and lists related monitoring and reporting requirements (RWQCB 2008). In addition, the SWQCB has designated Donner Lake, as impaired "water

quality limited segments” due to elevated levels of metals and/or toxic organic substances in fish tissue sample under the SWRCB Toxic Substances Monitoring Program (SWRCB, 2012).

GROUNDWATER

Several key properties help determine whether the subsurface environment will provide a significant, usable groundwater resource. Most of California’s groundwater occurs in material deposited by streams, called alluvium. Alluvium consists of coarse deposits, such as sand and gravel, and finer-grained deposits such as clay and silt. The coarse and fine materials are usually coalesced in thin lenses and beds in an alluvial environment. In an alluvial environment, the coarse materials such as sand and gravel deposits usually provide the best source of water and are termed aquifers; whereas, the finer-grained clay and silt deposits are relatively poor sources of water and are referred to as aquitards. California’s groundwater basins usually include one or a series of alluvial aquifers with intermingled aquitards. Although alluvial aquifers are most common in California, other groundwater development occurs in fractured crystalline rocks, fractured volcanics, and limestones.

According to the Nevada County General Plan EIR the majority of groundwater in the western portion of the County occurs in fractures of the hard rocks and between 200 and 215 feet below ground. There is little groundwater found to occur in the alluvium and colluvium of the area.

In the eastern portion of the County, the Martis Valley Groundwater Basin (MVGB) is the only significant subsurface water resource. The MVGB is traversed by the Truckee River, and exhibits a subsurface extent of approximately 36,000 acres. The northern two thirds of the MGVB occur in Nevada County north to Hobart Mills, with the southern third occurring in Placer County extending southerly and roughly tracing the Martis and East Martis Creek from west to east (GEI, 2018).

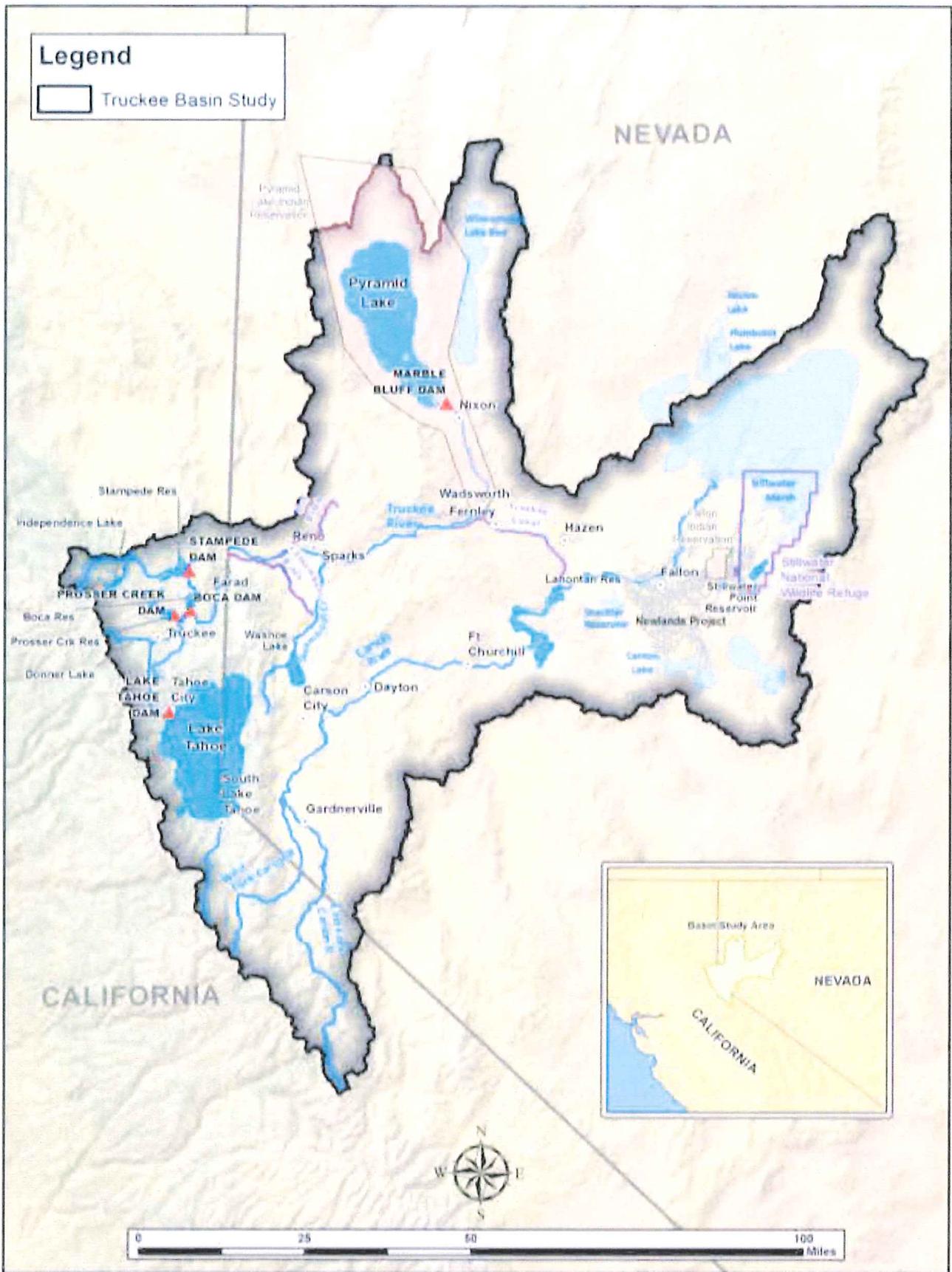
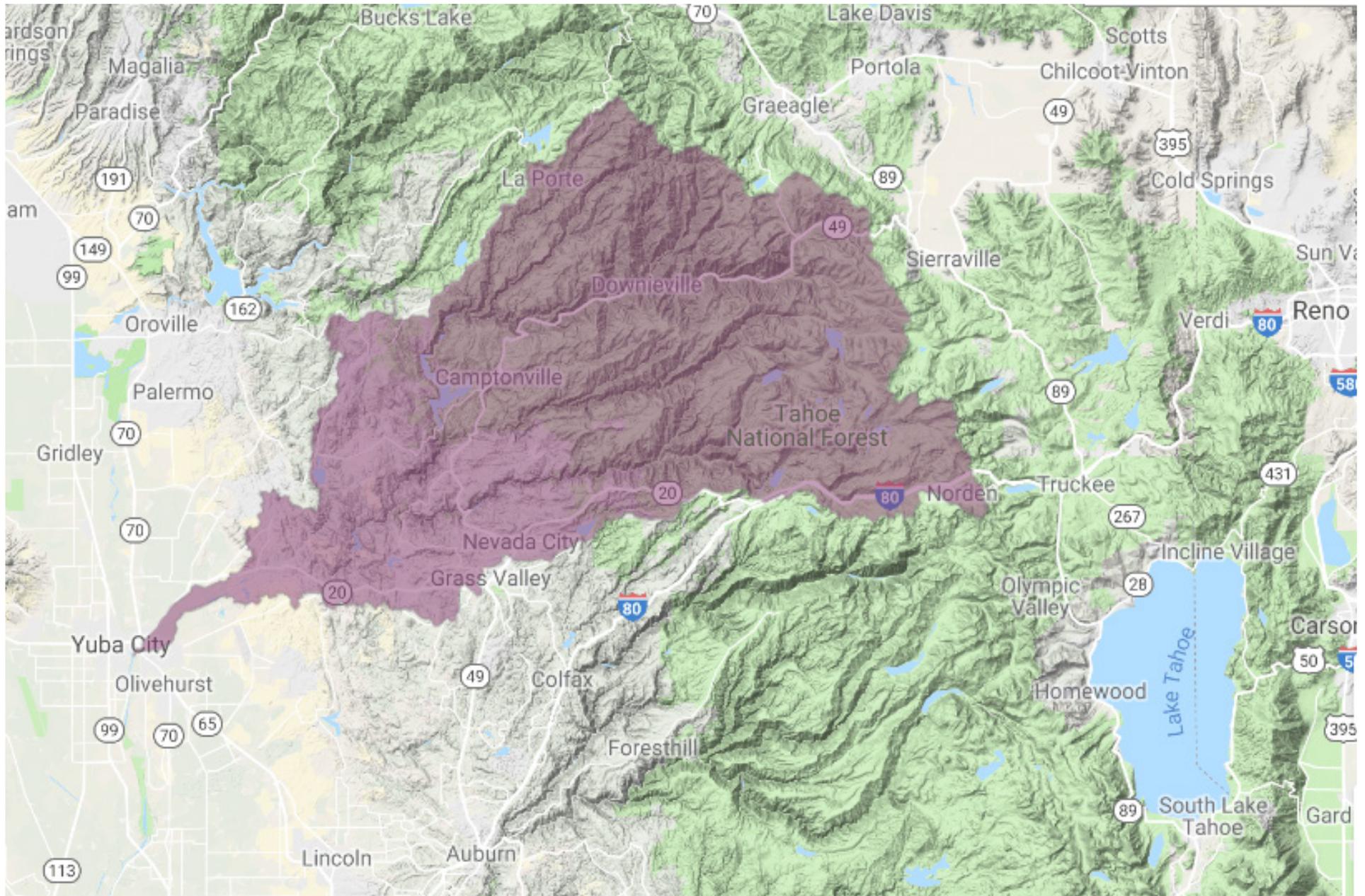


FIGURE 4.8-1: Truckee River Watershed
Nevada County Cannabis EIR



Source: Sacramento River Watershed Program

FIGURE 4.8-2: Yuba River Watershed
 Nevada County Cannabis EIR

The basins water-bearing units include interbedded alluvial and volcanic deposits, but some groundwater closer to the surface may be disconnected from the deeper MVGB, due to conditions such as hydrologic separation and geologic structure.

DAMS

Nevada County has identified 21 regulated and non-regulated privately-owned dams in Western Nevada County and 25 such dams in eastern Nevada County. Twelve of the 46 dams are regulated and owned by organizations such as the Nevada Irrigation District, Pacific Gas and Electric, the Army Corps of Engineers or other organizations. Regulated Dams have filed dam inundation plans with the State of California, the appropriate federal agency and the County. There are populated areas within the inundation zone of several of these dams; others have public property (such as roads) located down creek.

Populations occur in the inundation zone of several of the dams listed in the General Plan EIR. Of particular concern is the failure of the Upper or Lower Scott’s Flat dam. However, the area of Nevada County in which these dams exist is not located within an historical seismic zone. The western half of the County is located in the lowest “Maximum Expectable Earthquake Intensity” zone in California while the far eastern portion is classified in the highest earthquake intensity zone. Within the highest earthquake zone area are three major dams: Prosser Creek Reservoir Dam, Stampede Reservoir Dam (in Sierra County), and Boca Reservoir Dam.

Englebright Dam - marks the division between the Upper and Lower Yuba River. The dam was completed in 1941 to capture gold-rush era hydraulic mining debris that threatened downstream areas with floods. Englebright Reservoir has a storage capacity of 45,000 acre-feet and provides electricity and recreational opportunities.

Upper or Lower Scott’s Flat Dam – The inundation zone of these dams includes the population centers of Nevada City, Bitney Springs Road, Deer Creek, and a portion of Newtown Road, and the Lake Wildwood Subdivision.

Table 4.8-1: Damns in Nevada County list the remaining dams and the city or town in which they are located.

Table 4.8-1: Dams in Nevada County

Dam	Location	Dam	Location
Anthony House Dam	Rough And Ready	Jackson Meadows Dam	Haypress Valley
Bellett Dam	Nevada City	Lake Angela Dam	Norden
Big Downey Lake Dam	English Mountain	Lake Fordyce Dam	Webber Peak
Blue Lake Dam	Blue Canyon	Lake Spaulding Dam	Blue Canyon
Boca Dam	Boca	Lake Sterling Dam	Soda Springs
Bowman Rockfill Dam	Graniteville	Lake Vera Dam	Nevada City
Culbertson Dam	English Mountain	Liberty Hill Dam	Dutch Flat

Table 4.8-1: Dams in Nevada County

Dam	Location	Dam	Location
Deer Creek Diversion Dam	North Bloomfield	Loma Rica Airport Dam	Chicago Park
Donner Ever Valley Dam	Norden	Lower Feeley Lake Dam	Graniteville
Donner Lake Dam	Truckee	Lower Lindsey Dam	Graniteville
Dutch Flat 2 Forebay Dam	Dutch Flat	Magnolia Dam	Lake Combie
Dutch Flat Afterbay Dam	Dutch Flat	Martis Creek Lake Dam	Martis Peak
Faucherie Dam	English Mountain	Meadow Lake Dam	Webber Peak
French Lake Dam	English Mountain	Mid Lindsey Lake Dam	Graniteville
Fuller Lake Dam	Blue Canyon	Milton Diversion Dam	Haypress Valley
Jackson Lake Dam	English Mountain	Nevada City Raw Water Dam	Chicago Park
Our House Dam	Pike	Swan Dam	Rough And Ready
Pine Grove Dam	French Corral	Upper Feeley Lake Dam	Graniteville
Prosser Creek Dam	Hobart Mills	Upper Rock Lake Dam	English Mountain
Rucker Lake Dam	Blue Canyon	Weaver Dam	Graniteville
Sawmill Lake Dam	English Mountain	White Rock Lake Dam	Webber Peak
Scotts Flat 61-018 Dam	North Bloomfield		

Source: California.hometownlocator, - Nevada County CA, Dams, 2018

FLOOD HAZARD

According to the General Plan EIR the major flooding problems normally occur during the winter months between November through April. Especially severe flooding can occur when the ground is already saturated or existing snow is melted by warmer rains. In general, the County does not have significant, wide floodplains that are found in areas with less steep slopes.

Flood Insurance Rate maps partition flood areas into three zones: Zone A for areas of 100-year flood; Zone B for areas of 500-year flood; and Zone C for areas of minimal flooding. The National Flood Insurance Program (NFIP) 100-year floodplain is considered the base flood condition, which is defined as a flood event of a magnitude that would be equaled or exceeded an average of once during a 100-year period. Floodways are defined as stream channels plus adjacent floodplains that must be kept free of encroachment as much as possible so that the 100-year floods can be carried without substantial increases (no more than one foot) in flood elevations. Most portions of the County are not within a NFIP designated flood hazard zone and would therefore have an extremely low risk of flooding.

Some areas within the County subject to 100-year and 500-year flooding include Deer Creek west from Scott's Flat Reservoir through Nevada City towards Lake Wildwood, two tributaries bordering Alta Sierra and Highway 49 to the east and west, along Bear River to Rollins Reservoir, Little Greenhorn Creek, Greenhorn Creek, Steep Hollow Creek, the South Yuba River, the Truckee River, and tributaries that run south into Prosser Creek Reservoir, Boca Reservoir, and Martis Creek Reservoir.

According to the NFIP, administered by Federal Emergency Management Agency (FEMA), majority of the unincorporated portions of Nevada County are Zone D or Zone X. Zone D is an area with flood risk due to levee or areas of undetermined flood hazard. Zone X includes areas of minimal flood hazard. These could be due to reduced flood risk due to levees, future conditions one percent annual chance flood hazard, and 0.2 percent annual chance flood hazard as areas of one-percent annual chance flood with average depth less than one foot or with drainage areas of less than one square mile.

Some portions of Tahoe National Forest are Zone A which is a special flood hazard area without base flood elevation (BFE), however, the majority of the Forest is Zone D. The Nevada County airport is located in Zone D (undetermined flood hazard). Near the waterways there is Zone AO and AE meaning with Base Flood Elevation or Depth.

SEICHE

Seiches are the result of seismic activity. A seiche is a seismically-induced wave in an enclosed body of water such as lakes and reservoirs. Nevada County has a large number of reservoirs and recreational lakes. The effect of a seismic event depends on numerous factors such as the magnitude of the earthquake, the direction, radiation, and frequency of the seismic waves. The overall seiche risk in the County is considered to be moderate due to the overall seismic risk in Nevada County.

WATER QUALITY

The most common categories of stormwater pollutants are described below. Water quality degradation can be caused by several sources including: wastewater disposal practices, stormwater runoff from parking lots and roadways, erosion, siltation, agricultural, mining, and logging operations, and some industrial operations. Receiving waters can assimilate a certain quantity of various runoff constituents. However, there are thresholds beyond which a measured constituent becomes a pollutant and results in an undesirable impact.

SEDIMENT

Sediment is made up of tiny soil particles that are washed or blown into surface waters. It is typically the major pollutant by volume in surface water. The smallest particles of earthy or rock material are part of the process of siltation. These silt elements typically consist of 80 percent soil or silt and less than 12 percent clay. Suspended soil particles can cause the water to look cloudy and be turbid. The fine sediment particles also act as a vehicle to transport other pollutants, including nutrients, trace metals and hydrocarbons. Construction sites are the largest source of sediment for urban areas under development. Another major source is stream bank erosion, which may be accelerated by increases in peak flow rates and volumes of runoff due to urbanization. Agricultural operations are the largest source of sediment in rural areas.

NUTRIENTS

Nutrients are a major concern for surface water quality, especially phosphorous and nitrogen, which can cause algal blooms and excessive vegetative growth. Of the two, phosphorus is usually the limiting nutrient that controls the growth of algae in lakes or other non-moving water bodies. The orthophosphorous form of phosphorus is a readily available nutrient for plant growth. Orthophosphate from automobile emissions also contributes phosphorus in areas with heavy automobile traffic.

The ammonium form of nitrogen can also have severe effects on surface water quality. Ammonium is converted to nitrate and nitrite forms nitrogen in a process called nitrification. This process consumes large amounts of oxygen, which can impair the dissolved oxygen (DO) levels in water. The nitrate form of nitrogen is very soluble and is found naturally at low levels in water. When nitrogen fertilizer is applied in excess of plant needs, nitrates can leach below the root zone, eventually reaching groundwater.

Generally, nutrient export is greatest from agricultural areas and developed areas with large impervious areas. Other problems resulting from excess nutrients are surface algal scums, water discolorations, odors, toxic releases, and overgrowth of plants. Common measures of nutrients are total nitrogen, organic nitrogen, total Kjeldahl nitrogen (TKN), nitrate, ammonia, total phosphate, and total organic carbon (TOC).

TRACE METALS

Trace metals are primarily of concern because of their toxic effects on aquatic life and their potential to contaminate drinking water supplies. A shorter duration of exposure to a trace metal reduces its toxicity in the aquatic environment. The toxicity of trace metals in runoff also varies with the hardness of the receiving water. As total hardness of the water increases, so does the potential for adverse effects. Metals commonly found in urban runoff are lead, zinc and copper. According to the General Plan EIR, the western portion of the County has naturally occurring elements such as heavy metals that can contribute to water quality degradation. Automobile emissions are also a major source of lead in urban areas. In the project area, pollution concerns from heavy metal mining include arsenic, iron, manganese, mercury, lead and aluminum. A large fraction of the trace metals in stormwater runoff is attached to sediment. Sediment effectively reduces the level of trace metals that are immediately available for biological uptake and subsequent bioaccumulation (metals attached to sediment settle out rapidly and accumulate in the soil).

BACTERIA

Bacteria levels in undiluted urban runoff exceed public health standards for water contact recreation (including canoeing and rafting), almost without exception. According to the General Plan EIR the bacteriological results of the 1974 DWR study found degradation of the surface waters due to the unsatisfactory disposal of domestic sewage through the use of septic tanks and leach field systems.

OIL AND GREASE

Oil and grease contain a wide variety of hydrocarbons, some of which could be toxic to aquatic life in low concentrations. These materials initially float on water and create the familiar rainbow-colored film. Hydrocarbons have a strong affinity for sediment and quickly become absorbed in it. The major source of hydrocarbons in urban runoff is through leakage of crankcase oil and other lubricating agents from automobiles onto impervious surfaces. Hydrocarbon levels are highest in the runoff from parking lots, roads and service stations. Residential land uses generate less hydrocarbons export, although illegal disposal of waste oil into stormwater can be a local problem.

4.8.2 REGULATORY SETTING

FEDERAL

CLEAN WATER ACT (CWA)

The Clean Water Act (CWA) (U.S. Government Code [USC], Title 33, Section 1251 et seq.), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA establishes the basic structure for regulating discharges of pollutants into the waters of the U.S. and has given the U.S. Environmental Protection Agency (U.S. EPA) the authority to implement pollution control programs. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain nonpoint source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402).

CLEAN WATER ACT, SECTION 303, LIST OF WATER QUALITY LIMITED SEGMENTS

Section 303 of the CWA requires that the state adopt water quality standards for surface waters. When designated beneficial uses of a particular water body are being compromised by water quality, Section 303(d) of the CWA requires identifying and listing that water body as impaired. States are required to compile this information in a list and submit the list to U.S. EPA for review and approval. An affected waterbody, and associated pollutant or stressor, is then prioritized in a list of impaired water bodies known as the 303(d) List. The CWA further requires the development of a Total Maximum Daily Load (TMDL) for each listing.

Once a water body has been deemed impaired, a Total Maximum Daily Load (TMDL) must be developed for each impairing water quality constituent. A TMDL is an estimate of the total load of pollutants from point, non-point, and natural sources that a water body may receive without exceeding applicable water quality standards (often with a “factor of safety” included, which limits the total load of pollutants to a level well below that which could cause the standard to be exceeded). Once established, the TMDL is allocated among current and future dischargers into the water body. In California, implementation of TMDLs is achieved through water quality control plans, known as basin plans. Basin plans contain specific water quality standards, as well as a program of implementation for how those water quality standards may be achieved.

CLEAN WATER ACT, SECTION 402, NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Direct discharges of pollutants into waters of the U.S. are not allowed, except in accordance with the NPDES permit process established in Section 402 of the CWA. Section 402 authorizes the California State Water Resources Control Board (SWRCB) to issue NPDES General Construction Storm Water Permit (Water Quality Order 99-08-DWQ). Non-point source discharges to stormwater are regulated under stormwater NPDES permits for municipal stormwater discharges, industrial activities, and construction activities.

- Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving off-site into receiving waters;

- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation; and
- Perform inspections of all BMPs.

The SWPPP must contain a visual monitoring program; a chemical monitoring program for “non-visible” pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the construction site discharges directly to a water body listed on the 303(d) list for sediment. Increased compliance tasks under the adopted 2009 Construction General Permit include project risk evaluation, effluent monitoring, receiving water monitoring, electronic data submission of the SWPPP and all other permit registration documents, and a Rain Event Action Plan (REAP), which must be designed to protect all exposed portions of a project site within 48 hours prior to any likely precipitation event.

CLEAN WATER ACT, SECTIONS 404 AND 401

Under Section 404 of the CWA, the U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into waters of the U.S., which are those waters that have a connection to interstate commerce, either direct via a tributary system or indirect through a nexus identified in the USACE regulations. Under Section 401 of the CWA, the SWRCB must certify all activities requiring a 404 permit. The RWQCB regulates these activities and issues water quality certifications for those activities requiring a 404 permit.

Section 404 of the CWA establishes programs to regulate the discharge of dredged and fill material in waters of the U.S., including wetlands. For purposes of section 404 of the CWA, the limits of non-tidal waters extend to the Ordinary High Water (OHW) line, defined as the line on the shore established by the fluctuation of water and indicated by physical characteristics, such as natural line impressed on the bank, changes in the character of the soil, and presence of debris. When an application for a Section 404 permit is made, the applicant must show it has:

- Taken steps to avoid impacts to wetlands or waters of the U.S. where practicable;
- Minimized unavoidable impacts on waters of the U.S. and wetlands; and
- Provided mitigation for unavoidable impacts.

Section 404 of the CWA requires a permit for construction activities involving placement of any kind of fill material into waters of the U.S. or wetlands. A Water Quality Certification pursuant to Section 401 of the CWA is required for Section 404 permit actions. If applicable, construction would also require a request for Water Quality Certification (or waiver thereof) from the Central Valley RWQCB. Project activities would adhere to State and federal water quality standards and would be in compliance with Sections 401 and 404 of the CWA.

NATIONAL FLOOD INSURANCE ACT

The Federal Emergency Management Administration (FEMA) is tasked with responding to, planning for, recovering from, and mitigating against disasters. FEMA is also responsible for coordinating the federal response to floods, earthquakes, hurricanes, and other natural or man-made disasters and providing disaster assistance to states, communities, and individuals. The Federal Insurance and Mitigation Administration within FEMA is responsible for administering the National Flood Insurance Program (NFIP). FEMA prepares Flood Insurance Rate Maps (FIRMs). These maps delineate the regulatory floodplain to assist local governments with the land use planning and floodplain management decisions needed to meet

the requirements of NFIP. FEMA divides flood areas into three zones: Zone A for areas of 100-year flood; Zone B for areas of 500-year flood; and Zone C for areas of minimal flooding. The National Flood Insurance Program 100-year floodplain is considered to be the base flood condition. This is defined as a flood event of a magnitude that would be equaled or exceeded an average of once during a 100-year period. Floodways are defined as stream channels plus adjacent floodplains that must be kept free of encroachment as much as possible so that 100-year floods can be carried without substantial increases (no more than 1 foot) in flood elevations.

NATIONAL TOXICS RULE

In 1992, the US EPA issued the National Toxics Rule (NTR) (40 CFR 131.36) under the CWA to establish numeric criteria for priority toxic pollutants in 14 states and jurisdictions, including California, to protect human health and aquatic life. The NTR established water quality standards for 42 pollutants for which water quality criteria exist under CWA Section 304(a) but for which the respective states had not adopted adequate numeric criteria. EPA issued the California Toxics Rule (CTR) in May 2000. The CTR establishes numeric water quality criteria for 130 priority pollutants for which EPA has issued Section 304(a) numeric criteria that were not included in the NTR.

NATIONAL WILD AND SCENIC RIVERS SYSTEMS

In 1968, the National Wild and Scenic Rivers System was created by Congress (Public Law 90-542; 16 .S.C. 1271 et seq.) to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act is notable for safeguarding the special character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection.

Rivers may be designated by Congress or, if certain requirements are met, the Secretary of the Interior. Each river is administered by either a federal or state agency. Designated segments need not include the entire river and may include tributaries. For federally administered rivers, the designated boundaries generally average one-quarter mile on either bank in the lower 48 states and one-half mile on rivers outside national parks in Alaska to protect river-related values.

Rivers classified as Wild, are rivers that are free of impoundments and generally inaccessible except by trail. The watersheds or shorelines are primitive and waters unpolluted. Scenic Rivers are those free of impoundments, with largely primitive and undeveloped shorelines or watersheds. These rivers are accessible in certain places by roads. Recreational River areas are those rivers or sections of rivers that are easily accessible by road or railroad and have some development along their shorelines. These river areas may have undergone some impoundment or diversion in the past. However, regardless of classification each river in the National System is administered with the goal of protecting and enhancing the values that lead it to be designated. Designation does not prohibit developer or gives the federal government control over private property. Protection of the river is provided through voluntary stewardship by landowners and river users and through regulation and programs of federal, state, local, or tribal governments.

SAFE DRINKING WATER ACT

Passed in 1974, the Safe Drinking Water Act (Public Law 93-523), delegates the USEPA to regulate contaminants of concern to domestic water supply. Such contaminants are defined as those that pose a

public health threat or that alter the aesthetic acceptability of the water. These types of contaminants are regulated by EPA primary and secondary maximum contaminant levels (MCLs). MCLs and the process for setting these standards are reviewed triennially. Amendments to the Safe Drinking Water Act enacted in 1986 established an accelerated schedule for setting drinking water MCLs. EPA has delegated responsibility for California's drinking water program to Department of Health Services (DHS). DHS is accountable to EPA for program implementation and for adoption of standards and regulations that are at least as stringent as those developed by EPA.

TRUCKEE RIVER OPERATING AGREEMENT

The TROA was negotiated between the States of California and Nevada for the operation of Truckee River Reservoirs (the five Federal reservoirs in the Truckee River basin). Pursuant to Section 205(a)(5) of the Truckee-Carson-Pyramid Lake Water Rights Settlement Act (P.L. 101-168 or "Settlement Act"), the TROA was promulgated as a Federal Regulation (43 CFR Part 419) in 2008. The agreement took effect in December 2015 after 26 years of federally facilitated negotiations, environmental studies, and legal challenges.

Section 204(c)(1)(B) of the Settlement Act required that "all new wells drilled after the date of enactment of this title shall be designed to minimize any short-term reductions of surface stream flows to the maximum extent feasible." To achieve this, Section 10.C of TROA requires notification for any wells installed after May 1, 1996, and review of well sites and design by the TROA Administrator to ensure that they comply with Section 204 of the Settlement Act.

Within the Special Zones along the Truckee River between Lake Tahoe and the California-Nevada border, wells are conclusively presumed to meet the terms of Section 204(c)(1)(B) if they meet criteria stated in Section 10.B of TROA. Notably, new wells within the Special Zones that are located more than 500 feet from the Truckee River (and in some cases, closer to the river) meet the criteria.

Dobbas Spring, which provides the water supply for currently permitted mining operations and is the proposed water supply for the proposed project, has been fitted with improvements to enable the economic use of the spring's surface waters. This was approved by a conditional use permit issued by Nevada County in 1998. The project applicant's lease allows for use of these surface waters for the quarry operations.

The spring does not meet the Nevada County Water Supply Ordinance definition of a "well" which is an artificial excavation constructed for the purpose of extracting water from, or injecting water into, the underground (Section L-X1.2(LL) of the County Land Use and Development Code). Therefore, the spring is not subject to the notification requirements of Section 10.C of TROA. The spring is located about 2,600 feet from the centerline of the Truckee River, but is contiguous with a channel, pond, and on- and off-site wetlands. The nearest point of any of these other surface waters and off-site wetland is about 1,700 feet from the centerline of the Truckee River in a direct line, and over 1,800 feet in the direction of flow. Further, it is anticipated that, if the developed spring were to be considered to be a well, it would be in compliance with Section 204 of the Settlement Act.

STATE

STATE WATER RESOURCES CONTROL BOARD

The National Pollution Discharge Elimination System (NPDES) was established per the 1972 amendments to the Federal Water Pollution Control Act, or Clean Water Act (CWA), to control discharges of pollutants

from point sources (Section 402). Amendments to the CWA created a new section to the Act, which is devoted to stormwater permitting, with individual states designated for administration and enforcement of the provisions of the CWA and the NPDES permit program. The State Water Resources Control Board (SWRCB) issues both general construction permits and individual permits under this program.

As required by the California Water Code (Section 13240) and supported by the CWA, each RWQCB must formulate and adopt a water quality plan (Basin Plan) for its region. The Basin Plan includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term “water quality standards,” as used in the CWA, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain water quality standards. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels needed to meet the beneficial uses, plans for improving water quality are included. The Basin Plan reflects, incorporates and implements applicable portions of a number of national and statewide water quality plans and policies, including the Porter-Cologne Act, California Water Code and the CWA.

The SWRCB developed a policy for water quality control to establish principles and guidelines for cannabis cultivation statewide. The principles and guidelines include measures to protect springs, wetland, and aquatic habitats from negative impacts of cannabis cultivation. The policy includes instream flow objectives, limits on diversions, and requirements for screening of diversions and elimination of barriers to fish passage. The policy also includes requirements that apply to groundwater extractions, forbearance periods, off-stream storage requirements, riparian buffers, and irrigation conservation measures as well as other best management practices.

As discussed above, the primary responsibility for the protection of water quality in California rests with the SWRCB. The SWRCB sets Statewide policy for the implementation of State and Federal laws and regulations. To do this more effectively, the SWRCB is divided into nine regional water quality control boards (RWQCBs). The RWQCBs adopt and implement Water Quality Control Plans (Basin Plans) that recognize regional differences in natural water quality, actual and potential beneficial uses, and water quality problems associated with human activities.

There are two RWQCB within Nevada County. This include the Lahontan RWQCB and the Central Valley RWQCB. The jurisdiction of the Lahontan RWQCB extends from the Oregon border to the northern Mojave Desert and includes all of California east of the Sierra Nevada crest. Lahontan RWQCB includes the North and South Basins. Nevada County is located within the North Basin. The North Basin includes seven counties along the California and Nevada border. The western portion of Nevada County is located within the Central Valley RWQCB. The jurisdiction of the Central Valley RWQCB extends from the Oregon border, over the valley and foothills from Redding to Fresno, through the Central Valley, to the border with Los Angeles County.

LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD

The RWQCB Lahontan Basin Plan establishes a number of beneficial uses and water quality objectives for surface and groundwater resources. *Figure 4.8-4 North Lahontan Basin and Central Valley Basins* shows the northern portion of the basin which occupies a part of Nevada County. Beneficial uses are generally

defined as the uses of water necessary for the survival or well being of man, plus plants and wildlife. Identified beneficial uses for the water basin include municipal and domestic supply (MUN); agricultural supply (AGR); aquaculture (AQUA); preservation of biological habitats of special significance (BIOL); industrial service supply (IND); groundwater recharge (GWR); freshwater replenishment (FRSH); hydropower generation (POW); industrial process supply (PRO); contact and non-contact water recreation (REC-1 and REC-2); commercial and sport fishing (COMM); cold freshwater habitat (COLD); flood peak attenuation/ flood water storage (FLD); wildlife habitat (WILD); rare, threatened, or endangered species (RARE); migration of aquatic organisms (MIGR); navigation (NAV); inland saline water habitat (SAL); spawning, reproduction, and/or early development (SPWN); warm freshwater habitat (WARM); and water quality enhancement (WQE). While no beneficial uses are listed for local groundwater, beneficial uses identified for the nearby Martis Valley Groundwater Basin include MUN, AGR, and FRSH.

At the time of the General Plan EIR, RWQCB staff are currently sampling a number of Truckee River stations to determine the extent of problems related to sediment, nutrients, and ambient metals. Concerns have been raised about abandoned mine drainage degrading surface water quality. Some of the mines have ownership while others do not. The extent of mine drainage impacts has not been studied or determined.

The LWQCB did not adopt their own criteria related to cannabis permitting and defaulted to the SWRQB. Therefore, those standards currently, and would apply under the proposed project.

CENTRAL VALLEY WATER QUALITY CONTROL BOARD

On October 2, 2015, the Central Valley Regional Water Quality Control Board adopted the General Waste Discharge Requirements Order for Discharges of Waste Associated with Medical Cannabis Cultivation Activities Order No. R5-2015-0113 (Central Valley Order). The CVWQCB separates the cultivators into Tiers based on the criteria including area of cultivation, slopes and presence of watercourses. These Tiers are shown in *Table 4.8-2: CVWQCB Tiers*, below. All cannabis cultivators not currently enrolled under the Central Valley Regional Water Quality Control Board Order No. R5-2015-0113 (Central Valley Order) are required to apply for coverage under the Cannabis General Order. Once an online application is submitted and the applicable fee is paid, a Notice of Applicability (NOA) will be issued to the enrollee by the appropriate Regional Water Quality Control Board. However, beginning July 1, 2019, the General Order will default to the SWRCB standards and individual RWQCBs will no longer set their own criteria.

Table 4.8-2: CVWQCB Tiers

Tier 1	Cannabis Cultivators whose cultivation areas and associated facilities are located on less than 30% slopes, occupy and/or disturb less than 1/4 acre, AND are not located within 200 feet of a wetland, Class I or II watercourse
Tier 2	Cannabis Cultivators whose cultivation areas and associated facilities are located on less than 30% slopes, occupy and/or disturb less than 1 acre and less than 50% of the Cultivator's/Landowner's parcel, AND are not located within 200 feet of a wetland, Class I or II watercourse
Tier 3	Cannabis Cultivators whose cultivation areas and associated facilities are located on greater than 30% slopes, occupy and/or disturb more than 1 acre or more than 50% of the Cultivator's/Landowner's parcel, OR are within 200 feet of a wetland, Class I or II watercourse

CANNABIS GENERAL ORDER

On October 17, 2017, the State Water Resources Control Board (State Water Board) adopted the current Cannabis Cultivation Policy Principles and Guideline for Cannabis Cultivation (Cannabis Policy) and the General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities (Cannabis General Order), which implements the Cannabis Policy (WQ 2017-0023-DWQ). On December 18, 2017, the state’s Office of Administrative Law approved the Cannabis Policy, making the Cannabis Policy and Cannabis General Order effective as of that date. The Cannabis Policy is implemented through the Small Irrigation Use Registration (SIUR) Program and the Cannabis General Order. Compliance with the Cannabis Policy is required to obtain a license from the California Department of Food and Agriculture (CDFA) under its CalCannabis Licensing Program.

On September 28, 2018, the State Water Board released proposed updates to the Cannabis Cultivation Policy – Principles and Guidelines for Cannabis Cultivation (Cannabis Policy), Cannabis Cultivation Policy Staff Report (Staff Report), and General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities (Cannabis Cultivation General Order) for public comment. Hearings on the revised policy are to be held on February 5, 2019 and the revised General Order would be adopted after that time. It should be noted that some existing Dischargers may qualify for conditional exemption from the General Order; some previously exempted activities may need to obtain coverage under the Waiver or enroll under this General Order. Once and if the new rules take effect, all cannabis cultivation within the County will be required to comply with this order.

Accordingly, no new applications will be accepted under the Central Valley Order. Cannabis cultivators currently enrolled under the Central Valley Order may continue to operate under and comply with the requirements of their respective order until they enroll in the Cannabis General Order. All enrollees under the North Coast Order and Central Valley Order must transition the Cannabis General Order by July 1, 2019.

The General Order also uses a tiered approach, which includes Tier 1 and Tier 2 but also includes categorization for personal use, indoor commercial cultivation, and outdoor cultivation less than 2,00sf. This system would be applicable statewide upon adoption of the statewide General Order. The General Order also assigns risk factors to cultivation areas based on the slope of the cultivation sites. *Table 4.8-3, RWQCB General Order Tiers*, and *Table 4.8-4 Summary of Risk Designations*, show these criteria below:

Table 4.8-3: RWQCB General Order Tiers

Personal Use	Personal use exempt Dischargers are very small non-commercial cultivators that are exempt from this General Order (Refer to the General Order for specific exemptions for more information).
Indoor Commercial Cultivation	Indoor commercial cultivation activities are conditionally exempt under this General Order (Refer to the General Order for specific exemptions for more information)
Outdoor Cultivation (<2,000 sf)	Cultivation activities that disturb less than 2,000 square feet may be conditionally exempt under this General Order (Refer to the General Order for specific exemptions and more information.)

Tier 1	Tier 1 Dischargers cultivate cannabis commercially outdoors and have a disturbed area equal to or greater than 2,000 square feet and less than 1 acre (43,560 square feet).
Tier 2	Tier 2 Dischargers cultivate cannabis commercially outdoors, and have a disturbed area equal to or greater than 1 acre
<p>Source: RWQCB, 2018 Notes: Regarding Personal Use, Indoor Commercial Cultivation, and Outdoor Cultivation <2,000 sf, (Refer to the General Order for specific exemptions and for more information). Under the revised General Order, there are no proposed changes to the tiers.</p>	

Table 4.8-4: Summary of Risk Designations

Low Risk	Moderate Risk	High Risk
No portion of the disturbed area is located on a slope greater than 30 percent, and	Any portion of the disturbed area is located on a slope greater than 30 percent, and less than 50 percent, and	Any portion of the disturbed area is located within the setback requirements
All of the disturbed area complies with the setback requirements	All of the disturbed area complies with the setback requirements	
<p>Source: RWQCB, 2018 Notes: less than 50 percent, and is the only revised language. Setbacks are defined as follows: 150 ft from perennial watercourses, waterbodies (e.g. lakes ponds, springs); 100 ft from intermittent watercourses or wetlands; and 50 ft from ephemeral watercourses.</p>		

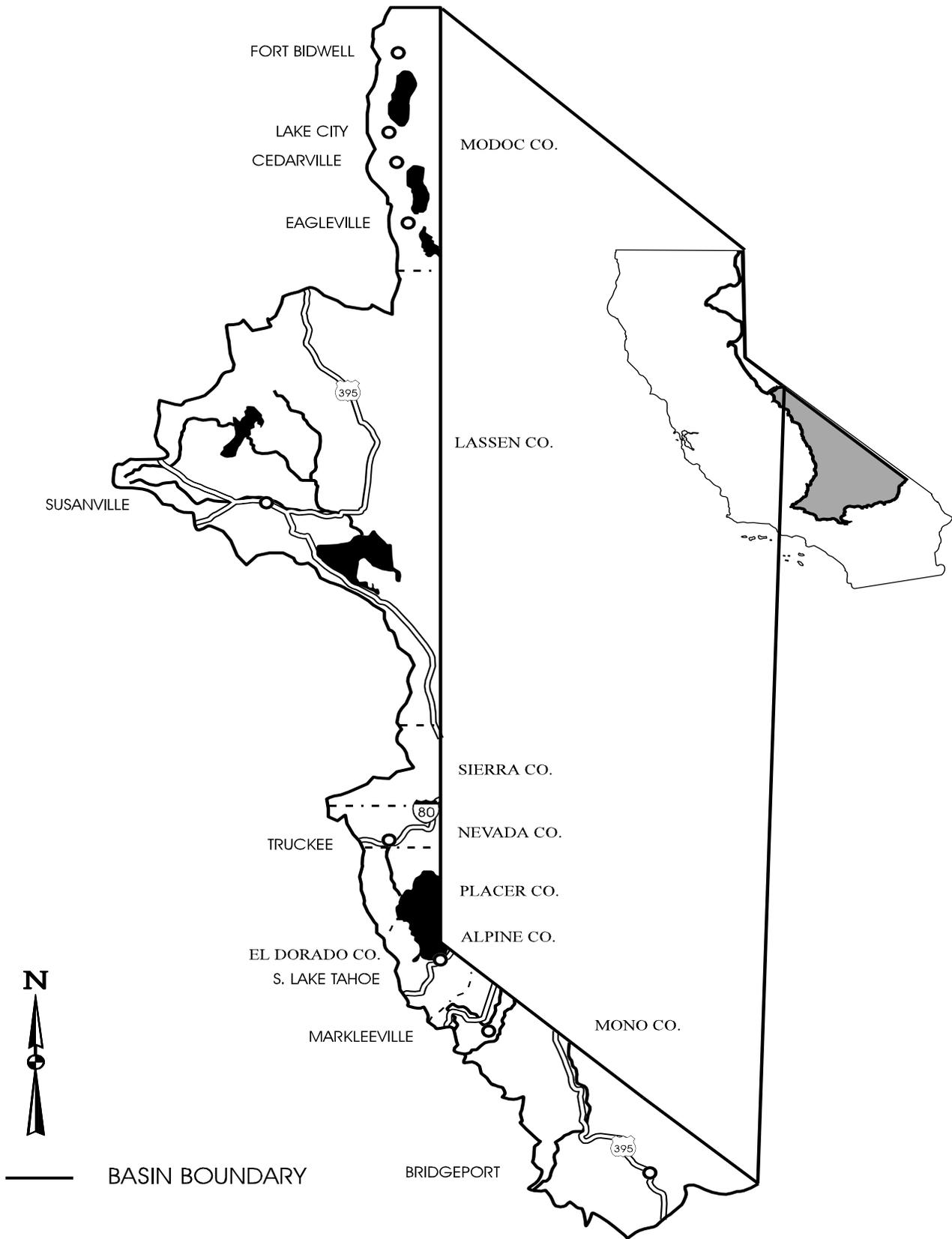


FIGURE 4.8-4: North Lahontan and Central Basin
 Nevada County Cannabis EIR

DEPARTMENT OF WATER RESOURCES

Department of Water Resources (DWR) major responsibilities include preparing and updating the California Water Plan to guide development and management of the State's water resources; planning, designing, constructing, operating, and maintaining the State Water Resources Development System; regulating dams; providing flood protection; assisting in emergency management to safeguard life and property; educating the public; and serving local water needs by providing technical assistance. In addition, DWR cooperates with local agencies on water resources investigations; supports watershed and river restoration programs; encourages water conservation; explores conjunctive use of ground and surface water; facilitates voluntary water transfers; and, when needed, operates a State drought water bank.

PORTER-COLOGNE WATER QUALITY CONTROL ACT

Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) is California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater. The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) grants the State Water Resources Control Board (SWRCB) and each of the nine Regional Water Quality Control Boards (RWQCBs) power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the CWA. The applicable RWQCB for the project area is the Lahontan Regional Water Quality Control Board (LRWQCB). Under the Porter-Cologne Act, the SWRCB and RWQCBs have the authority and responsibility to adopt plans and policies, regulate discharges to surface and groundwater, regulate waste disposal sites and require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substances, sewage, or oil or petroleum products.

STREAMBED ALTERATION AGREEMENT (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE)

Section 1602 of the California Fish and Wildlife (CDFW) protects the natural flow, bed, channel, and bank of any river, stream, or lake designated by the CDFW in which there is, at any time, any existing fish or wildlife resources, or benefit for the resources. Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State, and requires any person, State or local governmental agency, or public utility to notify the CDFW before beginning any activity that will:

- Substantially divert or obstruct the natural flow of any river, stream or lake;
- Substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

During final engineering and design of a project, if it is determined that any project-related actions would have the potential to necessitate a Streambed Alteration Agreement, then such an agreement would be prepared and implemented prior to construction of the project, thus maintaining compliance with Section 1602 of the California Fish and Game Code. A Streambed Alteration Agreement is required if the CDFW determines the activity could substantially adversely affect an existing fish and wildlife resource. The agreement includes measures to protect fish and wildlife resources while conducting the project. The CDFW must comply with CEQA before it may issue a final Lake or Streambed Alteration Agreement;

therefore, the CDFW must wait for the lead agency to fully comply with CEQA before it may sign the draft Lake or Streambed Alteration Agreement, thereby making it final.

CALIFORNIA WATER CODE SECTION 13050-13260

California Water Code Section 13050(e) defines “waters of the state” as “any surface water or groundwater, including saline waters, within the boundaries of the state.” California Water Code Section 13260 requires that any person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the State, other than into a community sewer system, must submit a report of waste discharge to the applicable RWQCB.

CALIFORNIA TOXICS RULE

Because California had not established a complete list of acceptable water quality criteria, the EPA (under the authority of the CWA) established numeric water quality criteria in the form of the California Toxics Rule (CTR) (40 CFR 131.38), which was finalized May 18, 2000. CTR covers potentially toxic constituents in receiving waters with human health or aquatic life designated uses. The CTR specifies water quality criteria for 128 priority pollutants based on toxicity to aquatic species, which are used as a basis for the establishment of effluent limitations in NPDES permits. The CTR is applicable to surfaced waters only.

SUSTAINABLE GROUNDWATER MANAGEMENT ACT OF 2014

As noted under Section 10720.1 of the Sustainable Groundwater Management Act (SGMA), effective January 1, 2015, it established a framework of priorities and requirements to facilitate sustainable groundwater management throughout California. The legislative intent of the SGMA is for groundwater to be managed in California's groundwater basins by local public agencies and newly-formed Groundwater Sustainability Agencies (GSAs).

Specifically, the Act establishes a definition of “sustainable groundwater management,” requires that a Groundwater Sustainability Plan be adopted for the most important groundwater basins in California, establishes a timetable for adoption of Groundwater Sustainability Plans, empowers local agencies to manage basins sustainably, establishes basic requirements for Groundwater Sustainability Plans, and provides for a limited State role.

RECYCLED WATER POLICY

On February 3, 2009, by Resolution No. 2009-0011, the SWRCB adopted a Recycled Water Policy in an effort to move towards a sustainable water future. In the Recycled Water Policy states “we declare our independence from relying on the vagaries of annual precipitation and move towards sustainable management of surface waters and groundwater, together with enhanced water conservation, water reuse and the use of stormwater.”

The following goals were included in the Recycled Water Policy:

- Increase use of recycled water over 2002 levels by at least one million acre-feet per year by 2020 and at least two million acre-feet per year by 2030.
- Increase the use of stormwater over use in 2007 by at least 500,000 acre-feet per year by 2020 and at least one million acre-feet per year by 2030.
- Increase the amount of water conserved in urban and industrial areas by comparison to 2007 by at least 20 percent by 2020.

- Included in these goals is the substitution of as much recycled water for potable water as possible by 2030.

The Recycled Water Policy provides direction to the RWQCBs regarding issuing permits for recycled water projects, addresses the benefits of recycled water, addresses a mandate for use of recycled water and indicates the SWRCB will exercise its authority to the fullest extent possible to encourage the use of recycled water. The Recycled Water Policy also indicates that some groundwater basins contain salts and nutrients that exceed or threaten to exceed water quality objectives established in basin plans and states that it is the intent of this Recycled Water Policy that all salts and nutrients be managed on a basin-wide or watershed-wide basis through development of regional or sub-regional management plans. Finally, the Recycled Water Policy addresses the control of incidental runoff from landscape irrigation projects, recycled water groundwater recharge projects, anti-degradation, control of emerging constituents and chemicals of emerging concern and incentives for use of recycled water.

Only groundwater recharge reuse facilities will be required to monitor for CECs and surrogates. Surface application and subsurface application facilities will have different mandatory CECs and a different monitoring schedule. Monitoring is not required for recycled water used for landscape irrigation projects that qualify for streamlined permitting unless monitoring is required under the adopted salt and nutrient management plan. Streamlined permitting projects must meet the criteria specified in the Policy including: compliance with Title 22, application at agronomic rates, compliance with any applicable salt and nutrient management plan, and appropriate use of fertilizers.

CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN CODE)

The State of California enacted The California Green Building Standards Code (CALGreen Code) as part 11 of The California Building Standards Code (Title 24). The 2016 CALGreen Code, effective on January 1, 2017, contains measures that are designed to improve public health, safety, and general welfare by utilizing design and construction methods that reduce the negative environmental impact of development and encourage sustainable construction practices.

Under the CALGreen Code, all residential and non-residential sites are required to keep surface water from entering buildings and to incorporate efficient outdoor water use measures. Construction plans are required to show appropriate grading and surface water management methods. Plans should also include outdoor water use plans that utilize weather or soil moisture-controlled irrigation systems. In addition to the above-mentioned requirements, non-residential structures are also required to develop:

- A SWPPP;
- An irrigation budget for landscapes greater than 2,500 square feet, and
- A quantified plan to reduce waste water by 20 percent through use of water-efficient fixtures or non-potable water systems, such as use of harvested rainwater, grey water, and/or recycled water.

CALGreen also offers a tiered set of voluntary measures to encourage residential and non-residential development that goes beyond the mandatory standards to reduce soil erosion, rainwater capture and infiltration, and use of recycled and/or grey water systems. Non-residential developers are further encouraged to integrate treatment BMPs that result in zero net increase in runoff due to development and can treat runoff from the 85th percentile storms.

SENATE BILLS 610 (CHAPTER 643, STATUTES OF 2001)

SB 610 was passed on January 1, 2002, amending California law to require detailed analysis of water supply availability for large development projects. An SB 610 Water Supply Assessment (WSA) must be prepared if the following three conditions are met: 1) the proposed project is subject to CEQA under Water Code Section 10910; 2) the proposed project meets criteria to be defined as a “Project” under Water Code Section 10912; and 3) the applicable water agency’s current Urban Water Management Plan (UWMP) does not account for the water supply demand associated with the proposed project. A proposed project would meet the definition of “Project” per Water Code Section 10912 if it is:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A proposed hotel or motel, or both, having more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- A mixed-use project that includes one or more of the projects specified in this subdivision; or
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project (DWR, 2003).

PROPOSITION 50

In 2002, California voters passed Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002. Proposition 50 provided \$500 Million to support Integrated Regional Water Management (IRWM) using Integrated Regional Water Management Plans (IRWMP). In 2006, California voters passed Proposition 84, the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act. Proposition 84 provided an additional \$1 Billion, which helped spread the practice of IRWM across most of California (Waterboards, 2015). IRWPs is a collaborative group that is typically stakeholder-driven incorporating water management agencies, conservation groups, counties and cities, regional watershed collaboratives, recreational interests, agricultural interests, and disadvantaged communities, Tribes, and other partners with responsibility for, or interests in, water management issues. Related to the project area, the Cosumnes, American, Bear, Yuba (CABY) Integrated Regional Water Management (IRWM) group was formed. Using grant money, CABY engages in initiatives, and partnerships and undertakes projects that concentrate on water quality, water quantity, and environmental quality. More specifically, CABY integrates long-term planning and high-quality project implementation in an adaptive management framework-fostering coordination and communication among these listed diverse stakeholders.

The program framework developed by CABY includes five Program Areas and five associated Program Goals. This includes the following:

- Water Supply: Ensure adequate and reliable supply that can be adapted to climate change and can meet the needs of the region;

- Water Quality: Ensure sufficient water quality to support healthy ecosystems and dependent organisms;
- Environment and Habitat: Preserve and restore watershed Health;
- Climate Change: Anticipate climate change needs and be prepared to respond adaptively to human and ecosystem needs; and
- Human-Landscape Interaction: Maintain and enhance functioning landscapes that project sustainable services for humans.

LOCAL

NEVADA COUNTY GENERAL PLAN

The policies, goals, and implementation measures in the General Plan applicable to hydrology and water quality as related to the proposed project are provided below. The General Plan contains additional policies, goals, and implementation measures that are more general in nature and not specific. Therefore, they are not listed below, but, as stated in *Section 2: Introduction*, all policies, goals, and implementation measures in the General Plan are incorporated by reference.

The Nevada County General Plan (1995) Water Element (Chapter 11) identifies the primary goals and objectives:

Goal 11.1	Identify, protect and manage for sustainable water resources and riparian habitats.
Objective 11.1	Promote and provide for conservation of domestic and agricultural water.
Policy 11.1	Adopt water conservation standards, consistent with State guidelines, for multi-family, commercial and industrial development encouraging installation and use of low-flow plumbing fixtures, drip irrigation systems, and drought-tolerant landscape plantings.
Policy 11.2	Encourage the protection of resources which produce water for domestic and agricultural consumption.
Policy 11.3	To promote protection of water quality where water is transported in open canals, the County shall support reasonable protective regulations adopted by public water purveyors in the processing of subdivision and discretionary permit applications.
Policy 11.3A	The County shall provide for a comprehensive and organized system of well log data. Such data shall be generalized as necessary to protect confidentiality of individual wells. This information will be utilized by decision makers to assist in the making of land use decisions.
Objective 11.2	Preserve surface and sub-surface water quality and, where feasible, improve such quality.
Policy 11.4	Cooperate with State and local agencies in efforts to identify and reduce to acceptable levels all sources of existing and potential point- and non-point-source pollution to ground and surface waters, including leaking fuel tanks, discharges

- from storm drains, auto dismantling and dump sites, sanitary waste systems, parking lots, roadways, logging and mining operations.
- Policy 11.5 Maintain the operation of the Nevada County Water Agency Advisory Council in order to promote continuing communication and cooperation between public water purveyors and other public agencies in protecting and enhancing the County's water resources.
- Policy 11.6 Enforce Grading Ordinance provisions for erosion control on all new development projects by adopting provisions for ongoing monitoring of project grading. Project site inspection shall be required prior to initial site disturbance and grading to ensure all necessary control measures, including proper staking and tree protection measures, are in place. The installation, maintenance, and performance of erosion and sedimentation control measures shall be monitored by County or District staff (or their designee) and completely funded by a project applicant. All County projects shall comply with this policy.
- Policy 11.6A New development shall minimize the discharge of pollutants into surface water drainages by providing the following improvements or similar methods which provide equal or greater runoff control: (a) include curbs and gutters on arterials, collectors, and local roads consistent with adopted urban street designs; and (b) oil, grease, and silt traps for subdivisions creating 5 or more parcels and commercial and industrial development of 1 acre or greater size. Maintenance of such facilities shall be assured through a legally-enforceable mechanism.
- Policy 11.6B In order to determine the potential long-term effects of the continued use of septic tank/leachfield systems on groundwater quality, the County shall provide for a comprehensive and organized database of system failures based on current and updated data available in the Department of Environmental Health. Such information shall assist the County in determining existing and potential septic tank/leachfield system problem areas.
- Objective 11.3 Preserve and, where economically feasible, restore the density and diversity of water dependent species and continuous riparian habitats based on sound ecological principles.
- Policy 11.7 Through the development and application of Comprehensive Site Development Standards, and project environmental review, establish and enforce minimum building setback lines from perennial streams and significant wetlands that are adequate to protect stream and wetland resource values.
- Policy 11.8 Utilize voluntary clustering of development to preserve stream corridors, riparian habitat, wetlands, and floodplains.
- Objective 11.4 Preserve the integrity and minimize the disruption of watersheds and identified critical water courses.
- Policy 11.9 Within Rural Regions, maintain the low densities of development allowed in the Rural and Forest General Plan Land Use Designations, in order to protect existing watersheds.

Policy 11.9A	Approve only those grading applications and development proposals that are adequately protected from flood hazards and which do not add flood damage potential. This may include the requirement for foundation design which minimizes displacement of flood waters, as well as other mitigation measures.
Policy 11.9B	Require new utilities, critical facilities and non-essential public structures to be located outside the 100-year flood plain unless such facilities are necessary to serve existing uses, there is no other feasible location, and construction of these structures will not increase hazards to life or property within or adjacent to the floodplains.
Policy 11.9C	When constructed within a floodplain, require elevation of the habitable portions of residential structures to be above the 100-year flood level. Require flood-proofing or elevation of non-residential structures. Require that foundations do not cause floodwater displacement except where necessary for flood-proofing.
Objective 11.5	Support the acquisition, development, maintenance and restoration, where clearly consistent with General Plan policies, of habitat lands for wildlife enhancement.
Policy 11.10	Cooperate with State and Federal agencies and public and quasi-public organizations and agencies in the acquisition, restoration, and maintenance of habitat lands.
Policy 11.11	Cooperate with and encourage the USFS and BLM to restore/maintain habitat areas on existing owned lands.
The Safety Element of the Nevada County General Plan discusses Flood Hazards (FH).	
Goal FH- 10.3	Reduce the potential for injury, property damage, and environmental damage from flooding.
Policy FH- 10.3.1	Implement development standards to ensure new construction does not result in increased peak run-off or flood potential.
Policy FH- 10.3.2	Avoid potential increases in downstream flooding potential by protecting natural drainage and vegetative patterns through project site plan review, application of Comprehensive Site Development Standards, use of clustered development and project subdivision design. The Comprehensive Site Development Standards shall include measures applicable to all discretionary and ministerial projects to avoid downstream flooding resulting from new development. Such measures, shall include, but not be limited to: <ul style="list-style-type: none"> a. Avoidance of stream channel modifications; b. Avoidance of excessive areas of impervious surfaces; and c. Use of on-site retention or detention of stormwater.
Policy FH- 10.3.3	Participate in County flood studies and programs.
Policy FH- 10.3.4	Continue to work with appropriate local, state and federal agencies (particularly FEMA) in maintaining the most current flood hazard and flood plain information

as a basis for project review in such areas in accordance with federal, state and local standards.

Policy FH- 10.3.5 Continue to participate in the National Flood Insurance Program.

NEVADA COUNTY LAND USE AND DEVELOPMENT CODE

The Nevada County Land Use and Development Code is Title III of the Nevada County Code. The Purpose of Chapter II, Zoning Regulations, Article 4, Comprehensive Site Development Standards, Division 4.3 Resource Standards, Section 4.3.17 Watercourses, Wetlands and Riparian Areas is for preserving the integrity and minimizing the disruption of watersheds and watercourses. Preserving stream corridors and riparian habitat, ensuring adequate protection of stream values, and protecting stream corridors for wildlife movement and foraging. To avoid the impact of development on wetlands, or where avoidance is not possible, to minimize or compensate for such impacts, to provide for minimum setbacks to protect resources values, and to retain wetlands as non-disturbance open space.

Specifically, the chapter outlines the following development standards. A project shall be approved only when not within the following non-disturbance buffers, unless a Management Plan is prepared, consistent with the U.S. Fish and Wildlife Service, State Department of Fish and Game, and U.S. Army Corps of Engineers standards below, or unless greater or lesser setbacks are delineated on the Zoning District Map, which shall be adhered to:

- For all applicable projects, the developer shall have a Biological Inventory prepared by a qualified biologist, to determine whether the habitat for the defined resource, or the resource itself may be affected by a proposed project.
- Within 100' of the highwater mark of perennial streams and watercourses.
- Within 50' from the highwater mark of intermittent watercourses.
- Within 100' of all wetlands and riparian areas.
- Within 100' of the canal water surface on the uphill side of a canal; and within 20' of the water surface on the downhill side of a canal.
- A project shall be approved only when it is determined by the Planning Agency that it will not adversely affect any wetlands over one acre, or riparian areas, and that it will result in no net loss of habitat functions or values of the wetlands or riparian area.
- Project developers shall obtain appropriate authorizations from the U.S. Fish and Wildlife Service, State Department of Fish and Game, and U.S. Army Corps of Engineers prior to project approval. Any provisions to avoid, mitigate, or compensate for impacts to the wetlands or riparian areas contained in such authorizations shall become conditions of project approval.
- If the above standards effectively preclude development of the project or a revised project, or adversely affect another environmentally sensitive resource, a Management Plan, prepared by a qualified biologist or botanist, shall be prepared that avoids or minimizes impacts to the resource.

According to the Land Use and Development section, possible mitigation can involve the purchase of compensatory habitat acreage within Nevada County of comparable or superior quality within a qualified wetland or riparian area mitigation banking site in Nevada County ensuring full replacement consistent

with the above standard. The bank developer shall provide assurance to the County that the created wetlands or riparian areas are permanently protected and maintained.

Chapter V (Buildings) Article 13 (Grading) of the Nevada County Land Development Code sets forth rules and regulations to control excavation, grading and earthwork construction, including fills and embankments; establishes standards of required performance in preventing or minimizing water quality impacts from stormwater runoff; establishes the administrative procedure for issuance of permits; and provides for approval of plans and inspection of grading construction, drainage, and erosion and sediment controls at construction sites. The section includes the permits and fees required for construction within the County.

DIVISION 4.3 RESOURCE STANDARDS

Section 3.0 Project Description discusses the Comprehensive Development Standards found in Article 4 Comprehensive Site Development Standards and defined in Division 4.3 Resource Standards. In part, the purpose of the development standards is to avoid the impact of development projects on sensitive environmental resources and natural site constraints. The following discusses those standards applicable to geology and soils and specific requirements related to the protection of the associated resource(s) is discussed in *4.8.4 Potential Impacts and Mitigation Measures*, further below.

Section L-II 4.3.10 Floodplains. The purpose of this section is to mitigate the impact of development on floodplains and to protect development and downstream users from the potential for hazards associated with flooding. The definitions of applicable terms are as follows:

Floodway - The channel of any water course and adjacent lands that must be reserved in order to discharge the base flood without increasing the water surface elevation more than one foot.

Floodplain - Areas adjacent to a watercourse or other body of water that are subject to inundation by floodwaters.

100-Year Floodplain Any area of normally dry land with a 1% annual probability of being inundated by water.

4.8.3 STANDARDS OF SIGNIFICANCE

ENVIRONMENTAL ANALYSIS

THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant aesthetic impact if it would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation onsite or offsite;

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; or,
- Inundation by seiche, tsunami, or mudflow.

4.8.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACT 4.8-1: VIOLATE ANY WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS

Short-Term Construction Impacts

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. If outdoor cultivation is used for personal cultivation, this would be the equivalent of a small garden and the violation of water quality standards or discharges would not occur. These impacts would be less than significant.

Cannabis cultivation for commercial or non-remuneration, would require processing of a Commercial Cannabis Permit (CCP) for cannabis cultivation less than 2,500 sf and an Administrative Development Permit (ADP) for cannabis cultivation 2,500 sf to 10,000 sf. Verification of conformance to applicable regulations to protect water quality for both a CCP and an ADP would be made during the plan review and approval process and could be made by the Planning Director. An Annual Cannabis Permit (ACP) also would be required and need to be renewed annually.

Demolition and construction activities associated with new and modifications to existing commercial cannabis operations in the County that may occur under the proposed NCCO would include grading, excavation, and other ground-disturbing activities that have the potential to cause substantial erosion and sedimentation on the project site. If erosion is not prevented or contained during construction, sediments and particulates, along with other contaminants found on the project site, could be conveyed off-site and into downstream waters, resulting in water quality degradation and the subsequent violation of water quality standards.

Unregulated cannabis cultivation operations have been found to be disruptive to water ecosystems as a result of cannabis being a water- and nutrient-intensive crop. The cultivation of cannabis is associated with clearing of vegetation, surface water diversion, and agrochemical pollution (Carah et al. 2015). Other

negative impacts include decrease in soil stability and resulting increase in erosion due to ground disturbance and clearing of vegetation.

Development of new commercial cannabis cultivation site and modification of existing sites under the proposed ordinance would result in preparation of small structures for manufacturing, processing, and dispensing cannabis, water detention features for water storage, and roadway construction or improvements. These construction activities could lead to grading, placement of fill, and excavation that could accelerate erosion and sedimentation that causes poor water quality from high turbidity, total suspended solids, and total dissolved solids in local waterways.

As discussed, above, cannabis cultivation for commercial or non-remuneration, would require processing of a CCP, an ADP, and ACP. As part of the CCP and ADP process, the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with federal, State, and local laws and regulations. A CCP would be used for cultivation of 2,500 sf or less of canopy and accessory structure(s) with a maximum of 625 sf. Therefore, the maximum land disturbance not including roadways or other areas of disturbance would be approximately 3,125 sf or approximately 7.0% of an acre. An ADP would result in a maximum canopy of 10,000 sf and a maximum of 2,500 sf of accessory structures. Therefore, the maximum land disturbance not including roadways or other areas of disturbance would be approximately 12,500 sf. or approximately 28% of an acre. It not expected that the overall area of disturbance including access roads, stock piles, etc. would exceed 1.0 acres. If overall disturbance exceeds 1.0 acres, this would trigger compliance with the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ, or The Lahontan Regional Water Board (Regional Water Board 6SLT) that has adopted its own permit (R6T-2016-0010) to regulate storm water discharges from construction activity in the Lake Tahoe Hydrologic Unit. Conformance with these requirements, should they be needed, would reduce impacts to less than significant.

It is expected that most projects, both CCPs and ADPs would result in the disturbance of less than one-acre. These projects would be required to conform with County Code Sec. L-V 13.14 Erosion Control. This section of code requires project implement long-term erosion and sediment controls, minimize disturbance areas, preserve vegetation, among others to reduce erosion during construction. Implementation of a sedimentation and erosion control plan developed by a qualified professional would lessen potential water quality impacts. As a result, short-term construction impacts associated with water quality standards and wastewater discharge requirements would be less than significant.

Long-Term Operational Impacts

Impacts discussed above related to cannabis cultivation for personal use would be the same. If outdoor cultivation is used for personal cultivation, this would be the equivalent of a small garden and the violation of water quality standards or discharges would not occur. This is consistent with the personal use exemption discussed in the General Order because they present a lower threat to water quality and are not required to submit any application information to obtain coverage under the Cannabis Cultivation General Order. These impacts would be less than significant.

Sedimentation would be the primary source of water quality impacts during construction and building of new structures; however, once structures are completed and the ground is covered the newly constructed structures would stabilize the soils on which they were built. Erosion and sedimentation in these areas would not be considered a significant issue long-term. However, structures and paved areas would result

in an increase in the amount of impervious surfaces within the project area and would increase stormwater runoff generation and flows. In addition, new development may result in greater vehicular use of new and existing nearby roadways, which could potentially increase contaminants that would be carried in runoff and discharged into receiving waters. In addition, plants used in cannabis cultivation areas and gardens could stabilize soils and reduce stormwater runoff, but some baring or soils would occur, and potentially harmful runoff would still be expected. Therefore, after construction and during the life of the proposed project, non-point-source pollutants would be the primary contributors to potential water quality degradation. Non-point-source pollutants would be washed by rainwater from rooftops, landscaped areas, parking areas and other impervious surfaces into the onsite drainage system.

Cannabis cultivation involves the long-term use of agrochemicals, pesticides, and fertilizers. These products could have a negative effect on water quality and ultimately affect the health and sustainability of organisms that rely on high water quality. Other sources of contaminated runoff are roads, landscaping, industrial coverage, accidental spills, and illegal dumping. Runoff from roads or surface parking lots often contain oil, grease, and heavy metals from automotive leaks and spills.

Storage, use, and disposal of building maintenance chemicals such as paints or solvents would be done in compliance with local, state, and federal laws. Fuels, fertilizers, pesticides, fungicides, and others also require proper storage and use to ensure standards are met. Refer to *Section 4.7 Hazards and Hazardous Materials* for a further discussion of impacts.

Historically unregulated cannabis cultivation operations within the County have led to illegal water diversions, alteration of natural drainage features, unpermitted removal of sensitive vegetation, and impacts to aquatic habitat from improper use of rodenticide and insecticides. These acts can contribute to water quality impacts to surface water, including waterways already subject to 303(d) listing. Commercial cannabis operations in the County that may occur under the proposed project have the potential to modify surface drainage and flows such that increased sedimentation and erosion could take place, leading to water quality degradation. As a result, potential impacts would be significant. Therefore, future proposed project would be required to comply with respective RWQCB cannabis policies.

Cannabis cultivation for these commercial or non-remuneration, would require processing of a CCP for cultivation less than 2,500 sf or an ADP for cultivation 2,500 to 10,000 sf. As part of the CCP and ADP process, the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with federal, State, and local laws and regulations.

Through planning and design, newly installed stormwater drainage facilities would comply with all applicable requirements and standards. As a result, the proposed project would ensure that stormwater flows and associated sediments, particulates, and contaminants contained within the runoff would be collected at the project site and discharged to the existing municipal storm drain system and subsequently conveyed to permitted treatment facilities. To ensure that the new stormwater drainage improvements are planned and designed to satisfy the either RWQCB's water quality requirements, and all other applicable requirements and standards, would be required. Therefore, long-term operational impacts associated with water quality standards and wastewater discharge requirements would be less than significant.

Limiting development adjacent to creeks would significantly reduce the potential for trash or other pollutants associated with urban runoff to be discharged into them. Moreover, planting native vegetation

and restoring eroded areas along creeks, as well as minimizing grading near creeks and using existing ranch roads for path locations along creeks would help to prevent erosion and sedimentation of creeks.

Future proposed projects under the proposed NCCO would be required to comply with laws and regulations controlling on-site pollutants ensure that the threat of pollution from improperly constructed sites would not result in water quality degradation. All cannabis cultivation activities would be evaluated for their compliance with the Cannabis General Order and placed into the Tier 1, Tier 2, or Tier 3 threat category. Depending on this categorization, the projects would be required to implement the prescribed control and minimization of erosion, sedimentation, and chemical transport. Through the project approval process, applications for existing and proposed cannabis cultivation projects under both a CCP and ADP would be reviewed by the Planning Director or designee for conformance to all applicable water quality standards. The applicants for all cannabis-related facilities would be required to implement and comply with development standards and other required water quality control measures including the State Cannabis Policy (WQ 2017-0023-DWQ) water quality requirements for implementing cannabis activities. Under the RWQCB standards, all cannabis cultivation activities in western Nevada County within the CBRQCB jurisdiction and all projects in eastern LRWQCB jurisdiction, even if currently permitted would be required to apply with the RWQCB General Order (WQ 2017-0023-DWQ) prior to July 1, 2019. Compliance with these water quality standards is required in order to receive approval of a CCP and an ADP. An ACP also would be required and need to be renewed annually. This would confirm compliance on a yearly basis or the ACP would be denied. Therefore, potential impacts are considered less than significant, and no mitigation is required.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.8-2: SUBSTANTIALLY DEplete GROUNDwater SUPPLIES OR INTERFERE SUBSTANTIALLY WITH GROUNDwater RECHARGE SUCH THAT THERE WOULD BE A NET DEFICIT IN AQUIFER VOLUME OR A LOWERING OF THE LOCAL GROUNDwater TABLE LEVEL;

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. Cultivation for personal use would be the equivalent of a small garden and would not require substantial volumes of water such that groundwater supplies would be affected. Similarly, the garden or planting areas would not interfere with groundwater recharge. These impacts would be less than significant.

Commercial Cannabis operations may obtain water from the Nevada Irrigation District (NID); however, some projects may extract groundwater from existing or future wells for water supply. The County does not have any control over the volume of water that is extracted from personally owned wells for the purpose of commercial cannabis cultivation.

As discussed in *Section 4.16 Utilities and Service Systems*, total water demand estimated for the commercial and personal use cultivation is 5,785,879,558 gallons per year (GPY), or 17,756.21-acre feet

per year (AFY). This estimate includes all eligible parcels including the estimated existing 3,500 cannabis cultivation sites. The exact cultivation area on these sites; however, is not known, but it is assumed that upon enrollment in the permitting process they would either be reduced the maximum allowable sf based on parcel size or increase to the maximum allowable sf based on parcel size. The reduction was calculated because this would be required for these growers to become compliant with the proposed NCCO, and the increase was calculated to ensure all potential water demand is evaluated.

NID has indicated that within their service area, they have adequate capacity to serve their existing customers for cultivation demands. However, the proposed project includes some parcels that are outside NID service areas and these sites are anticipated to use ground water to continue existing cultivation activities or use groundwater to irrigate new cultivation. Below 6,000 feet of elevation there are a total of 9,311 parcels on which either personal or commercial cultivation could occur. These parcels are not served by NID. Of these parcels, there are 866 AG or AE parcels, and 8,445 R1, R2, R3, RA, and TPZ parcels. The total water demand from these parcels, should they have the maximum cultivation areas would be approximately 11,894,803 gpy or 36.5 AFY. It is assumed that water would likely be sourced from groundwater to facilitate cultivation in these areas. Additionally, as discussed above, it is unknown how many of these parcels that could accommodate cultivation under the proposed NCCO are currently cultivating cannabis, but it is assumed for the purpose of a complete analysis that all eligible parcels would cultivation upon adoption of the proposed project. Groundwater wells managed by NID, or other special water districts within the unincorporated areas of the County that sell retail groundwater to customers have managed wells. Through the management of these wells, the service providers have mechanisms in place to track how much groundwater is used and have procedures in place to reduce production if a particular well or basin is at risk of an overdraft situation. As such, groundwater use from NID and special districts is considered less than significant.

Groundwater use for individual wells is not currently regulated within the unincorporated areas of the County, and well users are not required to monitor and provide well logs. As previously stated, it is unknown how much groundwater is currently being used in the County through individual wells. Additionally, the groundwater within the western portion of the County is located with a fissured granite aquifer, which is given its physical make-up is difficult to measure and quantify the amount of groundwater available for pumping. Therefore, adoption and implementation of the proposed project could result in a substantial depletion of aquifers and/or ground water as a result of increased use of individual groundwater wells. This depletion could result in water shortages and reduction in water availability for existing users and typical residential non-cannabis cultivation related demands. Thus, the potential impacts on groundwater supply are considered significant.

Related to ground water recharge capacity, commercial cannabis cultivation operations would consist of growing plants similar to existing agricultural production. In this instance the ground would remain open for water infiltration even with all potential cannabis cultivation occurring. In addition, although accessory structures could be constructed it is not expected that there would not be a substantial conversion of unpaved areas to impervious surfaces to enable the construction. Therefore, although the proposed project has the potential to minimally increase the amount of impervious surfaces, the proposed project would not have the potential to substantially reduce the potential for groundwater recharge.

Therefore, commercial Cannabis operations in Nevada County under the proposed ordinance have the potential to deplete local groundwater supplies and affect adjacent wells as a result of water demands. Under the proposed ordinance, future commercial cannabis operation facilities would be required to

obtain and disclose an irrigation water service verification. While this requirement would address the potential effects in areas with a water supplier, it does not address groundwater availability for the use of water wells associated with commercial cannabis cultivation using individual groundwater wells. Over an extended period of time future cannabis operations could adversely affect the groundwater supply for new wells as well as wells on adjacent properties. This impact would be considered significant and unavoidable.

MITIGATION MEASURES

The County currently does not have a mechanism to regulate groundwater use for any type of land use application within the unincorporated areas. No feasible mitigation measures have been identified that could be implemented on a project by project level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are significant and unavoidable.

IMPACT 4.8-3: SUBSTANTIALLY ALTER THE EXISTING DRAINAGE PATTERN OF THE SITE OR AREA, INCLUDING THROUGH THE ALTERATION OF THE COURSE OF A STREAM OR RIVER, OR SUBSTANTIALLY INCREASE THE RATE OR AMOUNT OF SURFACE RUNOFF IN A MANNER WHICH WOULD RESULT IN SUBSTANTIAL EROSION OR SILTATION ON-SITE OR OFF-SITE;

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. If outdoor cultivation is used for personal cultivation, this would be the equivalent of a small garden the potential for substantial alteration of the drainage pattern of the site or a stream or river is remote. These impacts would be less than significant.

Commercial cannabis operations in the County that may occur under the proposed ordinance could alter local drainage characteristics of individual sites, result in erosion or siltation. The potential for these effects would occur in areas with new construction for cannabis facilities where the peak flow and volume of stormwater runoff could be affected by development through conversion of vegetated or pervious surfaces to impervious surfaces such as roads, roofs, driveways, and walkways. Improvements to existing facilities or construction of new cannabis facilities could increase the rate and volume of runoff and eliminate some natural storage and infiltration capacity along drainage paths. Consequently, individual project sites could be subject to on-site ponding, or on-site or off-site flooding.

Because future commercial cannabis cultivation would involve vegetation removal, grading, earth excavation and the construction of roads, sidewalks and buildings, it would alter existing drainage patterns and increase the potential for erosion and/or siltation. As previously discussed under Impact 4.8-1, implementation of erosion control plans would include erosion control measures determined by a qualified party to the satisfaction of the Planning Department or Department of Public works and would be expected to minimize these risks during construction. Compliance with County development standards, specifically County Code Sec. L-V 13.14 Erosion Control, would reduce potential erosion and siltation impacts associated with altering existing drainage patterns during the life of the project to a less than significant level.

Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cannabis cultivation less than 2,500 sf of canopy and an ADP for cannabis cultivation with a canopy between 2,500 sf to 10,000 sf. 10,000 sf of canopy is the maximum allowed under the proposed NCCO. Conformance to applicable regulations for an ADP would be verified by county planning staff and final determination of compliance could be made by the Planning Director. As part of both the CCP and ADP process, the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with all federal, State, and local laws and regulations related to protection of water quality and associated potential to result in erosion and on-site as well as downstream sedimentation. An ACP also would be required and need to be renewed annually. This would confirm compliance on a yearly basis or the ACP would be denied. Therefore, impacts associated with the altering of existing drainage patterns and erosion would be less than significant.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.8-4: SUBSTANTIALLY ALTER THE EXISTING DRAINAGE PATTERN OF THE SITE OR AREA, INCLUDING THROUGH THE ALTERATION OF THE COURSE OF A STREAM OR RIVER, OR SUBSTANTIALLY INCREASE THE RATE OR AMOUNT OF SURFACE RUNOFF IN A MANNER WHICH WOULD RESULT IN FLOODING ON-SITE OR OFF-SITE

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. If outdoor cultivation is used for personal cultivation, this would be the equivalent of a small garden the potential for substantial alteration of the drainage pattern of the site or such that flooding would result is remote. These impacts would be less than significant.

Commercial cannabis operations in the County that may occur under the proposed ordinance could alter local drainage characteristics on individual sites and result in or influence flooding. The potential for these effects would be most likely to occur as a result of new construction for cannabis facilities where the construction activities would alter drainage characteristics potentially affecting peak flow and the volume of stormwater runoff. The volume of runoff could be affected by the new development through the conversion of vegetated or other pervious surfaces to impervious surfaces such as roads, roofs, driveways, and walkways. Although the changes are not expected to be substantial, improvements to existing facilities or construction of new cannabis facilities also could increase the rate and volume of runoff and eliminate some natural storage and infiltration capacity along drainage paths. Consequently, individual project sites could be subject to on-site ponding, or on-site or off-site flooding. Of particular note, would be cultivation sites that use a pond, water catchment system, or hard tank storage reservoirs water retention. If these structures or facilities were to rupture or become unstable, they could result in on-site as well as flooding of off-site areas depending the volume of water the hold and extent of the spill.

As part of the CCP, ADP, and ACP process, the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with all federal, State, and local laws and regulations related to protection of water quality potential for creating a risk of flowing. The creation of an on-site pond or leveling of ground to enable placement of water storage tanks would require the issuance of a grading permit, which would be subject to review and approval by the Building Department, Planning Department and Department of Public Works. Continuing conformance with all applicable requirements would be confirmed during the annual ACP renewal process or the permit would be denied. Additionally, as discussed above, if the application for a grading permit would result in ground disturbance greater than one acre it would trigger compliance with the applicable RWQCB General Permit. If less than an acre, it would trigger the County requirement for the preparation of an erosion control plan in conformance with County Code Sec. L-V 13.14 Erosion Control, to address water quality impacts. This would include a discussion of potential effects and measures to reduce impacts from a water storage system. Therefore, through the application review process and conformance to applicable rules and regulations, impacts associated with creating a situation in which on-site or off-site flooding would occur, would be reduced to less than significant.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.8-5: CREATE OR CONTRIBUTE RUNOFF WATER WHICH WOULD EXCEED THE CAPACITY OF EXISTING OR PLANNED STORMWATER DRAINAGE SYSTEMS OR PROVIDE SUBSTANTIAL ADDITIONAL SOURCES OF POLLUTED RUNOFF;

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. If outdoor cultivation is used for personal cultivation, this would be the equivalent of a small garden the potential for exceedance of the capacity of an existing or planning stormwater drainage system or providing substantial sources of polluted runoff is remote. These impacts would be less than significant.

Future commercial cannabis cultivation activities could, depending on location relative to existing infrastructure, require construction of new or expanded stormwater drainage facilities. However, by complying with federal, State, and local requirements on a project-by-project basis and minimizing the amount of grading and utilizing existing drainage patterns, projects should be able to minimize their effect on downstream water courses, as well as their impacts on water quality.

As stated in the impact discussions above, the cannabis cultivation sites could result in changes to absorption rates, drainage patterns and the corresponding rate and amount of surface runoff within a particular project area. New development associated with the proposed project would require the construction of adequately sized storm drainage facilities that would connect to existing storm drainage systems.

As part of the CCP, ADP, and yearly ACP project applications would be reviewed for completeness during the planning and approval process. Applications for existing and future cannabis cultivation would be

reviewed by the Planning Director or designee, Building Department, and Environmental Health for conformance. To ensure stormwater and water drainage systems are adequately sized to accommodate future development within the proposed project area, the project plans would be reviewed, as part of the listed permitting processes, by the department of Public Works. This review would verify that the plans conform to drainage requirements and it would ensure that the proposed stormwater drainage facilities are properly designed to accommodate potential increases in stormwater flows.

In addition, if a grading permit is required, an erosion control plan, in conformance with County Code Sec. L-V 13.14 Erosion Control, would address the sizing of the stormwater drainage system, would be required prior to project approval. Ensuring a properly designed and sized stormwater drainage system would further minimize potential effects of creating substantial additional sources of polluted runoff. Therefore, project-specific impacts in this regard are less than significant.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.8-6: OTHERWISE SUBSTANTIALLY DEGRADE WATER QUALITY

Future development of cannabis cultivation within the proposed project area would not otherwise degrade water quality beyond the impacts discussed in this section. As discussed above, if a cultivation project under either a CCP or an ADP reached the threshold of disturbance greater than one acre, the project would be required to comply with the RWQCB statewide General Order WQ 2017-0023-DWQ which applies to all cannabis cultivation activities in the state. Accordingly, as of July 19, 2019 all existing and future dischargers would be required to transition to the statewide General Order. Even if exempt from the General Order, all cannabis projects would be required to comply with the standards set forth in Attachment A of that order. While portions of Attachment A are applicable to project that require a General Permit, it also is intended to protect water quality from cannabis cultivation projects less than one acre in size. Further, regardless of compliance with the General Permit, all projects that propose grading also would be required, as discussed above, to comply with County Code Sec. L-V 13.14 Erosion Control. Compliance with the water quality requirements established by the RWQCB and County regulations at a project specific level would reduce impacts to water quality on a project by project basis.

Therefore, no further water quality impacts beyond those discussed in the impact discussion above would result. Any future development of commercial cannabis within the proposed project area would be required to undergo the planning review process at which time it would be verified that all appropriate water quality permits and associated water quality protection measures are included as part of the cannabis cultivation project.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.8-7: PLACE HOUSING WITHIN A 100-YEAR FLOOD HAZARD AREA AS MAPPED ON A FEDERAL FLOOD HAZARD BOUNDARY OR FLOOD INSURANCE RATE MAP OR OTHER FLOOD HAZARD DELINEATION MAP

Nevada County has a substantial number of waterways, dams, and other waterbodies. If water flows exceed the capacity of these water courses, flooding on lands adjacent to streams and rivers, lakes and reservoirs could occur. Some of the parcels on which commercial cannabis cultivation would be allowed are likely to be within a 100-year flood hazard area. The proposed project includes all areas of the unincorporated County which includes numerous rivers and stream. Therefore, existing and future commercial cannabis cultivation sites could be affected by flooding. As previously discussed, the majority of the County is located within Zone X or D according to the FIRM Map prepared by FEMA. Future cannabis-related facilities within a special flood hazards area would be required to comply with all applicable federal, State, and local requirements.

In addition, cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cannabis cultivation less than 2,500 sf and an ADP for cannabis cultivation 2,500 sf to 10,000 sf. An ACP would be required to be renewed annually. Conformance to applicable regulations for all projects under both a CCP and ADP would be verified during the planning review process. This review would include verification that the cultivation areas and any habitable structures are outside a 100-year floodplain. This would be verified during the planning review process and could be done by the Planning Director or designee. During the permitting and review process, the location of a prospective cultivation site would be disclosed and a determination regarding its proximity to a floodplain would be made. This would provide the opportunity to deny the project or require modifications as conditions of approval to reduce the effects. If it is determined that that a cannabis cultivation site is within a 100-year floodplain, the applicant could apply for a Conditional Use Permit and the project may be approved provided it is in full conformance with the Nevada County Land Use Development Code, specifically Chapter XII: Floodplain Management Regulations, which contains safety regulations to minimize the damage and dangers to land uses within a floodplain. Additionally, the ACP would need to be renewed annually. This would confirm continued compliance and that no encroach has occurred since the initial project approval. This would ensure that impacts would be less than significant.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.8-8: PLACE STRUCTURES WITHIN A 100-YEAR FLOOD HAZARD AREA WHICH WOULD IMPEDE OR REDIRECT FLOOD FLOWS

As discussed in Impact 4.8-7 above, Nevada County has significant waterways, dams, and other waterbodies and placement of structures in these locations could result in impacts from flood hazards. Additionally, placement of such structures could impede or redirect flood flows. The proposed project could be affected by flooding, which could occur on lands adjacent to streams and rivers when flows exceed the capacity of the water course.

In consideration of location, application for commercial cannabis would be required to indicate if the project site is on or adjacent to the locations of 100-year floodplains. This information would be reviewed

by the Planning Director (or designee) during the planning process. Accordingly, processing of a CCP for cannabis cultivation projects with less than 2,500 sf of canopy, or an ADP for project between 2,500 sf and 10,000 sf of canopy would ensure the proposed commercial cannabis operations conform to applicable regulations. During the permitting and review process, the location of a prospective cultivation site would be disclosed and a determination regarding its proximity to a floodplain would be made. This would provide the opportunity to deny the project or require modifications as conditions of approval to reduce the effects. An ACP also would be required and need to be renewed annually and would verify continued compliance year over year. If new structures are proposed and violations would occur, the permit could be denied. In addition, if a future cannabis-related facility is within a special flood hazards and approved it would be required to comply with all applicable federal, State, and local requirements. As part of this review, an analysis for consistency with the development standards in Chapter XII: Floodplain Management Regulations and Section L-II 4.3.10 Floodplains would be made. The Planning Agency is limited in the projects that may be approved. This includes:

- Projects in the floodway shall not be approved due to the extremely hazardous nature. Exceptions may be made for utilities and public structures necessary to serve existing uses where there is no other feasible location and construction will not increase hazards to life or property within or adjacent to the floodplain;
- Within 100 feet of the 100-year floodplain;
- A project may be approved within 100 feet of the 100-year floodplain if a Management Plan prepared by a registered professional engineer and consistent with Federal Emergency Management Agency (FEMA) standards, shall be prepared that minimizes impacts to the floodplain.
- Development, including the placement of fill, within the 100-year floodplain shall require a Use Permit and shall comply with the standards of Land Use Development Code Chapter XII Floodplain Management Regulations. Development within the 100-year floodplain will also require confirmation that applicable State Department Fish and Game stream alteration regulations have been satisfied.
- New utilities, critical facilities, and non-essential public structures shall be located outside the 100-year floodplain unless such facilities serve existing uses, there is no other feasible location, and construction of these structures will not increase hazards to life or property within or adjacent to the floodplain. Facilities within the 100-year floodplain shall require a Use Permit consistent with the same requirements listed above.
- Projects that may result in flood damage to downstream land uses shall not be allowed. Where determined necessary, retention/detention facilities shall be designed to protect downstream users and ensure that the water surface returns to its base elevation within 24 hours after the storm event.

Therefore, impacts from placing a structure within a 100-year flood hazard zone with the potential to impede or redirect flood flows would be less than significant and mitigation is not required.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.8-9: EXPOSE PEOPLE OR STRUCTURES TO A SIGNIFICANT RISK OF LOSS, INJURY, OR DEATH INVOLVING FLOODING, INCLUDING FLOODING AS A RESULT OF THE FAILURE OF A LEVEE OR DAM

Dam failure is another form of flood hazard which can occur as a result of manmade or natural causes. Causes of dam failure could include improper siting, structural design flaws, erosion of the face of foundation, earthquakes, massive landslides, and rapidly rising flood waters.

Within the eastern portion of Nevada County, which is classified in a higher earthquake intensity zone, there are three major dams: Prosser Creek Reservoir Dam, Stampede Reservoir Dam (located with Sierra County) and Boca Reservoir Dam. One of the two major faults believed to be potential seismic sources appears to be relatively active and of special significance due to its close proximity to the three dams. During the Truckee earthquake of 1966 had a magnitude of 5.4 but only relatively slight damage occurred to both Prosser and Boca earth fill dams, but the Martis Creek Dam, that is managed by the Army Corps of Engineers(USACE) is one of the nation's six dams most at risk of failure. In addition, an earthquake fault-line is located within 200 yards of the dam. The dam is on an active monitoring program, and not in use for water storage and is under extensive remediation work.

In the western portion of the County, flooding in the event of failure of the Upper and Lower Scotts Flat Dams would inundate a wide area from east of Nevada City, through Nevada City and west to Lake Wildwood. The failure of such a dam would most likely be the result of a significant earthquake. Also located in western Nevada County is the Rollins Reservoir on the Bear River, which flows into Combie Lake. Inundation plans are in place for both bodies of water. It is predicted that a collapse of the Rollins Reservoir may impact Camp Far West reservoir in Yuba County. Three dams are owned by PG&E in the Spaulding Lake complex. Collapse of the three dams would cause significant flooding at the 2,700 foot elevation level in the Town of Washington. However, the area of Nevada County where these dams exist is not located within a historically seismically active zone. In fact, the western half of the County resides within the lowest earthquake intensity zone in California, and according to the Nevada County General Plan EIR, exposure of future residents and structures to flood hazards related to dam failure would be less-than-significant impact due to existing regulations, local plans, and proposed policies would minimize the hazards

Existing and future commercial cannabis cultivation sites may include the use of ponds to supply water for cultivation. This would result in in the storage of water, that if the wall of the pond or damn retaining the water failed, could result in downstream flooding. Ponds used for cannabis cultivation provide a large year-round water source that can be used during summer month to reduce groundwater withdrawal and stream diversions. Any pond constructed or used for cannabis cultivation would be required to be design in conformance with the most recent Conservation Practice Standard, "Pond" (Code 378) as published by the Natural Resources Conservation Service per Nevada County Land Use and Development Code Sec. L-V 13.6 Grading Permit Requirements subsection A.3 Ponds.

Although it is highly unlikely, if a pond utilizes at six foot or greater dam it may be subject to California Department of Water Resources Division of Safety of Dams (DSOD). Based on DSOD requirements, if the dam height is more than 6 feet and it impounds 50 acre-feet (16,292,550 gallons) or more of water, or if the dam is 25 feet or higher and impounds more than 15 acre-feet of water, it will be under DSOD

jurisdiction. The agency required that dam designs be earthquake and seiche resistant, and any construction or alteration shall undergo a full seismic and geologic investigation.

Any commercial cannabis cultivation project proposing the use of a pond or dam would require processing of a CCP for projects less than 2,500 sf of canopy or an ADP for project 2,500 sf to 10,000 sf of canopy. Additionally, a yearly ACP would be required, and this information would be verified at that time year after year. During the permitting and review process, the location of any dam or pond would be reviewed for conformance to all safety requirements as listed above. This would provide the Planning Department the opportunity to deny the project or require modifications as conditions of approval to reduce potential effects. If new construction occurred in violation of all dam or levee safety requirements, the permit could be denied. This would ensure that impacts would be less than significant.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.8-10: RESULT IN INUNDATION BY SEICHE, TSUNAMI, OR MUDFLOW

A tsunami is typically a wave, or series of waves, generated in a large body of water (typically the ocean) by fault displacement or major ground movement. The County is between approximately 115 and 190 miles from the nearest coastline, surrounded by valley and mountainous terrain. The western portion of the County is Sacramento Valley at an elevation of 300 feet and the highest point in the County is the peak of Mount Lola at 9,143 feet. Given the distance, as well as the topography, between the County and the coastline, it is unlikely that the County would be inundated by a tsunami. Potential impacts due to tsunami are less than significant and no mitigation is required.

As discussed in environmental setting, a seiche is defined as a large, standing wave in an enclosed or partially enclosed body of water, such as a lake or reservoir. A seiche is the tide-like rise and drop of water in a closed body of water caused by earthquake-induced seismic shaking or strong winds. Nevada County includes approximately 46 dams and many recreational lakes. The proposed project areas could experience moderate ground shaking caused by earthquakes occurring along fault either inside or outside the County. This shaking could result in seismic shaking that could generate wave motion that could result in a seiche. According to the General Plan EIR, the overall seiche risk in the County is a moderate hazard due to the overall seismic risk in Nevada County. Hazards from seiche events would be reduced to less than significant levels by a combination of compliance with federal, State, and local regulations and policies. Therefore, impacts due to seiche are less than significant.

Mudflows are a type of mass wasting or landslide, where earth and surface materials are rapidly transported downhill under the force of gravity. Mudflow events are caused by a combination of factors, including soil type, soil profile, precipitation, and slope. Mudflow may be triggered by heavy rainfall that the soil is not able to sufficiently drain or absorb. As a result of this super-saturation, soil and rock materials become unstable and eventually slide away from their existing location. Soils most susceptible to mudflow are saturated, loose, non-plastic, uniformly graded, and fine-grained sand deposits. The County contains mountainous terrain with steep slopes and areas of loose soil. As discussed in Chapter 4.6, Geology and Soils, mud and debris flow hazards are present to a variable degree within the project area due to the history of mining in the County. Landslides that become reactivated are likely to shed

large earthflows and debris flows to the toe of the mountain front and adjacent land. Debris flow hazards are present to a variable degree within the project area. The highest-level debris flow hazards occur at the mouths of incised alluvial fan channels.

Any commercial cannabis cultivation project would be evaluated for its presence in an area susceptible to landslides or mudslides during the processing of either a CCP for cannabis cultivation with less than 2,500 sf of canopy or an ADP with 2,500 sf to 10,000 sf of canopy. Additionally, a yearly ACP would be required and this information would be verified at that. During the permitting and review process, the location of these areas would be determined, and projects would be reviewed for conformance to all safety requirements. This would provide the Planning Department the opportunity to deny the project or require modifications as conditions of approval to reduce potential effects. If new construction occurred in violation or new hazards become known or are created by a project, the permit could be denied. This would ensure that impacts would be less than significant.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

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4.9 LAND USE

This section evaluates the Nevada County Cannabis Cultivation Ordinance (NCCO or proposed project) compatibility with existing land uses and its consistency with relevant planning policies. For the most part, direct and indirect physical impacts resulting from project implementation are not addressed in this section, but rather in their appropriate technical sections of the EIR. For example, direct impacts such as dust and noise from project construction are addressed in *Section 4.3: Air Quality*, and *Section 4.11: Noise*, respectively.

4.9.1 ENVIRONMENTAL SETTING

The proposed project is located in the unincorporated areas of Nevada County (County). Nevada County's total land area is approximately 978 square miles or approximately 612,900 acres, of which approximately 70 percent is privately owned and approximately 30 percent is public lands. Public lands are managed by the U.S. Forest Service (USFS) in the Tahoe National Forest (TNF), other public lands are under the control of the Bureau of Land Management (BLM).

The County is bounded by Sierra County and Yuba County on the north, Yuba County on the west, Placer County on the south, and the state of Nevada on the east. *Figure 4.9-1: Regional Location Map* shows Nevada County in relation to its position within the State of California, and *Figure 4.9-2: Vicinity Map*, shows Nevada County in relation to surrounding counties, major cities, and major roadways. Development within Nevada County consists of a mixed land use pattern and includes residential, commercial, industrial, agricultural, and public uses. Nevada County consists of numerous urbanized areas as well as rural residential, commercial, industrial, open space, and many areas used for agriculture. There are three incorporated cities within the County including Grass Valley, Nevada City, and Truckee. The proposed Nevada County Commercial Cannabis Cultivation Ordinance would not apply to these incorporated areas.

4.9.2 REGULATORY SETTING

FEDERAL

Although the use of cannabis and cultivation of cannabis has been decriminalized at the state level, the use and cultivation of cannabis remains illegal at the Federal level and is subject to the prosecutorial discretion of the federal government. As discussed in *Section 3.0: Project Description*, the U.S. Department of Justice (USDOJ) issued a memorandum on January 4, 2018, regarding cannabis enforcement, announcing "...a return to the rule of law and the rescission of previous guidance documents." This memo directs all U.S. Attorneys to enforce the laws enacted by Congress and to follow well-established principles when pursuing prosecutions related to cannabis activities and to deploy Justice Department resources most effectively to reduce violent crime, stem the tide of the drug crisis, and dismantle criminal gangs" (USDOJ, 2018).

While Nevada County contains some Federal lands, these areas would not be authorized under the proposed project for cannabis cultivation, nor does the County have the authority to authorize the use of these areas for the cultivation of cannabis. Accordingly, these Federal lands are regulated by a variety of federal agencies and programs, including National Forest management plans and federal preserve

management plans and because the proposed project does not contain federal lands there are no applicable federal regulations for land use and planning for the proposed project.

STATE

The California Environmental Quality Act (CEQA) establishes that a significant effect on the environment involves an adverse change to the physical environment. Pursuant to the CEQA Guidelines, a project's impact related to land use planning is evaluated in terms of compatibility with existing land uses and consistency with local plans and other local land use controls (i.e., general plans, zoning codes, specific plans, etc.).

California Government Code §6586021 requires zoning to be consistent with the general plan. Consistency with the general plan is possible only if the local government, in this case Nevada County, has officially adopted a general plan. The land uses authorized in the Nevada County Zoning Ordinance must then be compatible with the objectives, policies, general land uses, and programs specified in the Nevada County General Plan. This consistency is completed at the County level during the approval process of a general plan, general plan element (such as a housing element), general plan amendment, or zone code change.

THE MEDICINAL AND ADULT-USE CANNABIS REGULATION AND SAFETY ACT (MAUCRSA)

On June 27, 2017, Senate Bill 94 repealed the MMRSA and merged the provision with the AUMA. This created the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA), which is now the foundation of cannabis law in California.

The MAUCRSA renamed the State's Bureau of Cannabis to the Bureau of Cannabis Control, revised references to "cannabis" or "medical cannabis" in existing law to instead refer to "cannabis" or "medicinal cannabis," respectively, and applied a definition of "cannabis" similar to the definition used in MCRSA to MAUCRSA. SB 94 also generally imposed the same requirements on both commercial medicinal and commercial adult-use cannabis activity, with specific exceptions and made applying for and being issued more than one license contingent upon the licensed premises being separate and distinct. In addition, the MAUCRSA provided for testing of both adult-use cannabis and medicinal cannabis under single testing laboratory license and made protection of the public to be the highest priority for a licensing authority in exercising its licensing, regulatory, and disciplinary functions by requiring the protection of the public to be paramount over any other interests sought to be promoted. In addition, it required the advisory committee advising the licensing authorities on the development of standards and regulations to include persons who work directly with racially, ethnically, and economically diverse populations. The MAUCRSA also addressed transportation and delivery of cannabis products; placed specific requirements on testing and testing procedures; repealed the residency requirement; gave expanded to cities full power and authority to enforce the MAUCRSA; authorized the denial of applications for inability to comply with requirements; renamed certain panels; placed limits on certain advertising; imposed an excise tax; required the identification of water supply and coordination with the California Department of Fish and Wildlife (CDFW); regulated and required addressing of discharges of waste(s); required the development of pesticide use guidelines and required by, January 1, 2021, development of a program comparable to the National Organic Program and California Organic Food Farming Act; required conformance to building standards and a track and trace program; provided for medical confidentiality; eliminated the Bureau's ability to regulate hemp and exempt certain infused products; allowed for the formation of cannabis cooperatives; established the formation of an impaired driving task force; redefined some cannabis related infractions(s); and made a variety of conforming and related changes and allowed for the severability of the bill's provisions (CLI, 2018).



State of Nevada

PACIFIC OCEAN



FIGURE 4.9-1: Regional Location Map
Nevada County Cannabis EIR

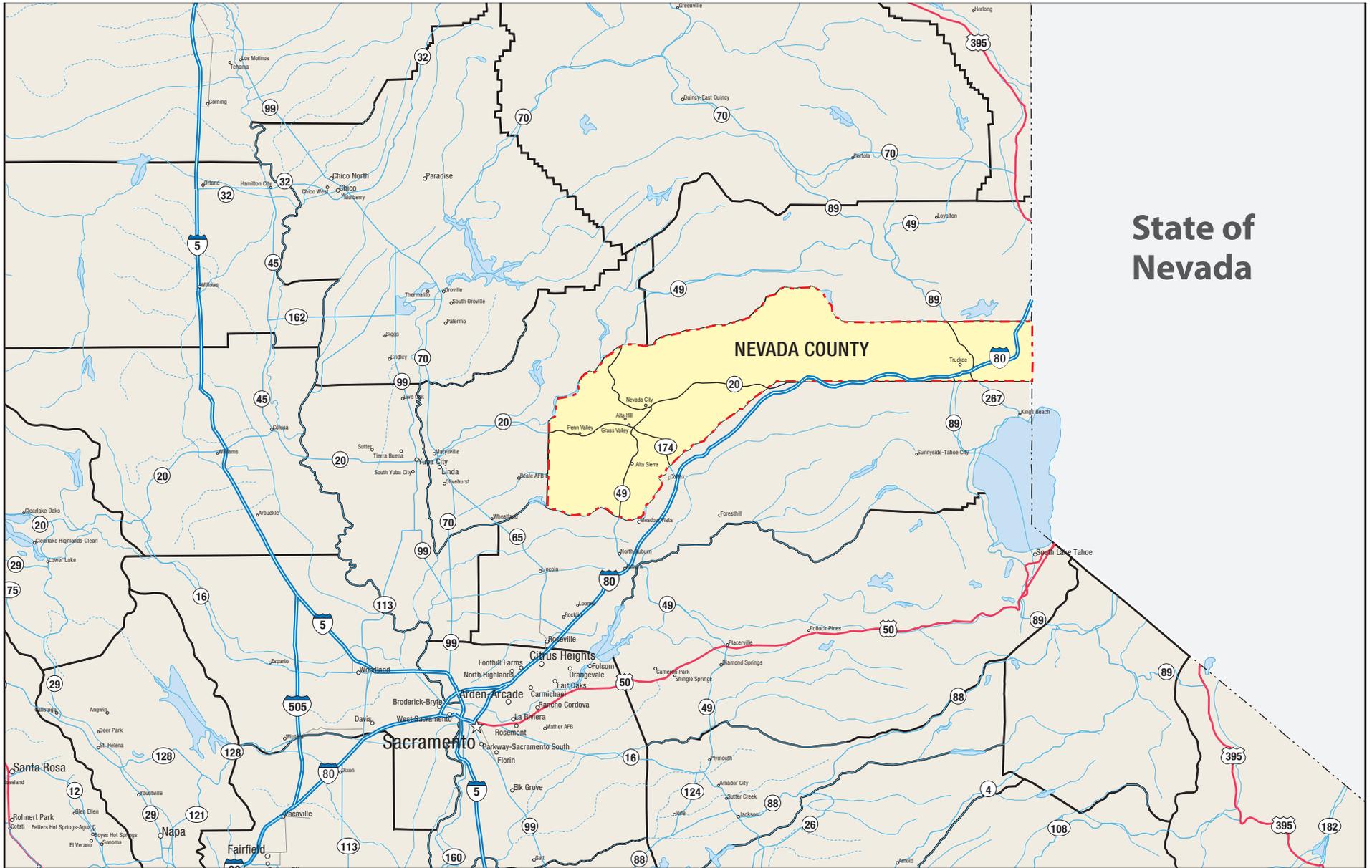


FIGURE 4.9-2: Vicinity Map
Nevada County Cannabis EIR

PLANNING AND ZONING LAWS

California Government Code Section 65300 et seq. requires the planning agencies of cities and counties to adopt and implement comprehensive, long-term general plans for the physical development of lands within their jurisdictions and any land outside the boundaries, which in the planning agencies judgment, bears relation to its planning. The area outside the boundaries of cities that bear relation to planning are typically identified as a Sphere of Influence (SOI) in their general plans (Leginfo, 2018a). While the SOI defines areas outside formal jurisdictional boundaries of a city, the SOI defines areas or locations that are considered probable future boundaries for city growth and areas that would be provided city services. In addition, general plans for both counties and cities are required to address a range of planning issues, including but not limited to land use, circulation, housing, conservation, open space, noise, and safety. To address these topics, the general plan, such as the Nevada County General Plan, will typically include principals, goals, objectives, and policies that support the vision for their vision for provision of services, general economic goals, and patterns of future development.

California Government Code Section 65800 et seq provides for the adoption and administration of zoning laws, ordinances, and rules and regulations by counties and cities. It also requires the zoning codes and ordinances to be consistent with the general plan. Further, it is the intent of the Legislature to provide only a minimum of limitation in order that counties and cities may exercise the maximum degree of control over local zoning matters (Leginfo, 2018b). The County general plan policies and zoning ordinances, as they relate to the proposed project, are summarized below further below. County General Plan goals and policies, as well as zoning ordinances as they apply to each individual section of this document are provided therein.

REGIONAL

NEVADA COUNTY REGIONAL TRANSPORTATION PLAN 2015-2035

The Nevada County Transportation Commission (NCTC) which is the designated Regional Transportation Planning Agency for Nevada County, is required by California law to prepare, adopt, and submit an updated Regional Transportation Plan (RTP) to Caltrans and the California Transportation Commission (CTC) every five years. The 2016 RTP documents Nevada County's regional transportation needs for the next 20 years and establishes a cost-feasible action plan to meet those needs. The RTP includes policies and guidelines for use of federal, state, and local funding. Development of updates to the RTP is a cooperative effort between NCTC, Caltrans, and other stakeholders, including but not limited to Native American tribes, local transit authorities, local service providers, and the general public. A complete discussion of the NCRTP as it pertains to the proposed NCCO is provided in *Section 4.15: Transportation and Traffic*.

LOCAL

As discussed above, the applicable goals, policies, for each resource area analyzed in this Program EIR have been identified in their respective sections of this Program EIR. This section lists the applicable goals, objectives, policies, and implementation measures from the Nevada County General Plan that would apply to the proposed NCCO as they relate to land use planning. A complete listing of applicable goals and policies is provided below.

In addition to the General Plan there are a number of Areas Plans that pertain to specific towns and communities within the County. These Area Plans and the areas they describe are provided in additional detail below.

NEVADA COUNTY GENERAL PLAN

The Nevada County General Plan sets forth goals, objectives, and policies related to land use and some of which would be applicable to the proposed project and those are listed below.

- Goal 1.1 Promote and encourage growth in Community Regions while limiting growth in Rural Regions.
- Policy 1.1.1 Maintain a distinct boundary between Rural and Community Regions.
- Goal 1.2 Recognize and allow for a range of land uses that preserve the qualities of each Community Region, Rural Region and Rural Place.
- Policy 1.2.2 The County will review innovative land use measures that promote the preservation of open space and environmentally-sensitive areas. Such concepts as transferable development credits, clustering incentives, and site analysis requirements will be considered.
- Goal 1.3 Within Rural Regions, maintain and enhance the County’s pastoral character, existing land use patterns, rural lifestyle, and economy in their natural setting.
- Policy 1.3.1 Provide for a land use pattern compatible with preservation of character, environmental values and constraints, and the form and orderly development of Rural Places.
- Policy 1.3.10 To encourage resource management in subdivisions in the Rural General Plan designations, agricultural and timber production uses shall be considered appropriate uses within said subdivisions, and the tentative map approval process shall encourage clustering to support grazing, forest management, and crop production coexistent with residential uses.
- Policy 1.3.12 In Rural Regions, development shall be driven and determined by land use designations and the need to provide additional road circulation in areas where there is inadequate secondary safety access rather than infrastructure availability.
- GOAL 1.4 Within Community Regions, provide for an adequate supply and broad range of residential, employment-generating, and cultural, public and quasi-public uses located for convenience, efficiency, and affordability while protecting, maintaining, and enhancing communities and neighborhoods.
- Policy 1.4.2 Development within the Community Regions shall be consistent with the overall rural quality of life in the County, as demonstrated through sensitivity to resource constraints, provision of interwoven open space as a part of development, and community design which respects the small town or village character of the Community Regions. These criteria shall be accomplished through application of the Comprehensive Site Design Standards in review of discretionary and ministerial projects.

Policy 1.4.5 Encourage land use patterns which minimize use of the automobile and allow for viable alternative transportation modes.

Goal 1.5 Within Community Regions, ensure that development reflects our small-town character, the characteristics of the land and the natural environment.

Policy 1.5.1 Establish a land use pattern which provides for open space, environmentally sensitive land, resource management areas and appropriate transitions.

Policy 1.5.2 Implement development standards which incorporate open space, protect environmentally sensitive land, and allow for resource management.

Policy 1.5.3 The adopted Comprehensive Site Development Standards., contained in the Land Use and Development Code (Chapter II, Article 4), were established and are implemented as directed by Action Policy 1.17 of the 1995 General Plan. These standards are used during the “project site review process” to provide a consistent approach for addressing the presence of sensitive environmental features and/or natural constraints, clustering and provisions of open space as a part of development, the potential for land use conflicts between uses, and the potential for public health hazards.

Applicable to all development projects in the County, the Comprehensive Site Development Standards have been designed to be protective of the County’s unique character, providing guidance for:

- a. Protection of environmentally sensitive resources;
- b. Provision of open space as part of site development;
- c. Prevention and reduction of fire hazards;
- d. Maintenance and enhancement of vegetation and landscaping;
- e. Prevention and reduction of flood hazards;
- f. Transitions between uses and multiple-use site development;
- g. Community design;
- h. Buffering and screening to mitigate adverse effects;
- i. Incentives to provide for access to public resources and open space; and
- j. Protection of important agricultural, mineral, and timber resources.

These standards shall identify the basic requirements for site development in the County, including, at a minimum, standards to mitigate the impact of development on the following environmentally sensitive resources:

- Wetlands (as delineated in the U.S. Fish and Wildlife Service National Wetlands inventory);
- Major deer migration corridors, critical range, and critical fawning areas (as defined by the State Department of Fish and Wildlife’s Migratory Deer Range Maps);

- Landmark oaks, (defined as any oak 36" or greater at dbh);
- Landmark oak groves, (defined as areas with 33+% canopy closure based on the State Department of Forestry and Fire Protection's Hardwood Rangeland Maps);
- Rare and endangered species, (as found in the California Natural Diversity Database and the California Native Plant Society Inventory of Rare and Endangered Vascular Plants of California);
- Riparian corridors within 100 feet of intermittent or perennial water courses (as shown the U.S. Geological Survey Quadrangle Topographic Maps);
- Significant cultural resources (as may be defined based upon recommendations by the Native American Heritage Commission or recognized Native American Group, Nevada County Landmarks Commission, or the Nevada County Historical Society);
- Floodplains precluding development and land disturbance within floodways and restricting development within the floodway fringe, through the establishment of floodplain setbacks and associated development regulations (as defined by the Federal Emergency Management Agency's Flood Insurance Rate Maps);
- Important agricultural lands, (as defined by the State Department of Conservation's Important Farmlands Map);
- Significant mineral areas, (as defined by the State Division of Mines and Geology 's Nevada County Mineral Classification Report Maps referred to as Mineral Resource Zones -2);
- Earthquake faults, (as defined by the State Division of Mines and Geology's Fault Map of California the United States Bureau of Reclamation's Seismotectonic Study of the Truckee/Lake Tahoe Area);
- Avalanche hazards (as defined by the Norman Wilson Avalanche Hazard Study);
- Steep slopes (30+%);
- Areas with high erosion potential (as determined by the United States Department of Agriculture's Soil Surveys of Nevada County and the Tahoe National Forest);
- Areas subject to fire hazards, (as defined by the State Department of Forestry and Fire Protection's Fire Hazard Severity Map); and
- Visually important ridgelines and viewsheds, (as defined by standards developed by Policy 18.3 of the General Plan).

Policy 1.5.4

Where such resources are present, the standards shall require that professional field inventory and review shall be undertaken to delineate the extent of the resource and determine the impact of the proposed development. The following

siting and design measures shall be implemented as appropriate to meet the performance criteria:

- Identification of building envelopes;
- Conservation easements/deed restrictions;
- Use of common vs. individual driveways;
- Specification of location and type of fencing;
- Identification of setbacks and/or buffers;
- Development restrictions;
- Use of Transfer of Development Rights; and
- Offsite mitigation/mitigation banking.

The County shall approve a project for a discretionary permit only if it can be demonstrated that the project, as designed and sited, meets the intent of the performance criteria of the Comprehensive Site Development Standards.

- | | |
|--------------|---|
| Goal 1.6 | Allow for growth while protecting, maintaining and enhancing communities and neighborhoods. |
| Policy 1.6.1 | Establish land uses which protect, enhance, and complement existing communities and neighborhoods. |
| Policy 1.6.5 | Discourage incompatible land uses in proximity to public facilities and institutional uses. <ol style="list-style-type: none"> a. Where possible, industrial uses should not be placed adjacent to public facilities or institutional uses. New or expanded industrial uses that abut a public facility or institutional use should provide a buffer area so as to mitigate visual, noise, light and glare, and other adverse impacts. However, these criteria do not apply to uses which abut a public or institutional uses of an industrial character, such as the corporation yard. b. Public facilities and institutional uses in areas designated for Industrial use on the General Plan Land Use Maps should establish buffers from the surrounding industrial sites, through additional setbacks, landscaping, fencing and other screening, except where the public or institutional use is intended to serve the industrial area or is of an industrial character. |
| Goal 1.7 | Coordinate land use planning within the Community Regions and Rural Regions. |
| Policy 1.7.3 | Provide for specific intensities of use for non-residential uses in the Community Regions and Rural Regions. |
| Policy 1.7.5 | Provide flexibility in the General Plan land use provisions so that variations in land use patterns and activities are permitted within the land use framework established for Community Regions and Rural Regions. |

- Policy 1.7.11 Notwithstanding other policies, the County shall provide for development on an existing legally established lot which does not conform to the minimum parcel size of the General Plan land use designation and implementing zoning district provided that all other current development standards are met.
- Goal 1.8 Coordinate with the cities/town in land use planning and development within their spheres of influence.
- Policy 1.8.1 Encourage compatibility and coordination of land use designations.
- Policy 1.8.2 The County shall continue to work closely with the municipalities within the County concerning planning and development of land within the municipalities' spheres of influence.
- Policy 1.8.3 Within the City/Town spheres of influence, the Nevada County General Plan Land Use Maps will generally reflect the City's/Town's General Plan land use mapping. In some instances, the County may provide for a less intensive land use due to infrastructure capability, environmental constraints or effect on land use and development patterns outside the city's sphere. However, the County's Plan will not preclude implementation of the City's/Town's Plan by providing for a significantly more intensive land use than the City's/Town's Plan.
- Policy 1.8.4 For all discretionary projects within a City's/Town's sphere, the County shall first request that the City/Town determine whether or not it desires to annex the project. If the City/Town does desire annexation, the applicant will be directed to the City/Town. If the City/Town does not desire annexation, the application will be referred to the City/Town for review and comment.
- Policy 1.8.5 While recognizing its own responsibilities and obligations, the County will cooperate, to the extent feasible, in the development and/or revision of the City and Town General Plans. The County may amend its General Plan within the City/Town spheres of influence to reflect said updates and/or revisions, unless there is a compelling land use conflict.
- Policy 1.8.6 Encourage and coordinate with Cities/Town and surrounding counties compatibility of design and development standards, and funding programs.
- Policy 1.8.7 The County will cooperate in the joint preparation of design and development standards applicable to development projects in the County and Cities.
- Policy 1.8.8 The County will actively pursue development of a coordinated development impact fee program, including mechanisms for sharing of development impact fees where the provision of facilities to serve new development extends across joint boundaries. The coordinated development impact fee program shall include coordination with incorporated cities and possibly a Memorandum of Understanding between the County and cities regarding facilitation and implementation of this program.
- Policy 1.8.11 Cooperate with Cities/Town and surrounding counties regarding shared responsibilities for improving and maintaining infrastructure.

- Goal 1.9 – The County shall recognize Legacy Communities and identify the public facility and service needs in those communities in accordance Government Code Section 65302.10 (SB244, Wolk 2011).
- Goal 1.10 Ensure the compatibility of land uses in the vicinity of airports.
- Policy 1.10.2 Refer all land use actions which always require Airport Land Use Commission (ALUC) review and other major land use actions affecting property within an airport influence area, to the appropriate ALUC, as listed in accordance with the policies set forth in the applicable Airport Land Use Compatibility Plan, as those standards are in effect and may be hereafter amended.

Chapter 2 of the Nevada County General Plan is the Economic Development Element. This element is focused on the growth of the economy and development within the County. This chapter recognizes that the County's ability to support its future population in terms of availability of jobs and provision of services is dependent upon the type and extent of economic growth. Increased employment opportunities and a greater fiscal base to provide needed services are both important considerations. The cultivation of cannabis has the potential to contribute to these factors and the following goals and objectives from that Chapter are pertinent to the proposed project.

- Goal 2.1 Provide for a strong economic base while protecting and maintaining communities and neighborhoods.
- Objective 2.2 Achieve a positive balance between the job growth rate and the population growth rate through land use and related policies.
- Objective 2.3 Develop land use and related policies to foster and encourage retention of existing jobs in the County.

Directive Policy

- Policy 2.8 In support of the County Economic Policy, develop and implement an on-going, proactive business retention program to support existing businesses and foster their expansion. As part of the business retention program, establish a business outreach program aimed at enhancing communication between existing businesses and the County.
- Objective 2.6 Within Community Regions, provide adequate public services and facilities to employment-generating uses.

Action Policy

- Policy 2.12 In support of the County Economic Policy, develop and implement a program that analyzes the existing and potential public services available to all job-generating land uses. Where the analysis determines a lack of a facility or service that restricts development potential, an action program to provide the needed facility or service shall be implemented.

Directive Policy

- Policy 2.13 Coordinate County capital improvement programs, including the Road Improvement Program, with the Economic Policy to ensure that public facilities

and services are appropriately located and sized, and properly timed to support the desired economic development.

Objective 2.8 Implement a program which increases the efficiency of the development review process.

Directive Policy

Policy 2.15 As part of the County Economic Policy, consider alternatives to increase the efficiency of the development review process, and incorporate recommendations for improvements in the strategic plan and annual action programs.

Objective 2.10 Provide for home occupations.

Objective 2.13 Support programs that provide or lead to sources of capital for local business development.

Objective 2.14 Encourage protection and enhancement of the natural scenic beauty of this County in support of the tourist trade.

Directive Policy

Policy 2.19 The County will support the Scenic Byways program, and particularly the establishment of the Yuba-Donner Scenic Byway, to further the promotion of tourism in the County.

Chapter 6 of the Nevada County General Plan is the Open Space Element. This element serves a variety of purposes and use as a focal point of the community in the form of preserving open space and in the form of local and regional parks and significant features in the area. In part, this element focuses on the preservation of natural resources including plant and animal life, habitat for fish and wildlife species, protects corridors along all major streams in the planning area and other environmentally sensitive areas. This element also notes that mineral resources have played an important role in the history of Nevada County and in that, provides for the protection of those resources. The Open Space Element recognizes that recreational resources are important to residents and visitors, and also notes that open space areas can provide important buffers from hazard areas including those prone to fires and other geologic hazards. In this way, the Open Space Element contains goals and policies that not only are applicable to those resources areas but also Land Use as a whole. These goals and policies that are pertinent to the proposed project are discussed below.

Goal 6.1 Encourage that land use patterns and site development reflect open space values.

Directive Policy

Policy 6.1 The General Plan recognizes the importance of open space serving one or more of the following purposes:

- a. Preservation of natural resource areas;
- b. Conservation of open spaces for the managed production of resources;
- c. Maintenance of areas with importance for outdoor recreation;

- d. Delineation of open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions; and
- e. Provision of open spaces to create a buffer which may be landscaped to minimize the adverse impact of one land use on another.

Policy 6.3 Maintain the density of development allowed in the Rural and Forest land use designations as shown on the General Plan Land Use Maps in order to provide for low-density development in Rural Regions which preserves an open, rural character and complements the permanent public and private open space.

Policy 6.6 Provide for, where feasible, continued access to open space and public resources by ensuring that all discretionary projects are consistent with development of the Nevada County Non-Motorized Trails Master Plan.

Objective 6.2 Implement development standards that incorporate open space values.

Action Policy

Policy 6.9 Development standards for project design, grading, construction and use, established through the Comprehensive Site Development Standards, shall be used in project review of all discretionary project permits to determine open space requirements for each project.

These standards shall provide for consideration of non-disturbance of, and open space setbacks from identified sensitive environmental, biological, or cultural resources, e.g. 100-year floodplains, wetlands, slopes in excess of 30% (excepting access across slopes up to 30%), lakes, ponds, significant historic or archaeological sites/resources, critical wildlife areas, minimization of land disturbance, consistency with the landforms and aesthetic context of the site, temporary and permanent erosion and sedimentation controls, and vegetation retention, replacement and enhancement.

Nevada County Zoning Ordinance

The Nevada County General Plan and Land Use Development Code (Zoning Ordinance) serve as the primary tool to implement and ensure consistency with the goals, objectives, and policies of the County General Plan by providing information on zoning types, site development standards, permitting requirements, allowed land uses and other development standards. The Zoning Ordinance applies to all land uses and development within the unincorporated areas of Nevada County. The zoning of the lands within the County is shown on *Figure 4.9-3: Western Nevada County District Zoning – Northern Portion*, *Figure 4.9-4: Western Nevada County District Zoning – Southern Portion*, and *Figure 4.9-5: Eastern Nevada County Zoning Districts*. Ordinance provisions are to be held to be the minimum requirements for the promotion of the public safety, health, convenience, comfort, prosperity and general welfare. The Nevada County Zoning Ordinance is adopted in order to achieve the following objectives:

- To serve as the primary tool to implement and ensure consistency with the goals, objectives, and policies of the Nevada County General Plan based upon the following central themes: 1) Fostering a rural quality of life, 2) Sustaining a quality environment; 3). Development of a strong diversified,

sustainable local economy. 4) Planned land use patterns to determine the level of public services appropriate to the character, economy, and environment of each region;

- To provide for the development of Nevada County as a balanced community with adequate amounts of land zoned in each district to achieve a balance among housing, employment, retail and commercial services, recreation, and public facilities.
- To provide for adequate mechanisms and standards to regulate the surface and subsurface uses of land, structures to meet the needs of residents, commerce, industry, agriculture, forestry, and other purposes in appropriate places.
- To provide for land use regulations that are clear, concise, enforceable, and effectively implement Nevada County General Plan provisions in a reasonable and balanced fashion.
- To provide for conservation of natural amenities, such as open space, wetlands, native vegetation, and wildlife.

Land Use Designations

Compatible land uses and land uses that are necessary and part of agricultural operations are described below.

Residential (RES) is intended to provide for lower density single-family residential uses at densities at a minimum lot size of 1.5 acres per dwelling unit in locations within or adjacent to Community Regions where limited services such as either public water and sewer (but not both) are available; or to reflect existing development patterns or where provision of transition from more intensive urban uses to less intensive rural uses is desirable. In keeping with the rural character, agricultural operations and natural resource-related uses, including the production of timber, are also appropriate in this designation.

Estate (EST) is intended to provide for low-density residential development at a minimum lot size of 3 acres per dwelling unit in areas which are essentially rural in character but are adjacent to Community boundaries or near Community Regions and therefore are more accessible to shopping, employment and services. In keeping with the rural character, agricultural operations and natural resource-related uses, including the production of timber, are also appropriate in this designation.

Rural (RUR) designations are intended to provide for development of compatible uses within a rural setting. Such uses may include rural residential at maximum densities ranging from 5 to 160 acres per dwelling (depending upon the specific development pattern and character of an area; availability of public facilities and services; and environmental constraints), agricultural operations and supporting agricultural production, natural resource production and management, and low-intensity recreation.

Residential Agricultural (RA) zone - The RA District establishes provisions for low-density single-family dwellings, as well as other dwelling unit types in keeping with the rural character of the area, at densities equivalent to 1.5 acre minimum parcel size, or 3 acre minimum parcel size where neither a public water nor public sewer system is available. Within the Residential and Estate General Plan designations, the single-family dwelling is of primary importance and agricultural uses are Secondary. Within Rural General Plan designations, agricultural operations and natural resource-related uses and residential uses are of equal importance.

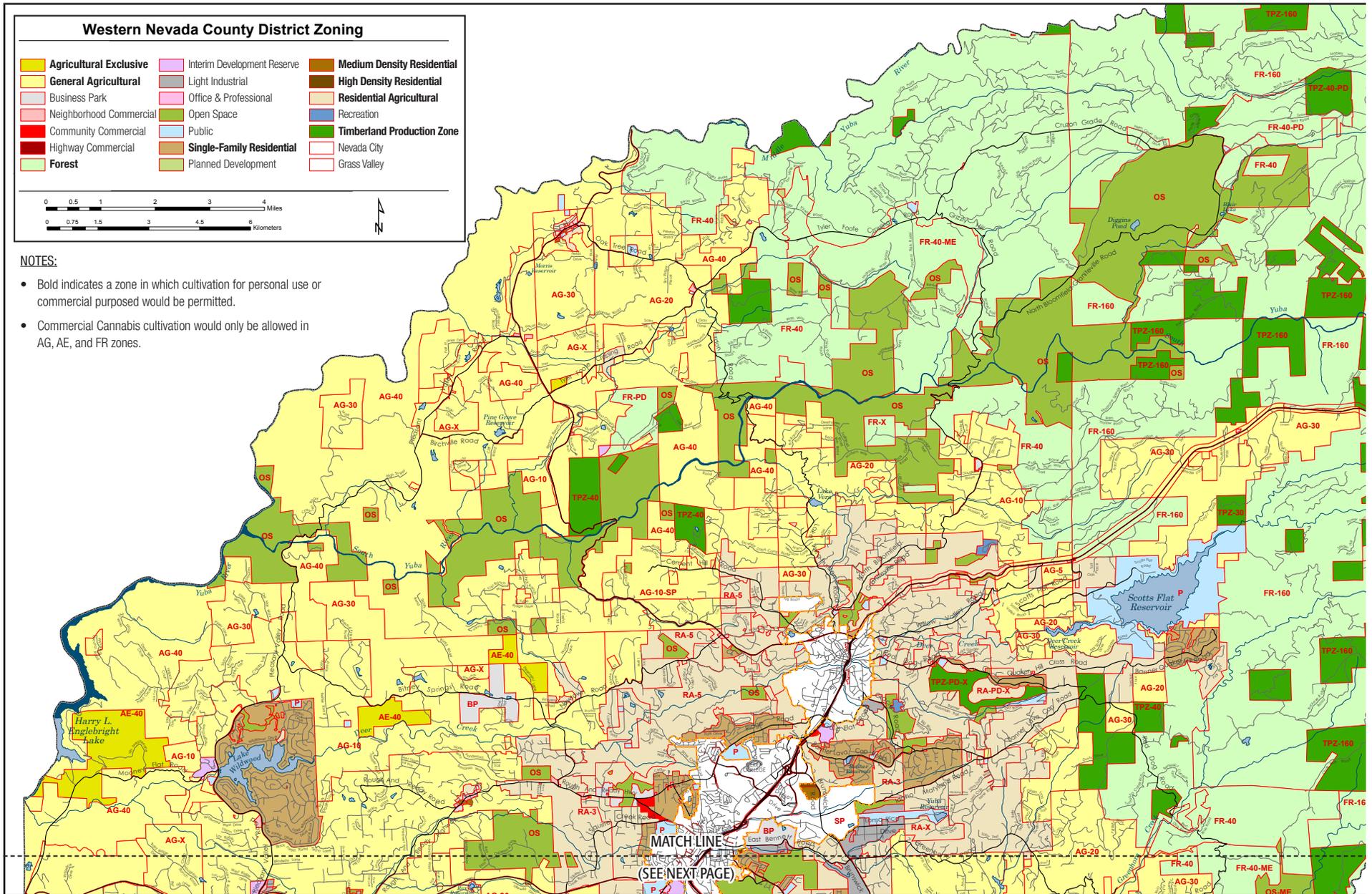


FIGURE 4.9-3: Western Nevada County District Zoning – Northern Portion
Nevada County Cannabis EIR

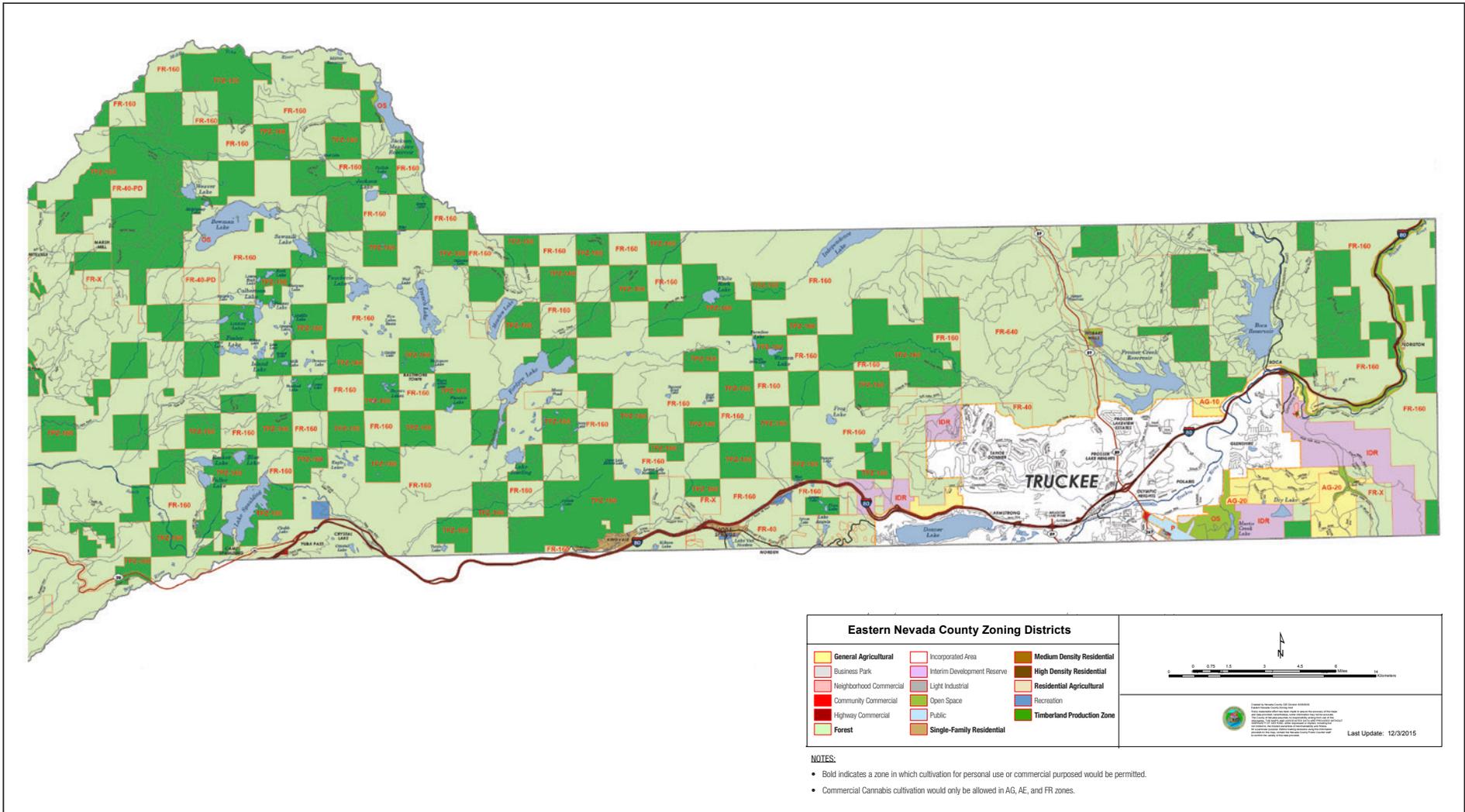


FIGURE 4.9-5: Eastern Nevada County Zoning Districts
Nevada County Cannabis EIR

Rural Commercial (RC) is intended to provide for limited day-to-day retail and service needs for local residents, or for uses of limited scale and intensity providing goods and services to support local agricultural, natural resource or recreational operations. It also provides for limited mixed-use employment opportunities. Such designations should have not more than 5 acres in a single location, and convenient, controlled access to an arterial or major collector roadway.

Size may be increased to not more than 10 acres where it is determined that a local market need clearly exists for this size development based upon a professionally-prepared market study, and a Design Master Plan is adopted providing for development in keeping with the rural character of the area.

Open Space (OS) is intended to provide for land, primarily in public ownership, which is dedicated to recreation, resource and habitat preservation, and protection of environmental resources, and which typically allows only recreation or very low-intensity limited uses, such as, but not limited to, visual corridor preservation, interconnecting wildlife corridors, slope protection, preservation of ditches, railroad rights-of-way, historic trails, agriculture, and timber production. This designation shall also provide for the designation of land in private ownership which is permanently devoted to open space through clustering or other open space requirements.

Commercial cultivation would only be permitted in AG, AE, and FR. These zones are within the Rural District, which also includes the TPZ zone. The purpose of these zones as defined by the zoning Ordinance is twofold:

- To preserve the existing open, pastoral character of rural areas, to allow for the development of compatible uses within a rural setting, including lower-density residential uses, agricultural operations and support uses, natural resource production and management, and low-intensity recreation; and
- To ensure the long-term quality of natural resource values while at the same time ensuring the sustainability of agricultural and logging activities.

Zoning

Agricultural Exclusive (AE) zone - The AE District provides for the preservation and protection of important agricultural lands that are being used for commercial agricultural production. It is consistent with all agricultural-oriented General Plan land use designations, as well as those designations that allow for more intensive uses. Agricultural uses are of primary importance and all other uses determined to be incompatible with agriculture shall not be permitted.

General Agricultural (AG) zone - The AG District provides areas for farming, ranching, agricultural support facilities and services, low intensity uses, and open space. It is consistent with all agricultural-oriented General Plan land use designations, as well as those designations that allow for more intensive uses. Agricultural uses are of primary importance and all other uses are secondary.

Forest (FR) zone - The FR District provides areas for the protection, production and management of timber, timber support uses, including but not limited to equipment storage and temporary offices low-intensity recreational uses, and open space.

Timberland Production Zone (TPZ) - The TPZ District provides for prudent and responsible forest resource management and the continued use of timberlands for the production of timber products and compatible uses. It is established in conformance with the Forest Taxation Reform Act of 1976 and all requirements and restrictions therein shall apply. It is intended to be a district where the land is devoted to the growing

and harvesting of timber and for such compatible uses that do not significantly detract from the use of the land for the growing and harvesting of timber.

City of Nevada City

In August of 2016, the City of Nevada City evaluated the potential for allowing a medical marijuana dispensary. On September 28, Council was presented with a draft ordinance that outlines a process for allowing one such dispensary within City Limits. At that meeting, Council referred review of the draft ordinance to the Planning Commission for their recommendation and also directed staff to develop ordinance options and recommendations related to other State authorized medical cannabis business operations. At this time, the Nevada City is considering four applications for medical cannabis manufacturing, distribution, cultivation (no mature plants), and testing laboratory business (Nevada City, 2018).

The Nevada County SOI is, in response to the Nevada County Local Agency Formation (LAFCo) request to submit a current plan and procedures, is to guide the orderly annexation of City of Nevada City SOI over the next 20 years. This intent is to facilitate and guide the City's ability to plan for growth and the corresponding pace of service expansion in the future. None of the area covered by the Nevada City SOI are zoned by the County as AE, AG, or FR. Under proposition 64 cannabis cultivation of six plants for personal use within California is legal. This is consistent with the personal use allowance under the proposed NCCO. *Figure 4.9-6: Nevada City Sphere of Influence*, shows this area.

City of Grass Valley

The City of Grass Valley Development Code Chapter 17.20.035 pertains to cannabis related businesses within the City. More specifically, this section of Code prohibits of medical marijuana cooperatives. Accordingly, it states that defines medical marijuana as authorized in strict compliance with California Health and Safety Code §§ 11362.5, 11362.7 et seq., and defines a medical marijuana cooperative or collective as a collective, cooperative, dispensary, operator, establishment, provider, association or similar entity that cultivates, distributes, dispenses, stores, exchanges, processes, delivers, makes available, transmits and/or gives away marijuana in the City for medicinal purposes to qualified patients, persons with an identification card or primary caregivers pursuant to Health and Safety Code §§ 11362.5, 11362.7 -11362.83.

The purpose of the Grass Valley SOI plan is to define the probable 20-year boundary of its service area and to delineate present and future land uses, including the present and probable need for public facilities and services in the sphere area. The SOI plan also discussed the existing capacity of public facilities and services, identifies relevant social or economic communities of interest in the area based on projected populations in the 5, 10, 15 and 20-year spheres. None of the area within the SOI is overlain by a County zoning designation (AG, AE, or FR) that would allow commercial cannabis cultivation. Under proposition 64 cannabis cultivation of six plants for personal use within California is legal. This is consistent with the personal use allowance under the proposed NCCO. *Figure 4.9-7: City of Grass Valley Sphere of Influence*, shows this area.

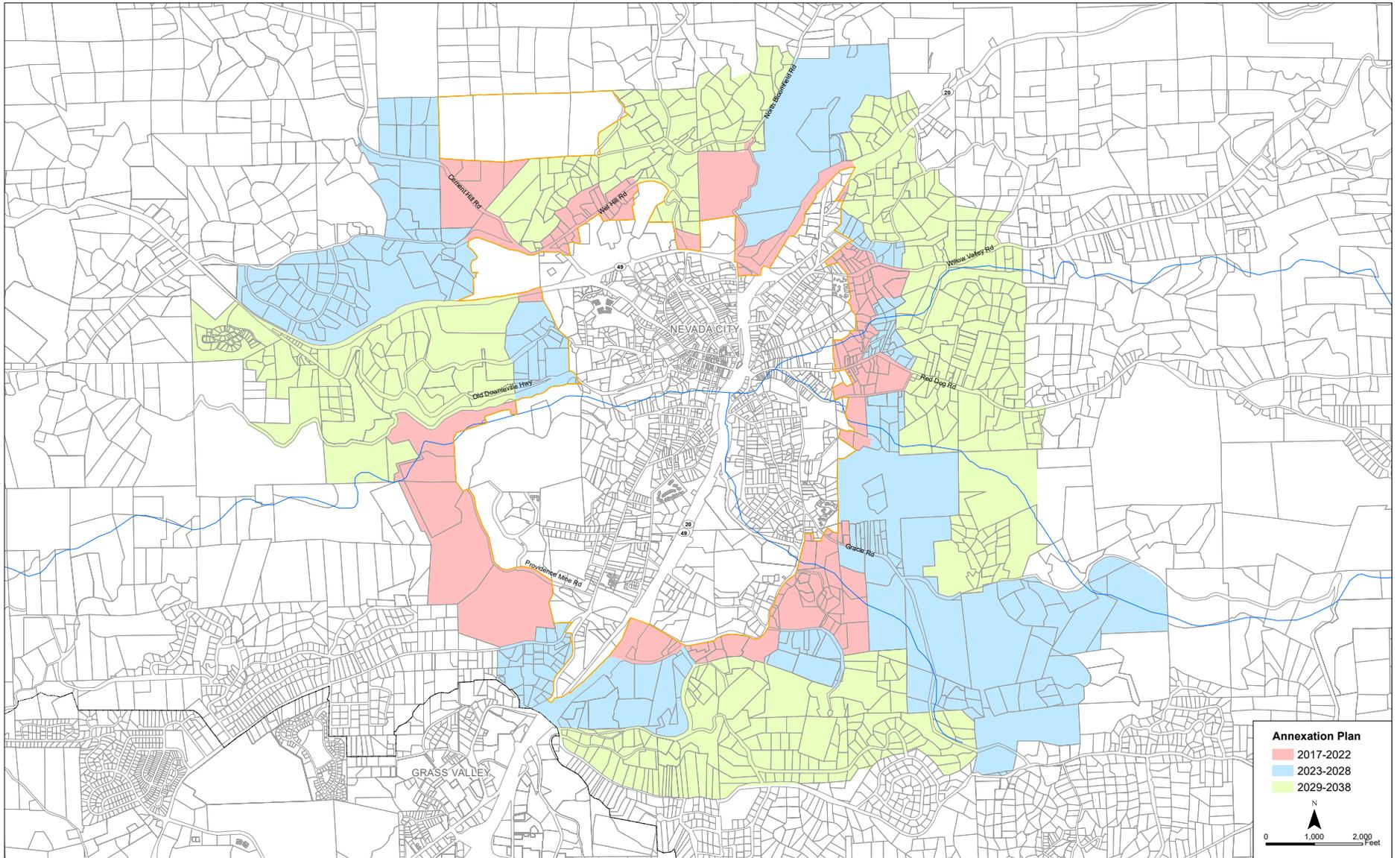
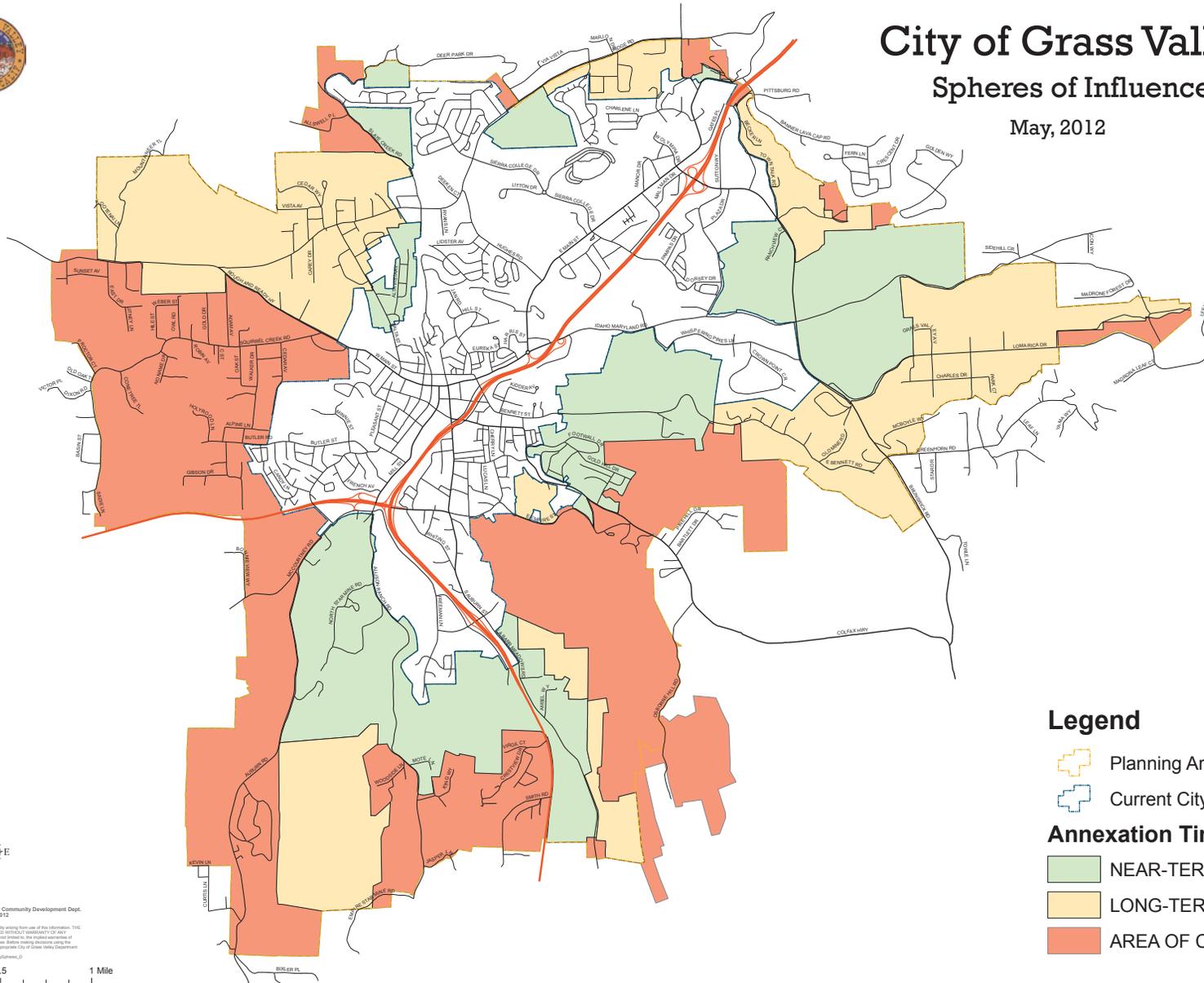


FIGURE 4.9-6: Nevada City Sphere of Influence
 Nevada County Cannabis EIR



City of Grass Valley Spheres of Influence

May, 2012



Legend

- Planning Area Boundary
- Current City Limit
- Annexation Timeline**
- NEAR-TERM
- LONG-TERM
- AREA OF CONCERN

Created by the City of Grass Valley Community Development Dept.
May, 2012

The City of Grass Valley assumes no responsibility for the use of this information. THE USER ASSUMES ALL LIABILITY FOR ANY AND ALL DAMAGES, INCLUDING REASONABLE ATTORNEY'S FEES, ARISING FROM THE USE OF THIS INFORMATION. THE CITY OF GRASS VALLEY ASSUMES NO LIABILITY FOR ANY AND ALL DAMAGES, INCLUDING REASONABLE ATTORNEY'S FEES, ARISING FROM THE USE OF THIS INFORMATION. THE USER ASSUMES ALL LIABILITY FOR ANY AND ALL DAMAGES, INCLUDING REASONABLE ATTORNEY'S FEES, ARISING FROM THE USE OF THIS INFORMATION.

0 0.25 0.5 1 Mile



FIGURE 4.9-7: City of Grass Valley Sphere of Influence
Nevada County Cannabis EIR

City of Truckee

In response to the passage of Proposition 64 in the November 2016 state election the Town of Truckee Town Council held a series of workshops to discuss the Town's approach to marijuana regulations. The focus of these workshops included discussions on indoor and outdoor cultivation, manufacturing and processing, taxation, retail and commercial uses and delivery services, which resulted in the adoption of updated land use regulations for commercial cannabis delivery services. Now, in addition to the allowances made by California law allowing the possess, transport, obtain transfer of cannabis to other adults 21 or older, and the cultivation up to 6 plants per residence and possess the cannabis produced by these plants; the Town of Truckee adopted updated land use regulations allowing commercial cannabis delivery services. At the June 12, 2018 Town Council meeting, the Council adopted permanent land use regulations to allow the establishment of cannabis delivery service businesses (adult-use and medicinal) after obtaining a proper license in accordance with MAUCRSA requirements (Truckee, 2018).

In 2010, Resolution 10-05 the Local Agency Formation Commission of Nevada County updated the Sphere of Influence for the Town of Truckee. The document, included a map showing the Town of Truckee Recommended Sphere of Influence Annexation Schedule. This map, shown in *Figure 4.9-8: Town of Truckee Recommended Sphere of Influence*, shows the Near-Term Sphere, Long-Term Sphere, and Areas of Concern. Within the southeastern portion of the SOI there is approximately County land zoned AG-20 within the Areas of Concern, and additional areas including the Truckee Airport zoned as Public, Open Space, and Interim Development Reserve. The 2006 Truckee General Plan designates these areas, excluding the airport, Resource Conservation/Open Space, and Planned Residential Development.

The western portion of the SOI, is zoned by the County as General Agriculture, Forest, Timber Production Zone, and Interim Development Reserve. The 2006 General Plan designates these areas as Resource Conservation/open Space, Residential Cluster (10 Acres), and Planned Residential Development. The annexation schedule shows areas in both near-term, long-term, and areas of concern.

Area Plans

Area Plans are informational policy documents that are used to address specific issues within a community to provide long-term guidance and stability in implementing identified County and community goals. The area plans are supporting land use policy documents that compliment and assist in the further implementation of the goals, policies, and programs of the General Plan. Relevant goals and policies from the adopted Area Plans are described below.

Higgins Corner Area Plan

The Higgins Area Plan is located in the portion of southwest Nevada County. The Higgins Area Plan policies and guidelines provide for preservation of area resources and reinforce policies contained in the Nevada County General Plan by emphasizing protection of ridgeline views, slopes in excess of 30 percent, oak woodlands and riparian corridors. The HCAP does not designate zoning districts within the plan area that would be suitable for commercial cannabis cultivation. The parcels designated for multiple family residential, medium density multiple family residential, and residential agriculture zoning are suitable for indoor personal cannabis cultivation. The HCAP encompasses approximately 246 acres and implements the following General Plan designations and corresponding zoning:

General Plan Designations

BP	Business Park
CC	Community Commercial
EST	Estate
IND	Industrial
NC	Neighborhood Commercial
OP	Office-Professional
OS	Open Space
PD	Planned Development
PUB	Public
RES	Residential
UMD	Urban Medium Density Residential

Zoning Districts

BP	Business Park
C1	Neighborhood Commercial
C2	Community Commercial
M1	Light Manufacturing and Industrial
OP	Office and Professional
OS	Open Space
P	Public
R2	Multiple Family Residential
R3	Medium Density Multiple Family Residential
RA	Residential Agriculture

Loma Rica Industrial Area Plan

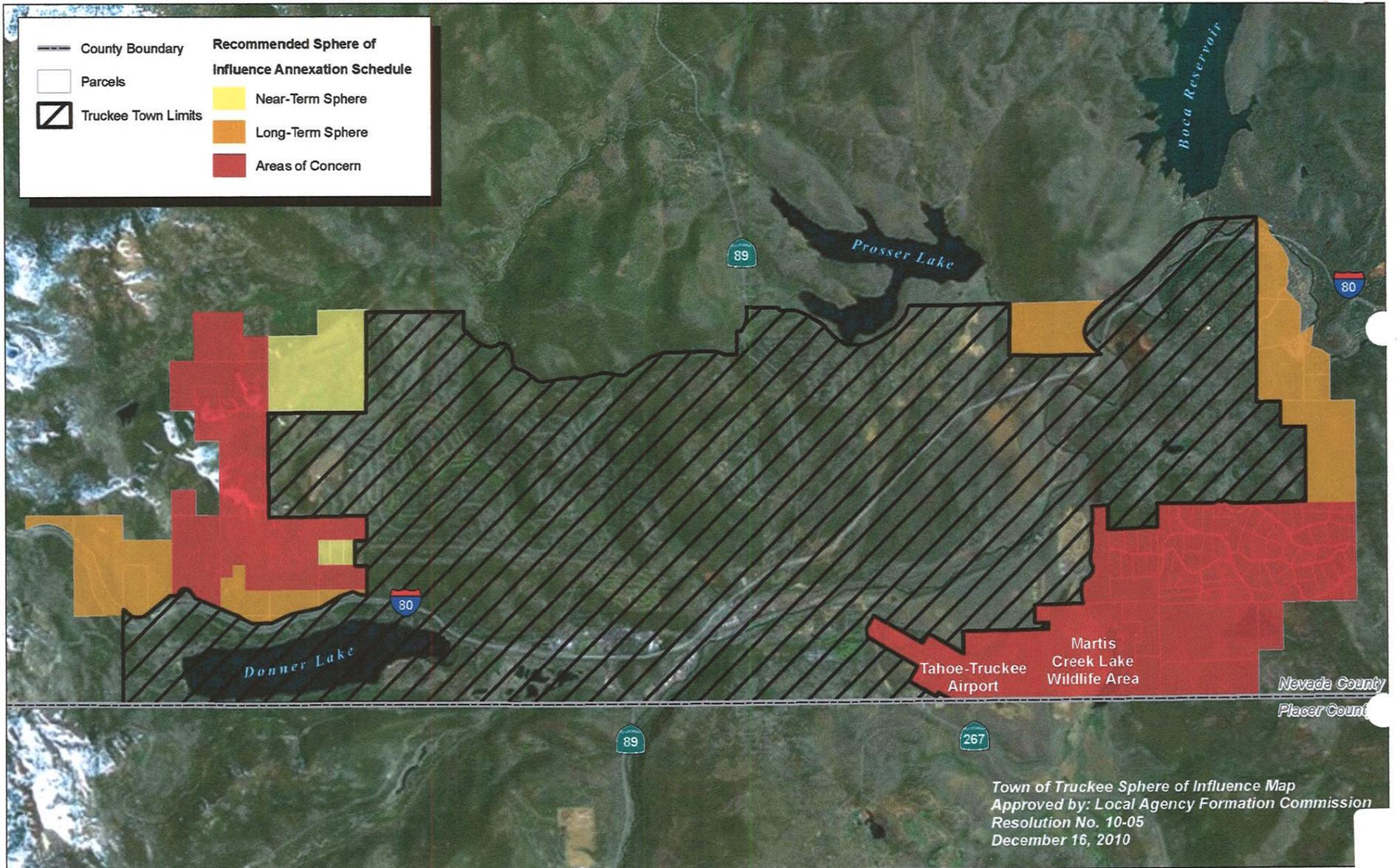
The Loma Rica Industrial Area Plan is located within the unincorporated portion of Nevada County where land use is governed by the Nevada County General Plan and Zoning Regulations. The Area Plan is mapped within the Grass Valley Sphere of Influence. Within the Area Plan, the three General Plan designations mapped within coinciding zoning are Industrial (IND), Public (PUB), and Special Development Area (SDA). The LRAP does not zone lands within the plan area that would be suitable for either commercial or personal cannabis cultivation. The respective zoning districts are M1 zoning district, Public zoning district, and Interim Development Reserve zoning district.

General Plan Designations

IND	Industrial
PUB	Public
SDA	Special Development Area

Zoning Districts

M1	Light Industrial
P	Public
IDR	Interim Development Reserve



Source: Nevada County GIS (2010), ESRI World Imagery.



FIGURE 4.9-8: Town of Truckee Recommended Sphere of Influence
 Nevada County Cannabis EIR

North San Juan Area Plan

All lands within the North San Juan (NSJ) Area Plan are located within the unincorporated territory of Nevada County where land use is governed by the County General Plan and Zoning Regulations. The area addressed by the North San Juan Area Plan is the 23-acre North San Juan Rural Center, which is the commercial center of a 480-acre historic townsite located in western Nevada County on State Highway 49, approximately 15 miles northwest of Nevada City. Land use within a Rural Center is intended to function in an interrelated development pattern that creates a visual identity reflecting the specific character of the rural region. The NSJAP encompasses approximately 23 acres and is located in the North San Juan Rural Center, which is the commercial center of the historic North San Juan townsite located in western Nevada County on SR-49. There are 37 separate parcels located within the NSJA. Zoning within the NSJAP are not suitable for commercial cannabis cultivation. The parcels zoned for medium density residential would be suitable for indoor personal cannabis cultivation. The NSJAP implements the following General Plan designations and corresponding zoning:

General Plan Designations

BP	Business Park
NC	Neighborhood Commercial
OP	Office and Professional
UMD	Urban Medium Density Residential
P	Public

Zoning Districts

BP	Business Park
C1	Neighborhood Commercial
OP	Office and Professional
R2	Medium Density Residential
P	Public

Penn Valley Village Center Area Plan

The Penn Valley Village Center Area (PVAP) is located in an unincorporated community in Western Nevada County where land use is governed by the Nevada County General Plan and Zoning Regulations. All proposed development, including new construction, additions, remodels and rehabilitation projects, and land use, must be consistent with the zoning and General Plan designations, for each subject property, that are in effect at the time of proposed development. The PVAP encompasses approximately 320 acres within the Penn Valley community in western Nevada County, and includes 81 separate parcels. The PVAP does not zone parcels within the plan area that would be suitable for commercial cannabis cultivation. The parcels zoned for multiple family residential, multiple family residential with mobile home and design combining districts, and residential agriculture are suitable for indoor personal cannabis cultivation. The PVAP implements the following General Plan designations and corresponding zoning:

General Plan Designations

UMD	Urban Medium Density, allowing 6 dwelling units per acre
UHD	Urban High Density, allowing 20 dwelling units per acre

PUB	Public
OP	Office and Professional
BP	Business Park
CC	Community Commercial
PD	Planned Development, allowing 11 acres of UMD and 5 acres of OS, Open Space
PD	Planned Development allowing 26 acres of UMD and 8 acres of OS

Zoning Districts

RA-1.5	Residential Agricultural with a 1.5-acre minimum parcel size
R2	Multi-Family Residential
R3-MH-D	Multi-Family Residential, with the Mobilehome and Design Combining Districts
P	Public
OP-D	Office and Professional, with the Design Combining District
BP-D	Business Park, with the Design Combining District
C2-D	Regional Commercial, with the Design Combining District
IDR	Interim Development Reserve, providing for 5 acres of “OS,” Open Space, and 11 acres of “R2”
IDR	Interim Development Reserve, providing for 26 acres of R2 and 8 acres of OS

Soda Springs Area Plan

The Soda Springs Area Plan (SSAP) serves as the comprehensive land use and zoning plan for the Donner Summit region and community of Soda Spring and embodies the expressed goals of residents, business owners, and elected officials and establishes concrete and achievable actions. The primary goal of the PVAP is to provide a blueprint for the ultimate development of the area derived from an assessment of current land use issues and potential solutions drawn from collaborative discussions and a careful analysis of what is needed to preserve and improve the functionality of the area. The SSAP encompasses approximately 148 acres within the Soda Springs Rural Center located on historic Donner Pass Road and includes 271 separate parcels. Only the FR/FOR zoning would allow cultivation of commercial cannabis. The SSAP implements the following General Plan designations and corresponding zoning:

General Plan Designations

USF	Urban Single Family Residential
UMD	Urban Medium Density, allowing 6 dwelling units per acre
UHD	Urban High Density, allowing 20 dwelling units per acre
C1	Neighborhood Commercial
CC	Community Commercial
HC	Highway Commercial
IND	Industrial
FOR-40	Forest
REC	Recreation

Zoning Districts

R1	Sing Family Residential
R2	Medium Density Residential
R3	High Density Residential
C1	Neighborhood Commercial
C2	Community Commercial
CH	Highway Commercial
M1	Light Industrial
FR	Forest
REC	Recreation

Because commercial cannabis cultivation could occur within the SSAP, the following goals and policies related to land use and planning and other environmental resources are discussed below.

Goal LU-1:	To create a sustainable economic, social, and natural environment for Soda Springs, for this and future generations.
Policy LU-2.1:	Work and Play Foster live-work opportunities in commercial areas with a diversity of jobs to provide greater economic stability and new opportunities for employment in Soda Springs.
Goal LU-3:	Ensure that new development improves the community character through appropriate site and building design standards promoting a high quality-built environment that establishes a distinct sense of place.
Policy LU-3.7:	Water Conservation Size Soda Springs' developments to existing water sources and recognize the challenging climate on Donner Summit and the impact of climate change on the region's landscape and resources. Incorporate water conservation components into the design, construction, and operation of new construction and major renovations.

Nevada County Airport Land Use Compatibility Plan (ALUCP)

The Nevada County Airport Land Use Compatibility Plan (ALUCP) was adopted by the Nevada County Airport Land Use Commission (ALUC) on September 21, 2011. The plan sets compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to land owners in the design of new development. The influence area extends 1.7 miles from the airport's runway. The plan is used by the ALUC staff to define compatibility for noise, safety, airspace protection, and overflight as it pertains to newly proposed projects in the vicinity of the Airport. The ALUCP is shown in *Figure 4.9-9: Nevada County Airport Land Use Compatibility Map*.

Truckee Tahoe Airport Land Use Compatibility Plan (TTALUCP)

The Truckee Tahoe Airport Land Use Commission (TTALUC) serves as the land use planning agency for the Truckee Tahoe Airport. This special Airport Land Use Commission (ALUC) consists of representatives from Nevada and Placer Counties. The Truckee Tahoe Airport Land Use Compatibility Plan (TTALUCP) is a document referred to by the Commission and individuals seeking to review standards for land use planning in the vicinity of the airport. The plan defines compatible land uses for noise, safety, airspace

protection, and overflight. The TTALUC performs consistency determinations for proposed projects in the area covered by the Compatibility Plan as needed. See, *Figure 4.9-10: Tahoe Truckee Airport Compatibility Factors: Noise & Safety*. The TTALUCP was most recently revised and adopted on October 27, 2016 (TTALUP, 2016).

4.9.3 STANDARDS OF SIGNIFICANCE

ENVIRONMENTAL ANALYSIS

This section discusses the potential land use and planning impacts associated with the Nevada County Commercial Cannabis Cultivation Ordinance EIR. Evaluation of potential land use impacts from implementation of the proposed NCCO is based on a review of documents, including the current Nevada County General Plan, and the Nevada County Code; various community plans, LCPs, and city general plans; and the ALUCP. In determining the level of significance, this analysis assumes permitted cannabis operations under the proposed ordinance would comply with relevant state and other County ordinances and regulations related to land use.

THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant land use impact if it would:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

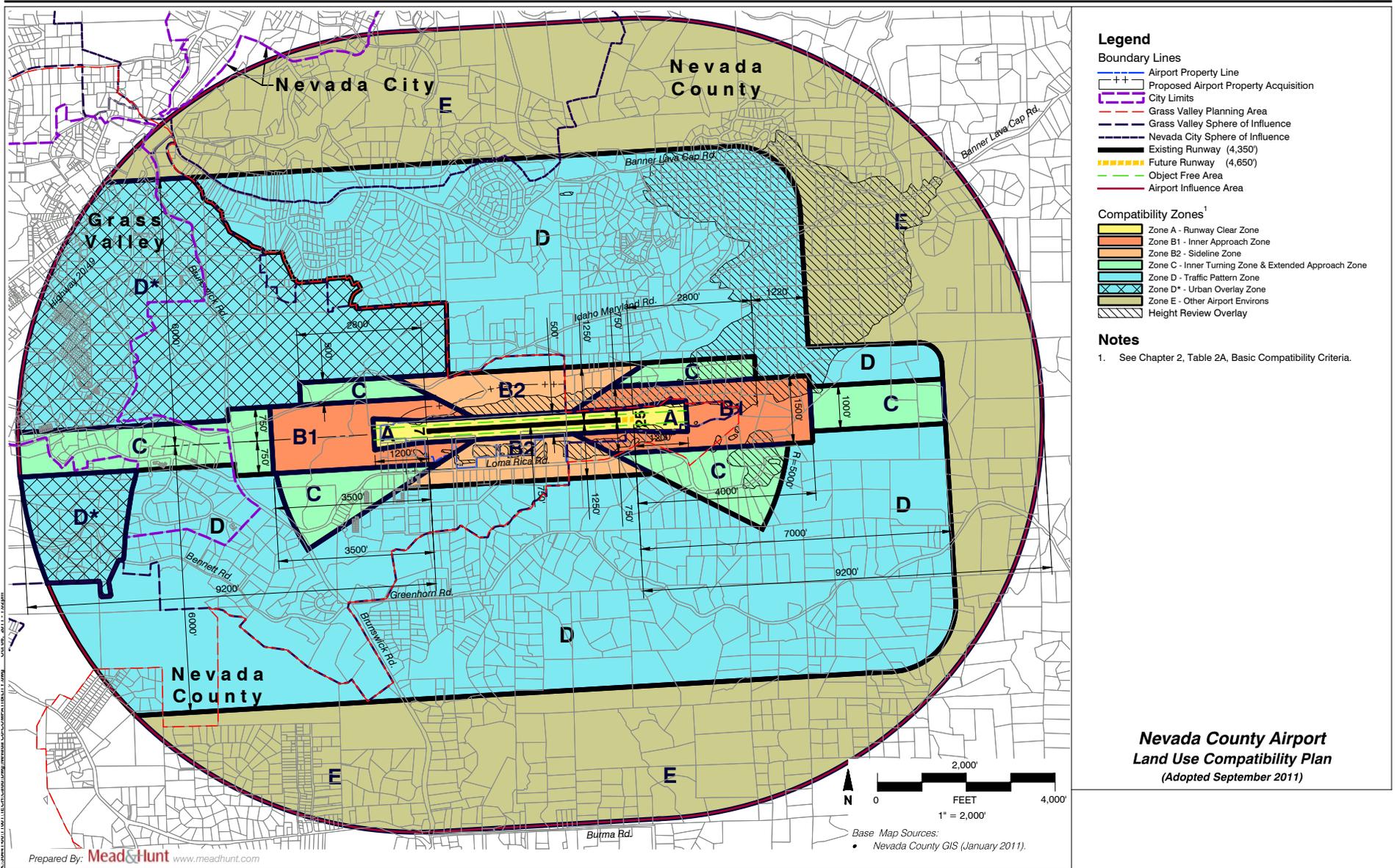


FIGURE 4.9-9: Nevada County Airport Land Use Compatibility Map
Nevada County Cannabis EIR

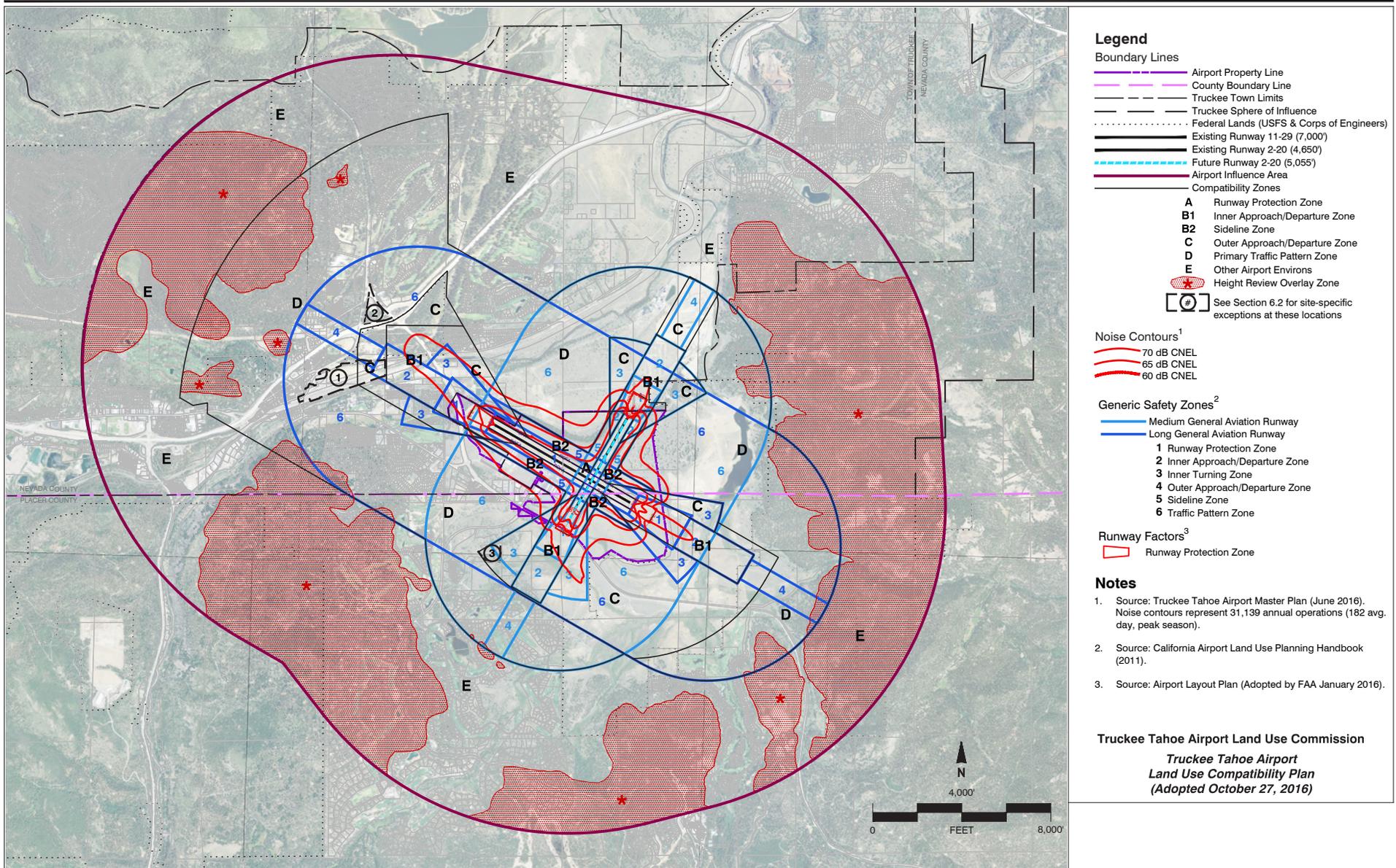


FIGURE 4.9-10: Tahoe Truckee Airport Compatibility Factors: Noise & Safety
 Nevada County Cannabis EIR

AREAS OF NO PROJECT IMPACT

The following impact is either not applicable to the project or not reasonably foreseeable:

- Conflict with any applicable habitat conservation plan or natural community conservation plan.

There are no habitat conservation plans (HCP), natural community conservation plans, or other approved local, regional, or state HCPs that apply to the project. Thus, the proposed project would not conflict with any such plans.

4.9.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

PROJECT IMPACTS

IMPACT 4.9-1: PHYSICALLY DIVIDE AN ESTABLISHED COMMUNITY.

The project proposes to be consistent with state law and to enable a structured and logical management procedure for the cultivation of cannabis within all unincorporated areas within the County. The proposed project would address cultivation for personal use, for the approximate 3,500 sites currently under cannabis cultivation, as well as for new commercial cultivation expected after adoption of the proposed NCCO. The proposed project would replace the existing cannabis regulations in Nevada County Land Use and Development Code and implement new county-specific regulations to address the licensing of cannabis cultivation activities in the unincorporated areas of the County. Because commercial cultivation would only be allowed in parcels zoned AG, AE, or FR, existing cultivation outside these areas would be deemed a nuisance and required to cease commercial cultivation. All new commercial cultivation activities would only be allowed on parcels zones AE, AG, and FR. All cultivation would be required to conform to the requirements of the proposed NCCO as well as all performance standards when applicable for some projects under an ADP and mitigation measures included to this Draft EIR.

Under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain a CCP for cannabis cultivation 2,500 sf of canopy or less and an ADP for cannabis cultivation of 2,500 sf to 10,000 sf of canopy or less. All applicants also would be required to apply for an ACP. The ACP would need to be renewed annually.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, would require registration with the enforcing officer through an administrative action. The cultivation activities of six plants for personal use in R1, R2, R3, or RA zones would be limited to indoor cultivation and would not result in a physical division of any established community. To further reduce physical divisions, commercial cultivation areas within these parcels would be required to be setback at least 100 feet from all property lines and based on the overall acreage of the site, an overall maximum of cannabis canopy would be allowed. Personal use cultivation would be contained to existing parcels, would be limited by the proposed NCCO and state law to a maximum of six plants. Although controversy may be surrounding cannabis cultivation, this type of cultivation does not have the potential to physically divide a community.

For parcels less than 2-acres, commercial cannabis cultivation is not allowed. For parcels greater than 2 acres and up to 4.99 acres, only indoor cultivation to a maximum of 500 sf of canopy would be allowed, and mixed-light and outdoor cultivation would be prohibited. On parcels greater than 5 acres up to 9.99 acres indoor, mixed-light, and outdoor would be allowed but would be limited to a total canopy of

2,500 sf (equates to a maximum of 1.1% the total parcel area). On parcels between 10 and 19.99 acres, indoors, mixed-light, outdoors or a combination of said methods would be limited to 5,000 sf (equate to a maximum of 1.1% of the total parcel area). Lastly, on parcels greater than 20 acres, indoors, mixed-light, and outdoors, or a combination of said methods with up to of 10,000 sf of canopy (equates to a maximum of 1.1% of area if the parcel is only y20 acres) of canopy would be allowed.

Cannabis is defined by the by the California State Health and Safety Code Section 11362.777[a] and Business and Professions Code Section 26067[a]) as an agricultural product. Agricultural land uses are typically considered compatible with other land uses and do not generally represent a physical division between communities. While Nevada County does not recognize cannabis as an agricultural product, the cultivation of cannabis under the proposed NCCO would include relatively small commercial cannabis cultivation areas which would include the use of structures and equipment that also are used for other agricultural products. Common structures and equipment may include machinery, accessory structures, greenhouses, nurseries, hoop houses, ponds, sheds, barns, fencing, planting areas, and screening vegetation. As discussed above, these features would be located within existing parcels and would not create new barriers or physical impairments, or block roadways or travel corridors between established communities. Therefore, the continued use of existing cultivation areas as well as newly permitted cannabis cultivation in accordance with all applicable laws and regulations would not physically divide an established community.

As described in *Section 3.0: Project Description* includes one of the project objectives within the purpose of reducing the potential for adverse effects on sensitive sites and populations by requiring reasonable setbacks from incompatible land uses such as schools, places of worship, culturally significant sites, daycare centers, and youth-oriented facilities. In addition, two other project objectives focus on eliminating or substantially reducing the public nuisance of unregulated, and currently illegal, cannabis cultivation sites by establishing land use requirements to minimize criminal activity, degradation of visual resources, and impacts to neighborhood character. A third project objective implements a permitting process to result in a reduction of negative and harmful environmental effects on natural resources and wildlife, including riparian corridors, wetlands, and sensitive habitats and species. The proposed project meets these objectives which are in place, in part, to reduce proposed project effects on communities. The proposed NCCO also includes setbacks, requirements for visual screening such as the use of fencing or vegetative screens to disallow views of cultivation areas from public views, and has been analyzed for consistency with the performance standards pertaining to other resources areas. The proposed project has been found to be consistent with these requirements. Therefore, this impact is less than significant.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.9-2: CONFLICT WITH ANY APPLICABLE LAND USE PLAN, POLICY, OR REGULATION OF AN AGENCY WITH JURISDICTION OVER THE PROJECT (INCLUDING, BUT NOT LIMITED TO, THE GENERAL PLAN, SPECIFIC PLAN, LOCAL COASTAL PROGRAM, OR ZONING ORDINANCE) ADOPTED FOR THE PURPOSE OF AVOIDING OR MITIGATING AN ENVIRONMENTAL EFFECT.

State CEQA guidelines 15125(d) relates to discussions of applicable planning documents and states “The EIR shall discuss any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans.” This section, as well as all other sections of the Draft EIR include a listing of applicable General Plan goals, policies, and objectives as they apply to this proposed project. Because some are not applicable, such as those pertaining to new residential developments, or design standards for commercial sites, they have not been included to the respective *Sections 4.1: Aesthetics* through *4.1: Utilities and Service Systems*. In accordance with state CEQA Guidelines, where the proposed NCCO may present an inconsistency with an applicable goal, policy, or objective, which was adopted for the purpose of mitigating an environmental effect, that goal, policy, or objective is considered and if feasible, mitigation is proposed.

Applicants future applicant wishing to permit an existing or new cultivation for personal use or for a commercial cannabis cultivation operation under the proposed NCCO would be required to conform to all applicant requirements listed in the NCCP as well as the County General Plan. As part of the application process, all applicants would be required to show compliance with performance standards and all mitigation measures in this Draft EIR. Cannabis cultivation of all sizes on parcel two acres or greater whether for commercial or non-remuneration would require processing of a CCP for cannabis cultivation less than 2,500 sf or an ADP for cultivation between 2,500 sf and 10,000 sf. In addition, an ACP would be required and would be needed to be renewed annually and would ensure continued compliance.

Conformance to applicable regulations for both a CCP and an ADP would be verified during the planning and review process and could be made by the Planning Director or designee. If conformance is not maintained on a yearly basis, the ACP could be denied. With this procedure in place and following the standard permitting process would ensure that all applicants for both personal and commercial cannabis cultivation activities obtain proper permits to obtain full compliance with the NCCO. In this way, the County could disapprove projects that do not meet all applicable requirements and maintain authority over any land use changes and proposals. During the review process, changes could be made to projects, conditions of approval could be added, or additional CEQA review could be required. This would ensure that any conflicts and associated environmental effects are avoided, minimized, or mitigated.

The proposed project is generally consistent with the goals and policies established in the County’s General Plan. The proposed project also is consistent with the existing land use development code and zoning regulations. The Nevada County Code being the regulatory device for implementing all development, including cannabis cultivation in the County, in a manner that is consistent with the General Plan would seek to reduce impacts in this way. Accordingly, the proposed NCCO is intended to implement and be consistent with existing General Plan policy provisions. Therefore, the proposed project maintains overall consistency with the goals, policies, and objectives of the General Plan and would not result in any direct conflicts. The proposed project includes project objectives that include consistency and has been found to meet these objectives.

Future existing as well as proposed cannabis cultivation projects, however, could result in conflicts resulting in impacts through potential inconsistencies with the General Plan primarily in relation to public services, as well as numerous policies focused on natural resource protection, water quality, vegetation, hillside protection, and visual resources. If placement of project-related buildings or support facilities such as (e.g., cultivation accessory and support facilities, such as outbuildings and warehouses; new service roads and parking areas) and other public utilities and infrastructure connections (e.g., irrigation systems, water lines and tanks) that may be installed to support these activities, would result in physical

environmental impacts. Impacts to associated with specific resource areas are discussed in Sections 4.1: *Aesthetics* through 4.17: *Utilities and Service Systems*. If impacts are found to result from a in violation of a General Plan goal, policy, or objectives, these inconsistencies could be considered to be in conflict with and result in an impact due to violation of an applicable guiding policy document.

The location, extent, and type of environmental land use impacts from cannabis activities would vary throughout the different regions of the county including the valleys, foothills, mountains, and agricultural lands. There are lands zones AE, AG, and FR within all of these areas. The proposed NCCP would not authorize cultivation on any public land, or land in an incorporated city, so direct impacts in these areas would not occur.

Lastly, the proposed NCCO does not propose nor would it result in any changes to the General Plan goals, policies, objectives and does not propose any changes to any land use designations. Therefore, the proposed project is considered supportive of the underlying General Plan land use designations and intended to protect the environment and would comply with relevant plans and policies adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, this impact would be less than significant.

County Adopted Area Plans

Within the County there are five adopted area plans. These include the Higgins Corner Area Plan, Loma Rica Industrial Area Plan, North San Juan Area Plan, and the Soda Springs Area Plan. As discussed above, none of the area plans with the exception of the Soda Springs Area plan contains an area zoned as AG, AE, or FR. Therefore, there would be no commercial cannabis cultivation allowed in these other four areas under the proposed NCCO.

The Soda Springs Area Plan, contains FR zoning within the northerly and southerly portions of the area plan. This zoning would allow for the commercial cultivation of cannabis, and while cultivation of cannabis would be allowed within these areas, all cultivation would be required to conform to the requirements and development standards set forth within the proposed NCCO. It should be noted that the SSAP does not mention or have any prohibitions against cannabis cultivation. The proposed project would be consistent with the applicable goals and policies listed in the SSAP. The proposed project would create allow a new and sustainable economic base, could be considered to add to the social fabric when performed responsible, and if performed in accordance with all regulations, codes, and requirements, would result in less than significant impacts to the environment. Additionally, the commercial cultivation activities could bring additional jobs to the areas, and all cultivation areas and new structures built would be required to conform to visual performance standards including setbacks and visual screens. Last, the cultivation activities would be required to prove that an adequate water source exists prior to any cultivation project approval. Therefore, the NCCO would not conflict with the provisions of the SSAP resulting in substantial impacts to the environment, and impacts would be less than significant.

The PVAP encompasses approximately 320 acres within the Penn Valley community in western Nevada County, and includes 81 separate parcels. The PVAP does not zone parcels within the plan area that would be suitable for commercial cannabis cultivation. The parcels zoned for multiple family residential, multiple family residential with mobile home and design combining districts, and residential agriculture are suitable for indoor personal cannabis cultivation. The PVAP implements the following General Plan designations and corresponding zoning. Therefore, the NCCO would not conflict with the provisions of the PVAP resulting in substantial impacts to the environment, and impacts would be less than significant.

Nevada County Zoning Ordinance

Spheres of Influence

There are three incorporated cities and towns within Nevada County including Nevada City, the City of Grass Valley, and Town of Truckee. Each of these jurisdictions have adopted general plans and zoning regulations that are applicable to the incorporated portions of their respective planning areas. The Nevada County's General Plan and Zoning Ordinance, however, remains applicable to the SOIs. Potential, land use conflicts associated with the potential for cannabis cultivation within each City's SOI is provided individually below.

City of Nevada City

As discussed above, Title 9, Chapter 22, Section 010 through 150, of Nevada City Municipal Code sets forth the regulations pertaining to medical cannabis dispensaries and other cannabis business activities including cultivation, manufacturing, testing, transporting, delivery, and distribution (Municode, 2018). Currently, the City is accepting applications for medical cannabis manufacturing, distribution, cultivation (with no mature plants), and testing laboratory business. Nevada City is surrounded by a SOI that designates the future potential annexation areas for the City. While the City has a development plan and strategy for these areas (Nevada City, 2017), development in the SOI is ultimately guided by the Nevada County General Plan and Nevada County Zoning Ordinance. The proposed NCCO would authorize the cultivation of cannabis in areas with zoning designations of AG, AE, and FR. The areas in the Nevada City SOI do not contain any of these County zones. While the proposed NCCO would allow for personal use cultivation in these parcels, the proposed NCCO would not apply to any other areas of the city. It should be noted; however, that under existing state law Proposition 64, it is legal to grow six cannabis plants for personal use. Therefore, the proposed NCCO would not allow any cannabis use in these areas that is not already legal under state law. Hence, under the proposed NCCO the cultivation of cannabis would not be authorized in any SOI areas and would not create a conflict should the City annex any areas in the SOI. Impacts would be less than significant.

City of Grass Valley

As discussed above, the purpose of Chapter 17.20.035 of the Grass Valley Municipal Code is to preclude the opening, establishment and operation of Medical Marijuana Cooperatives and Collectives in the City (Grass Valley, 2018). The city of Grass Valley is surrounded by a SOI that designates the future potential annexation areas for the City. Development in the SOI, however, is ultimately guided by the Nevada County General Plan and Nevada County Zoning Ordinance. The proposed NCCO would authorize the cultivation of cannabis in areas with zoning designations of AG, AE, and FR. The areas in the Grass Valley SOI do not contain any of these County zones. As discussed above, while the proposed NCCO would allow for personal use cultivation in these parcels, the proposed NCCO would not apply to any other areas of the city. It should be noted; however, that under existing state law Proposition 64, it is legal to grow six cannabis plants for personal use. Therefore, the proposed NCCO would not allow any cannabis use in these areas that is not already legal under state law. Hence, under the proposed NCCO the cultivation of cannabis would not be authorized in these areas and would not create a conflict should the City annex a and areas in SOI. Impacts would be less than significant.

City of Truckee

As discussed above, in addition to the allowances provided for by Proposition 64, the Town of Truckee f allows commercial cannabis delivery services after obtaining a proper license in accordance with MAUCRSA requirements (Truckee, 2018). The Town, however, does not provide for cultivation of cannabis beyond the six plants allowed by California State Law. Within the southeastern portion of the SOI there is approximately 1,178 acres in a SOI Area of concern that is zoned AG-20 by the County, an area that would allow, based on the proposed NCCO, commercial cultivation of cannabis. Within the western SOI, there are approximately other areas within an Area of Concern, areas within the Long-Term Sphere; and areas within the near-term sphere that are zoned by the County as AG and FR.

Implementation of the proposed NCCO could result in the permitting of a commercial cannabis operation within the Truckee SOI. This cultivation may conflict with a future land uses in these areas should the Town of Truckee choose to annex one of these areas. Conflicts, however, only would arise if there are existing cultivation activities. Land use conflicts could arise because commercial cultivation is not an allowable uses pursuant to Truckee planning documents. However, all future commercial cannabis activities that could occur within these areas would be required to conform to the proposed NCCO requirements and performance standards in order to obtain a CCP for cannabis cultivation less than 2,500 sf for an ADP for cannabis cultivation between 2,500 sf to 10,000 sf. It is anticipated that through the planning review process and conformance to all applicable environmental regulations that most environmental impacts associated with cannabis cultivation under the proposed NCCO would be reduced to less than significant levels. This is the same finding that would apply to parcels within the Truckee SOI. Prior to any annexation, the Truckee Town Council would be able to make a determination of the parcels that they want to annex. While this may result in the exclusion of some parcels should then be under cannabis cultivation, it may not exclude all parcels. Ultimately, cannabis cultivation within the Truckee SOI may lead to future land use conflicts resulting in a significant impact to the environment. Therefore, although the County finds this unlikely, this impact is considered significant and unavoidable.

Airport Land Use Compatibility Plan

(ALUCP) and (TTALUCP)

Any existing as well as new commercial cannabis cultivation in operation or implemented as part of the proposed NCCO in the vicinity of public use airports would be subject to review by the respective ALUC. As described above, the ALUC's use criteria and policies set forth in the ALUCP's when assessing land use compatibility. These criteria outline the types, densities, and heights of land uses permitted within each airport land use compatibility zone to provide for both safe airport operation and airport land use compatibility. The County does not anticipate, as part of the proposed project that any new structures or accessory buildings would be tall enough to violate height restrictions or present a hazard to flights and aircraft. Secondly, the proposed project does not propose any new development that would result in or attract new populations. Therefore, because applicants would be required to comply with ALUC review requirements and would be subject to performance standards and design requirements set forth by the County, the project would not conflict with either ALUCP. This impact would be less than significant.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

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4.10 MINERAL RESOURCES

This section describes the environmental conditions within the proposed project area related to mineral resources and evaluates the potential impacts associated with loss of availability of those that could result from implementation of the proposed project. Mitigation measures for potential impacts are identified where applicable. This majority of information in this section is summarized from sources including but not limited to the Nevada County General Plan, and California Division of Mines and Geology.

Public policy is that the nonrenewable characteristic of mineral deposits necessitates the careful and efficient development of mineral resources in order to prevent the unnecessary waste of these deposits due to careless exploitation and uncontrolled urbanization. Management of these mineral resources are meant to protect not only future development of mineral deposit areas but also guide the exploitation of mineral deposits so that adverse impacts caused by mineral extraction would be reduced or eliminated. This section discusses the existing conditions related to mineral resources within the project site and vicinity.

4.10.1 ENVIRONMENTAL SETTING

REGIONAL SETTING

Historically, mining activities in Nevada County has played an important role in not only the local economy but also on regional, state, and national level. In recent years, conflicts have intensified between interests in renewed mining activities and interests in the burgeoning growth of urban and suburban land uses. Urbanization and increased environmental awareness have resulted in disagreements between non-mining and mining interests in Nevada County. Nevada County has taken measures through the planning process to be used by both planners and private interests to mitigate, resolve conflicts, and to better manage and ensure opportunities for the continued development of mineral resources in the County. One of the major goals is to protect valuable mineral resources from urban encroachment while assuring that mining operations do not disturb the more developed regions of the County.

Recreational mining is allowed in all Nevada County General Plan designations without County permits. Mine exploration of limited scope and duration is allowed in designations compatible with mining but is restricted in incompatible designations. Large scale exploration projects, surface mines, and subsurface mines, however, require conditional use permits issued by the County, and most of these activities are disallowed in designations incompatible for mining. Incompatible designations are generally in the more urban areas of the County, whereas compatible designations are generally in the more rural areas.

The County recognizes that mine reclamation also is an integral part of any ongoing mining operation, and similar to other types of development and uses must be designed to conserve resources and protect the environment. Large scale exploration projects, surface mines, and subsurface mines require conditional use permits issued by the County, and most of these activities are disallowed in designations incompatible for mining. Recreational mining also is allowed in all Nevada County General Plan designations without County permits. Incompatible designations are generally in the more urban areas of the County, whereas compatible designations are generally in the more rural areas.

The history of mining in Nevada County largely centers on gold mines and goldmining that started in the California Gold Rush in 1848 prompting people to immigrate from all over the world around the world. Over the next few years the population boomed and by the mid-1950's there were approximately 120,000

miners in California. Less than two decades later; however, that number had dwindled to approximately 30,000 after mining operations evolved into larger businesses than individuals looking to strike it rich.

LOCAL SETTING

Locally, Nevada County had its fair share of gold mines and mining operations and both Nevada City and Grass Valley, two of the three major cities in Nevada County grew out of the gold mining business. This is exemplified by the early business districts and Victorian neighborhoods of Grass Valley and Nevada City grew from this early mining; the heritage and history of which, not just in those areas but throughout the County is protected today. Some of these attractions include: the North Star Mining Museum and Pelton Wheel; the Empire Mine State Historic Park, numerous gold mining historic markers; Bridgeport South Yuba River State Park, the Miners Foundry, the Firehouse Museum, and the Malakoff Diggings State Historic Park. Between 1848 and 1965, highlighting the importance of gold mining in the County, the value of gold produced in Nevada County was \$440,000,000, the highest of any county in California (Nevada City Chamber, 2005).

While the Gold Rush was positive for California in many ways, at the time, some elements of the industry had a substantial effect on the state's environment. While most of the previous damage has been reduced over time, some can still be seen today. To facilitate mining operations wood was needed to build structures needed for mining, fuel boilers, and to build canals. Large amount of timber also was needed to provide wood for development of the cities and mining towns. To provide these materials, wood was harvested from the surrounding forests, transported to the mills, and made into usable products. The demand for timber during this era was a catalyst for the creation of the California logging industry.

Some of the most significant environmental damage, seen not just at the mines but for miles downstream were the result of gold-mining technology, especially hydraulic mining. Hydraulic mining became popular in the 1850s and used intense streams of water shot from a series of pipes and very large nozzles that produced constant jets of water. The water was shot onto hillsides containing gold ore and washed into gold separating equipment. Large volumes of mercury were used to help separate the gold from the ore. The effects could be seen by changing flow regimes and drainage patterns, and the washing of sediments and pollutants downstream that affected downstream agriculture. Ultimately, the practice was banned in 1884 by the Sawyer Decision. Large areas of bare hillsides that were hydraulically mined, such as the Malakoff diggings, can still be seen today (Calisphere, 2005).

PETROLEUM RESOURCES

Unlike the central valley and pacific coast of California, much of the mountain regions including Nevada County do not possess quantities of petroleum resources such as oil and natural gas in volumes that make them a practical location for extraction. Nevada County is located in the Northern District as shown on the California Department of Conservation Division of Oil, Gas, & Geothermal Resources (DOGGR) Well finder GIS map. The DOGGR maps existing oil and gas wells, oil and gas fields, enhanced oil recovery wells and disposal wells (DOGGR, 2018). No wells are mapped within Nevada County.

AGGREGATE RESOURCES

Aggregate resources is a term used for both sand and gravel and crushed stone. Aggregate materials can be used in their loose form or combined with other materials such as cement to form concrete or asphalt. Aggregate resources. The Division of Mine Reclamation periodically publishes a list of mines regulated under SMARA that meet provisions set forth under California's Public Resources Code, Section 2717(b). This list is generally referred to as the AB 3098 List, in reference to the 1992 legislation, that established

it. Sections 10295.5 and 20676 of the Public Contract Code preclude mining operations that are not on the AB 3098 List from selling sand, gravel, aggregates or other mined materials to state or local agencies.

As of September 2018, there are eight mines listed on the AB 3098 list within the boundaries of Nevada County, two of which are located in the City of Truckee. The name of the mines and their mine identification number in Nevada County are shown in *Table 4.10-1: Mines in Nevada County*.

Table 4.10-1: Mines in Nevada County

Mine/Type	Mine ID and Status
Greenhorn Gravel Plant / Streambed or Gravel-	91-29-0006/Active
Ridge Rock Quarry/Sand and Gravel-	91-29-0010/Active
Boca Quarry/Sand and Gravel	91-29-0018/Active
Liberty Hill Mine -/Gold	91-29-0019/Abandoned
Meadow Lake Gold Mine/Gold	91-29-0016/Reclaimed
Trood Placer Mine -/Sand and Gravel	91-29-0011/Reclaimed
Clawson Mine /Gold	91-29-0008/Abandoned
North Star Plant/Rock	91-29-0002/Closed
Secret Town Plan/Gravel	91-29-0015/Reclaimed
Bear River Plant/ Streambed - Gravel	91-29-0007/Closed
French Corral /Rock	91-29-0013/Active
Sierra Boulder/Decorative Rock	91-29-0022/Active
Red Ledge Mine/Gold	91-29-0020/Idle
Spanish Mine/Gold	91-29-0003/Closed
Spring Creek Mine – Reclaimed/ Gold	91-2900009/Closed
Northstar Mine/Tailings – Sand and Gravel	91-29-0014/Bankrupt
Bear River Plant/ Gravel- Stone	91-29-0007/Closed
*Source, California Department of Conservation, 2018	

GOLD MINES

As discussed above and shown in Table 4.10-1 above, Nevada County has a history gold mining and although the California Department of Conservation does not show any as currently active, there are numerous individuals with claims throughout the County. According to the diggings.com, within the County on public Bureau of Land Management (BLM) land there have been a total of 8,381 mining claims, of which 861 are active and 7,502 are closed. While these claims are not within the jurisdiction of County lands, it does show the rich history and continued experience of gold mining in the County. Additionally, although the number of gold mines has been substantially reduced from the peak there is the potential

for gold mining to resume. In sum, there have been a total of approximately 2,335 mines of varying types and intensities within the County.

OTHER MINERAL RESOURCES

Based on the U.S. Geological Survey's (USGS) data for 2015, California ranked 6th after Nevada, Arizona, Texas, Minnesota and Wisconsin in the value of mineral production other than oil and gas, accounting for approximately 4.2 percent of the nation's total mineral production. The California Geological Survey (CGS) compiled data for 2013. Based on this information, California led the nation in the production of diatomite and natural sodium sulfate and was the only producer of boron compounds and rare earth minerals. In 2011, the state ranked second behind Texas for Portland cement production. The only metals produced in California were gold, silver, and iron ore; California ranked 6th in gold production out of eleven states that reported for the year. Other minerals produced commercially include common clay, bentonite clay (including hectorite), crushed stone, dimension stone, feldspar, fuller's earth, gemstones, gypsum, iron ore (used in cement manufacture), kaolin clay, lime, magnesium compounds, perlite, pumice, pumicite, salt, soda ash, and zeolites.

4.10.2 REGULATORY SETTING

FEDERAL

FEDERAL BUREAU OF LAND MANAGEMENT

The Bureau of Land Management (BLM), an agency within the United States Department of the Interior, administers 261 million surface acres of the United States' public lands, located primarily in two western states. BLM sustains the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations. The public lands provide myriad opportunities for commercial activities. Commercially valuable natural resources include energy and mineral commodities, forest products, grazing and foraging, and special uses such as rights-of-way for pipelines and transmission lines. BLM is responsible for managing commercial energy and mineral production from the public lands in an environmentally sound and responsible manner. BLM also is responsible for the leasing of Federal oil, gas, and geothermal minerals; and for supervising the exploration, development, and production operations of these resources on both Federal and Indian lands. The proposed NCCO would occur within Nevada County and individually operated cultivation project sites would be privately owned and would not authorize cultivation activities in an area under ownership of BLM.

STATE

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

DOGGR is responsible for supervising the drilling, operation, maintenance, plugging, and abandonment of oil, gas, and geothermal wells. DOGGR's regulatory program promotes the sensitive development of oil, natural gas, and geothermal resources in California through sound engineering practices, prevention of pollution, and implementation of public safety programs. To implement this regulatory program, DOGGR requires avoidance of building over or near plugged or abandoned oil and gas wells, or requires the remediation of wells to current DOGGR standards.

SURFACE MINING AND RECLAMATION ACT OF 1975

The Surface Mining and Reclamation Act of 1975 (SMARA, Public Resources Code, Sections 2710-2796) provides a comprehensive surface mining and reclamation policy with the regulation of surface mining

operations to assure that adverse environmental impacts are minimized, and mined lands are reclaimed to a usable condition. SMARA also encourages the production, conservation, and protection of the state's mineral resources. Accordingly, SMARA mandated the initiation of mineral land classification by the State Geologist in order to help identify and protect mineral resources in areas within the State subject to urban expansion and other irreversible land uses that would preclude mineral extraction. SMARA also allowed the designation of lands containing mineral deposits of regional or Statewide significance. Public Resources Code Section 2207 provides annual reporting requirements for all mines in the state, under which the State Mining and Geology Board is also granted authority and obligations.

The Surface Mining and Reclamation Act (SMARA), Chapter 9, Division 2 of the Public Resources Code, requires the State Mining and Geology Board to adopt State policy for the reclamation of mined lands and the conservation of mineral resources. These policies are prepared in accordance with the Administrative Procedures Act, (Government Code) and are found in California Code of Regulations, Title 14, Division 2, Chapter 8, Subchapter 1 (CDOC, 2017).

Mineral lands are mapped using the California Mineral Land Classification System according to jurisdictional boundaries, mapping all mineral commodities at one time in the area, including aggregate, common clay, and dimensions stone. Priority is given to areas where future mineral resource extraction could be precluded by incompatible land use or to mineral resources likely to be mined during the 50-year period following their classification. The California Department of Conservation provides mapping of Mineral Resource Zones (MRZ) within the State. MRZs are defined as MRZ-1, MRZ-2a, MRZ-2b, MRZ-3a, MRZ-3b, and MRZ-4 which are defined as follows:

- MRZ-1: Area where available geologic information indicates there is little likelihood for the presence of significant mineral resources;
- MRZ-2a: Areas underlain by mineral deposits there are geologic data indicate that significant measures or indicated resources are present;
- MRZ-2b: Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present;
- MRZ-3a: Areas containing known mineral occurrences of undetermined mineral resource significance;
- MRZ-3b: Areas containing inferred mineral occurrences of undetermined mineral resource significance; and
- MRZ-4 Areas of no known mineral occurrences where geologic information does not rule out either the presence or absence of significant mineral resources.

Western and Central Nevada County contains all listed MRZs (e.g., MRZ-1, MRZ-2a, MRZ-2b, MRZ-3a, MRZ-3b, MRZ-4). *Figure 4.10-1: Mineral Land Classification Map Western Nevada County*, and *Figure 4.10-2 Mineral Land Classification Map Central Nevada County*, shows the generalized locations of these areas. Almost all of eastern Nevada County is listed as MRZ-4 with two small areas designated as MRZ-2a, and MRZ-3a. Reference *Figure 4.10-3: Mineral Land Classification Map Eastern Nevada County*.

SPECIAL PUBLICATION 51

Special Publication 51 prepared by SMGB in cooperation with the Office of Mine Reclamation and the California Geological Survey, contains California Surface Mining and Reclamation Policies and Procedures.

CALIFORNIA GEOLOGICAL SURVEY (FORMERLY CALIFORNIA DIVISION OF MINES AND GEOLOGY)

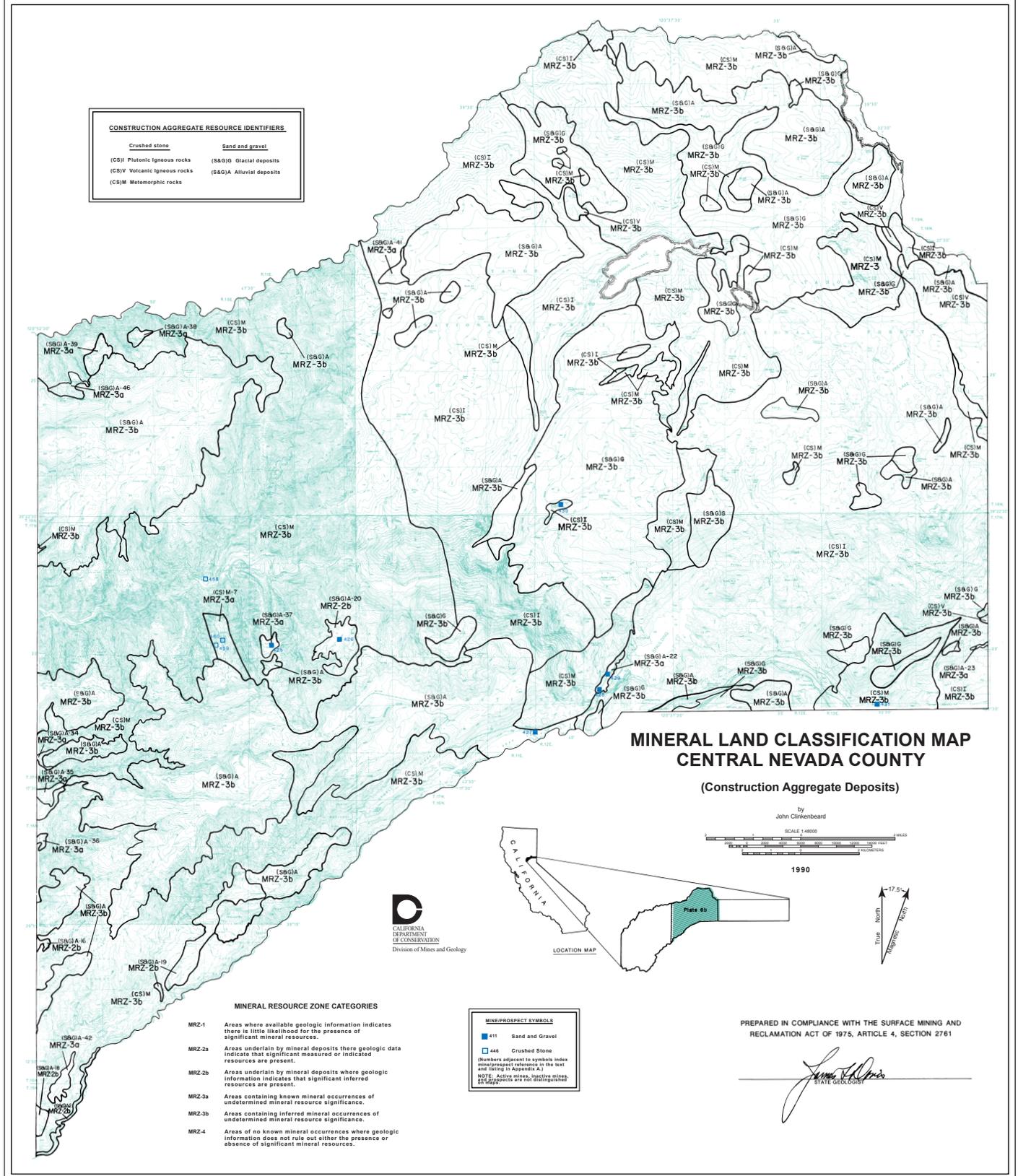
The California Geological Survey (CGS, formerly the California Division of Mines and Geology within the State Department of Conservation) has responsibility for identifying and assisting in the utilization of mineral deposits, and identifying geological hazards, including fault locations.

LOCAL

CALIFORNIA STATE SURFACE MINING AND RECLAMATION ACT

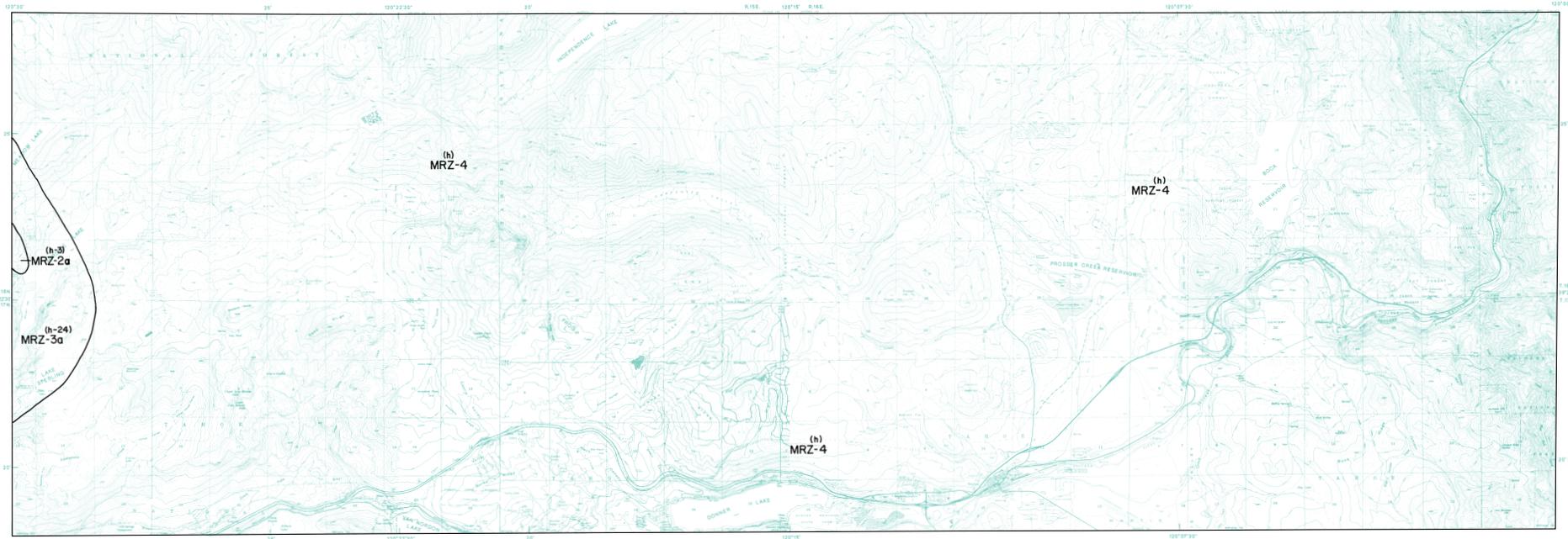
The Mineral Management Chapter applies to lands in Nevada County which are outside the administration of the Bureau of Land Management, the Forest Service and other Federal and State land-holding agencies and is compatible with and required by the California State Surface Mining and Reclamation Act of 1975.

The Act recognizes mining on said lands may not be prohibited by the County, and thus the County's use permit process will not apply to such activities, and such mining is subject to compliance with the County's health, sanitation, building, and environmental regulations (reference is to the U.S. Supreme Court decision in Granite Rock).



Measured from: Allegheny, Washington, Dutch Flat, Sierra City, Grantville, Blue Canyon, Haystack Valley, Eagle Mine, and Clark Grove U.S.G.S. 7.5 Topographic Quadrangles.

FIGURE 4.10-2: Mineral Land Classification Map
Central Nevada County
 Nevada County Cannabis EIR



Mosaicked from: Soda Springs, Webber Peak, Independence Lake, Norden, Hobart Mills, Truckee, Boca, and Maria Peak U.S.G.S. 7.5' topographic quadrangles.

MINERAL LAND CLASSIFICATION MAP EASTERN NEVADA COUNTY

(Hydrothermal Deposits)

by
 Ralph Loyd



1990

PREPARED IN COMPLIANCE WITH THE SURFACE MINING AND
 RECLAMATION ACT OF 1975, ARTICLE 4, SECTION 2761

STATE GEOLOGIST



MINERAL RESOURCE ZONE CATEGORIES

- MRZ-1** Areas where available geologic information indicates there is little likelihood for the presence of significant mineral resources.
- MRZ-2a** Areas underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present.
- MRZ-2b** Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present.
- MRZ-3a** Areas containing known mineral occurrences of undetermined mineral resource significance.
- MRZ-3b** Areas containing inferred mineral occurrences of undetermined mineral resource significance.
- MRZ-4** Areas of no known mineral occurrences where geologic information does not rule out either the presence or absence of significant mineral resources.

FIGURE 4.10-3: Mineral Land Classification Map Eastern Nevada County
 Nevada County Cannabis EIR

NEVADA COUNTY GENERAL PLAN

The General Plan sets forth goals, objectives, and policies related to mining and some of which would be applicable to the proposed project and those are listed below.

- Goal 17.1 Recognize and protect valuable mineral resources for current and future generations in a manner that does not create land use conflicts.
- Objective 17.1 Protect valuable mineral deposits from intrusion by incompatible land uses that will impede or preclude mineral extraction or processing. Promote the proper management of all mineral resource activities in the County and minimize the impact of extraction and processing on neighboring activities and the environment in general.

MINE DEVELOPMENT AND OPERATION GENERAL

- Policy 17.6 Encourage extraction of mineral resources in compatible areas prior to intensified urbanization or conversion to other incompatible land use development.
- Policy 17.19 Any proposed residential development, including land divisions and dwelling unit construction, located within 1,000 linear feet from an area zoned "ME" shall be developed to ensure that said development is located as far removed from the area zoned "ME" as is reasonably possible.

NEVADA COUNTY ZONING ORDINANCE

Surface mining is conditionally permitted in compatible designations that are zoned within the "ME" Mineral Extraction Combining District. Such areas are those known to contain potentially significant mineral resources and lie in compatible areas for surface mining. The purpose of this District is to allow for surface mining and to provide for public awareness of the potential for surface mining to occur where adequate information indicates that significant mineral deposits are likely present. This district shall be used only on those lands that are within any of the compatible Nevada County General Plan designations and which are not in a residential zone. Areas not currently zoned "ME" and that lie in a compatible designation may be rezoned if a significant resource can be shown to be present. The "ME" zone will be used to warn the public that the potential for a future surface mining operation exists and thus this zone will discourage the encroachment of incompatible land uses. Its use will be based on data found in State Classification Reports or similar data identifying significant mineral resource areas.

COMPREHENSIVE SITE DEVELOPMENT STANDARDS

Section 3.0: Project Description discusses the Comprehensive Development Standards found in Article 4 Comprehensive Site Development Standards and defined in Division 4.3 Resource Standards. In part, the purpose of the development standards is to avoid the impact of development projects on sensitive environmental resources and natural site constraints. The following discusses those standards applicable to mineral resources.

Sec. L-II 4.3.11 Mineral Areas, Significant

- A. Purpose. To protect significant mineral areas from incompatible land uses and to minimize land use conflicts between surface mineral extraction and processing and neighboring incompatible land uses.

B. Definitions.

1. Compatible General Plan Designations - Those Nevada County General Plan designations compatible for surface mining, subject to approval of a Use Permit, including the Rural, Forest, Industrial, Public, Water, and Planned Development designations. All other designations are considered to be incompatible for, and do not allow, surface mining.
2. Significant Mineral Areas - Areas where information indicates that significant mineral deposits are likely present based on State Division of Mines and Geology's Nevada County Mineral Classification Report Maps, referred to as Mineral Resource Zones - 2 (MRZ-2).

C. Standards.

1. The clearing, cultivating, preparing or tilling of land to raise crops or livestock for commercial purposes, shall be allowed in Significant Mineral Areas. All other projects that are not associated with mineral extraction shall be approved only when they are not within both Compatible General Plan Designations and Significant Mineral Areas unless a Management Plan is prepared consistent with paragraph 2 below or the project is within the Industrial General Plan designation.
2. If the above standard effectively precludes development of the project, or adversely affects another environmentally-sensitive resource, a Management Plan shall be prepared by a professional registered engineer, a registered geologist or a land use planner, that avoids or minimizes impacts to the significant mineral area. If the entire site is within or adjacent to such an area, the plan shall provide for the development of the project on that portion of the site determined to have the least impact on the long-term management of the mineral resource.
3. All land divisions and dwelling unit construction within 1,000 feet of an area zoned within the ME District shall be developed to ensure that said development is located as far removed from the area zoned ME as is reasonably possible. In determining the most appropriate location for proposed parcels and/or dwelling units, the applicant shall clearly demonstrate that there is no other site more suitable to minimize potential land use conflicts with existing or future mining operations.

4.10.3 STANDARDS OF SIGNIFICANCE**ENVIRONMENTAL ANALYSIS****THRESHOLDS OF SIGNIFICANCE**

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact to mineral resources if it would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state;
- Result in the loss of availability of a locally important mineral resource recover site delineated on a local general plan, specific plan, or other land use plan?

4.10.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACT 4.10-1: RESULT IN THE LOSS OF AVAILABILITY OF A KNOWN MINERAL RESOURCE THAT WOULD BE OF VALUE TO THE REGION AND THE RESIDENTS OF THE STATE

The proposed project does not have the potential for significant impacts associated with mineral resources. Under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. Depending on the size of the proposed cultivation area(s), applicants would be required to apply for and obtain an Administrative Development Permit (ADP). An Annual Permit (AP) also would be required and need to be renewed annually.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer and obtain proof of registration. Cultivation of six plants, either indoors or outdoors, for personal use would be similar in size to a small garden, would be approved through an administrative action, and would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cannabis cultivation less than 2,500 sf of canopy and an ADP for cannabis cultivation between 2,500 sf and 10,000 sf of canopy. During the plan review process, county staff would verify that all proposed cannabis cultivation sites do not occur on a mineral resource zone and that the proposed cultivation activities would not preclude any existing or future mineral resource extraction.

Mineral resource operations within the County are only allowed in zones with the “ME” designation. Because cannabis cultivation is not authorized in these zones, the proposed project would not conflict with any existing or future areas zoned for mining. In addition, cultivation of cannabis that may be located in proximity to a mining operation is not considered a use that would conflict with the mining operation and result in a future preclusion of the mining use. Existing and future cannabis cultivation also would be subject to the permitting and Development Standards listed above and in *Section 3.0: Project Description*.

The Development Standards specifically allow for clearing, cultivating, preparing or tilling of land to raise crops or livestock for commercial purposes in significant mineral areas. Projects not consistent with mineral extraction can only be approved when they are not within both a Compatible General Plan Designation and Significant Mineral Areas, unless a Management Plan is prepared in accordance with the following:

- If the above standard effectively precludes development of the project, or adversely affects another environmentally-sensitive resource, a Management Plan shall be prepared by a professional registered engineer, a registered geologist or a land use planner, that avoids or minimizes impacts to the significant mineral area. If the entire site is within or adjacent to such an area, the plan shall provide for the development of the project on that portion of the site determined to have the least impact on the long-term management of the mineral resource.
- All land divisions and dwelling unit construction within 1,000 feet of an area zoned within the ME District shall be developed to ensure that said development is located as far removed from the area zoned ME as is reasonably possible. In determining the most appropriate location for proposed parcels and/or dwelling units, the applicant shall clearly demonstrate that there is no

other site more suitable to minimize potential land use conflicts with existing or future mining operations.

Because the project would be consistent with the listed requirements land use compatibility would be maintained. These regulations and standards would ensure that cannabis activities do not adversely affect mineral resources in the County. Therefore, the proposed project would have no impact related to mineral resources.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

No Impact.

IMPACT 4.10-2: RESULT IN THE LOSS OF AVAILABILITY OF A LOCALLY IMPORTANT MINERAL RESOURCE RECOVER SITE DELINEATED ON A LOCAL GENERAL PLAN, SPECIFIC PLAN, OR OTHER LAND USE PLAN?

The Nevada County General Plan recognizes that urbanization and increased environmental awareness have resulted in conflicts between non-mining and mining interests in Nevada County. The General Plan contains policies to be used by both planners and private interests to mitigate and resolve these types of conflicts and to more effectively manage the development of mineral resources in the County.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer and obtain proof of registration. Cultivation of six plants, either indoors or outdoors, for personal use would be similar in size to a small garden, would be approved through an administrative action, and would not result in the loss of availability of a locally important mineral resources recovery site delineated on a local general plan, specific plan or other land use plan.

Cannabis cultivation Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cannabis cultivation less than 2,500 sf and an ADP for cannabis cultivation between 2,500 sf and 10,000 sf. During the plan review process for county staff would verify that all proposed cannabis cultivation sites would not be located on or result in the loss of availability of a locally important mineral resource recover site delineated on any applicable plan.

As discussed above, conformance to the development standard in Section L-II 4.3.11, and conformance to applicable general plan policies valuable mineral resources would be protected from urban encroachment, which would include use of lands for commercial cannabis cultivation. This would ensure that existing and future mining operations are not affected by the proposed project and that they do not disturb commercial cannabis cultivation. As a result, implementation of the project would not result in the loss of availability of or preclude the recovery of mineral resources within the County. Therefore, no significant impacts to mineral resources would occur and this issue is not discussed further.

MITIGATION MEASURES

No Mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

No Impact.

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4.11 NOISE

This section identifies and evaluates potential noise impacts that could arise from cannabis, cultivation, distribution, manufacturing, processing, testing, and retail sales activities and facilities permitted under the Nevada County Cannabis Ordinance. Information in this section was obtained from the Nevada County General Plan (General Plan), Nevada County General Plan Environmental Impact Report (General Plan EIR), Federal Highway Administration Roadway Construction Noise Model User's Guide, U.S. Environmental Protection Agency (USEPA) Noise Effects Handbook, and various noise publications. Noise modeling was not performed for the proposed project. Instead, the existing setting and impacts for the proposed project are described and analyzed qualitatively. Mitigation measures are identified where appropriate.

4.11.1 ENVIRONMENTAL SETTING

ACOUSTICAL TERMINOLOGY

NOISE SCALES AND DEFINITION

Sound is described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by differentiating among frequencies in a manner approximating the sensitivity of the human ear.

Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dBA higher than another is perceived to be twice as loud and 20 dBA higher is perceived to be four times as loud, and so forth. Everyday sounds normally range from 30 dBA (very quiet) to 100 dBA (very loud).

Many methods have been developed for evaluating community noise to account for, among other things:

- The variation of noise levels over time
- The influence of periodic individual loud events
- The community response to changes in the community noise environment

Table 4.11-1: Noise Descriptors, provides a listing of methods to measure sound over a period of time.

Table 4.11-1: Noise Descriptors

Term	Definition
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micropascals (or 20 micronewtons per square meter), where 1 pascal is the pressure resulting from a force of 1 newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micropascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
L_{max} , L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01} , L_{10} , L_{50} , L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level, L_{dn} or DNL	A 24-hour average L_{eq} with a 10 dBA “weighting” added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn} .
Community Noise Equivalent Level, CNEL	A 24-hour average L_{eq} with a 5 dBA “weighting” during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA “weighting” added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.7 dBA CNEL.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.

Table 4.11-1: Noise Descriptors

Term	Definition
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends on its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

HEALTH EFFECTS OF NOISE

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60 to 70 dBA range, and high above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in A-weighted noise levels (dBA), the following relationships should be noted:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived by humans.
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference.
- A change in level of at least 5 dBA is required before any noticeable change in community response would be expected. An increase of 5 dBA is typically considered substantial.
- A 10 dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

HEARING LOSS

According to the U.S. Public Health Service, nearly ten million of the estimated 21 million Americans with hearing impairments owe their losses to noise exposure. Noise can mask important sounds and disrupt communication between individuals in a variety of settings. This process can cause anything from a slight irritation to a serious safety hazard, depending on the circumstance. Noise can disrupt face-to-face communication and telephone communication, and the enjoyment of music and television in the home. It can also disrupt effective communication between teachers and pupils in schools, and can cause fatigue and vocal strain in those who need to communicate in spite of the noise.

While physical damage to the ear from an intense noise impulse is rare, a degradation of auditory acuity can occur even within a community noise environment. Hearing loss occurs mainly due to chronic exposure to excessive noise, but may be due to a single event such as an explosion. Natural hearing loss associated with aging may also be accelerated from chronic exposure to loud noise.

The Occupational Safety and Health Administration (OSHA) has a noise exposure standard that is set at the noise threshold where hearing loss may occur from long-term exposures. The maximum allowable level is 90 dBA averaged over 8 hours. If the noise is above 90 dBA, the allowable exposure time is correspondingly shorter.

ANNOYANCE

Human response to sound is highly individualized. Annoyance is the most common issue regarding community noise. The percentage of people claiming to be annoyed by noise generally increases with the environmental sound level. However, many factors also influence people's response to noise. The factors can include the character of the noise, the variability of the sound level, the presence of tones or impulses, and the time of day of the occurrence. Additionally, non-acoustical factors, such as the person's opinion of the noise source, the ability to adapt to the noise, the attitude towards the source and those associated with it, and the predictability of the noise, all influence people's response. As such, response to noise varies widely from one person to another and with any particular noise, individual responses range from "not annoyed" to "highly annoyed."

Annoyance can be viewed as the expression of negative feelings resulting from interference with activities, as well as the disruption of one's peace of mind and the enjoyment of one's environment. Field evaluations of community annoyance are useful for predicting the consequences of planned actions involving highways, airports, road traffic, railroads, or other noise sources. The consequences of noise-induced annoyance are privately held dissatisfaction, publicly expressed complaints to authorities, and potential adverse health effects, as discussed above. In a study conducted by the United States Department of Transportation, the effects of annoyance to the community were quantified. In areas where noise levels were consistently above 60 dBA community noise equivalent level (CNEL), approximately nine percent of the community is highly annoyed. When levels exceed 65 dBA CNEL, that percentage rises to 15 percent. Although evidence for the various effects of noise have differing levels of certainty, it is clear that noise can affect human health. Most of the effects are, to a varying degree, stress related.

OTHER HEALTH EFFECTS

Interference with communication has proved to be one of the most important components of noise-related annoyance. Noise-induced sleep interference is one of the critical components of community annoyance. Sound level, frequency distribution, duration, repetition and variability can make it difficult to fall asleep and may cause momentary shifts in the natural sleep pattern, or level of sleep. It can produce short-term adverse effects on mood changes and job performance, with the possibility of more serious effects on health if it continues over long periods. Noise can cause adverse effects on task performance and behavior at work, and non-occupational and social settings. These effects are the subject of some controversy since the presence and degree of effects depends on a variety of intervening variables. Most research in this area has focused mainly on occupational settings, where noise levels must be sufficiently high and the task sufficiently complex for effects on performance to occur.

Recent research implicates that more moderate noise levels can produce disruptive after-effects, commonly manifested as a reduced tolerance for frustration, increased anxiety, decreased incidence of “helping” behavior and increased incidence of “hostile” behavior. Noise has been implicated in the development or exacerbation of a variety of health problems, ranging from hypertension to psychosis. As with other categories, quantifying these effects is difficult due to the amount of variables that need to be considered in each situation. As a biological stressor, noise can influence the entire physiological system. Most effects seem to be transitory, but with continued exposure some effects have been shown to be chronic in laboratory animals.

GROUND-BORNE VIBRATION

Vibration is an oscillatory motion through a solid medium in which the motion’s amplitude can be described in terms of displacement, velocity or acceleration. The peak particle velocity or the root mean square velocity is usually used to describe vibration amplitudes. The peak particle velocity is defined as the maximum instantaneous peak or vibration signal, while the root mean square velocity is defined as the square root of the average of the squared amplitude of the signal. The peak particle velocity is typically used for evaluating potential building damage, whereas the root mean square velocity is typically more suitable for evaluating human response. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of vibration. Man-made vibration issues are, therefore, usually confined to short distances (i.e., 500 feet or less) from the source.

Both construction and operation of development projects can generate ground-borne vibration. In general, demolition of structures preceding construction generates the highest vibrations. Construction equipment, such as vibratory compactors or rollers, pile drivers, and pavement breakers, can generate perceptible vibration during construction activities. Heavy trucks can also generate ground-borne vibrations that vary depending on vehicle type, weight, and pavement conditions.

SENSITIVE RECEPTORS

Human response to noise varies widely depending on the type of noise, time of day, and sensitivity of the receptor. Certain land uses are particularly sensitive to noise, including schools, hospitals, rest homes, long-term medical and mental care facilities, and parks and recreation areas. Residential areas are also considered noise sensitive, especially during the nighttime hours. Nearby noise-sensitive land uses generally consist of residential uses, commercial uses, and open space.

NOISE SOURCES

AIRCRAFT NOISE

The Federal Aviation Administration (FAA) identifies 10 public and private airport and heliport facilities within Nevada County. The two public airports are Nevada County Airport, located at 13083 John Bauer, and Truckee-Tahoe Airport, located at 10356 Truckee Airport Road. The airports range in size and with some being public use and others private. They offer a wide variety of services such as hangar space, pilot license lessons, local aerial tours, helicopter rides, and skydiving classes. *Table 4.11-2: Airports in Nevada County* shows the airports, location, and status as public or private.

Table 4.11-2: Airports in Nevada County

Airport	Location	Public/Private
Alta Sierra Airport	18575 Norlene Way, Grass valley	Private
Grass Valley Service Center Heliport	343 Sacramento Street, Auburn, CA	Private
Nevada County Air Park Airport	Grass Valley	Public
Shaws Hill Heliport	Grass Valley	Private
Sierra Nevada Memorial Hospital Heliport	Sierra Nevada Memoria Hospital 155 Glasson Way	Private
Jackson Lake Heliport	Jackson Lake	Private
Milhous Ranch Airport	North San Juan	Private
Limberlost Ranch Airport	Rough and Ready	Private
Tahoe Forest Hospital Heliport	Truckee	Private
Truckee-Tahoe Airport	Truckee	Public
Source: FAA, 2018		

STATIONARY NOISE SOURCES

The project area consists of eight zones in which cannabis cultivation would be allowed. These include residential (RA, R1, R2, R3), general agricultural (AG), agricultural exclusive (AE), forest (FR), and timberland production zone (TPZ). The primary sources of stationary noise in these areas are generators and HVAC systems. It should be noted that the proposed NCCO prohibits generators from being used for indoor cultivation. Some of the agricultural areas also generate noise from the operation of existing farming equipment.

Commercial and industrial land uses located near residential areas currently generate occasional noise impacts. The primary noise sources associated with these facilities are caused by delivery trucks, heavy machinery, air compressors, generators, outdoor loudspeakers, and gas venting. Other significant stationary noise sources in the area include noise from construction activities, street sweepers, and gas-powered leaf blowers.

4.11.2 REGULATORY SETTING

This section describes the laws, ordinances, regulations, and standards that are applicable to the proposed project. To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the federal government, the state of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise.

STATE

CALIFORNIA GOVERNMENT CODE

California Government Code Section 65302(f) mandates that the legislative body of each county and city adopt a noise element as part of their comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of “normally acceptable,” “conditionally acceptable,” and “clearly unacceptable” noise levels for various land use types. Single-family homes are “normally acceptable” in exterior noise environments up to 60 CNEL and “conditionally acceptable” up to 70 CNEL. Multiple-family residential uses are “normally acceptable” up to 65 CNEL and “conditionally acceptable” up to 70 CNEL. Schools, libraries and churches are “normally acceptable” up to 70 CNEL, as are office buildings and business, commercial and professional uses.

TITLE 24- BUILDING CODE

The state’s noise insulation standards are codified in the California Code of Regulations, Title 24: Part 1, Building Standards Administrative Code, and Part 2, California Building Code. These noise standards are applied to new construction in California for the purpose of interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

LOCAL

Local agencies may regulate noise levels of most sources not regulated by the federal government; provide standards for insulation of noise receivers, either within the structure or by placement of noise barriers such as walls; and, through land use decisions, reduce noise impacts by separating noise generators from noise sensitive uses.

Nevada County Land Use and Development Code

The Nevada County Land Use and Development Code contains regulations pertaining to development regulations within the County. The main purpose of the Code is for providing minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures, regulated equipment, grading and construction activities that result in a land disturbance on private property within this jurisdiction. As it would pertain to the proposed project in terms of noise, Sec. L-II 4.1.7 Noise of Title 3, Chapter II, Article 4, Division 4.1 Site Development Standards, is in place to ensure that future development minimizes unnecessary and annoying noise, by establishing maximum noise levels and standards for evaluating potential noise impacts. This standard is applicable to all discretionary projects, including development permit and use permits, unless otherwise noted in the section. Specific noise requirements in the listed Section are discussed in detail below.

NEVADA COUNTY GENERAL PLAN AND NOISE ORDINANCE

The Noise Element of the Nevada County General Plan (2014) establishes maximum allowable exterior noise levels for various land use categories in terms of the average-hourly (L_{eq}) and maximum intermittent (L_{max}) noise descriptors. Maximum allowable noise standards are identified for daytime (7:00 AM to 7:00 PM), evening (7:00 PM to 10:00 PM), and nighttime (10:00 PM to 7:00 AM) periods. The County’s noise standards, which are typically applied to non-transportation noise sources, are summarized in *Table 4.11-3: County of Nevada Exterior Noise Limits*. These noise standards are also identified in the Nevada County Land Use and Development Code, Chapter II, Zoning Regulations (Section L-II, 4.1.7, Noise). Construction activities are exempt from the County’s noise standards.

Table 4.11-3: County of Nevada Exterior Noise Limits

Land Use Category	Zoning District	Time Period	Noise Level	
			L_{eq}	L_{max}
Rural	AG, TPZ, AE, OS, FR, IDR	7 am - 7 pm	55	75
		7 pm - 10 pm	50	65
		10 pm - 7 am	40	55
Residential and Public	RA, R1, R2, R3, P	7 am - 7 pm	55	75
		7 pm - 10 pm	50	65
		10 pm - 7 am	45	60
Commercial and Recreation	C1, C2, C3, CH, CS, OP, REC	7 am - 7 pm	70	90
		7 pm - 7 am	65	75
Business Park	BP	7 am - 7 pm	65	85
		7 pm - 7 am	60	70
Industrial	M1, M2	Any time	80	90

Notes:

- Compliance with the above standards shall be determined by measuring the noise level based on the mean average of not less than three (3) 20-minute measurements for any given time period. Additional noise measurements may be necessary to ensure that the ambient noise level is adequately determined.
- Where two different zoning districts abut, the standard applicable to the lower or more restrictive district plus 5 dBA shall apply.
- The above standards shall be measured only on property containing a noise-sensitive land use as defined in General Plan Policy 9.8 and may be measured anywhere on the property containing said land use.
- If the measured ambient level exceeds that permitted, the allowable noise exposure standard shall be set at 5 dBA above the ambient.
- Because of the unique nature of sound, the County reserves the right to provide for a more restrictive standard than shown in the Exterior Noise Limits table contained in this policy. The maximum adjustment shall be limited to be not less than the current ambient noise levels and shall not exceed the standards of this policy or as they may be further adjusted by General Plan Policy 9.1b. Imposition of a noise level adjustment shall only be considered if one or more of the following conditions are found to exist:
 - a. Unique characteristics of the noise source:
 - The noise contains a very high or low frequency, is of a pure tone (a steady, audible tone such as a whine, screech, or hum), or contains a wide divergence in frequency spectra between the noise source and ambient level.

Table 4.11-3: County of Nevada Exterior Noise Limits

Land Use Category	Zoning District	Time Period	Noise Level	
			Leq	Lmax
<ul style="list-style-type: none"> The noise is impulsive in nature (such as hammering, riveting, or explosions), or contains music or speech. The noise source is of a long duration. <p>b. Unique characteristics of the noise receptor when the ambient noise level is determined to be 5 dBA or more below the Policy 9.1 standard for those projects requiring a General Plan amendment, rezoning, and/or conditional use permit. In such instances, the new standard shall not exceed 10 dBA above the ambient or General Plan Policy 9.1 standard, whichever is more restrictive.</p> <ul style="list-style-type: none"> The above standards shall not apply to those activities associated with the actual construction of a project or to those projects associated with the provision of emergency services or functions. The standards of this policy shall be enforced through compliance inspections and/or complaints. Recognizing that this chapter must work toward the solution to existing noise problems, those land uses that are inconsistent with the above standards and are therefore nonconforming in nature, shall comply with said standards as these land uses are upgraded or intensified or after abandonment through the use permit or site plan process. Said standards shall apply only to that portion of the land use requiring approval. In any event, the use or portion subject to a land use permit must meet the standards in the Exterior Noise Limits table in this policy and cumulatively the noise generated from the entire site must be equal to or less than the pre-land use permit ambient noise level. All such projects will require a comprehensive noise analysis per Policy 9.1.13 and the Nevada County Noise Element Manual. 				
<p>Source: Nevada County, <i>Nevada County Land Use Development Code, Chapter II, Zoning Regulations, 2010</i>; <i>Nevada County General Plan, 2014</i></p>				

For transportation noise sources, the County uses the average-daily noise descriptor (i.e., CNEL or L_{dn}) for determination of land use compatibility. The County’s General Plan Noise Element identifies noise criteria to be used for determination of land use compatibility within exterior noise environments, as summarized in *Table 4.11-4: Nevada County Land Use Compatibility Noise Guidelines*.

Table 4.11-4: Nevada County Land Use Compatibility Noise Guidelines

Land Use Category	(L _{dn} , or CNEL, dBA)				
	Clearly Acceptable	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Low Density, Single-Family, Duplex, Mobile Homes	45 – 55	55 – 60	55 – 65	60 – 70	70 – 80
Residential - Multiple Family	45 – 55	55 – 60	60 – 70	65 – 70	70 – 80
Transient Lodging - Motel, Hotels	45 – 55	55 – 60	60 – 70	65 – 75	75 – 80
Schools, Libraries, Churches, Hospitals, Nursing Homes	45 – 55	55 – 60	55 – 65	65 – 70	70 – 80
Auditoriums, Concert Halls, Amphitheaters	45 – 50	50 – 55	50 – 65	60 – 75	75 – 80

Table 4.11-4: Nevada County Land Use Compatibility Noise Guidelines

Land Use Category	(L _{dn} , or CNEL, dBA)				
	Clearly Acceptable	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Sports Arenas, Outdoor Spectator Sports	45 – 55	55 – 65	55 – 75	65 – 80	75 – 80
Playgrounds, Neighborhood Parks	45 – 55	55 – 65	60 – 70	70 – 80	75 – 80
Golf Courses, Riding Stables, Water Recreation, Cemeteries	45 – 60	60 – 70	65 – 75	70 – 80	NA
Office Buildings, Business Commercial and Professional	45 – 60	55 – 65	60 – 75	70 – 80	NA
Industrial, Manufacturing, Utilities, Agriculture	45 – 65	65 – 75	70 – 80	75 – 80	NA
NA: Not Applicable Notes: <u>Clearly Acceptable</u> – The activities associated with the specified land use may be carried out with essentially no interference from the noise exposure. <u>Normally Acceptable</u> – Noise should be considered in proposed land use projects, but under most circumstances conventional construction without any special noise insulation requirements is satisfactory. <u>Conditionally Acceptable</u> - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice. <u>Normally Unacceptable</u> - New Construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. <u>Clearly Unacceptable</u> – New construction or development should generally not be undertaken. Source: Nevada County, <i>Nevada County General Plan</i> , 2014.					

In addition to the identification of noise standards, the County’s General Plan also identifies goals, objectives, and policies to reduce noise-related impacts and land use compatibility conflicts. Applicable goals and policies relative to the proposed project within the noise element are listed below:

- Goal 9.1: Provide for the health, safety, and welfare of the people of Nevada County through a set of policies designed to encourage an environment free of unnecessary and annoying noise.
- Policy 9.1.1: Determine the existing noise environment and continue to reassess this environment so that a realistic set of noise standards can be developed reflecting the varying nature of different land uses.
- Policy 9.1.2: The following noise standards, as performance standards and land use compatibility standards, shall apply to all discretionary and ministerial projects

- excluding permitted residential (including tentative maps) land uses [refer to Table 4.11-3 for the noise standards].
- Policy 9.1.3: The Nevada County Planning Department shall be the lead agency responsible for coordination of all local noise control activities and intergovernmental group activities and subsequent enforcement efforts.
- Policy 9.1.4: The County will continue an ongoing County-wide noise monitoring program. The purpose of this program is to assess the changing noise environment in the County in terms of the existing ambient noise level for typical rural, residential, commercial and industrial areas and to ensure that the Policy 9.1.1 standards realistically reflect the current needs of the County.
- Policy 9.1.5: This chapter of the General Plan shall be implemented, in part, through the incorporation of the Policy 9.1.1 noise standards within the Land Use and Development Code and the adoption of the Noise Element Manual providing detailed direction and implementation measures.
- Policy 9.1.6: Encourage public awareness of noise and its hazards and means to minimize its existing and future impacts.
- Policy 9.1.7: Encourage heavy truck traffic to those routes outside residential areas.
- Policy 9.1.8: Encourage cities within Nevada County to adopt noise control programs compatible with County efforts.
- Policy 9.1.9: Develop a realistic policy framework designed to function as a guide to planning for appropriate land uses in relation to hazardous and annoying noise.
- Policy 9.1.10: Strongly discourage those General Plan amendments and zone changes that would likely create land use conflicts relative to noise.
- Policy 9.1.11: Strongly encourage future noise sensitive land uses, including residences, schools, hospitals, nursing homes, churches, and libraries, to those locations of the County where the impact of noise generators is limited so that compliance with standards found in Policy 9.1.2 will be maintained. This policy shall apply to the approval of all tentative maps for residentially zoned parcels. As an additional guide in evaluating land use compatibility, those standards as found in (General Plan) Figure 1 shall be used.
- Policy 9.1.12: Limit future noise generating land use to those locations of the County where their impacts on noise sensitive land uses will be minimized, consistent with the standards found in Policy 9.1.
- Policy 9.1.13: Require the preparation of a comprehensive noise study for all land use projects determined to have a potential to create noise levels inconsistent with those standards found in Policy 9.1, and in accordance with the methodology identified in the Noise Element Manual.
- Policy 9.1.14: Provide for adequate design controls to assist in mitigating on-site the significant adverse impacts of future noise generating land uses through increased setbacks, landscaping, earthen berms, and solid fencing.

- Policy 9.1.15: Strictly enforce the noise insulation standards for new construction as required by Title 24 of the California Administrative Code.
- Policy 9.1.16: Minimize the noise impact from automobiles, trucks, motorcycles, and off-road vehicles by continuing to request enforcement of those sections of the California Vehicle Code relative to vehicle exhaust system maintenance by the County Sheriff and State Highway Patrol.
- Policy 9.1.17: Where realistically possible, encourage noise sensitive land uses away from railroad operations.
- Policy 9.1.18: The routing and design of new or expanded transportation facilities by the County shall incorporate feasible measures necessary to mitigate increases in noise levels.
- Policy 9.1.19: Encourage the minimization of noise emission from all County-controlled activities consistent with Policy 9.1.1 standards.
- Policy 9.1.20: Protect the safety and general welfare of people in the vicinity of the Nevada County Airport and the Truckee Tahoe Airport by implementing the appropriate noise compatibility policies to avoid the establishment of noise-sensitive land uses in the portion of the airport environs that are exposed to significant levels of aircraft noise.
- Policy 9.1.21: Ensure the development of compatible land uses adjacent to the Nevada County Airport by enforcing the noise criteria as found in the Nevada County Airport Land Use Compatibility Plan as adopted by the Nevada County Airport Land Use Commission on September 21, 2011, as those standards are in effect and may be hereafter amended. (See General Plan Figure 9.1).
- Policy 9.1.22: Ensure the development of compatible land uses adjacent to the Truckee Tahoe Airport by implementing the noise criteria as found in the Truckee Tahoe Airport Land Use Compatibility Plan as adopted by the Truckee Tahoe Airport Land Use Commission on October 19, 2010, as those standards are in effect and may be hereafter amended.
- Policy 9.1.23: The County shall continue to enforce noise criteria standards consistent with the airport noise policies adopted by the Nevada County Airport Land Use Commission and the Truckee Tahoe Airport Land Use Commission based on the considerations of the following factors:
- a. Established federal and state regulations and guidelines.
 - b. The ambient noise levels in the community. Ambient noise levels influence the potential intrusiveness of aircraft noise upon a particular land use and vary greatly between *Community Regions and Rural Regions*.
 - c. The extent to which noise would intrude upon and interrupt the activity associated with a particular use.
 - d. The extent to which the activity itself generates noise.

- e. The extent which the activity itself generates itself generates noise.
- f. The extent of outdoor activity associated with a particular land use.
- g. The extent to which indoor uses associated with a particular land use may be made compatible with application of sound attenuation in accordance with the policies set forth for maximum acceptable interior noise levels.

4.11.3 STANDARDS OF SIGNIFICANCE

ENVIRONMENTAL ANALYSIS

THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant noise impact if it would:

- Exposure of persons to, or the generation of, noise levels in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies.
- Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels (e.g., blasting)
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels
- For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels

4.11.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACT 4.11-1: EXPOSURE OF PERSONS TO, OR THE GENERATION OF, NOISE LEVELS IN EXCESS OF STANDARDS ESTABLISHED IN THE LOCAL GENERAL PLAN, NOISE ORDINANCE, OR APPLICABLE STANDARDS OF OTHER AGENCIES.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, would require registration with the enforcing officer through an administrative action. The cultivation activities of six plants for personal use in R1, R2, R3, or RA zones would be limited to indoor cultivation and would not result in physical changes that would create substantial noise. Any outdoor cultivation for personal use also would be limited to six plants and activities would be similar to those needed for a home garden. Impacts in this regard would be less than significant and mitigation is not required.

The initial development of new commercial cannabis cultivation sites under a CCP for would be use for cultivation with less than 2,500 sf of canopy, and an ADP would be required for cannabis cultivation

between 2,500 sf and 10,000 sf of canopy. These construction activities could result in generation of noise from grading or other earthwork, construction of ancillary facilities, and use of heavy equipment. These activities would result in a temporary increase in noise levels in the vicinity of each new site.

Construction activities for a CCP would be similar to those of a building permit and would not be required to conform to the requirements of Section L-II 4.1.7 Noise of the Land Use and Development Code. This Section exempts construction activities from conformance these noise standards and there are no currently adopted County thresholds against which to measure CCP project impacts. It is anticipated that the intensity of construction activity for new commercial cannabis cultivation sites under a CCP would be similar to that of a comparably sized agricultural development, small residential renovation, or building of a residential addition project. The noise generated from this type of work is not sustained over an extended period of time and noise would only be punctuated during times if heavy equipment or machinery is used. Noise generated from this type of construction is not anticipated to be substantial, would occur on sites no less than two-acre, and is not anticipated to cause a significant disruption to off-site areas.

Additionally, under a CCP cultivation would be limited to 2,500 sf of canopy and must be at least 100 feet from the property line. This would limit the distance that any grading, plowing, or terracing would occur from nearby uses and is anticipated to very short term in nature. Further any proposed accessory structures would be limited to 625 sf which is not anticipated to require long term construction operations. Therefore, although there could be relatively high single-event noise exposure to surrounding uses potentially causing and intermittent noise nuisance, the effect on hourly or daily ambient noise levels for both surrounding uses and those that may be considered sensitive receptors in the vicinity of future and existing projects are anticipated to be negligible.

Establishment of the new cultivation sites under an ADP, which would allow for commercial cannabis cultivation with 2,500 sf to 10,000 sf of canopy, and 2,500 sf of accessory structures square feet (sf). To enable these uses, construction may involve the use of off-road construction equipment for grubbing and removal of existing vegetation, breaking ground, initial plowing, terracing, and/or grading to establish a gravel pad or foundation and lifting supplies and building materials. It is anticipated that new commercial cannabis non-cultivation sites may also require earth-moving construction activities (tree removal, vegetation clearing, grading) at a similar scale and intensity to that of new cannabis cultivation sites. Construction noise for an ADP would not be exempt from the County Noise Ordinance, Section L-II4.1.7 Noise of the Land Use and Development Code.

Future cannabis cultivation in Nevada County under an ADP could, depending on location relative to sensitive noise receptors, result in noise levels in excess of the County's thresholds. Future noise-generating activities would occur at outdoor cultivation sites or in areas where new facilities or structures are constructed. Future cannabis-related activities such as use of construction equipment, traffic to/from facilities, and use of equipment for future cannabis cultivation, processing and packaging, and distribution may generate noise. In addition, for future indoor cultivation, the units needed for heating-ventilation-air-conditioning (HVAC) systems would generate noise and could affect adjacent uses. The duration, noise level and proximity between these noise sources and sensitive receptors would be different based on locations of the uses and receptors and could vary greatly between individual projects. Mechanical HVAC equipment located on the ground or on rooftops of buildings have the potential to generate noise levels. This equipment averages 71 dBA CNEL at a distance of 50 feet when equipment is operating continuously for 24 hours. Depending on the location of the HVAC equipment, there is the potential to generate noise

that may exceed 65 dBA at nearby land uses; however, the setbacks for cannabis cultivation facilities are a minimum of 100 feet from the property line. For a single point source such as a piece of mechanical equipment, the sound level normally decreases by approximately 6 dBA for each doubling of distance from the source under “hard-surface” conditions typical of a developed commercial site. The proposed NCCO includes the following cultivation restriction:

Noise levels generated by Cultivation shall not exceed the standards set forth in Table L-II 4.1.7 (Exterior Noise Limits) [Table 4.11-3 of this EIR] of the Nevada County Zoning Ordinance applicable to the Land Use Category and Zoning District for the Premises on which the Cultivation occurs.

Future outdoor cultivation of cannabis plants would include the use of farming equipment, including tractors, and a number of miscellaneous noise emitting equipment. Future indoor cannabis cultivation would occur in greenhouses or other structures. These activities would include equipment typical of greenhouse activities for other agricultural crops; however, the HVAC systems could generate additional noise as compared to other agricultural crops, due to the need for specific oxygen/nitrogen mixes as well as air filters to reduce odors. As mentioned above, these facilities would be allowed in agricultural, Timber Production Zones, and Forest zones only and are not anticipated to be within close proximity to sensitive receptors. As such, potential impacts are considered less than significant.

Traffic noise resulting from the operation of future cannabis-related facilities could generate noise at adjacent sensitive receptors sites. Traffic volumes would be a small percentage of existing traffic on existing roadways, resulting in minimal changes to the noise environment from the development of an individual traffic noise generator, as discussed in further detail in *Section 4.15: Transportation and Traffic*. Impacts in this regard are considered less than significant and no mitigation is required.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.11-2: EXPOSURE OF PERSONS TO OR GENERATION OF EXCESSIVE GROUND-BORNE VIBRATION OR GROUND-BORNE NOISE LEVELS (E.G., BLASTING).

Construction

Project construction can generate varying degrees of ground-borne vibration, depending on the construction procedure and equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of a construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Ground-borne vibrations from construction activities rarely reach levels that damage structures. Construction-related ground vibration is normally associated with impact equipment such as pile drivers, jackhammers, and the operation of some heavy-duty construction equipment, such as dozers and trucks. Vibration decreases rapidly with distance.

The Federal Transit Administration (FTA) has published standard vibration velocities for construction equipment operations. In general, depending on the building category of the nearest buildings adjacent to the potential pile driving area, the potential construction vibration damage criteria vary. For example, for a building that is constructed with reinforced concrete with no plaster, the FTA guidelines show that a vibration level of up to 0.50 inch per second (in/sec) peak particle velocity (PPV) is considered safe and would not result in any construction vibration damage. The FTA architectural damage criterion for continuous vibrations for non-engineered timber and masonry buildings (i.e., 0.20 inch/second) appears to be conservative. The types of construction vibration impact include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment.

Future construction activities that may occur within the project area have the potential to generate low levels of groundborne vibration. *Table 4.11-5: Vibration Levels for Varying Construction Equipment*, identifies the typical vibration levels produced by construction equipment at 25 feet, 50 feet, and 100 feet from the construction activity.

Table 4.11-5: Vibration Levels for Varying Construction Equipment

Equipment	Approximate peak particle velocity at 25 feet (inches/second) ¹	Approximate peak particle velocity at 50 feet (inches/second) ²	Approximate peak particle velocity at 100 feet (inches/second) ²
Large bulldozer	0.089	0.031	0.011
Loaded trucks	0.076	0.027	0.010
Small bulldozer	0.003	0.001	0.000
Auger/Drill rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibrator Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210 (<0.200 @26')	0.074	0.026
Pile Driver	0.644	0.228	0.081

Notes:
 1. Calculated using the following formula:

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$$
 where: PPV (equip) = the peak particle velocity in inch per second of the equipment adjusted for the distance
 PPV (ref) = the reference vibration level in inch per second from Table 12-2 of the FTA Transit Noise and Vibration Impact Assessment Guidelines
 D = the distance from the equipment to the receiver

The Table 4.11-5 data indicates that construction vibration levels anticipated for the project are less than the 0.2 in/sec PPV threshold of damage to buildings and less than the 0.1 in/sec threshold of annoyance criteria at distances of 100 feet. Sensitive receptors which could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located approximately 100 feet, or further, from the project site construction areas. At these distances construction vibrations are not predicted to exceed acceptable levels. It should be noted that 0.2 inch-per-second PPV is a conservative threshold, as that is

the construction vibration damage criteria for non-engineered timber and masonry buildings.¹ Buildings within the project area would be better represented by the 0.5 inch-per-second PPV significance threshold (construction vibration damage criteria for a reinforced concrete, steel, or timber buildings).² Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

Because construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors, implementation of the proposed project would not expose persons to or generate excessive ground borne vibration or ground borne noise levels. Therefore, construction vibrations are not anticipated to cause damage to existing buildings or cause annoyance to sensitive receptors. Vibration impacts associated with construction are considered to be less than significant and no mitigation measures are required.

Operational

The proposed project would not generate groundborne vibration that could be felt at surrounding uses. The project would not involve railroads or substantial heavy truck operations, with the exception of possible delivery vehicles to the project site once facilities are operational. As a result, impacts from vibration associated with project operation would be less than significant and no mitigation measures are required.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.11-3: A SUBSTANTIAL PERMANENT INCREASE IN AMBIENT NOISE LEVELS IN THE PROJECT VICINITY ABOVE LEVELS EXISTING WITHOUT THE PROJECT.

Long-term impacts associated with noise from traffic on vicinity roadways would occur if cannabis activities generate enough additional vehicle trips on an adjacent roadway to result in roadway noise increases that exceed the thresholds listed in Table 4.11-3. Likewise, equipment noise associated with cultivation and farming operations could also contribute to long-term noise impacts if equipment generates noise at levels that exceed the thresholds. These thresholds are dependent on existing noise levels; the greater the existing noise level, the smaller the threshold. In areas where the existing ambient noise level is below 60 dBA, a substantial increase is 5 dBA; where the pre-project ambient noise level is between 60 and 65 dBA, a substantial increase is 3 dBA; and where the ambient existing noise level exceeds 65 dBA, a significant increase is 1.5 dBA.

Stationary Sources

The proposed project would allow the use of generators but they would be prohibited from being inside cultivation structures. Generators are expected to be used to power fans for the greenhouses and other electrical equipment used during cultivation activities for projects that are not supplied electricity by a utility provider or solar source. Further, future cultivation uses would be required to adhere to Nevada County Land Use and Development Code, Chapter II, Zoning Regulations (Section L-II, 4.1.7, Noise), which

¹ Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Guidelines*, May 2006. Table 12-3.

² Ibid.

ensures that future development minimizes unnecessary and annoying noise by establishing maximum noise levels and standards. Generators are anticipated to be the primary noise sources during operation of commercial cannabis sites. It is anticipated that generators would only be used on cultivation sites that are not supplied with electricity from a utility or other source such as solar. Generators would be used to power lights and other mechanical equipment needed for cultivation and are anticipated to be a continual source of noise.

Although CCPs would be exempt from conformance with the listed noise standards, generators used for projects under ADPs, would be required to comply. Although these generators could not be placed in indoor cultivation areas, to comply with the noise standards listed above the generators would be required to be housed in a shed or other containment structures that would reduce the noise heard at a distance. Placement of the generators in such an enclosure would ensure noise does not exceed the listed thresholds.

Regarding projects under CCPs, although it is not a requirement under the noise ordinance, generators would be required to be placed in containment structures to reduce noise impacts to wildlife species. As discussed in Impact 4.4-1, in *Section 4.4 – Biological Resources*, this is a required measure to reduce effects on sensitive species such as nesting birds, nocturnal wildlife, and other species because the noise can result in a substantial disruption to the natural activities.

Therefore, noise sources as a result of the operation the proposed NCCO are anticipated to result in less than significant impacts to projects under both CCPs and ADPs.

Outdoor cannabis cultivation activities generally do not generate high levels of noise. Outdoor cannabis cultivation involves common agricultural practices, including tilling soil, sowing seeds, irrigating soil, and harvesting mature plants. Noise would also be generated by farm equipment and truck traffic during peak harvest activities, but these noise sources are generally compatible with the agricultural zoning and uses allowed under the proposed project. Greenhouse cultivation and other indoor cultivation sites would generate noise from farm equipment, but noise levels would typically be reduced as activities would occur inside the greenhouse, which would buffer noise levels. Greenhouses may use fans or generators that could generate low levels of ambient noise, but these noise levels are not expected to be perceptible beyond the property line. Also, indoor cultivation would generate noise from heating, ventilation, and air conditioning (HVAC) equipment although it is expected to only generate a low hum from fans or blowers.

Noise levels from commercial HVAC equipment and greenhouse generators can be the dominant noise source in areas void of heavy traffic or where background noise levels are low; however, units are typically fitted with noise shielding cabinets, placed on the roof behind parapets on commercial or industrial structures, or placed in mechanical equipment rooms to block the line-of-sight, thus reducing noise levels.

Mobile Sources

As discussed in *Section 4.15: Traffic and Transportation*, the proposed project is not anticipated to substantially increase vehicle trips or traffic volumes along any one road or intersection, as proposed cannabis activities would be dispersed across the County. Implementation of the proposed project has the potential to introduce new vehicle traffic to certain County roadways and intersections such that the County's thresholds for traffic related impacts are exceeded. As such, the proposed project may also result in increased noise levels associated with the additional vehicle trips and congestion from cultivation and distribution activities, but only for relatively short periods, particularly during harvesting and transport of cannabis products. Like other agricultural, commercial, and industrial activities, cannabis activity sites

would be required to conform to the County's regulatory standards. These existing regulations would ensure that cannabis activities would not produce noise levels that exceed the County's thresholds and standards.

The proposed project includes features that would ensure any noise generated by cannabis activities would not adversely affect sensitive receptors by requiring setbacks of 100 feet from the property line and 1,000 feet from sensitive sites, including schools providing instruction in kindergarten or any grades 1 through 12, day care centers, and youth centers. Also, all noise sources would be located, shielded, or controlled so as to avoid exposure of incompatible noise to nearby sensitive receptors, in compliance with the Nevada County General Plan Noise Element. Further, manufacturing facilities and activities would be licensed within buildings, which would sufficiently contain the low levels and incidences of noise. However, since the location and degree of vehicle noise cannot be known as part of the project, there is no feasible way to ensure that vehicle noise increases from project traffic would not exceed County thresholds for ambient noise.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.11-4: A SUBSTANTIAL TEMPORARY OR PERIODIC INCREASE IN AMBIENT NOISE LEVELS IN THE PROJECT VICINITY ABOVE LEVELS EXISTING WITHOUT THE PROJECT.

Construction activities have a short and temporary duration, lasting from a few days to a period of several months. Ground-borne noise and vibration, as well as other types of construction-related noise impacts may occur during the initial site preparation, which can create the highest levels of noise and vibration. Generally, site preparation has the shortest duration of all construction phases. Activities that occur during this phase include earth-moving and soils compaction. High ground-borne noise levels can occur during this phase by the operation of heavy-duty construction equipment. Construction activities have the potential to expose adjacent sensitive land uses (nearby residential, institutional, and park uses) to noise levels between 70 and 90 decibels at 50 feet from the noise source. The degree of noise impact would be dependent upon the distance between the construction activity and the noise sensitive receptor. However, construction would primarily occur in undeveloped rural areas without significant sensitive receptors, as rural agricultural uses are generally set on large parcels at a distance from established communities.

As discussed in Impact 4.11-1 above, impacts from construction and operation of commercial cannabis cultivation projects would result in temporary and periodic increase in ambient noise levels for both projects under CCPs and ADPs. Regarding CCPs, due to scope and scale of these projects and the relatively small scale of operations construction impacts are anticipated to occur over a brief period of time and largely be contained to the project site due to the 100-foot required buffer. In addition, if generators are used, they would be required to be housed in a shed or other containment structures to meet noise thresholds for ADPs and reduce impacts from CCPs. Therefore, compliance with the County's Noise Ordinance, and other goals, objectives, and policies in the General Plan, and cultivation restrictions in the

proposed ordinance would ensure that substantial temporary or periodic increase in ambient noise levels in the project vicinity would be reduced to less than significant

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.11-5: FOR A PROJECT LOCATED WITHIN AN AIRPORT LAND USE PLAN OR, WHERE SUCH A PLAN HAS NOT BEEN ADOPTED, WITHIN TWO MILES OF A PUBLIC AIRPORT OR PUBLIC USE AIRPORT, WOULD THE PROJECT EXPOSE PEOPLE RESIDING OR WORKING IN THE PROJECT AREA TO EXCESSIVE NOISE LEVELS.

The Nevada County Airport is located in the southwestern portion of the County approximately 2.5 miles east of the City of Grass Valley.³ The Truckee Tahoe Airport is located in the eastern portion of the project area adjacent to the Town of Truckee. To the northwest of the Truckee Tahoe Airport land uses are within the existing Town and commercial cannabis cultivation under the proposed NCCO would not occur. To the southeast, the airport is adjacent to County Designated Open Space. To the south the airport is adjacent to the County of Placer County and is not applicable to the proposed project. Therefore, no noise impacts would occur in this regard.

Future cannabis-related activities could occur in the vicinity of the Nevada County Airport. Noise from airport operations at the Nevada County Airport could expose workers at commercial cannabis cultivation sites to noise associated with operations of the airport. The nearest land uses that would allow commercial cannabis cultivation are approximately 1.7 miles east of the airport and include AG-20 zoned land near Flying Cloud Drive. Other zone districts surrounding the Nevada County Airport are light industrial to the north and south of the western portion of the airport and residential agricultural (RA-3) surrounding the airport on the eastern side. There is a portion of AG-20 zoned area south of the airport, which would be within a 55dB CNEL contour, and is within an area defined as Zone D a Traffic Pattern Zone. Development in this area consists of approximately six rural residential units.

Aircraft operations at the Nevada County airport would consist of relatively infrequent flights by small general aviation propeller aircraft. Occasional corporate jet aircraft operations may occur at the airport throughout the, but this would be infrequent, and noise would be temporary. Therefore, impacts would be less than significant.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

³ Nevada County Airport Land Use Commission, *Nevada County Airport Land Use Compatibility Plan*, July 2011.

IMPACT 4.11-6: FOR A PROJECT WITHIN THE VICINITY OF A PRIVATE AIRSTRIP, WOULD THE PROJECT EXPOSE PEOPLE RESIDING OR WORKING IN THE PROJECT AREA TO EXCESSIVE NOISE LEVELS.

Nevada County contains eight private airports and heliports. Five are located near the City of Grass Valley, one near the City of Truckee, one in Jackson Lake in the eastern portion of the county, and one in North San Juan located in the northern portion of Nevada County.

The majority of the private airports and airstrips house mostly single-engine planes. The short duration of noise events generated by planes taking off and landing at private airstrips would temporarily increase noise levels in the immediate vicinity of the airport. Similar to Impact 4.11-5, future cannabis-related activities could occur in the vicinity of a private airstrip, thus exposing workers to noise levels associated with an airstrip. Typically zone districts near airstrips are generally related to agriculture, industrial, and commercial zones. If future cannabis-related facilities, specifically future cannabis cultivation, were to occur and be operated within close proximity to a private airport or airstrip, the combined noise levels of aircraft take-offs and landings and future cannabis cultivation, processing and packaging, and distribution activities have the potential to exceed County acceptable noise levels for workers and/or residents that are in proximity to both the private airport and potential cannabis-related activities, depending on the location of the future cannabis-related facility and the residence or facility. Future cannabis-related facilities would comply with federal, State, and local laws, regulations, and policies, thus reducing potential impacts.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

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4.12 POPULATION AND HOUSING

This section of the Environmental Impact Report (EIR) addresses potential impacts of the Nevada County Cannabis Cultivation Ordinance (proposed project or proposed NCCO) on population, housing, and employment and provides an overview of current population estimates, projected population growth, current housing, employment trends, and the regulatory setting.

Sources of information and data provided in this section include, but are not limited to, the Nevada County General Plan and associated elements, and demographic information from the California Department of Finance (DOF), the California Economic Development Department (CA EDD), the U.S. Census Bureau and information obtained from Nevada County.

4.12.1 ENVIRONMENTAL SETTING

Nevada County's total land area is 978 square miles. Of that total land area, 70% is privately owned while 30% is public lands. In 2010 the population density in the County was 103 residents per square mile, putting it amongst the lowest of comparison counties and well below the overall California average population density of 244 people per square mile. With just under 100,000 residents, Nevada County was ranked as the 36th most populated county in California in 2012.

POPULATION

The population of Nevada County grew from 92,053 in 2000 to 98,764 in 2010 but saw a decline to 98,095 residents in 2015. Nevada County experienced its highest growth between the 1950s and 1980s, increasing by 260% between 1950 and 1980, and another 70% between 1980 and 1990 (Nevada County, 2017). Over the last eight years, the population increases have slowed and the County population increased by approximately 0.4 percent (%) or 391 people from 98,764 total persons,

Currently, the County has an estimated total population of 99,155 people of which 66,207 live in unincorporated areas and 32,948 live in incorporated areas. The three largest incorporated cities include Grass Valley with 13,041 residents, Truckee with 16,681 residents, and Nevada City with 3,226 residents, or approximately 33% of the County's population (CDOF, 2018). The remaining 67% of residents live in outlying unincorporated areas. Population estimates for future growth show a slow but gradual population increase of the next 20 years.

Population projections were included in the General Plan Housing Element 2014-2019 and based largely the CDOF estimates available at that time. The current CDOF county population projection data, which estimates the total county population within the states to 2060, show that Nevada County had a population in January 2018 of 98,757, which is less by 398 people or 0.04 %. CDOF estimated that by 2020 the population would be 99,548 which also is a growth rate of approximately 0.04%. *Table 4.12-1: Nevada County Projected Population through 2060*, provides the CDOF population growth estimates in increments of ten years for the next four decades. By 2060, CDOF estimates the population of Nevada County will increase to 123,265 or approximately 23%.

Table 4.12-1: Nevada County Projected Population through 2060

Year	2030	2040	2050	2060
Population	105,318	111,007	115,407	123,265
Source: CDOF, 2018				

Compared to its surrounding counties, Nevada County has the highest percentage of residents over 65 years of age but has less ethnic variation. There are fewer residents under the age of 30 in Nevada County (29%) than statewide (41%). In years past, the economic downturn accelerated the trend towards an older population as higher unemployment rates, typical of the “Great Recession,” caused younger people with families to seek employment in urban areas. With the recent improvement in the County’s unemployment and economic status, the attractiveness of this area as a great place for young families continues to increase (Nevada County, 2017).

Although low compared to surrounding areas, the County’s population is comprised of several different ethnic groups. According to 2017 Census data, 85.2 percent of the County’s population identified themselves as white, not of Hispanic origin. The second largest ethnic group was Hispanic with 9.5 percent of the County’s population. In 2016, the median age of residents in the County was 49.5 years (US Census, 2016a). The County’s median income in 2016 was \$57,429 (US Census, 2016b). In 2016 there were approximately 4.0 persons per household in the County (US Census 2016c).

HOUSING

Nevada County has experienced slight housing growth since 2010. As shown in *Table 4.12-2: Nevada County Housing Trends*, housing stock (the existing supply of residential units) in the County increased 2.2 percent between 2010 and 2018 and 1.73 percent in the County’s unincorporated areas. These trends are reflected in *Table 4.12-2: Nevada County Housing Trends*, below.

Table 4.12-2: Nevada County Housing Trends (Housing Units)

Area	2010 ¹	2018 ²	2010-2018 Percent Change
Nevada County (Unincorporated)	31,340	32,182	2.7%
Nevada County (Total County)	52,590	53,745	2.2%
¹ U.S. Census Bureau, 2010 ² DOF, 2018b			

The census bureau defines a household as any group of people occupying a housing unit, which may include single persons living alone, families related through marriage or blood, or unrelated persons sharing living quarters. Persons living in retirement or convalescent homes, dormitories, or other group living situations are not considered households. Household characteristics are important indicators of the type and size of housing needed in a community. The number of persons per household in Nevada County in 2018 was 2.35 (DOF, 2018b).

EMPLOYMENT

The American Communities Survey provides estimates of employment by industry for the jurisdictions in California including Nevada County. *Table 4.12-3: Nevada County Employment by Industry* shows the unincorporated area’s civilian labor force 16 years and older in comparison to the overall County’s labor force, including the incorporated areas. The comparison also shows the overall distribution of labor force

by industry. Consistent with past years data, educational services, and health care and social services was the largest employer of persons countywide, followed closely by retail trade and construction. Conversely, in the unincorporated area retail trade holds a slight edge over educational services, and health care and social assistance as the top employment industry with construction filling in the third largest employment segment. Approximately 54 percent of the civilian labor force (defined as all civilians age 16 or over who are able to work) in Nevada County is currently working. The unemployment rate in Nevada County is 3.3%, which is considered moderate unemployment.

Table 4.12-3: Nevada County Employment by Industry

	Nevada County		Unincorporated Area	
	Estimate	Percent	Estimate	Percent
Civilian employed population 16 years and over	48,654	100%	33,149	- 15,504
Agriculture, forestry, fishing and hunting, and mining	514	1.1%	367	1.1%
Construction	6,603	13.6%	5,033	15.2%
Manufacturing	2,584	5.3%	2,098	6.3%
Wholesale trade	844	1.7%	593	1.8%
Retail trade	8,084	16.6%	5,878	17.7%
Transportation and warehousing, and utilities	1,300	2.7%	885	2.7%
Information	1,850	3.8%	1,311	4.0%
Finance and insurance, and real estate and rental and leasing	3,465	7.1%	2,159	6.5%
Professional, scientific, and management, and administrative and waste management services	4,885	10.0%	3,081	9.3%
Educational services, and health care and social assistance	8,107	16.7%	5,450	16.4%
Arts, entertainment, and recreation, and accommodation and food services	4,475	9.2%	2,227	6.7%
Other services, except public administration	3,161	6.5%	2,132	6.4%
Public administration	2,782	5.7%	1,935	5.8%

Source: Nevada County General Plan Housing Element 2014-2019

EXISTING CANNABIS EMPLOYMENT

Since the legalization of cannabis in California the industry has grown and required employees for all facets of the industry. The cannabis industry has resulted in jobs for obvious areas such as cultivation and dispensaries, but it also has generated employment opportunities for harvest technicians, delivery drivers, medical professionals, wellness consultants, quality control and product testing, marketing and advertising, as well as many jobs related to enforcement and compliance including city and county planners, city and County code enforcement, water quality and environmental specialists with the state and local boards and agencies.

The County has an estimated 3,500 cannabis cultivation sites occurring on parcels throughout the unincorporated areas. The proposed project does not include a provision for any dispensaries or other employment generating uses other than cultivation. It is unknown how many people are currently

employed in the county in the existing cannabis industry. With the existing estimate of 3,500 cultivation operations it can be safely estimated that at least 3,500 full time or part time jobs are generated from existing cultivation.

INCOME

Standard income groups are established by Housing and Urban Development (HUD) and are based on the median income of the area, which can either be the entire county or a Metropolitan Statistical Area (MSA). The groups are defined as follows:

- Extremely Low Households Earning Less Than 30% of the Median Income
- Very Low Households Earning Less Than 50% of the Median Income
- Low Households Earning Between 50% and 80% of the Median Income
- Moderate Households Earning Between 80% and 120% of the Median Income
- Above Moderate Households Earning Above 120% of the Median Income

For all housing programs in Nevada County, eligibility is based on the median income for the County, which was \$57,382 in 2008-2012 according the Bureau of Census, American Communities Survey. For comparison, the State of California median income over the same time period was to be \$61,400. According to statistics provided by the State Department of Housing and Community Development (HCD) the “Area Median Income as reflected in *Table 4.12-4: Nevada County Households By Income Group* is based upon the County’s median income of \$57,382 and shows that approximately 44 percent of Nevada County’s population has an income that is within the low or lesser income categories. Additional, data from the 2010 Census indicates that approximately 11.6 percent of individuals of the County’s population are living below the poverty level.

Table 4.12-4: Nevada County Households By Income Group

Income Group	Related Income Range	Households in Income Range	Percent in Income Range
Extremely Low	\$0-\$17,214	4,246 ⁽²⁾	10.2%
Very Low	\$17,215-\$28,691	4,246 ⁽³⁾	10.2%
Low	\$28,692-\$45,905	9,865 ⁽⁴⁾	23.7%
Moderate	\$45,906-\$68,858	7,576 ⁽⁵⁾	18.2%
Above Moderate	\$68,859-and above	15,693 ⁽⁶⁾	37.7%
TOTAL	n/a	41,626	100%

Source: Nevada County General Plan Housing Element 2014-2019

4.12.2 REGULATORY SETTING

STATE

CALIFORNIA HOUSING ELEMENT LAW

State law requires each city and county to adopt a general plan for future growth. This plan must include a housing element that identifies housing needs for all economic segments and provides opportunities for housing development to meet that need. At the state level, the California Department of Housing and Community Development estimates the relative share of California's projected population growth that could occur in each county in the state based on DOF population projections and historic growth trends. Where there is a regional council of governments, as in Nevada County, the California Department of Housing and Community Development provides information regarding the regional housing need to the council. Locally, Nevada County then assigns a share of the regional housing need to each of its cities and the county. The process of assigning shares provides cities and counties the opportunity to comment on the proposed allocations. The California Department of Housing and Community Development oversees the process to ensure that the council of governments distribute their share of the state's projected housing need.

Each city and county must update its general plan housing element on a regular basis. Among other things, including incorporating policies, the housing element must identify potential sites that could accommodate the city's share of the regional housing needs. Before adopting an update to its housing element, the city or county must submit a draft to the California Department of Housing and Community Development for review. The department advises the local jurisdiction as to whether its housing element complies with the provisions of California housing element law (California Government Code Sections 65580–65589.8).

REGIONAL HOUSING NEED ALLOCATION PROCESS

Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element of the general plan. As part of this process, the California Department of Housing and Community Development identifies state-wide housing need and assigns the County a share in a manner that is consistent with the development pattern included in the Sustainable Communities Strategy (SCS) of the 2014 RTP that was adopted in June 2014. This process was recently revised with the approval of Senate Bill (SB) 375, in 2008, which amended the RHNA schedule and methodology requiring due dates for local governments to update their housing elements no later than 18 months from the date that Nevada COG adopts the RTP, which occurred on June 19, 2014 (California Government Code Section 65584 et seq.). The RHNA for January 1, 2019 through December 31, 2027, which was finalized on October 12, 2018 in a letter from the State of California Department of Housing and Community Development (CDHCD) to the County. The minimum regional housing need determination was 3,695 total units among four income categories (CDHCD, 2018)

SENATE BILL 375 SUSTAINABLE COMMUNITIES STRATEGY

SB 375 (Chapter 728, Statutes of 2008) directs the California Air Resources Board to set regional targets for the reduction of greenhouse gas (GHG) emissions in coordination with Assembly Bill 32, California's Global Warming Solutions Act of 2006. SB 375 is implemented through the development of a Sustainable

Communities Strategy (SCS). This SCS is a chapter of the 2014 RTP, which was approved on June 19, 2014, by the Nevada COG Board functioning as the Transportation Planning Policy Committee.

SB 375 is designed to enhance existing regional planning efforts by coordinating regional transportation planning together with the RHNA in an effort to reduce GHG emissions from cars and light-duty trucks through the provision of incentivized land use strategies by willing local governments and development applicants. Under the SB 375 process, cities and counties maintain their existing authority over local planning and land use decisions.

LOCAL

NEVADA COUNTY GENERAL PLAN (NCGP)

The Nevada County General Plan (NCGP) explains the goals and policies of the county. The document is intended to be a general source of guidance for the County in its decision making. The NCGP includes sections on many sections, or elements, regarding life and business in the County. Specifically, the Land Use, Economic Development, Housing, Elements of the NCGP include several goals, objectives and policies pertaining to population and housing and this project.

Land Use Element

Goal 1.6 Allow for growth while protecting, maintaining and enhancing communities and neighborhoods.

Policy 1.6.1 Establish land uses which protect, enhance, and complement existing communities and neighborhoods.

Economic Development Element

Goal 2.1 Provide for a strong economic base while protecting and maintain communities and neighborhoods.

Objective 2.7 Encourage the provision of adequate housing to meet existing and future needs of wage earners.

Policy 2.14 As part of the County Economic Policy, identify opportunities for investment in affordable housing for local wage earners, as well as for the maintenance of the long-term affordability of such housing.

Housing Element

Goal HD-8.1 To provide for a variety of housing types by tenure and price in all residential areas for all income segments, special needs groups, and the County's workforce for both existing Nevada County residents, as well as potential future residents, commensurate with the Regional Housing Need Allocation (RHNA) Plan and the County's quantified objectives.

Goal HD-8.3 Ensure that appropriate types and higher density housing development are directed to Community Regions and Rural Centers.

4.12.3 STANDARDS OF SIGNIFICANCE

ENVIRONMENTAL ANALYSIS

THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant aesthetic impact if it would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

4.12.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACT 4.12-1: WOULD THE PROJECT INDUCE SUBSTANTIAL POPULATION GROWTH IN AN AREA, EITHER DIRECTLY (FOR EXAMPLE, BY PROPOSING NEW HOMES AND BUSINESSES) OR INDIRECTLY (FOR EXAMPLE, THROUGH EXTENSION OF ROADS OR OTHER INFRASTRUCTURE)?

The development of new homes or businesses are activities that are generally associated with directly inducing population growth, and the extension of roads or other infrastructure is generally associated with inducing population growth indirectly. Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. This cultivation would be limited to a total of six plants. Persons wishing to cultivate for personal use within the County may already do so under state law. The proposed project includes a registration process for personal use cannabis cultivation. This process would not permit, authorize, or result in the construction of new residential units nor would it result in the need for roadway improvements or expansions to accommodate personal use cultivation. Therefore, the project would not directly or indirectly induce population growth in this regard.

In regard to commercial cultivation and cultivation for non-remuneration, the project could induce population growth in an area either directly or indirectly. Under the proposed project there is no limitation on the number of AE, AG, or FR parcels that could be cultivated, however, 2-5 acre parcels could cultivate a maximum of 500 sf of cannabis, 5-10 acre parcels could cultivate 2,500 sf of cannabis, 10-20 acre parcels could cultivate 5,000 sf of cannabis, and 20 acre parcels and greater could cultivate up to 10,000 sf of cannabis. Assuming 100 percent of the AE, AG, and FR parcels are cultivated, based on the number of existing parcels and their acreage, a total of 116,928,000 sf or 4.2 square miles of cannabis cultivation could occur.

While there is no formally documented data related to employment associated with the cannabis industry specifically, the State of California released a consultant study in 2017 prepared by ERA Economics that contains extensive job analysis related to cannabis cultivation. For indoor, greenhouse gas growing [a process using supplemental carbon dioxide (CO₂) levels], including trimmers, the study documents a full

time equivalent (FTE) level of cannabis cultivation employment at 0.88 FTE per 1,000 square feet of canopy. For outdoor cultivation, the employment rate is 0.40 FTE per 1,000 square feet of canopy. For outdoor cultivation and other cannabis activities, employment ratios widely vary based on the size and type of operation. Most of the cannabis cultivation is assumed mixed-light and outdoor, with a smaller portion being indoor. Commercial indoor cultivation is expected to be limited due to the rural nature of the area and costs associated with buildings, infrastructures, lighting and electrical demand, and needs for HVAC.

Based on these factors, and using the worst-case estimates the proposed project would be expected to require a total of 46,771 employees (one employee for every 2,500 sf of cultivation.) This number, however; would be expected to be slightly reduced because for most operations, the property owners are expected to be a part of the work force. In addition, the County estimates there are a total of 3,500 existing cultivation sites that already use employees, which would reduce the increase demand because the 3,500 would be a part of the baseline conditions. In addition, commercial cultivation could only occur on a parcel or premises with an occupied legally permitted residence, or on a vacant parcel adjacent to a parcel with an occupied legally permitted residence under common ownership and on AE, AG, and FR parcels. It is anticipated that at approximately 75% of owners would work on one of the 27,207 parcels on which cultivation would be allowed. This would reduce the demand for employees by 20,405 (75% of 27,207). This, in addition to the estimated 3,500 existing cannabis cultivation operations would reduce the total demand for employees to approximately 22,866. It should be noted, that based on trip generation (refer to *Section 4.15: Traffic and Circulation*) the proposed project was estimated to generate, approximate total of 30,705 vehicle trips, which if this is reduced by 3,500, equals 27,205 trips. The traffic estimate also was based on the assumption that under the proposed NCCO, 100% of parcels would be cultivated to the maximum sf allowable. Therefore, the estimate of approximately 22,866 employees is reasonable for the purposes of this analysis.

The existing labor force in Nevada County is 48,654. The increase demand for employees from the proposed project; therefore, represents an approximate 47% increased demand on the existing workforce. Considering the current unemployment rate is approximately a 3.3% (CA EDD, 2018) or approximately 1,605 persons who are unemployed, the increase would be substantial. However; the increase demand for employees would moderated by a number of factors. First, the cannabis cultivation operations are expected to be phased in over time as cultivators compile information needed to complete the application process. This would result in a yearly incremental increase of projects that would increase the demand on the workforce.

The proposed project also is analyzed on the assumption that 100% of eligible parcels would be used for cultivation. This is done for the purpose of a thorough CEQA evaluation and ensuring that the known environmental factors are discussed, and impacts are evaluated. Therefore; the hypothetical full development or worst-case buildout scenario is used to ensure the Draft EIR fully discloses the level of potential impacts. However, in the case of the proposed project there would be numerous development constraints for many of the parcels upon which commercial cultivation could occur. These constraints, such but not limited to irregularly shaped parcels that cannot provide adequate buffers, parcels that are within 1,000 feet of a sensitive site, parcels with sensitive biological habitat that cannot be used, sites with steep and rugged terrain or inclement weather, parcels with access and roadway issues, parcels that could not obtain electrical connections or sources of water, or the fact that some parcels would be too

remote such as those in the Sierra Nevada Mountains, would be significant barriers to many parcels and property owners from entering the commercial cannabis cultivation market.

Lastly, as discussed above all existing and future cannabis cultivation projects would be required to undergo the project review process and obtain a CCP for cannabis cultivation with less than 2,500 sf of canopy and an ADP for cannabis cultivation with 2,500 sf to 10,000 sf of canopy. As part of the proposed NCCO, all commercial cannabis operations are required to have a residence on the proposed cultivation site or on adjacently owned parcel. If a property owner with a vacant parcel wishes to cultivate and does not meet the above criteria, that owner would have to have a residence constructed or in place prior to initiation of cultivation operations. This requirement would account for some of the increased demand for housing.

Based on these factors, including the staged timing of project implementation, the environmental and physical constraints to implementation of commercial cultivation in some locations; and by virtue of the proposed project itself requiring housing be in place or be constructed; it is expected that population growth would occur over a prolonged period of time and although the proposed project may induce growth beyond what would be expected without the proposed NCCO; the proposed project would not be considered to induce substantial population growth and impacts would be less than significant.

MITIGATION MEASURE

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

IMPACT 4.12-2: WOULD THE PROJECT DISPLACE SUBSTANTIAL NUMBERS OF EXISTING HOUSING, NECESSITATING THE CONSTRUCTION OF REPLACEMENT HOUSING ELSEWHERE?

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, would require registration with the enforcing officer through an administrative action. The cultivation activities of six plants for personal use in R1, R2, R3, or RA zones would be limited to indoor cultivation and would not result in the displacement of any residential units. Impacts in this regard would not occur and mitigation is not required.

As discussed above the implementation of the proposed project would result in use of parcels within the AE, AG, and FR zones for commercial cannabis cultivation or non-remuneration cultivation activities. This could result in a maximum of 116,928,000 sf of new cultivation and result in the demand for approximately 22,866 employees, which is approximately 46% of the existing population. The proposed project does not propose the removal, demolition, or displacement of any existing housing. In fact, the proposed NCCO requires that all parcels used for commercial cannabis cultivation contain a resident in order to be approved for cultivation activities.

In addition, the proposed project requires that all applicants go through the development review process when filing for a CCP for cannabis cultivation projects with less than 2,500 sf of canopy and an ADP for cannabis cultivation project with 2,500 sf to 10,000 of canopy. As part of this process, the Planning Director or designee(s) would ensure that all proposed commercial cannabis cultivation occurs on a parcel or premises with an occupied legally permitted residence, or on a vacant parcel adjacent to a parcel with

an occupied legally permitted residence under common ownership, or that a residence is constructed prior to project approval. This would ensure that housing is not displaced but would be created. Therefore, the proposed project would not displace any housing and the construction of replacement housing would not be required. Therefore, impacts would be less than significant.

MITIGATION MEASURE

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

IMPACT 4.12-3: WOULD THE PROJECT DISPLACE SUBSTANTIAL NUMBERS OF PEOPLE, NECESSITATING THE CONSTRUCTION OF REPLACEMENT HOUSING ELSEWHERE?

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, would require registration with the enforcing officer through an administrative action. The cultivation activities of six plants for personal use in R1, R2, R3, or RA zones would be limited to indoor cultivation and would not result in the displacement of any people necessitating replacement housing. Impacts in this regard would not occur and mitigation is not required.

As discussed above the implementation of the proposed project would result in use of parcels within the AE, AG, and FR zones for commercial cannabis cultivation or non-remuneration cultivation activities. This could result in a maximum of 116,928,000 sf of new cultivation and result in the demand for approximately 22,866 employees, which is approximately 46% of the existing population. The proposed project does not propose the removal, demolition, or displacement of any existing housing and would not displace a substantial or any number of people. In fact, the proposed NCCO requires that all parcels used for commercial cannabis cultivation contain a resident in order to be approved for cultivation activities.

In addition, the proposed project requires that all applicants go through the development review process when filing for a CCP for cannabis cultivation projects with less than 2,500 sf of canopy and an ADP for cannabis cultivation project with 2,500 sf to 10,000 of canopy. As part of this process, the Planning Director or designee(s) would ensure that every proposed project site contains an existing residence or that a residence is constructed prior to project approval. This would ensure that housing would not be displaced but would be created. Therefore, the proposed project would not displace any housing and the construction of replacement housing would not be required. Therefore, impacts would be less than significant.

MITIGATION MEASURE

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

4.13 PUBLIC SERVICES

This section of the Draft Environmental Impact Report (EIR) addresses potential impacts of the proposed NCCO on public services, which include fire protection, law enforcement, schools, and other public facilities. Potential impacts resulting from wildland fires on the project site are discussed in *Section 4.8 Hazards and Hazardous Materials*, potential impacts associated with stormwater runoff and drainage facilities are discussed in *Section 4.9 Hydrology and Water Quality*; and potential impacts on parks and recreation facilities are discussed in *Section 4.14 Recreation*. This section also describes relevant environmental and regulatory settings and discusses mitigation measures to reduce impacts, where applicable. The proposed project would potentially increase demand on public services. Therefore, it is the purpose of this section to ascertain if the potential increase in demand would exceed the capacity of existing public services, which may result in the need for additional personnel or require construction of new facilities.

The following governmental agencies provided the data used to prepare the analysis in this section; refer to Appendix K (Service Availability Letters):

- Nevada County Sheriff's Office;
- Nevada County Consolidated Fire Department;
- California Department of Forestry and Fire Protection;
- Nevada Joint Union High School District

4.13.1 ENVIRONMENTAL SETTING

State and Local government agencies provide a range of services throughout the 978 square miles of land within Nevada County and to the approximate 100,000 total residents. Of the residents, approximately 67% reside in unincorporated areas and 33% reside in the three incorporated cities of Nevada City, Grass Valley and Truckee. Public services are provided on both public and private lands. Approximately 70% of the land area is privately owned while 30%, mostly in eastern Nevada County consist of public lands. Land use patterns in the unincorporated areas generally consist of rural developments and in some towns with somewhat higher population densities. In 2010 the population density in the County was 103 residents per square mile, putting it amongst the lowest of comparison counties and well below the overall California average population density of 244 people per square mile. Due to the large overall size of the unincorporated area County, public services, including schools, and law enforcement, and fire protective services are provided by numerous agencies, which are discussed in more detail below. *Figure 4.13-1: Nevada County Reference Map*, shows the overall County lands, cities including Nevada City and Grass Valley, and Town of Truckee.

SCHOOLS

SCHOOL DISTRICTS

Within the County there are a total of 14 school districts consisting of public Elementary, Middle, and High Schools, Charter Schools, as well as four private schools. Although the Grass Valley, Nevada City, and Tahoe Truckee School districts serve incorporated City areas to which the NCCO would not apply, these

schools also serve students from unincorporated areas within the County *Figure 4.13-2a: Nevada County Schools and School Districts (western portion), Figure 4.13-2b: Nevada County Schools and School Districts (central portion), and Figure 4.13-2c: Nevada County Schools and School District (eastern portion)* show the location of the schools and school districts in Nevada County based on region. The school districts in the County include:

- Chicago Park School District (CPSD)
- Clear Creek School District (CCSD)
- Grass Valley School District (GVSD)
- Nevada City School District (NCSD)
- Penn Valley Union School District (PVSD)
- Pleasant Ridge Union School District (PRSD)
- Tahoe Truckee TA1 School District
- Tahoe Truckee TA2 School District
- Tahoe Truckee TA3 School District
- Twin Ridges School District (TRSD)
- Union Hill School District (UHSD)
- Nevada Joint Union High School District (NJUHSD)
- Ready Springs School District (RSSD)
- Pleasant Valley School District (PVSD)

1) a portion of the NJUHSD extends north beyond the county boundaries into Sierra County.

2) RSSD and PVSD only serve elementary students.

Within the County, there also are other education opportunities for public education include alternative school, a juvenile hall education program, charter schools and coops, resource centers, and four private schools. These schools are shown on the three listed figures above. School Bus Services are provided for Bear River High School (BRHS), Nevada Union High School (NUHS), and five school districts including GVSD, NCSD, PRSD, PVSD, and TRSD.

SHERIFF'S SERVICES

The Nevada County Sheriff's Department provides law enforcement to all the unincorporated areas of Nevada County. Sheriff's services include patrol, dispatch, investigations, search and rescue, boat patrol, correctional facilities, and coroner and court security services. The Sheriff's Office has two offices that would provide these services. The main office is in Nevada City at 950 Maidu Avenue, Nevada City, Ca 95959 with the second location in Truckee at 10879 Donner Pass Road, Truckee, CA 96161.

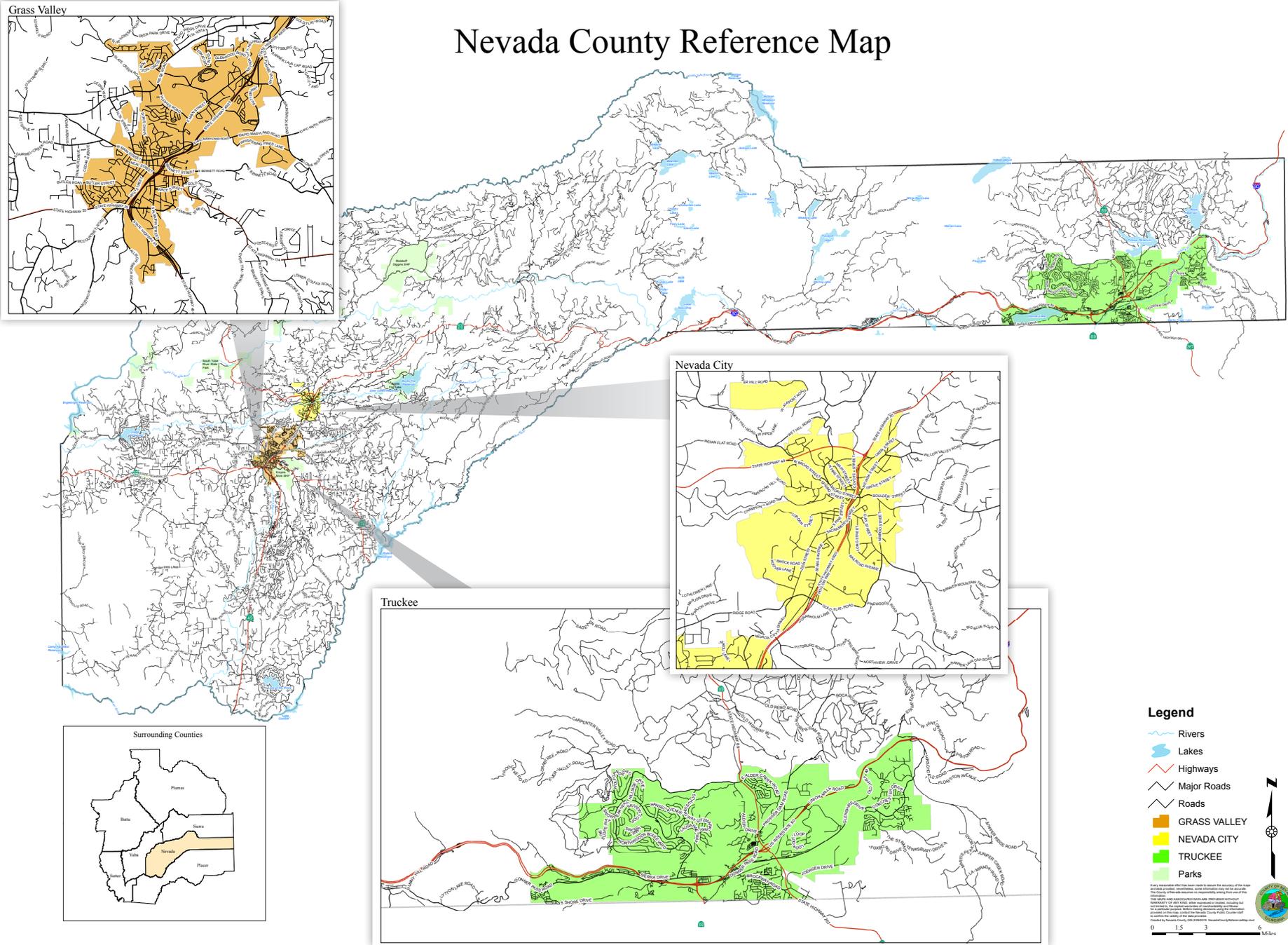
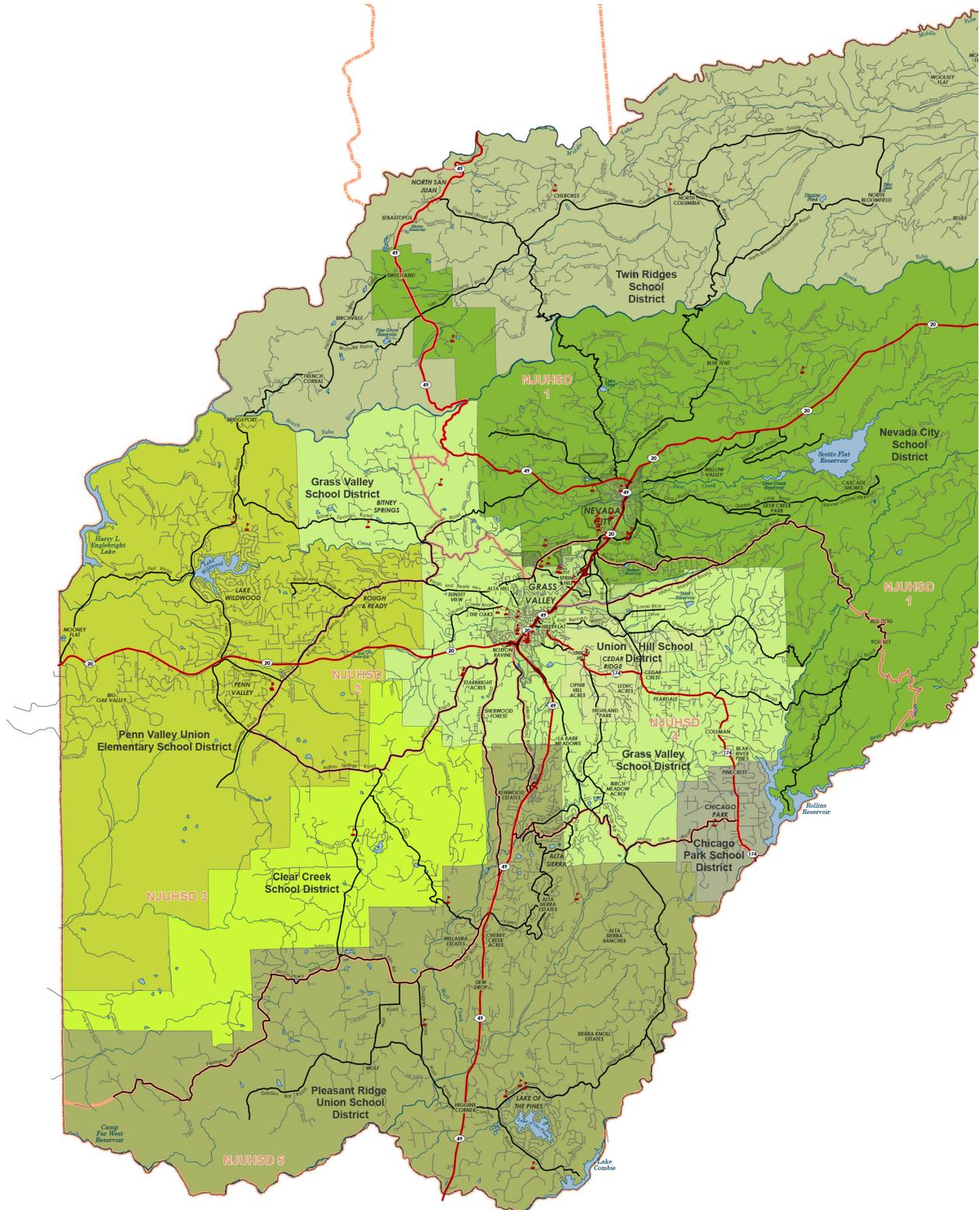


FIGURE 4.13-1: Nevada County Reference Map
 Nevada County Cannabis EIR

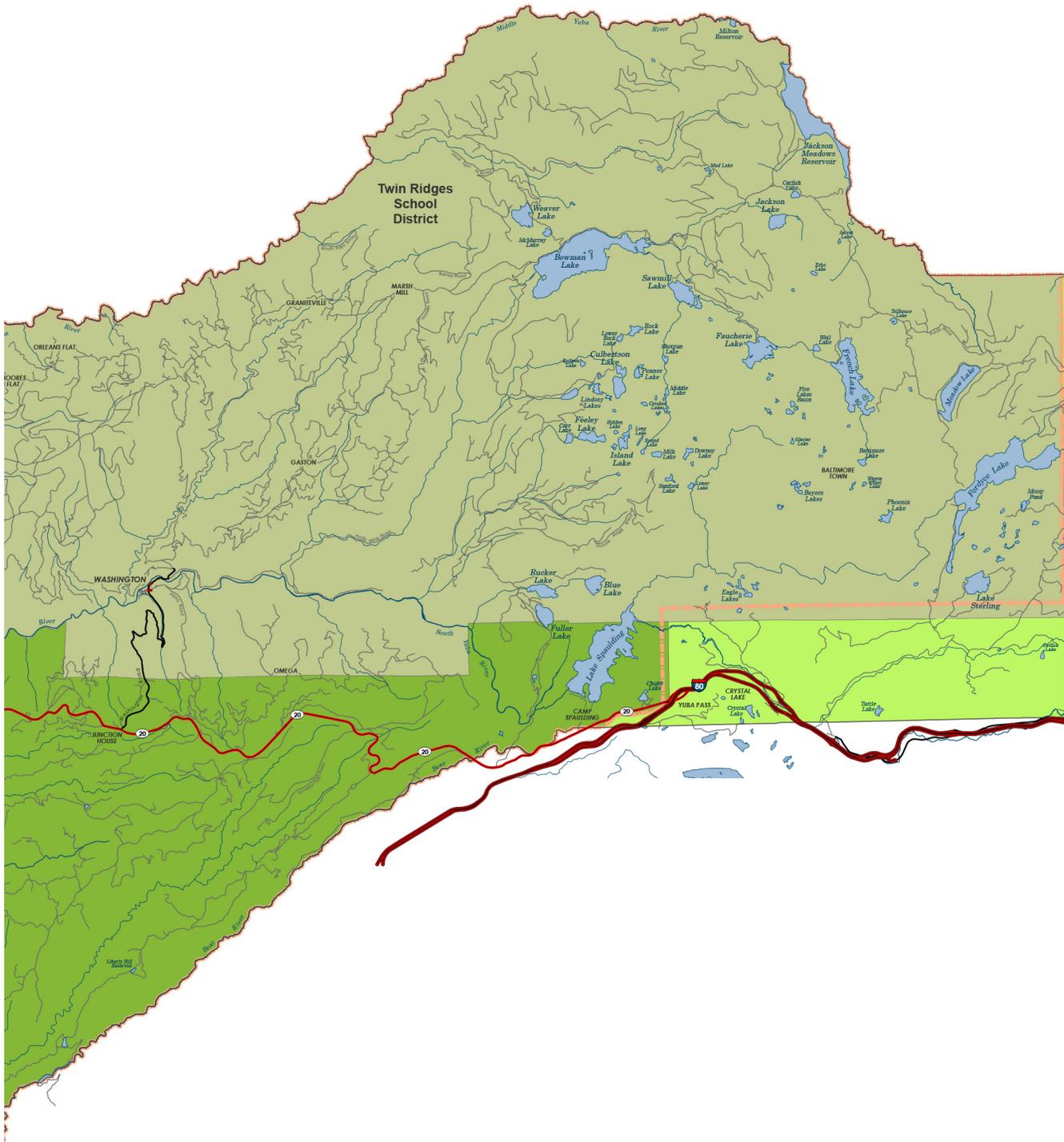
Nevada County Elementary School Districts & Nevada Joint Union High School District



<p>Legend</p> <ul style="list-style-type: none">  Schools  Nevada Joint Union High School District  Elementary School Districts Shown in Various Shades of Green / Gray and Labeled with District Name 	  <p>NORTH</p>	<p><small>Every reasonable effort has been made to assure the accuracy of the maps and data provided; nevertheless, some information may not be accurate. The County of Nevada assumes no responsibility arising from use of this information. THE MAPS AND ASSOCIATED DATA ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, either expressed or implied, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Before making decisions using the information provided on this map, contact the Nevada County Public Counter staff to confirm the validity of the data provided.</small></p> <p><small>Map Produced by: Nevada County GIS Division Date: 4/17/2014 Coordinate System: NAD 1983 StatePlane California FIPS 5402</small></p>
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FIGURE 4.13-2a: Nevada County Schools and School Districts – Western Portion
Nevada County Cannabis EIR

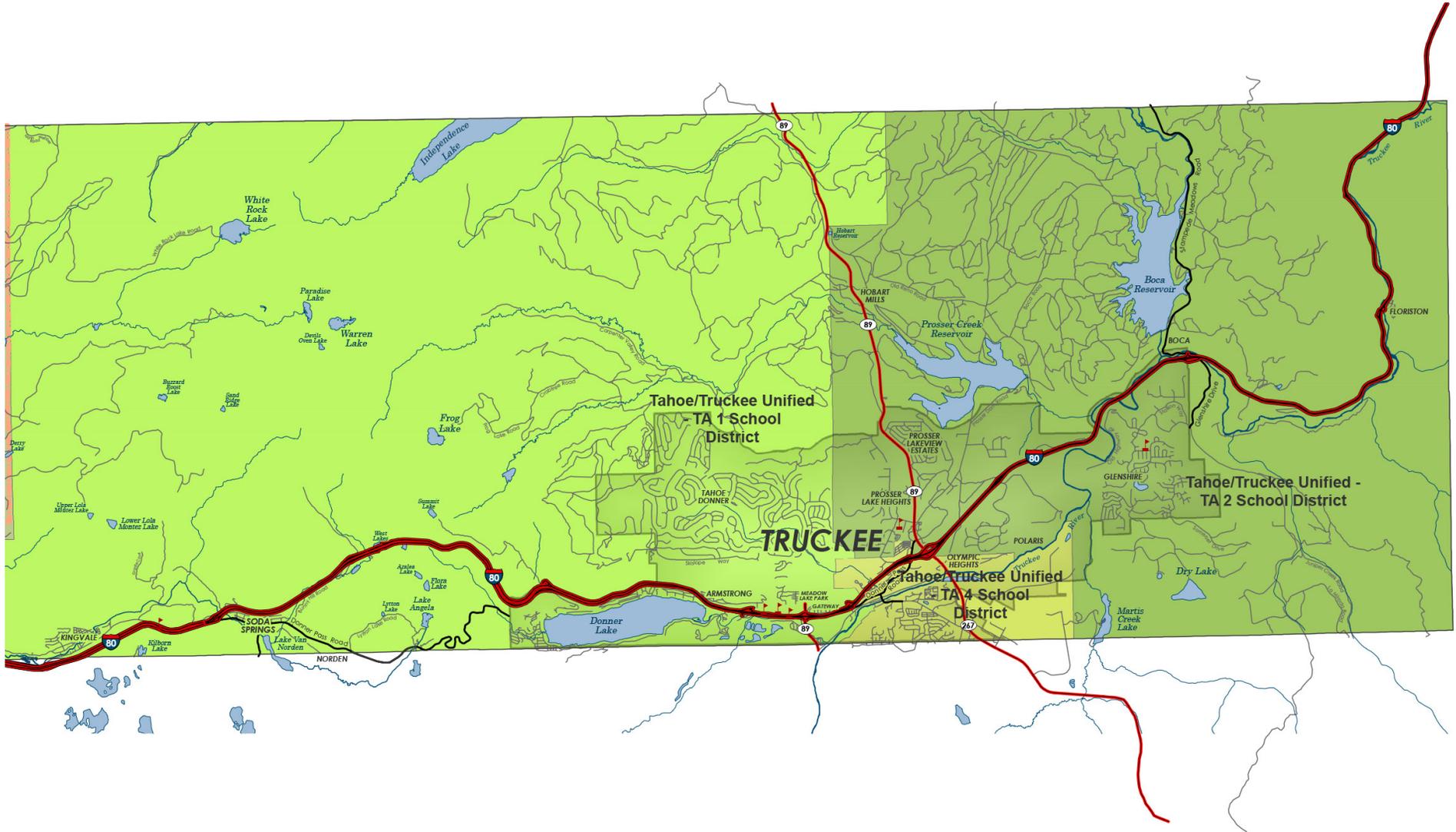
Nevada County Elementary School Districts & Nevada Joint Union High School District



<p>Legend</p> <ul style="list-style-type: none"> Schools Nevada Joint Union High School District Elementary School Districts Shown in Various Shades of Green / Gray and Labeled with District Name 		 <p>NORTH</p>	<p>Every reasonable effort has been made to assure the accuracy of the maps and data provided; nevertheless, some information may not be accurate. The County of Nevada assumes no responsibility arising from use of this information. THE MAPS AND ASSOCIATED DATA ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, either expressed or implied, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Before making decisions using the information provided on this map, contact the Nevada County Public Counter staff to confirm the validity of the data provided.</p> <p>Map Produced by: Nevada County GIS Division Date: 4/17/2014 Coordinate System: NAD 1983 StatePlane California FIPS 5402</p>
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FIGURE 4.13-2b: Nevada County Schools and School Districts – Central Portion
 Nevada County Cannabis EIR

Nevada County Elementary School Districts & Nevada Joint Union High School District



<p style="text-align: center;">Legend</p> <p>● Schools</p> <p>NORTH 1 Nevada Joint Union High School District</p> <p> Elementary School Districts Shown in Various Shades of Green / Gray and Labeled with District Name</p>		 <p>NORTH</p>	<p>Every reasonable effort has been made to assure the accuracy of the maps and data provided; nevertheless, some information may not be accurate. The County of Nevada assumes no responsibility arising from use of this information. THE MAPS AND ASSOCIATED DATA ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, either expressed or implied, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Before making decisions using the information provided on this map, contact the Nevada County Public Counter staff to confirm the validity of the data provided.</p> <p>Map Produced by: Nevada County GIS Division Date: 4/17/2014 Coordinate System: NAD 1983 StatePlane California FIPS 0402</p>
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FIGURE 4.13-2c: Nevada County Schools and School Districts – Eastern Portion
 Nevada County Cannabis EIR

The Department has four divisions including the Administrative Support Division, the Corrections Division, Finance Units, and Operations Division. The Administrative Support division provides support services in units including, civil, communications/dispatch, evidence, personnel/training, and records. The Corrections Division manages the operations and services within the County Jail, and the Finance Unit oversees contract management, grant funding, budget development and reports, and public administration.

The Operations Division has 16 units or teams including but not limited to animal control, hostage negotiation, major crimes, school resource officer program, special enforcement detail, and the Narcotics Task Force. The Narcotics Task Force is multi-agency unit supervised by the Sheriff's Office. This unit is responsible for investigating information regarding narcotics trafficking, the manufacturing of controlled substances and the cultivation of illegal marijuana for both indoor and outdoor grows (Nevada County, 2018).

The Department currently operates enforcement efforts on cannabis with a two-deputy team. The Department receive between 200 to 300 calls for service each year related to cannabis complaints, this number is approximated over the last several years. Due to man-power shortage, however, the department is not able to handle all of the calls. While some calls are unanswered because they are vague as to the violation, other are not responded to due to the existing workload or time needed to reach the remote locations in which they are reported. The Department notes that the majority of the illegal cultivation occurs in less dense and rural areas away from population centers making it more difficult to access the sites (NCSD, 2018).

CHP

The California Highway Patrol was created in 1929 to provide uniform traffic law enforcement throughout the state. The primary purpose of CHP is to assure the safe, convenient and efficient transportation of people and goods on our highway system. CHP operates numerous programs throughout the state in various divisions based on regional locations. The programs include, cargo theft interdiction, a certified business advocate program, commercial vehicles section, impaired driver enforcement program, school bus program, and your programs. Within Nevada County, CHP has two offices: 1) 11363 McCourtney Road in Grass Valley, and 2) 10077 State Route 89 South in Truckee. CHP also maintains an office at 1) 50 Canyon Creek in Gold Run in Placer County in Gold Run along I-80 (CHP, 2018).

NEVADA COUNTY CODE COMPLIANCE DIVISION

The purpose of the Nevada County Code Compliance Program is to create a single, one-stop, consolidated code compliance/code enforcement program. The Code Compliance Division is authorized to enforce all County Codes, regulations and laws that are delegated to departments within the Community Development Agency (CDA). It is the mission of the Code Compliance Program to work in partnership with the people of Nevada County to promote and maintain a healthy, safe and desirable living and working environment. Along with law enforcement service within the County, County Code Compliance also would be responsible for ensuring compliance with the NCCO. In addition, Code Compliance also would ensure cultivation operations are complying with other codes including building codes, California State Housing Law, conditions of existing structures, solid waste, and zoning standards (Nevada County, 2018).

CITY POLICE

Law Enforcement services for the incorporated Cities of Grass Valley, Nevada City, and Truckee are service by Grass Valley Police Department (GVPD), Nevada City Police Department (NCPD), and Truckee Police Department (TPD). Services include patrol, investigations, traffic, code enforcement, and community policing programs. While their primary duties are to serve their respective jurisdictions, through mutual aid agreements in times of emergency, these departments would be available to assist the Nevada County Sheriff's Department, and also can perform law enforcement duties countywide (Grass Valley, 2018, Nevada City, 2018, and Truckee, 2018).

NATIONAL FOREST

Uniformed Law Enforcement Officers (LEO) enforce Federal laws and regulations governing National Forest System (NFS) lands and resources. The regulations are designed to protect the Forests and the natural environment, to ensure the health and safety of visitors, and to promote a pleasant and rewarding outdoor recreation experience for all visitors. As part of that mission issue citations, make arrests, execute search warrants, complete reports and testify in court. The regulations LEOs enforce include 36 Code of Federal Regulations (CFR) Parts 242 and 261 that applies to all NFS lands nationwide. The primary focus of their jobs is the protection of natural resources, protection of Forest Service employees and the protection of visitors (USDA, 2018).

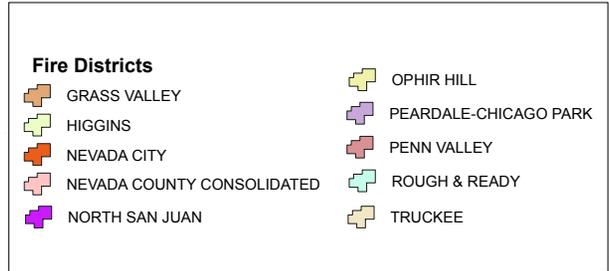
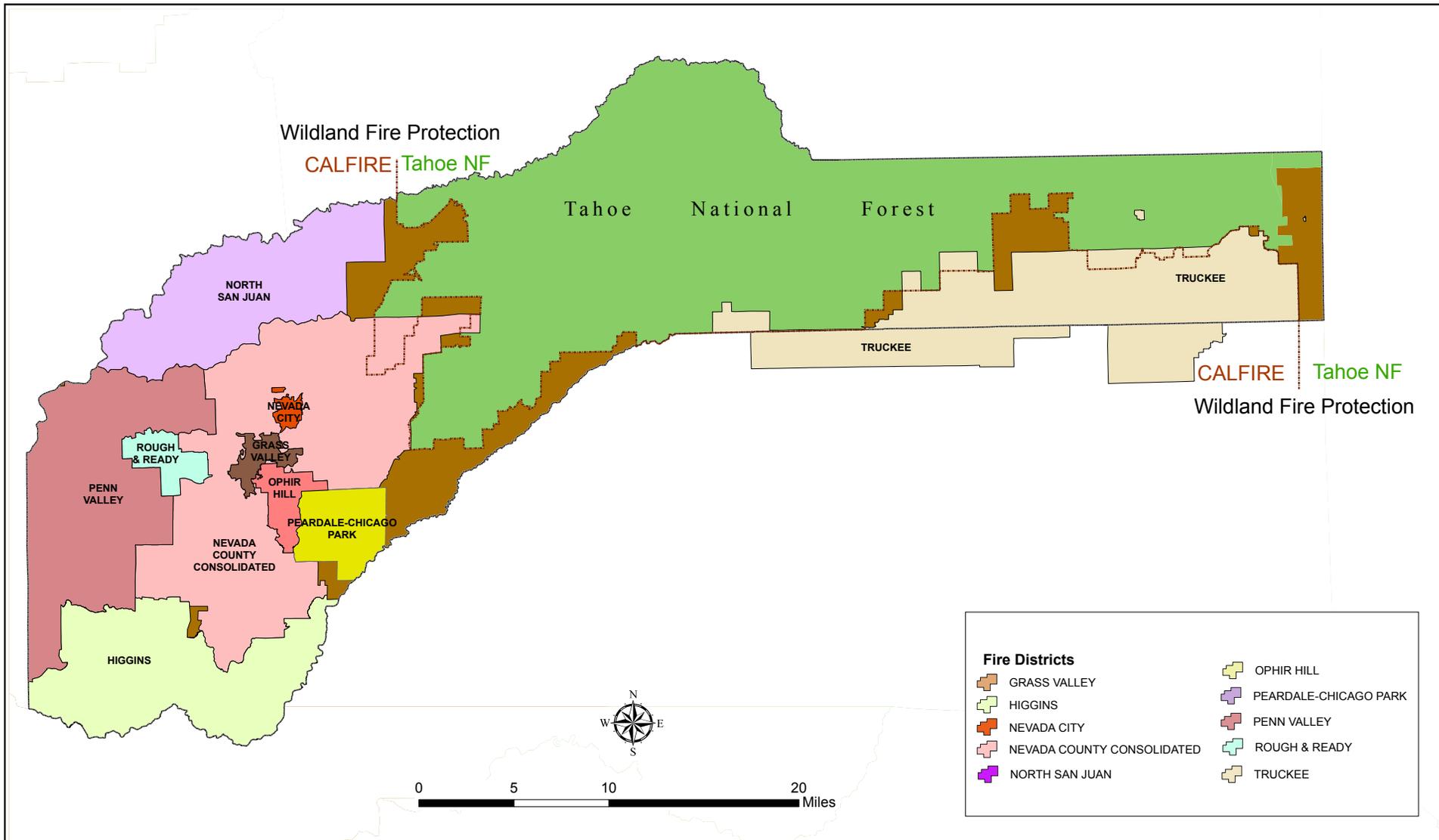
PUBLIC HEALTH

The mission of the Public Health Department (PHD) in the County is to protect lives, promote health and wellness, and provide support services to help Nevada County residents meet their basic needs. PHD achieves this mission through implementation of an array of programs including communicable disease control, chronic disease prevention, emergency preparedness, community health education, and clinical services and healthcare management. The PHD also provides coordination of the response to health emergencies to individual case management to primary prevention of disease and wellness promotion.

EMERGENCY AND FIRE PROTECTION

Fire protection services within the county are provided by eleven fire districts or departments. Fire Departments provide a variety of services in addition to active fire suppression. These services include but are not limited to providing emergency medical services, responding to hazardous material incidents, vehicle accidents, as well as rescues in wildland, urban, and water environments. Fire department responsibilities may also include transporting patients to hospitals and treatment centers. Fire services within the County are determined based on State Fire protection in Local Responsibility Areas (LRAs) is provided by the County, a city, or a designated fire protection district. Within State Responsibility Areas (SRAs), fire protection is provided by CalFire.

Within the County there are a total of nine fire districts including: Nevada County Consolidated Fire District, Higgins Fire Protection District, Penn Valley Fire Protection District, Rough and Ready Fire Department, Grass Valley Fire Department, Peardale Chicago Park Fire Protection District, Truckee Fire Protection District, Nevada City Fire Department, North San Juan Fire Protection District, as well as fire services in the Tahoe National Forest, and the California Department of Forestry and Fire Protection (CAL FIRE). Each agency's area of responsibility is illustrated in *Figure 3.14-3, Fire Service Areas*. While each department maintains a level of autonomy, fire services within the County and for the purpose of compliance with the NCCO would be coordinated through the Nevada County Fire Marshall and via CAL FIRE.



NEVADA COUNTY FIRE DISTRICTS

Every reasonable effort has been made to assure the accuracy of the maps and data provided; nevertheless, some information may not be accurate. The County of Nevada assumes no responsibility arising from use of this information.
 THE MAPS AND ASSOCIATED DATA ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, either expressed or implied, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Before making decisions using the information provided on this map, contact the Nevada County Public Counter staff to confirm the validity of the data provided. Date: 8/11/2014.

FIGURE 4.13-3: Fire Service Areas
 Nevada County Cannabis EIR

Nevada County is characterized by some urbanized areas but contains a substantial amount of rural development, which results in substantial wildland urban interface, which can increase the risk of wildland fires. Due to the nature of the vegetation, much of the county is categorized as a very high fire hazard severity zone (VHFHSZ) with a limited amount, generally in the western valley areas and high mountains above tree line being designated as a non-VHFHSZ. Additionally, most of the County is identified as being within a State Responsibility area within the exception of Nevada City, Grass Valley, and Truckee, which are local responsibility areas (LRA), and areas of the Tahoe National Forest which fall under a Federal Responsibility Area (FRA). *Figure 4.13-4a: Western Nevada County Fire Hazard Severity Zones in SRA (western portion), Figure 4.13-4b: Western Nevada County Fire Hazard Severity Zone in SRA (central portion), and Figure 4.13-4c: Western Nevada County Fire Hazard Severity Zone in SRA (eastern portion),* show graphically the fire hazard severity zones delineated in SRAs, FRAs, and LRAs within the County. It should be noted, that while these areas are designated, as SRA, LRA, and FRA, in some emergency situations, fire services would cross these boundary lines and provide fire protective services as needed, such as in disasters, requests for mutual aid, or forest fires.

Nevada County Consolidated Fire. Nevada County Consolidated Fire District (NCCFD) operates four of its own station (station 84, 86, 88, and 89) and three JOA (Joint XXX) stations (Station 1, 2, and 54). Stations 1 and 2 are jointly operated with Grass Valley and Station 54 is jointly operated with Nevada City (NCCFD, 2018a). Fire suppression equipment includes type 1 and type 2 engines, swift water rescued, water tender, reserve type 2 engines, an OES water tender, a type 6 engine, command vehicles, and repair vehicles (NCCFD, 2018b).

Higgins Fire Protection District. Higgins Fire Protection District (HFPD) has responsibility for 90 square miles and operates out of three fire stations, (Headquarter Station 21, and Station 22, and Station 23). HFPD maintains ten vehicles including Rescue 21, water Tender 21, Engine 21, Engine 21 Reserve, Engine 22, Squad 22 Engine 23, Brush 23, Water Tender 23, and Chief 6200 (Chiefs truck). The department is staffed by one Chief, two Captains, and an engineer, two firefighter/operators and paid call firefighters (HFPD, 2018).

Penn Valley Fire Protection District. The Penn Valley Fire Protection District (PVFPD) serves 92 square miles in western Nevada County, including Penn Valley, Lake Wildwood, Kentucky Flat, Mooney Flat, and Big Oaks areas. The District operates three fire stations, two of which are currently staffed twenty-four hours a day with a minimum of two personnel. The third station relies on off-duty personnel for staffing. Apparatus includes two front line fire engines, two reserve fire engines, two front line ambulances, one reserve ambulance, one water tender, two staff vehicles, one rescue and one utility vehicle (PVFPD, 2018).

Rough and Ready Fire Department. The Rough and Ready Fire Department (RRFD) is a volunteer fire department and operates out of a single station at 14506 Rough and Ready Highway. The departments apparatus includes a Type 3 Engine, a Type 1 Engine, a Rescue Truck, Water Tender, one duty truck, and a command truck (RRFD, 2018a). The Department consists of a chief, two Captain/EMT/Engineers, three firefighter/EMT, ten firefighters, one junior firefighter, and five probationary firefighters (RRFD, 2018).

Grass Valley Fire Department. The Grass Valley Fire Department (GVFD) operates out of two fire station (Fire Station 1 and 2). One of the stations is jointly staffed with the NCCFD. The department uses two frontline and one reserve engine, a 105-foot aerial ladder truck, and miscellaneous staff and support vehicles. The department is staffed by a total of 14 firefighter/EMTs. Management is from an interim Fire Chief, Battalion Chief, and Deputy Fire Marshall (GVFD, 2018).

Peardale Chicago Park Fire Protection District. The Peardale Chicago Park Fire Protection District (PCPPFD) provides fire protection for structures and wild-land, emergency medical response and public assistance from Stations 57 in Chicago Park and Station 257 in Peardale. The Department utilizes two fire engines, one wild-land engine and one water tender and two utility vehicles. Both stations are located on the Highway 174 corridor and serve an area approximately 21 square miles with approximately 3000 residents. On average, the department responds to over 300 emergency incidents per year with 80% of the calls being for emergency medical assistance.

Truckee Fire Protection District. The Truckee Fire Protection District (TFPD) operates out of seven Fire Stations (Stations 92, 93, 94, 95, 96, 97, and 98). Personnel consists of 24 firefighters, 8 paid call/volunteer firefighters, 3 Inspectors, 12 Captains, a Fire Chief, 2 Division Chiefs, 3 Battalion Chiefs, and various support staff and other specialist roles. Among other equipment the department utilizes number engines (structure engines, reserve structure engines, brush engines), ladder trucks, water tenders, heavy rescue vehicles, dive rescue, air boat, an OES HazMat vehicle, and approximately 9 ambulances.

Nevada City Fire Department. The Nevada City Fire Department (NCFD) has a current staff of a Fire Chief, two Fire Captains and three Firefighters and responds to approximately 1,000 calls for service a year. The Department's primary station is located at 201 Providence Mine Rd. and provides 24-hour, year-round service. The Fire Department currently operates a 2005 Type I Engine, a 2011 Type III Brush Engine, and three Utility Vehicles to cover the City. We also respond to calls in other jurisdictions under a Mutual Aid and Auto Aid Agreements (NCFD, 2018).

North San Juan Fire Protection District. The North San Juan Fire Protection District (NSJFPD) covers approximately 87 square miles, with the primary station (Station 3#) being located on Tyler Foote Road, as well as two other stations in North San Juan and French Corral. The District is served by volunteer firefighters using a duty officer system so that immediate response is provided for the approximate 2600 residents. The District maintains seven engines or vehicles, several equipped with compressed air foam equipment; and one 4000-gallon water tender (NSJFD, 2018).

California Department of Forestry and Fire Protection (CAL FIRE). CAL FIRE maintains stewardship and protection of over 31 million acres of California's privately-owned wildlands and provides varied emergency services in 36 of the State's 58 counties, including Nevada County, via contracts with local governments. CAL FIRE responds to numerous types of emergencies including but not limited to wildland fires, residential/commercial structure fires, automobile accidents, heart attacks, drownings, lost hikers, hazardous material spills on highways, train wrecks, floods, and earthquakes (CAL FIRE, 2018).

CAL FIRE operates nearly 1,000 fire engines (343 state and 624 local government); 184 rescue squads; 63 paramedic units; 9 hazmat units; 28 aerial ladder trucks; 59 bulldozers; 6 mobile communication centers; and 11 mobile kitchen units. The Department funds, via contract, an additional 82 engines, and 12 bulldozers used in six counties – Kern, Los Angeles, Marin, Orange, Santa Barbara, and Ventura. From the air, CAL FIRE operates 22 1,200-gallon airtankers (one is kept as maintenance relief), 12 Super Huey helicopters (two are kept as maintenance relief), and 17 air tactical planes (three are kept as maintenance relief, and two are used as training aircraft) (CAL FIRE, 2016).

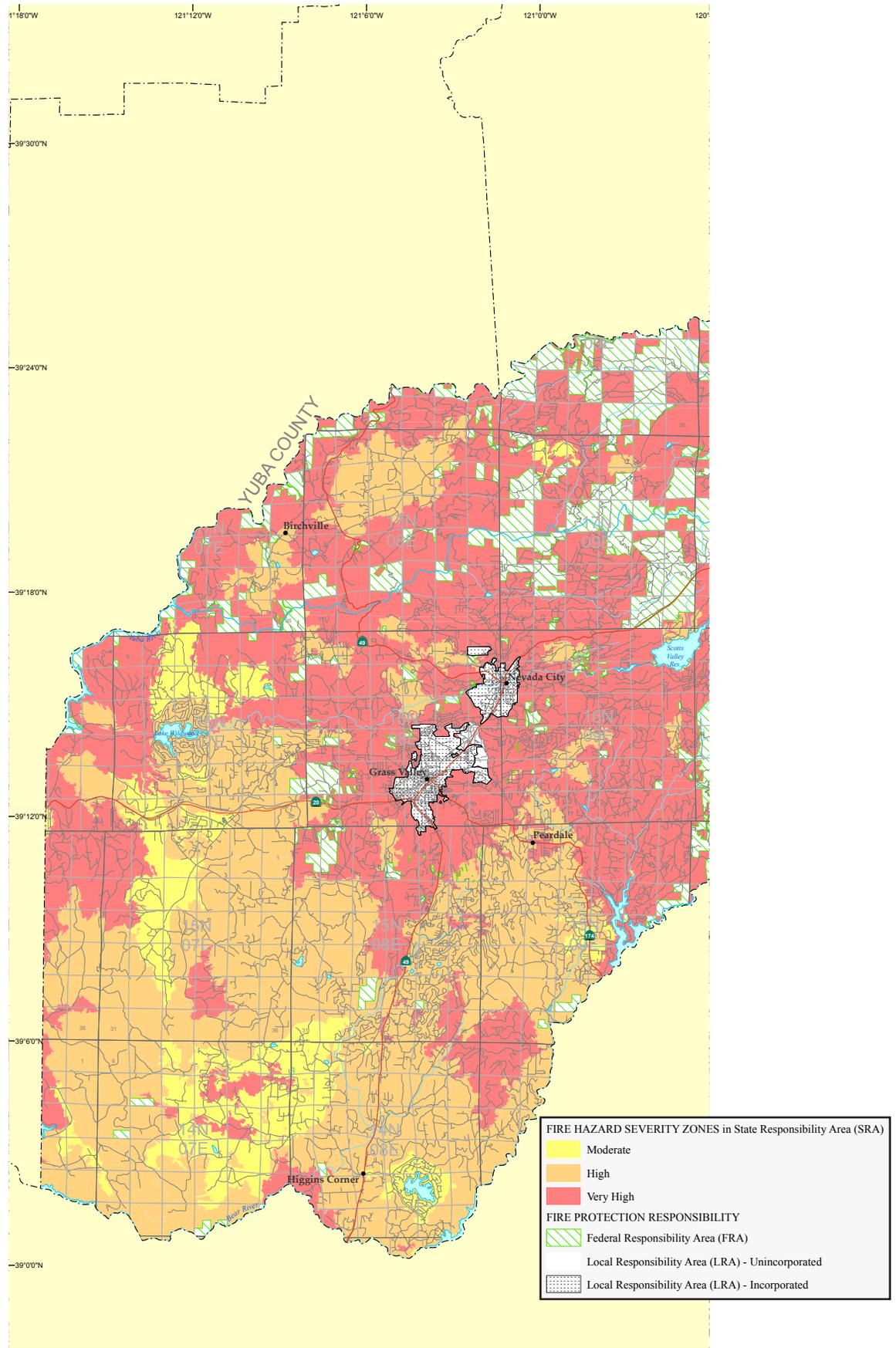


FIGURE 4.13-4a: Western Nevada County Fire Hazard Severity Zones in SRA – Western Portion
 Nevada County Cannabis EIR

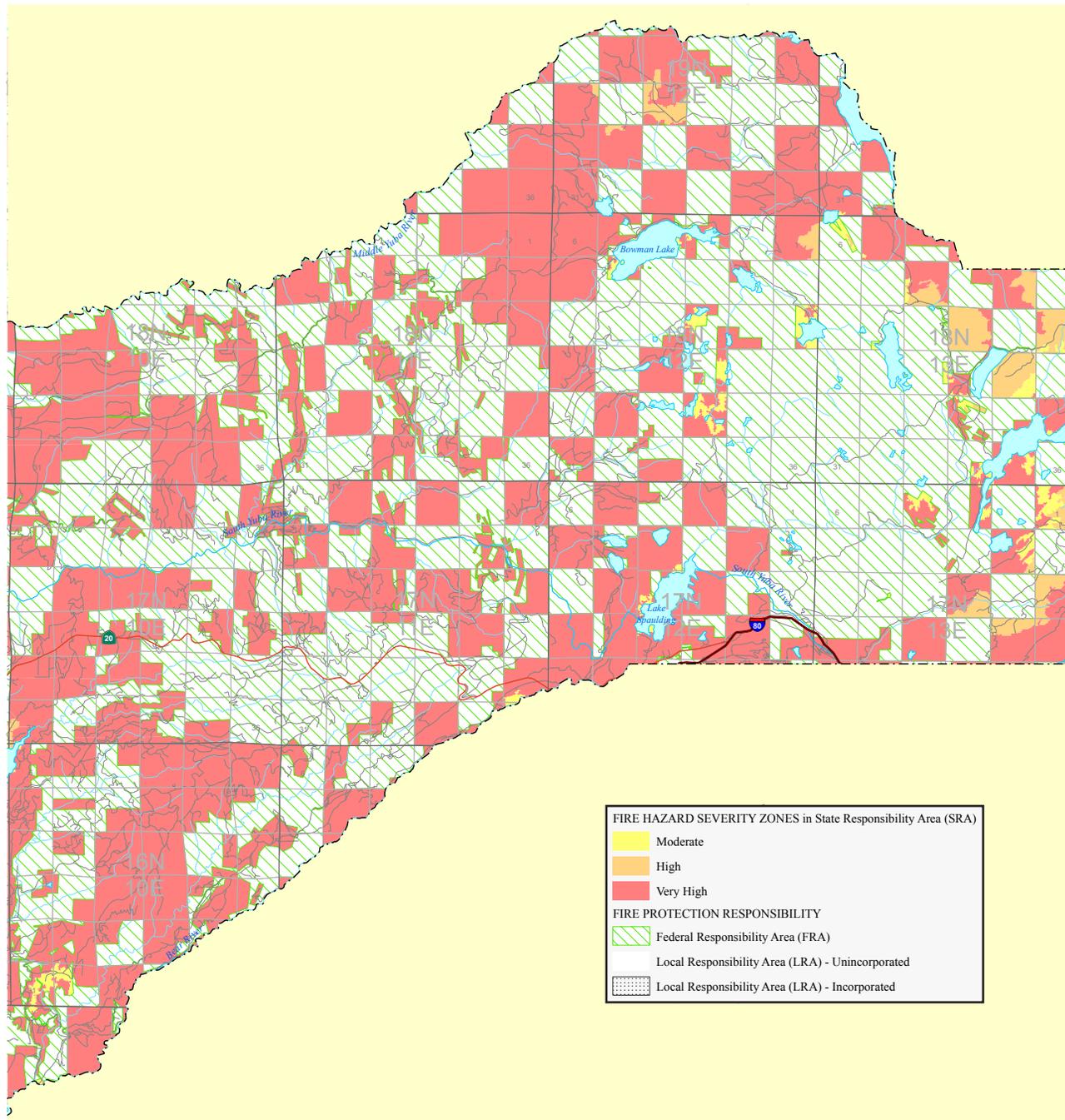


FIGURE 4.13-4b: Western Nevada County Fire Hazard Severity Zones in SRA – Central Portion
 Nevada County Cannabis EIR

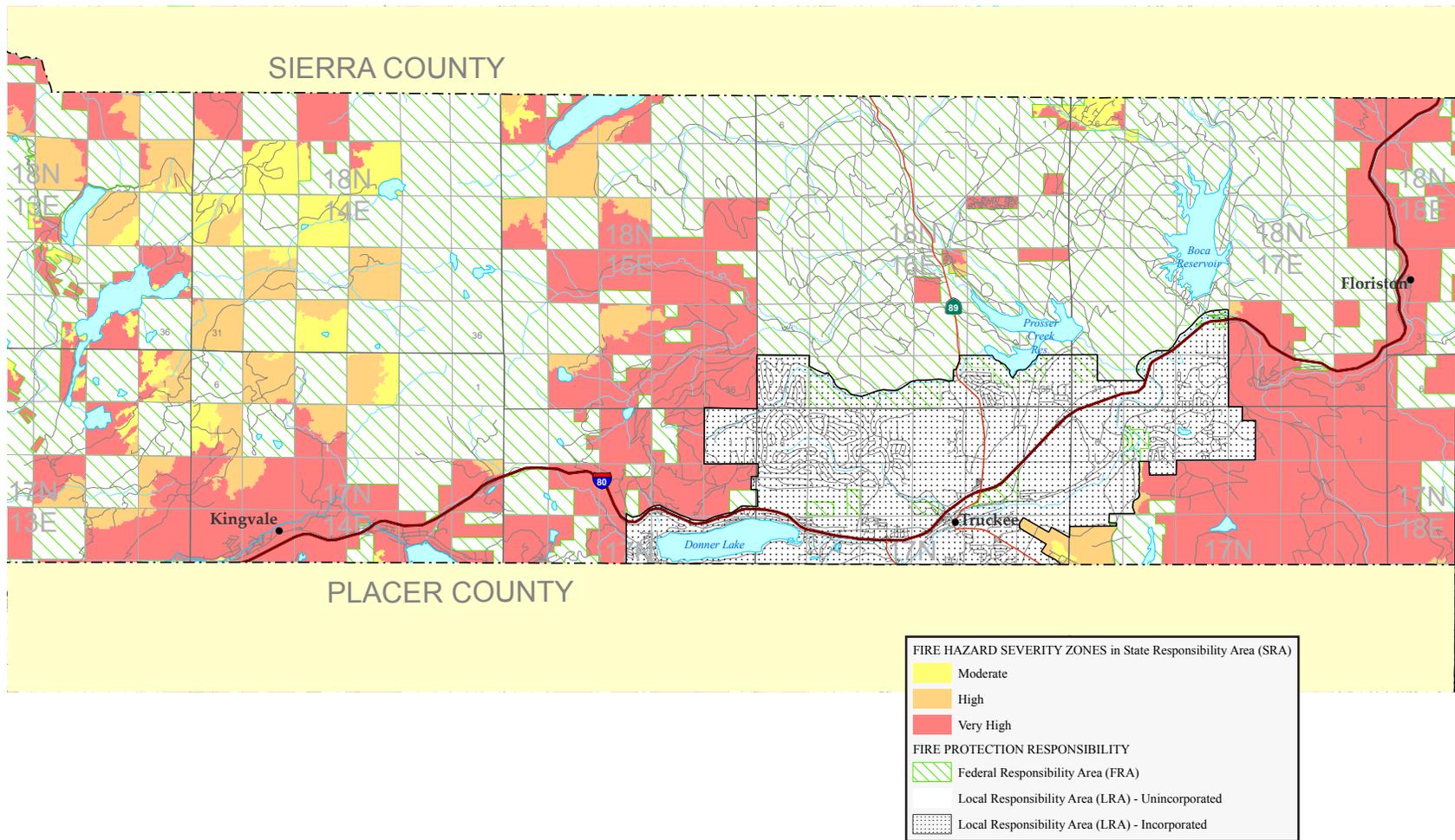


FIGURE 4.13-4c: Western Nevada County Fire Hazard Severity Zones in SRA – Eastern Portion
 Nevada County Cannabis EIR

LIBRARIES

The Nevada County Library System the Nevada County Community Library system consists of six library locations. Five of the branches are circulating branches, two of which are station libraries, and one is a historical reference library staffed by the Friends of the Nevada County Libraries' experienced volunteers. The Madelyn Helling Library is the main branch library housing administrative services. Additional detail on each branch are provided immediately below:

Bear River Library – The Bear River Library is located on the Bear River High School Campus.

Doris Foley Library for Historical Research – The Doris Foley Library for Historical Research is a non-circulating branch of the Nevada County Library system.

Grass Valley Library - Royce Branch – The Grass Valley Library - Royce Branch is a wonderfully historic Carnegie library listed in the National Register of Historic Places. Right in the heart of downtown Grass Valley, this library is full to the brim with items for every whim and need.

Madelyn Helling Library – The Madelyn Helling Library is the main branch of the Nevada County Library system, located near the Eric Rood Government Center in Nevada City.

Penn Valley Library – The Penn Valley Library is the newest branch of the Nevada County Library system and is located on Pleasant Valley Road across from the main entrance to Lake Wildwood.

Truckee Library – The Truckee Library services Eastern Nevada County through a unique facility and an extensive collection of materials.

HEALTH CARE

4.13.2 REGULATORY SETTING

FEDERAL

No federal laws, regulations, or programs were identified related to public services and the proposed ordinance. Several federal agencies have jurisdiction over law enforcement and fire protection on federal lands in California, related to unpermitted cultivation operations. The U.S. Forest Service (USFS) responds to fires in National Forests as well as to fires on other lands in support of other federal, state, and local agencies (USFS 2017). Because cannabis use and cultivation remains illegal under federal law, several federal agencies investigate and prosecute cannabis use, cultivation, and distribution on federally managed lands. Federal agencies involved in law enforcement in California include the USFS, whose Law Enforcement and Investigations (LEandI) division conducts law enforcement operations on federal lands, including eradication of unpermitted cannabis cultivation on National Forest lands. Both the Bureau of Land Management (BLM) and the National Park Service (NPS) law enforcement programs target cannabis cultivation on federally managed lands. In addition to law enforcement on federal lands, there are federal agencies that investigate and prosecute cannabis business activities generally. The Federal Bureau of Investigation (FBI), as the nation's foremost law enforcement agency, also works in California to investigate federal crimes and crimes that occur across state lines, including drug trafficking. The U.S. Drug Enforcement Administration (DEA) enforces federal controlled substances laws and regulations, including enforcement activities related to cannabis.

STATE

CALIFORNIA HEALTH AND SAFETY CODE

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code. This includes regulations for building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, and fire suppression training.

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

The Division of Occupational Safety and Health (DOSH), better known as Cal/OSHA, protects and improves the health and safety of working men and women in California. In accordance with California Code of Regulations (CCR), Title 8 Sections 1270 “Fire Prevention” and 6773 “Fire Protection and Fire Equipment,” the California Occupational Safety and Health Administration has established minimum standards for fire suppression and emergency medical services. The standards include guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance and use of all firefighting and emergency medical equipment. Additional Cal/OSHA requirements for cannabis business health and safety requirements are discussed in *Section 4.7: Hazards and Hazardous Materials*.

CALIFORNIA CODE OF REGULATIONS

The California Building Standards Code, Title 24 of the California Code of Regulations, serves as the basis for the design and construction of buildings in California. The California Building Code (Title 24, Part 2) covers all aspects of building design and required safety features for all 1 types of buildings, including fire protection systems, fire and smoke protection features, means of egress, and structural design and materials. Title 24, Part 3 is the Electrical Code, which contains standards for electrical systems, including safety features such as overcurrent protection, surge arresters, and proper wiring methods.

CALIFORNIA FIRE CODE

The California Fire Code is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The California Fire Code establishes minimum requirements to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. The California Fire Code also contains requirements related to emergency planning and preparedness, fire service features, building services and systems, fire resistance-rated construction, fire protection systems, and construction requirements for existing buildings, as well as specialized standards for specific types of facilities and materials. Structures used for indoor cultivation of cannabis and cannabis-supportive uses (e.g., manufacturing, distribution, processing, microbusinesses, and retail nurseries) would be subject to applicable sections of the California Fire Code.

LOCAL

The Nevada County General Plan has multiple sections that address Public Services and associated Utilities conditions. This includes Chapter 10: Safety which describes the interface of the natural and manmade environments and recognizes that potential safety hazards that may exist with utility services.

In part, the General Plan implements these measures through goals and policies meant to ensure the safety of the public, minimize risk to structures, and mitigate hazards. Goals and Policies that related to

geology and soils included below. The Safety element also includes numerous programs related to fire safety; however, those programs are outside the scope of this projects, and although some of those programs or aspects of them may be applied to future cultivation projects, they are not applicant to the proposed project and are not discussed herein.

- Policy GH-10.2.1.4 Require that underground utility lines, particularly water and natural gas mains, be designed to withstand seismic forces.
- Goal SF-10.6 Ensure adequate public safety services and facilities through development standards, development fees, and land use patterns.
- Policy SF-10.6.1 Maintain appropriate levels of safety and protection services and facilities on land and water for both Community and Rural Regions.
- Policy SF-10.6.2 County public safety facilities shall be included in the County's development impact fee program, as provided in Policy 3.8 to provide for new facilities or upgrading of existing facilities necessary to serve new development.
- Policy SF-10.6.3 The following shall be included in the adopted Comprehensive Site Development Standards as the basis for site plan review:
- a. Standards to enhance the ability of the County law enforcement personnel to protect multi-family, commercial, industrial, and business park uses, including but not limited to:
 - 1. exterior building and parking area lighting; and
 - 2. trimming and maintenance of on-site vegetation to provide adequate view of parking areas, building entrances, and other areas accessible to the public.
 - b. Standards to ensure adequate site and building access for fire and emergency medical access.
- Policy SF 10.6.5 Encourage appropriate levels of consolidated services to provide for efficiency and cost containment.
- Goal FP-10.7 Enhance fire safety and improve fire protection effectiveness through infrastructure and service improvements.
- Policy FP-10.7.4 Research the feasibility of a countywide rural fire protection water system that provides a cost-effective, adequate water supply.
- Policy FP-10.7.7 Cooperate with CAL FIRE, US Forest Service, local fire districts, and the Nevada County Fire Safe Council in fire prevention programs.
- Goal FP-10.8 Reduce fire risk to life and property through land use planning, ordinances, and compliance programs.
- Policy FP-10.8.1 As needed, review and revise existing wildland fire-related codes and ordinances to address the recognized hazards of development in the wildland urban interface.

- Policy FP-10.8.2 Recognize the ignition-resistant building standards in Land Use and Development Code Chapter V, Building.
- Policy FP-10.8.3 Comply with air quality regulations by encouraging alternatives to debris burning.
- Policy FP-10.8.4 Support removal of fuels and chipping and onsite distribution of chipped material as preferred alternatives to burning.
- Policy FP-10.8.5 Consider new wildfire safety codes and ordinances to meet the County’s fire safe needs.
- Policy FP-10.8.6 Review wildfire safety policies, codes, and ordinances, and report the findings to the Board of Supervisors at least every three years.
- Policy FP-10.8.7 Review and recommend improvement of the “same practical effect” process for meeting the intent of the fire safety regulations.
- Policy FP-10.8.8 Recognize the value of the “same practical effect” or “exception” process when the letter of the law may not be practically applied, but the intent of the law may be achieved through application of other measures. Develop a public information sheet to increase public awareness and understanding regarding the application of these processes.
- Policy FP-10.8.9 Land use patterns and development standards shall minimize fire hazard.
- Policy FP-10.8.10 The County shall coordinate and centralize firesafe reviews which will include coordination of development with respect to fire prevention and safety, and implementation of Nevada County fire safety programs, standards and procedures.
- Policy FP-10.8.11 The following shall be included in the Comprehensive Site Development Standards as the basis for site plan review:
- a. Standards for roads and private driveways which will enhance the ability of emergency service providers to respond to structural and wildland fires, and calls for medical and law enforcement emergency assistance. The standards shall provide for secondary road access to new projects where necessary for fire safety or emergency access;
 - b. Water supply standards which will provide necessary on-site water supply for fire protection;
 - c. Sign and address standards which will provide for easy identification of roads, streets, driveways and buildings by emergency service providers; and
 - d. Standards to reduce hazards associated with the structural and wildland intermix including:
 1. Fuel modification; and vegetation management procedures adjacent to structures;
 2. Vegetation management adjacent to roads and driveways to provide safe travel of residents and firefighting personnel; and

3. Building setbacks.

- Policy FP-10.8.12 In those areas outside Community Regions, which are identified as having a high fire hazard, and/or lack adequate year-round fire protection facilities, maintain low-density land use designations (Rural or Forest) in order to minimize the potential fire hazard.
- Goal FP-10.9 Encourage fire safety education and support programs to promote participation, voluntary compliance, and community awareness of fire safety issues.
- Policy FP-10.9.1 Inform the public how to undertake fuels management activities in accordance with environmental regulations and guidelines.
- Policy FP-10.9.2 Make available educational materials regarding environmental regulations, guidelines, and protection measures that property owners should be aware of and are responsible for when planning and undertaking fuels management activities. These educational materials shall be available to members of the public at the County.
- Policy FP-10.9.3 Increase public education and outreach on wildfire safety issues by utilizing the Fire Safe Council and collaborating with community and business associations.
- Policy FP-10.9.4 Provide a better understanding to the public and to the architectural and building industry about the benefits and material/design options available with ignition-resistant building materials.
- Policy FP-10.9.5 Support the development of a fuels management consulting and technical service contact list for private property owners by the appropriate fire agency.
- Policy FP-10.9.63 Encourage the development and organization of a property owner assistance program for fuels treatment.
- Policy FP-10.9.7 Encourage and support the effort for local neighborhoods and communities to become certified under the Firewise Communities USA® certification program through the Fire Safe Council.
- Policy FP-10.9.8 Create a cooperative business environment that encourages business, professional services, and governmental agencies to provide landowners with prudent, safe, economical, and environmentally sensitive services.
- Policy FP-10.9.9 Create incentives to encourage voluntary compliance with fire safe regulations.
- Policy FP-10.9.10 The County shall work with the California Department of Insurance to obtain recognition that Nevada County has developed fire safety programs that promote compliance with fire safety regulations.
- Policy FP-10.9.11 Assist the Fire Safe Council with identifying fuel reduction priorities for grant-funded projects.
- Policy FP-10.9.12 Support the Fire Safe Council's public education efforts in order to ensure projects are consistent with County policies, resource standards, and ordinances.
- Policy FP-10.9.13 Improve public awareness regarding Nevada County's ecosystem and fire history.

- Policy FP-10.9.14 Encourage landowners to obtain fire safety educational information from the appropriate fire and resource agencies.
- Policy FP-10.9.15 Support collaboration among CAL FIRE, the US Forest Service, the Bureau of Land Management, the Nevada County Superintendent of Schools, and other interested groups to develop a school curriculum based upon the role of cyclical historic fire in Sierra Nevada forests.
- Policy FP-10.9.16 Explore the feasibility of a forest school within the Tahoe National Forest to provide students a laboratory in which to study and understand the dynamics of the Sierra Nevada forests.
- Goal FP-10.10 Involve all stakeholders in collaborating on countywide fire safety goals and plans to consistently and efficiently implement fire safety-related best management practices.
- Policy FP-10.10.1 Create a collaborative process for integration of countywide common goals into each fire agency's fire prevention program.
- Policy FP-10.10.2 Facilitate a collaborative process with public and private land managers for integrated wildland-urban interface fuels management.
- Goal FP-10.11 Reduce fire severity and intensity through fuels management.
- Policy FP-10.11.1 Recognize Public Resources Codes 4290 and 4291, and other defensible space standards and guidelines in order to protect structures from wildfire, protect wildlands from structure fires, and provide safe access routes for people and firefighters.
- Policy FP-10.11.2 Recognize the Nevada County Defensible Space Standard as described in this policy. The Defensible Space Standard provides the basic protection measures for life and property from encroaching wildfire and minimizes structure fires or other fires which may threaten to spread into the wildlands. The standard utilizes Public Resources Code 4291 and includes one component of Public Resources Code 4290, fuels treatment next to driveways, as the minimum fire safety standard in Nevada County.
- The following definitions apply to the Nevada County Defensible Space Standard:
- a. Flammable vegetation: Any live or dead vegetation that is combustible during normal summer weather. Vegetation which is pruned, limbed, cultivated, or considered ornamental shrubbery or plants, provided they are maintained and/or irrigated and they do not form a means of rapidly transmitting a fire from the surrounding wildlands, is not considered flammable vegetation and is permissible to be retained;
 - b. Firebreak: An area where flammable vegetation and other combustible growth are removed and cleared to create a condition that avoids the spreads of fire to other vegetation or to a building or structure;

- c. Fuelbreak: An area that has been changed from dense, heavy vegetation to lower fuel volumes with tree pruning, intermediate shrub, brush, and dead fuel removed, and grasses and forbs replacing the shrub species;
- d. Structure Ignition Zone: A firebreak area free of flammable vegetation and other combustible growth around any structure.
- e. Reduced Fuel Zone: A fuelbreak area of separated vegetation, both vertically and horizontally, which extends beyond the Structure Ignition Zone;
- f. Extended Reduced Fuel Zone: An extension of the Reduced Fuel Zone on downslope areas that varies depending on slopes and vegetation characteristics, as shown in the table below; and
- g. Safe Access Route: A fuelbreak of spatially separated vegetation, both vertically and horizontally, adjacent to driveways that connect homes with roadways.

Table 10.2: Defensible Space Extended Reduced Fuel Zones

Vegetation Type	Down Slope: 0 - 20%	Down Slope: 21 - 30%	Down Slope: >31%
Grass-Oak Woodlands	100 feet	100 feet	100 feet
Montane Brush	100 feet	150 feet	200 feet
Mixed Conifer Forest	100 feet	150 feet	200 feet
Eastside Pine w/Sage	100 feet	125 feet	150 feet

The following criteria, in items *a* through *c* below, comprise the Nevada County Defensible Space Standard, which should apply to property within the unincorporated portions of Nevada County:

- a. Vegetation may only be maintained and treated on one’s own property. Fuel modification is limited to the property line;
- b. Defensible space should be maintained; and
- c. The recommended guidelines in Policies FP-10.11.3 and 10.11.5 should be observed when undertaking fuels treatment in the Extended Reduced Fuel Zone.

Policy FP-10.11.3

Recognize the following fuels treatment guidelines, which serve as recommendations for appropriate spatial arrangement, width, depth, and pruning/limbing height of vegetation in the Extended Reduced Fuel Zone during declared fire season. The guidelines also distinguish appropriate fuels treatment for the various vegetation types in the County: grass-oak woodlands, montane brush, mixed conifer forest and eastside pine with sage. These guidelines supplement the Extended Reduced Fuel Zone standards in Policy FP-10.11.2.

- a. Guidelines for grass-oak woodlands: Grass and oak trees dominate the western lower foothills of Nevada County. This vegetation type primarily consists of blue oaks, valley oaks and interior live oaks with brush and occasional conifer species. Fuel loadings are typically low to moderate with

low fire resistance, and fire burns very fast. Fire Hazard Severity Rating ranges from moderate to high depending on slope and aspect.

Montane brush lands are generally localized areas in the western lower foothills of Nevada County. This vegetation type primarily consists of brush species such as manzanita, deer brush, and scrub oak, with occasional oaks and pines in the overstory. Fuel loadings are typically moderate to high with moderate fire resistance time, and fire burns very fast. Fire Hazard Severity Ratings range from high to very high depending on slope and aspect.

Fuels treatment guidelines for grass-oak woodlands and montane brush lands are as follows:

- (1) Grass vegetation: A height of 3 inches or irrigated greenbelt should be maintained.
- (2) Brush plants: Dead or dying brush species should be removed at least 30 feet from the structure and gradually extending out to 100 feet. Individual plants or groups of plants can be retained, based on species, size, and slope conditions, with the following conditions:
 - a. Plants should be healthy and free of dead branches and leaves;
 - b. Plants should be 10 feet or less in canopy width;
 - c. Brush plant canopies should be horizontally separated at 3 times their height;
 - d. The lower branches of plants should be vertically separated from understory vegetation; and
 - e. For grass-oak woodlands, a break in the ladder fuels should be created between grass, brush, and tree species, retaining spatially separated healthy plants.
- (3) Oak and conifer tree species: Dead or dying oaks or conifers should be removed, along with suppressed conifer species. Individual trees or groups of trees can be retained, based on species, size, and slope conditions, with the following conditions:
 - a. Heritage oak trees and landmark oak groves should be retained;
 - b. Trees should be healthy and generally free of dead branches and leaves;
 - c. Trees should be horizontally separated a distance of 10 to 30 feet between trunk of trees; and
 - d. The lower canopy of trees should be vertically separated from the understory, with limbing or pruning to a height of 8 feet in order to prevent canopy fires.
- (4) Dead and down woody vegetation: Dead and down woody vegetation that is 8 or fewer inches in diameter and 2 or more feet in length should be removed. Dead material can be incorporated into the soil.

- a. Guidelines for mixed conifer forest and eastside pine with sage: Conifer forest dominates the mid-elevation on the west side and east side of the Sierra Nevada Range with pines, cedars, firs and deciduous oak trees in the canopy, and brush species in the understory. Fuel loadings are typically moderate to very high and have very high fire resistance time, and fire burns moderately fast. Fire Hazard Severity Ratings range from high to very high on most aspects and slopes. Eastside pine dominates the mid-elevations on the east side of the Sierra Nevada Range with pines and sagebrush species in the understory. Fuel loadings are moderate and have moderately to high fire resistance time, and fire burns moderately to very fast. Fire Hazard Severity Ratings range from high to very high on most aspects and slopes.

Fuels treatment guidelines for mixed conifer forest and eastside pine with sage are as follows:

- (1) Pine needles and leaves: Pine needles and leaves should be raked to a height of 3 inches or less.
- (2) Brush plants: Flammable brush plants should be removed. Individual plants or groups of plants are acceptable, based on species, size, and slope conditions, with the following conditions:
 - a. Plants should be healthy and free of dead branches and leaves;
 - b. Plants should be 5 feet or less in canopy width;
 - c. Brush plant canopies should be horizontally separated at 3 times their height; and
 - d. The lower branches of plants should be vertically separated from understory vegetation.
- (3) Oak and conifer tree species: Remove dead or dying trees. Remove suppressed conifer species. Individual trees or groups of trees can be retained, based on species, size, and slope conditions, with the following conditions:
 - a. Trees should be healthy and free of dead branches and leaves;
 - b. Trees should be horizontally separated a distance of 10 to 30 feet between trunk of trees; and
 - c. The lower canopy should be vertically separated from the understory, with limbing and pruning to 8 feet in height in order to prevent canopy fires.
- (4) Dead and down woody vegetation: Dead and down woody vegetation that is 8 or fewer inches in diameter and 2 or more feet in length should be removed. Dead material can be incorporated into the soil.

Policy FP-10.11.4

Recognize a stewardship program focusing on the management of flammable, hazardous vegetation in and around community areas to effectively reduce

wildfire intensity and severity, while considering other valuable resources and public interest.

Policy FP-10.11.5

Support the Nevada County Wildland Stewardship Program, which provides flexible guidelines for managing hazardous vegetation and promotes property owners' understanding of the wildland environment and responsible land stewardship concepts, including voluntary property management and collaboration with neighbors. The Wildland Stewardship Program focuses on the area adjacent to the defensible space area to enhance protection for structures and protect surrounding natural resources. The Wildland Stewardship Program is described in educational materials which shall be available at the County. The Wildland Stewardship Program includes the following:

- a. The educational material, which provides background and supporting information describing the wildfire and regulatory setting, as well as other important information for property owners in understanding and maintaining defensible space.
- b. A property owner's guide to help property owners develop goals, identify types of fire fuels, select treatment processes, estimate cost and time frames, and understand environmental constraints and regulations.
- c. Good neighbor practices to help achieve adequate defensible space in situations where structures cannot achieve it due to parcel size or other constraints.
- d. Fuels management environmental protection measures to inform property owners of various regulations, provide contacts at resource and regulatory agencies, and explain how best to comply with the regulations.
- e. Technical and funding assistance information to facilitate fuels management activities.
- f. Networking and coordination information to facilitate the coordination of fuels treatment programs.

The County may issue a Statement of Cooperation for property owners who demonstrate effective stewardship practices, in order to provide an incentive for property owners to engage in fuels treatment activities. The County may also monitor the effectiveness of the Wildland Stewardship Program and provide reports to the Board of Supervisors to assess the effectiveness of the program.

Policy FP-10.11.6

The County shall collaborate with the Fire Safe Council in updating and maintaining the countywide Community Wildfire Protection Plan according to Healthy Forest Restoration Act guidelines.

NEVADA COUNTY LAND USE DEVELOPMENT CODE

Sec. L-XVI 2.1 sets for the purpose and Intent of the Chapter related to fire protection, including road standards as the necessary minimum wildfire protection standards that will minimize public safety effects with the establishment of land uses and buildings within SRA lands within Nevada County. The regulations

are intended to mitigate effects of wildland fire exposure to such land uses within the SRAs and they are further adopted to equal, exceed, or provide the same practical effect contained in the California State Board of Forestry's Fire Safe Regulations adopted on November 7, 1990. Activities could occur under the proposed project to which these regulations would apply include but are not limited to:

- Subdivisions;
- Application for a use permit and all ministerial and discretionary site plans; and
- Road construction, including construction of a road that does not currently exist, or extension of an existing road, not including roads for agricultural or mining use solely on one ownership, and roads used solely for the management and harvesting of wood products

4.13.3 STANDARDS OF SIGNIFICANCE

ENVIRONMENTAL ANALYSIS

This section describes the methodology used in conducting the impact analysis for public services, the thresholds of significance used, and the assessment of the level of impact to public services. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts, where applicable, accompany each impact discussion.

Thresholds of Significance

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant aesthetic impact if it would:

- Result in substantial physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
 - Fire Protection?
 - Sheriff Protection?
 - Schools?; or
 - Other Public Facilities?

4.13.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACT 4.13-1: RESULT IN SUBSTANTIAL PHYSICAL IMPACTS ASSOCIATED WITH THE PROVISION OF NEW OR PHYSICALLY ALTERED GOVERNMENTAL FACILITIES, NEED FOR NEW OR PHYSICALLY ALTERED GOVERNMENTAL FACILITIES, THE CONSTRUCTION OF WHICH COULD CAUSE SIGNIFICANT ENVIRONMENTAL IMPACTS, IN ORDER TO MAINTAIN ACCEPTABLE SERVICE RATIOS, RESPONSE TIMES OR OTHER PERFORMANCE OBJECTIVES FOR ANY OF THE PUBLIC SERVICES.

IMPACT ANALYSIS

FIRE PROTECTION

Fire department response to cannabis cultivation operations would depend on the location of the cultivation activities and the fire service area in which they are located. The existing cultivation operations are largely unpermitted and illegal and would be considered a nuisance upon adoption of the proposed NCCO. Although some of the cultivation is thought to be occurring in facilities and ancillary structures that were properly permitted, it is likely that some cultivation operations are occurring in unpermitted structures. As a result, it is possible that some of these facilities could be a fire hazard because they are not in compliance with state and local regulations related to building, electrical, and fire regulations. If such activities continue in facilities without adequate capacity or is conducted via inadequate wiring, an electrical fire could result and result in an increased demand for fire protective services and negatively affect the environment and the health and safety of other structures and people in the vicinity. These conditions as they exist now, are considered to have an adverse effect on public services.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, either indoors or outdoors, could only occur on a property with a legally permitted residence and be in conformance with all applicable building requirements. Therefore, verification of proper permitting would ensure the structures on these cultivation sites would be properly constructed and have obtained proper electrical permits so that the risk of fire resulting from improper construction and subsequent loss, injury, or death from fire are minimized.

Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cannabis cultivation with canopy less than 2,500 sf and an ADP for commercial cannabis cultivation with between 2,500 sf and 10,000 sf of canopy. An ACP also would be required and would be required to be renewed on an annual basis. All proposed cannabis cultivation projects, whether under a CCP or an ADP would be required to conform with all applicable regulations and would be required to go through the planning review process.

As part of the application process a CCP would be initially reviewed by the Building Department and an ADP would be initially reviewed by the Planning Department. All the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with State, and local codes related to building, fire, and electrical. More specifically, during each plan review process the County would verify that all existing structures comply with all applicable building codes, and that plans for all new structures conform to the design requirements of the California Building Code electric and fire protection design standards contained in the Nevada County Code. This would be done as part of the standard plan check process. This would reduce or eliminate and in some instances may improve conditions by catching improperly permitting units or improvements and by reducing the number of unpermitted construction and electrical projects. Therefore, the associated impacts and conflicts with fire protection and codes to reduce fire risk in this regard, would be less than significant, and mitigation would not be required.

SHERIFF PROTECTION

Law enforcement response and enforcement of cannabis cultivation facilities would occur through the Nevada County Sheriff's office. The NCCO would not result in the permitting of any cannabis facilities within the Cities of Grass Valley, Nevada City, or Truckee and demand for law enforcement in these jurisdictions as a result of this project are not expected to rise. In addition, the proposed project would only result in the permitting of commercial cannabis cultivation in unincorporated County lands and would not address any currently illegal cultivation that may be occurring within the Tahoe National Forest. Illegal cultivation activities in this area would be addressed by the National Forest Service LEO division as it is occurring within Federal lands and is separate from the proposed project.

Similar to fire protection services, the current illegal cultivation activities have resulted in complaints to law enforcement and resulted in the demand for investigations related to the illegal activities. According to the NCSO the vast majority of cannabis grows are out of compliance. On average, the NCSO receives approximately 200-300 calls for service, some of which go unanswered due to the vague nature of the complaints and some because of the volume of calls, and inability to access the sites. The majority of the cultivation activities occur in areas remote areas with sparse populations making it difficult to reach some areas. Most of the calls for service focus on violations related to the cultivation of excessive plants, violations related to electricity and water use, as well as living conditions. The NCSO also has noted illegal grading and tree removal resulting in environmental damage. The Sheriff's department estimates that they are able to address less than 10 percent of the problem.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, either indoors or outdoors, could only occur on a property with a legally permitted residence and be in conformance with all applicable building requirements. Therefore, verification of proper permitting would ensure the cultivation sites conform to all requirements enforceable by the Sheriff's Department.

Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cannabis cultivation with canopy less than 2,500 sf and an ADP for commercial cannabis cultivation with between 2,500 sf and 10,000 sf of canopy. An ACP also would be required and would be required to be renewed on an annual basis. All proposed cannabis cultivation projects, whether under a CCP or an ADP would be required to conform with all applicable regulations and would be required to go through the planning review process.

While the enforcement services for compliance with legal requirements is not expected to increase substantially, adoption of the proposed NCCO would have the potential to incrementally increase demand for other aspects of law enforcements services. Cannabis is a high-value crop, and there is a potential for crimes such as trespass, theft, burglary, robbery, as well as financial crimes to increase due to the cultivation. The proposed project however, requires all commercial cultivation sites to adopt and implement a formal Security Plan, which could include locked gates and facilities, security cameras, and alarm systems, etc. Also, all commercial cultivation canopy areas are required to be screening by either vegetation or fencing from public view. This would reduce the visibility of cultivation sites making them less recognizable. Additionally, it is expected to would take applicants a varying amount of time to complete any necessary site-specific studies and compile all the required application materials. This

would result in an incremental increase of the implementation of cultivation projects being phased in over time. It is expected that many of the applicants for permits would come from the existing estimated 3,500 cultivation sites, which are currently served by law enforcement. Lastly, due to certain environmental constraints, irregularly shaped parcels, required setbacks from sensitive sites, etc., not every parcel zoned for cultivation would be permitted to cultivate.

Therefore, based on the listed circumstances an initial punctuated increase of commercial cultivation sites over the existing baseline conditions is not expected, and would not significantly increase demand on police protection services. In addition, funding for NCSO through a growing population and tax base from a growing cultivation industry, some of which would be used for NCSO. This would help NCSO to maintain adequate staffing. NCSO also would be able to operate from their existing facilities such that the construction of new facilities would not be required as a result of the proposed project. Therefore, direct impacts to police protection would be less than significant.

SCHOOLS

As discussed above, there are a total of 14 school districts within the County and total of approximately 45 schools or similarly purposed learning centers that serve the Countywide student population. The NCCO requires that the edge of all cultivation areas not be located closer than 1,000 feet from the nearest school, bus stop, youth-oriented facility, or child oriented sensitive site. The County has resources that show the locations of all schools and facilities, including bus stops, from which this determination could be made. In addition, processing of all applications for commercial cultivation of cannabis or cultivation for remuneration would be required to go through the permitting process and obtain an ADP. This process would require the applicant to verify that the cultivation activities are sufficiently distanced from all of the aforementioned locations. Therefore, impacts would be less than significant, and mitigation would not be required.

Cannabis related development that could occur because of the proposed project has the potential to indirectly result in population growth from increase employment demand and from people moving to the County so they can cultivate commercial cannabis. If these people have school aged children, this could result in a potential associated increase demand on school facilities. As discussed above; however, it is anticipated that commercial cultivation would be phased in due to the time needed for applicants to compile all required information and studies for a complete application. In addition, it is anticipated that numerous elgibly zoned parcels would be screened out due to environmental constraints, irregularly shaped parcels, and violations of setback requirements. Additionally, it is expected that many applicants would come from the pool of approximately 3,500 existing residents who are already actively cultivating and are therefore, considered part of the baseline for the purposes of this environmental analysis. Existing County codes and policies for future planned expansion of schools and payment of associated development fees and taxes is expected to off-set any incremental increase in school demand. Impacts therefore, are considered less than significant.

OTHER PUBLIC FACILITIES

As discussed, the proposed project Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Personal use cultivation would be limited to a total of six plants, and individuals engaging in cultivation for personal use would be required to register with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, either indoors or outdoors, could only occur

on a property with a legally permitted residence and be in conformance with all applicable building requirements. Therefore, verification of proper permitting would ensure the cultivation sites conform to all requirements enforceable by the Sheriff's Department.

Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cannabis cultivation with canopy less than 2,500 sf and an ADP for commercial cannabis cultivation with between 2,500 sf and 10,000 sf of canopy. An ACP also would be required and would be required to be renewed on an annual basis. All proposed cannabis cultivation projects, whether under a CCP or an ADP would be required to conform with all applicable regulations and would be required to go through the planning review process.

Cannabis related development that could occur because of the proposed project has the potential to indirectly result in population growth from increase employment demand and from people moving to the County so they can cultivate commercial cannabis. This could result in a potential associated increase demand on other public facilities. As discussed above; however, it is anticipated that commercial cultivation would be phased in due to the time needed for applicants to compile all required information and studies for a complete application. In addition, it is anticipated that numerous eligibly zoned parcels would be screened out due to environmental constraints, irregularly shaped parcels, and violations of setback requirements. Additionally, it is expected that many applicants would come from the pool of approximately 3,500 existing residents who are already actively cultivating and are therefore, considered part of the baseline for the purposes of this environmental analysis. Existing County codes and policies for future planned expansion of public facilities and payment of associated development fees and taxes is expected to off-set any incremental increase demand for these services. Impacts therefore, are considered less than significant.

MITIGATION MEASURE

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

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4.14 RECREATION

This section is intended to determine the extent to which a project contributes to the physical deterioration of publicly provided recreation and park facilities. This section also identifies any increased demand for various recreational and park facilities and identifies the potential need for new recreational and park facilities generated by the proposed project. This section describes the recreational resources within the project area, and the applicable regulations that govern those resources. Mitigation measures for potential impacts are identified where applicable.

The following analysis of the potential environmental impacts related to recreation is derived from the following sources and agencies:

- Nevada County. Nevada County General Plan. 1996.
- Nevada County. Western Nevada County Non-Motorized Recreational Trails Master Plan. 2010.
- Nevada County. Nevada County Bicycle Master Plan. 2013.

The section also discusses the proposed project in the context of regional and local recreational and park facilities and addresses the potential impacts to recreational resources that may occur as a result of the proposed project implementation.

4.14.1 ENVIRONMENTAL SETTING

RECREATION AND PARKS DISTRICTS

There are four separate Recreation and Parks Districts area within Nevada County (County). These include Bear River, Oak Tree, and Western Gateway Recreation and Park Districts in western Nevada County and Truckee Donner Recreation and Park District in eastern Nevada County. *Figure 4.14-1: Nevada County Recreational Districts* shows these areas.

RECREATION AND PARK FACILITIES

Recreational opportunities within Nevada County are varied, ranging from public parks with intensively used active recreational facilities, to vast tracts of forest lands, which provides a natural environment for passive recreation and visual enjoyment.

There are three recreation and park districts in Nevada County: Western Gateway Regional and Bear River in western County and Truckee Donner in eastern County. Western Gateway operates the Western Gateway Park, a large park offering a variety of recreational facilities. Truckee Donner operates a number of park and recreational facilities, primarily within the Town of Truckee. Bear River is a new District and currently operates the Magnolia Sports Complex in conjunction with the Pleasant Ridge School District.

Nevada County owns no recreation facilities and the County does not operate any recreation facilities. The County had prior ownership of the Western Gateway Park site in Penn Valley but this property was sold to Western Gateway Park District. The County; however, does collect AB1600 permit fees on new subdivision lots and distributes those fees to the cities, to existing park and recreation districts, to specific community recreational facilities, or to school districts for enhanced recreational opportunities. The most recent adoption of a fee schedule was on December 9, 1997, when the County adopted the Park and Recreation Capital Improvement Impact Fee Study and Imposition of Recreation Development Fees to

establish different impact fees for each of the five separate Recreation Benefit Zones: Bear River, Grass Valley/Nevada City, Twin Ridges, Western Gateway and Truckee Donner. These fees are codified in the County's Land Use and Development Code (LUDC Sec. L-IX 1.2.A). Since the 1997 study, Park and Recreation Fees have been treated as combined AB1600 and Quimby Act Fees.

These areas affected by the study are primarily located in and around the cities of Grass Valley and Nevada City and the town of Truckee but fees collected by the County also are passed to districts such as the Bear River and Western Gateway for their expenditures consistent with their respective approved Capital Improvement Programs (CIPs). For properties within the Truckee Donner Zone, fees are paid directly to the Truckee Donner Park and Recreation District.

The County is currently analyzing the appropriate fees and is updating the Nexus Study to identify the fee's that should be charged. Once the Board provides direction on the amount of the fee and the timing of implementation the appropriate Ordinances and Resolutions will be agendized for Board adoption and approval in order to adopt the Nexus Study and implement any new impact fees. Once the new Ordinances and Resolutions are adopted, the applicant fee would be applied to cannabis cultivation permits at the time they are applied for.

In addition to the support for the listed park resources, Nevada County supports a variety of private and commercial recreational facilities. These include ski areas and resorts, golf courses, and campgrounds. Among the most extensive private facilities are those provided by the Tahoe Donner Association in the Truckee area, with a golf course, swimming, tennis, and downhill and cross-country skiing.

There are several public land ownerships that cover a significant amount of the County's total land area. In addition to the County of Nevada, the State of California, and the United States Forest Service, the Bureau of Land Management (BLM) also has ownership within Nevada County. BLM is responsible for administering public lands and resources following the principles of multiple use and sustained yield set down by Congress in the landmark 1976 Federal Land Policy and Management Act. The Bureau of Land Management manages approximately 11,000 acres of land in Nevada County. These areas cover a total of 294 square miles (or 30%) of the County's 978 square miles.

State lands include Empire Mine State Park near Grass Valley, Malakoff Diggins State Historical Park north of Nevada City, Donner State Park within the Town of Truckee, and the South Yuba Project along the South Fork of the Yuba River. Also, about one-half of the 11,000-acre Spenceville Wildlife Management and Recreation Area is located in the County, west of Penn Valley. National forest lands are located along the county's northern border, throughout the San Juan Ridge and Chalk Bluff Ridge and due east towards the California-Nevada state line. The major areas administered by BLM are located within the South Yuba River Recreation Lands; north from Rollins Reservoir to Poore Mine and east to Deadman's Flat; west from the South Yuba River Recreation Lands to Bridgeport; and south from Rough and Ready to Ranch Hill. Smaller areas of BLM lands are located along the western and southern borders; south of Grass Valley; and pocket areas around Nevada City and in Willow Valley.

The Tahoe National Forest covers approximately 169,000 acres or 264 square miles of land in Nevada County. The Toiyabe National Forest covers 2,600 acres in eastern County. The Spenceville Wildlife and Recreation Area contains 11,000 acres or 17 square miles, with half the tract in Nevada County and the other half in Yuba County.

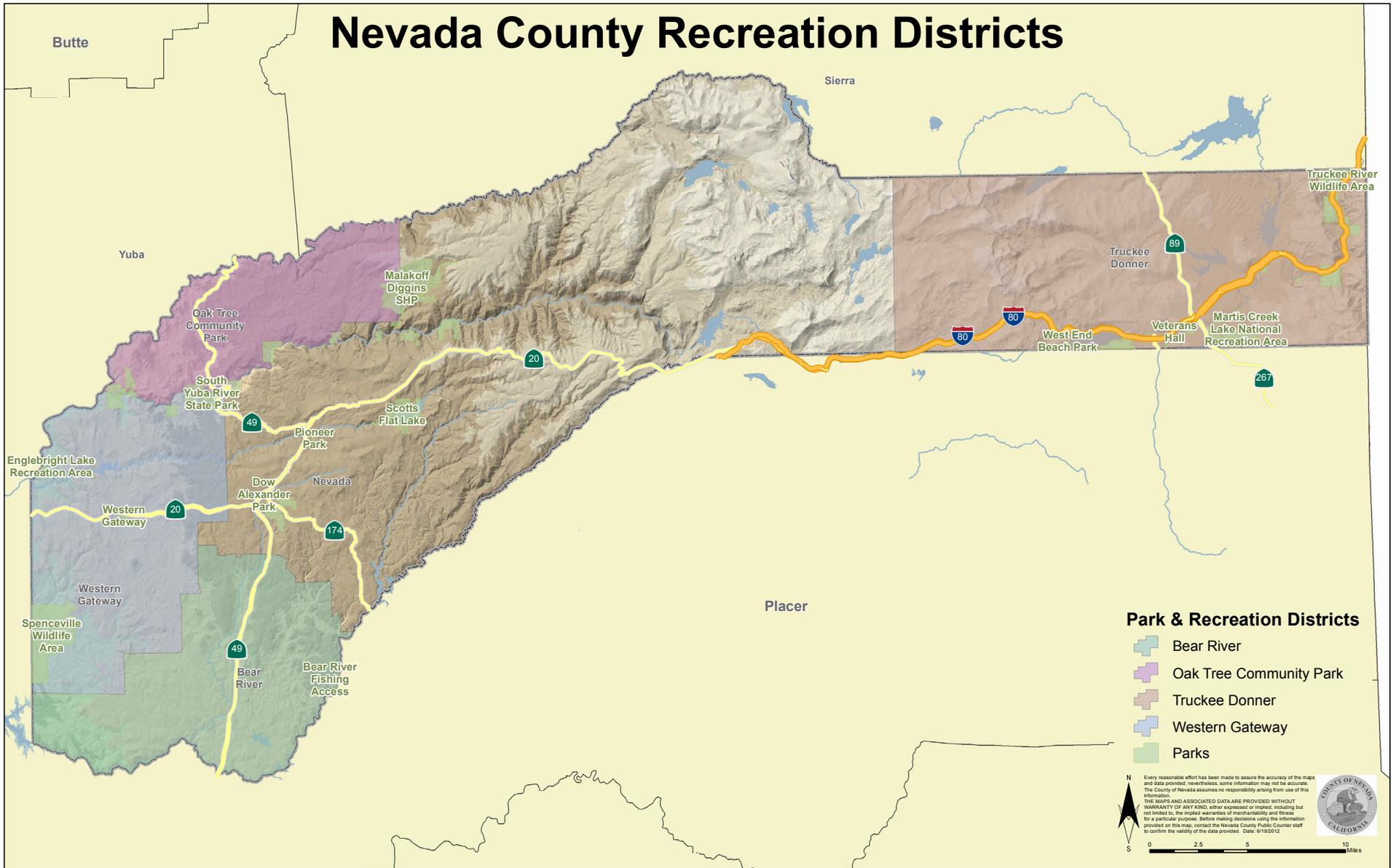


FIGURE 4.14-1: Nevada County Recreational Districts
Nevada County Cannabis EIR

Camping and other passive recreational opportunities are provided by the U.S. Forest Service, Bureau of Land Management, Army Corps of Engineers, State Parks and Recreation, the Nevada Irrigation District and the two parks and recreation districts, on public lands, and by the Pacific Gas and Electric Company in conjunction with hydroelectric power facilities. In addition, the County has around 2,500 campsites in private campgrounds and water-oriented facilities provided by parks and recreation districts and concessionaires on public lands.

RECREATIONAL TRAILS

Recreational trails are off-road, minimally improved facilities primarily intended for recreational purposes. Recreational trails are commonly located in parks, open space parcels, and easements on private land. They can be designed for single, shared, or multiple users including pedestrians, equestrians, off-road bicyclists, and may be suitable for use by people with disabilities or mobility limitations. Nevada County has a relatively large network of informal dirt trails that have been historically used for transportation and recreation. As large parcels of land have been subdivided and developed, many of these informal trails have been eliminated or closed off, effectively limiting non-motorized connectivity opportunities. As a result, residents must travel further from their homes to enjoy trails and alternative transportation opportunities become limited. When informal trails are closed it also places a higher demand on the remaining non-motorized facilities. These trails and brief description are provided below:

- Scott's Flat Trail – is a 50-mile trail that crosses both Forest Service and private property. It serves Upper Burlington Ridge, Deer Creek Forebay, Indian Springs and Towle Mill.
- Nugget Trail – is approximately 50 miles at the Sierra County Line. It also crosses both Forest Service and private property.
- South Yuba Trail – begins at the South Yuba Recreation Area and extends approximately 5 miles to campgrounds.
- Missouri Bar Trail – extends north of Highway 20 across the South Yuba River.
- Pioneer Trail – parallels Highway 20 east of Nevada City. Approximately 15 miles are complete, with plans for an extension to the Pacific Crest Trail by 1993.
- Emigrant Trail – is a historic trail of regional significance extending through the entire County.
- Wildwood – is a proposed equestrian center and trail system of approximately 25 miles near Lake Wildwood.
- Empire Mine State Park – is a trail of approximately 10 miles off Highway 49 in Grass Valley.
- Independence Trail – is a two-mile trail adjacent to Highway 49 north of Nevada City designed for handicapped and wheelchairs.
- Pacific Crest Trail – is a north-south trail extending from Canada to Mexico through the eastern portion of the County.
- Mount Olive Bike Path – is a Class I path adjacent to Mount Olive Road adjacent to Lower Colfax Road.
- Magnolia School Trail – is a short path that serves Magnolia School students along Magnolia Road.

BIKEWAY FACILITIES

Bikeway facilities are based on conventional Class I (bike path separated from the roadway), Class II (striped bike lane), and Class III (bike route or road sharing) bicycle facility standards as defined by the State of California Department of Transportation (Caltrans). Bikeway facilities are designed within the roadway system. Class I facilities provide significant non-motorized transportation opportunities due to being located within or near to community areas. Although the emphasis is placed on bicycles, Class I separated path facilities can also accommodate multiple users and recreational use. In addition, Class I facilities can be used to establish connections between recreation trail segments to promote overall trail system continuity. Class II and III facilities provide non-motorized opportunities for bicyclists but are not an effective means for addressing non-motorized needs of pedestrians and equestrians.

4.14.2 REGULATORY SETTING

STATE

AB 1600

In January 1989, the California State legislature passed AB 1600 codified as California Government Code Sections 66000 through 66009. This legislation set certain legal and procedural parameters for the charging of development impact fees. Prior to AB 1600 there was not a requirement for showing a nexus between the development impacts fees and the uses for which they were charged. A development impact fee is a monetary exaction other than a tax or special assessment that is charged by a local governmental agency to an applicant in connection with approval of a development project for the purpose of defraying all or a portion of the cost of public facilities related to the development project. Fee charged on new development to mitigate its impact on the need for new facilities. The development impact fee provides funding for public infrastructure and/or facilities needed to serve new residents and employees. The Development impact fees must conform to the requirements established in the Mitigation Fee Act (Nevada County, 2018).

AB 1600 required each local agency that imposes AB 1600 to prepare an annual report providing specific information about those fees. It addressed the nexus problem by stipulating that the fees imposed on new development have the proper connection to any project on which they are imposed. In addition, AB 1600 imposes certain accounting and reporting requirements with respect to the fees collected. The fees for accounting purposes must be segregated from the General Fund of the City and from other funds or accounts containing fees collected for other improvements. Interest on each development fee fund or account must be credited to the fund or account and used only for the purpose for which fees were collected (Calistoga, 2018). Local ordinances must now include definite standards for determine the proportion of the subdivision to be dedicated and the amount of the fee to be paid.

LOCAL

WESTERN NEVADA COUNTY NON-MOTORIZED RECREATIONAL TRAILS MASTER PLAN

The Nevada County Planning Department developed the Western Nevada County Non-Motorized Trails Master Plan (Plan) to guide the review of discretionary projects, including but not limited to, Subdivisions, Use Permits, and Development Permits, in Western Nevada County. The Plan is intended to be a tool for the Nevada County Planning Department and decision-makers to work with developers to provide recreational trails consistent with a regional system. The Plan also provides a framework for other trail

related organizations in Western Nevada County to enhance trail opportunities and become more competitive for grant funding.

The primary components of the Plan include: (1) a map depicting existing trails and identifying gaps in the regional trail system; (2) goals and policies developed through collaboration and public involvement; (3) design guidelines for trail development; and (4) programs to implement the regional trail system.

The Plan is intended to establish a policy framework for providing a comprehensive recreational trail system in Western Nevada County. A paramount goal of the Plan is to identify trail routes with important connectivity potential to be set aside when new development occurs. The Plan does not attempt to provide solutions for all issues related to recreational trails. The Plan does, however, lay a foundation and provide guidelines for addressing recreational needs of non-motorized users; pedestrians, equestrians, and off-road bicyclists.

NEVADA COUNTY BICYCLE MASTER PLAN

The Nevada County Bicycle Master Plan is primarily a Countywide coordinating and resource document for the City of Grass Valley, City of Nevada City, Town of Truckee and the unincorporated County areas. The plan focuses on developing a complete Countywide network of bikeways as well as programs, and specific policies and enhancements. In addition, the plan provides specific recommendations for the incorporated areas of Grass Valley and Nevada City and references the Town of Truckee Trails and Bikeways Plan, 2012. The plan helps to promote safe access to popular destinations Countywide and ensure the development and application of consistent design standards. Key goals of the plan are to provide consistency with other plans as well as to promote the critical aspect of policy integration and coordination with the County Department of Public Works and the County Planning Department, to ensure that projects proposed in this plan can be funded and implemented in a timely fashion.

NEVADA COUNTY GENERAL PLAN

Chapter 5, Recreation, of the Nevada County General Plan addresses recreation and recreational amenities within the County. Chapter 5 discusses the various types of recreational amenities located within the County, including bike trails, walking trails, parks, and open space. Additionally, Chapter 6, Open Space, includes a discussion of important open space areas of the County. In part, the General Plan implements these measures through goals and policies meant to ensure the future of existing and planned recreational amenities. Many of the goals and policies are related directly to County actions that encourage and define the development of park and recreational resources and would be implemented at the County level. Because of this, numerous goals and polices are not applicable to the proposed project. The project proposes to revise the county zoning ordinance related to commercial cannabis cultivation on private property. Therefore, only the goals and policies that are pertinent to these activities are included below:

Goal 5.1 Provide a variety of active and passive recreational opportunities.

Objective 5.2 Acquire, develop and maintain park lands to serve the needs of Nevada County.

Directive Policies

Policy 5.5 The County shall base park and recreation facility planning on the following level of service standard for County park land to provide regional parks serving both Community Regions and Rural Regions:

- 3.0 acres of park land for each increase of 1,000 persons in county-wide population.

Objective 5.4 Implement funding strategies for the acquisition, development, and maintenance of park and recreation facilities.

Directive Policies

Policy 5.9 Park and recreation facilities shall be included in the County's comprehensive impact fee program. The comprehensive development fees shall be in amounts sufficient to offset the costs identified as the appropriate share of the park and recreation facility improvements necessary to serve future development. The comprehensive development fee structure shall ensure that future growth fully mitigates its direct and cumulative impacts upon the County.

Objective 5.6 Implement a comprehensive, and where possible integrated, county-wide trail system.

Directive Policies

Policy 5.14 Provide a county incentive program which encourages retention of private open space by including such incentives as, but not limited to, tax incentives, insurance programs, and public ownership of open space easements.

Objective 5.7 Preserve and encourage water based recreational opportunities.

Objective 5.8 Recognize the Yuba River Canyon as a recreational resource.

Directive Policies

Policy 5.21 Recognize and protect the South Yuba River canyon as an important resource in terms of recreation, tourism, aesthetics, water resource, mineral resource, water quality, and wildlife habitat through the following actions:

- a. Designate publicly-owned lands physically adjoining the river as open space in the General Plan land use maps.
- b. Encourage the recreation master planning and development activities by the State Department of Parks and Recreation.
- c. Discourage the placement of dams on the South Yuba River canyon. Other water storage techniques, such as off-stream storage, may be considered as long as significant impacts are sufficiently mitigated.

Goal 6.1 Encourage that land use patterns and site development reflect open space values.

Objective 6.1 Integrate open space consideration in the establishment of land use patterns.

Directive Policies

Policy 6.1 The General Plan recognizes the importance of open space serving one or more of the following purposes:

- a. Preservation of natural resource areas;
- b. Conservation of open spaces for the managed production of resources;
- c. Maintenance of areas with importance for outdoor recreation;

- d. Delineation of open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions; and
- e. Provision of open spaces to create a buffer which may be landscaped to minimize the adverse impact of one land use on another.

The General Plan includes an Open Space land use designation, which is intended to provide for lands, serving one or more of the above purposes, which is either in public ownership, or permanently preserved as open space through easements or other restrictive mechanisms. The uses of land under the Open Space designation and implementing zoning are limited to those which have minimal impact on the natural character and environmental features of the land.

In addition, the Rural, Forest and Recreation designations of the General Plan also provide visual and functional open space, including open space for production of resources and provision of recreation opportunities.

- Policy 6.2 The County may utilize clustering of development, as provided in the Land Use policies, to preserve open space within the Rural Regions and to encourage creation of open space which will enhance visual, habitat and other open space values. Such open space may be permanently secured and preserved as open space through permanent easements, dedication to a public agency, permanent trust or other irrevocable means.
- Policy 6.3 Maintain the density of development allowed in the Rural and Forest land use designations as shown on the General Plan Land Use Maps in order to provide for low density development in Rural Regions which preserves an open, rural character and complements the permanent public and private open space.
- Policy 6.4 Protect areas supporting renewable natural resources from incompatible or disruptive development or land uses through very low density General Plan designation. High site and public timber resources shall be designated for forest uses at the 160-acre minimum parcel size or greater, except for areas of fragmented parcelization. Identified lakes and reservoirs shall be designated as water areas in the General Plan.
- Policy 6.6 Provide for, where feasible, continued access to open space and public resources by ensuring that all discretionary projects are consistent with development of the Nevada County Non-Motorized Trails Master Plan.
- Policy 6.7 Nevada County encourages the location and development of motorized off-road facilities on lands where such use can be accommodated. The location and development of such facilities shall include consultation with the State Department of Fish and Game as well as other responsible agencies.
- Policy 6.8 Encourage the local recreation and park districts and/or an appropriate private entity to obtain open spaces (on environmentally constrained lots or land, lots with relatively low construction potential) and neighborhood parks within existing residential subdivisions and areas.

Objective 6.2 Implement development standards that incorporate open space values.

Action Policies

Policy 6.9 Development standards for project design, grading, construction and use, established through the Comprehensive Site Development Standards, shall be used in project review of all discretionary project permits to determine open space requirements for each project.

These standards shall provide for consideration of non-disturbance of, and open space setbacks from identified sensitive environmental, biological, or cultural resources, e.g. 100-year floodplains, wetlands, slopes in excess of 30% (excepting access across slopes up to 30%), lakes, ponds, significant historic or archaeological sites/resources, critical wildlife areas, minimization of land disturbance, consistency with the landforms and aesthetic context of the site, temporary and permanent erosion and sedimentation controls, and vegetation retention, replacement and enhancement.

Policy 6.10 The County shall support the activities of the Nevada County Land Trust and Truckee-Donner Land Trust to acquire and manage open space lands. These non-profit Trusts shall be encouraged to acquire open space through dedication or voluntary purchase from willing sellers of property of easements.

The Trusts shall be encouraged to acquire land or other real property interests which could focus on lands which contain unique, valuable or sensitive resources reflecting environmental or biological sensitivity; scenic landscape units; community separators; historic, cultural, and archaeological content; and low intensity recreational potential.

4.14.3 STANDARDS OF SIGNIFICANCE

ENVIRONMENTAL ANALYSIS

THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant aesthetic impact if it would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

4.14.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACT 4.14-1: WOULD THE PROJECT INCREASE THE USE OF EXISTING NEIGHBORHOOD REGIONAL PARKS OR OTHER RECREATIONAL FACILITIES SUCH THAT

SUBSTANTIAL PHYSICAL DETERIORATION OF THE FACILITY WOULD BE ACCELERATED?

The project does not directly involve the development of residential uses, and therefore, would not directly increase the use of existing neighborhood and/or regional parks. Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, and this aspect of the proposed project would not result in the increased use of existing parks such that substantial physical deterioration would occur. Therefore, impacts in this regard would be less than significant.

Under the proposed project commercial cannabis cultivation could occur on parcels zoned AE, AG, or FR. As discussed in *Section 3.0: Project Description* and *Section 4.12: Population and Housing*, for a parcel to be used for commercial cultivation that parcel or adjacent parcel must contain an occupied legally permitted under common ownership. It is expected that most cultivation, would occur on parcels with existing residential units, or on an adjacent vacant parcel under ownership of a property owner already residing in the county on an adjacent parcel. It is not expected that the proposed project would result in a substantial number of new residents choosing to construct homes on parcels for the potential to cultivate cannabis. Therefore, the proposed NCCO in this regard would not add a substantial number of residents resulting in a physical deterioration of recreational facilities.

However, cannabis related development that could occur as a result of the proposed project has the potential to indirectly result in population growth from increase employment demand and direct growth from people moving to the County. This could result in a potential associated increase on recreational facilities. As discussed in *Section 4.12 Population and Housing*, due to a number of factors such as an incremental increase in the number of commercial cultivation facilities, and physical limitations associated with parcels on which cultivation would be permitted, the increase demand of recreational facilities that could occur as a result of the proposed project is anticipated to be phased in over a period of time. Additionally, it is expected that most applicants would come from the pool of existing residents who are already actively cultivating and are therefore, considered part of the baseline for the purposes of this environmental analysis. Existing County codes and policies for future planned public services, including recreational facilities, would be sufficient to serve this incremental increase employment, housing demand, and population anticipated under the proposed project. Lastly, the licenses for cannabis related activities would not be approved or activated unless all other required permits and/or entitlements are in place for a proposed cannabis facility. These facts, payment of development impact fees, and incremental increase in population that may use recreational facilities and parks would allow for the provision of new recreational resources by the County and other area jurisdiction as the demand increases.

As such, a substantial physical deterioration of existing facilities is not anticipated, and impacts would be less than significant.

MITIGATION MEASURE

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

IMPACT 4.14-2: WOULD THE PROJECT INCLUDE RECREATIONAL FACILITIES OR REQUIRE THE CONSTRUCTION OR EXPANSION OF RECREATIONAL FACILITIES WHICH MAY HAVE AN ADVERSE PHYSICAL EFFECT ON THE ENVIRONMENT?

Refer to Response 4.14-1, above. The proposed project does not include the development of recreational facilities. Additionally, the project does not propose uses that would require the construction and/or expansion of recreational facilities due to a substantial sudden increase in population. Cannabis activities would likely generate some new employment opportunities, but these would be incremental and phased in over time.

The County is in the process of updating the Nexus Study for their Recreation Development Fees, which would be expected to provide some funding for future development of recreational facilities for use by the public. Any new recreational facilities would be required to go through the County's development review process and appropriate level of CEQA review prior to their construction. This would be done on a project by project basis, would be separate from and is not a part of the proposed NCCO. At this time, it is unknown where or when such projects would be constructed, and it would be speculative to anticipate potential environmental effects because impacts are site specific. While future commercial cannabis cultivation facilities are expected to generate some amount of funding for recreational resources via the Nexus Study, the potential impacts from new employment opportunities and potential new housing units cannot yet be accounted for. Therefore; it is unknown if the increase would be substantial enough to create a significant increased demand. In addition, the potential environmental effects of any new recreational project or expansion of existing recreational facilities would be accounted for in their respective CEQA document, if required. As such, impacts would be expected to be mitigated, if needed, at that time. Impacts from the proposed NCCO in this regard are less than significant.

MITIGATION MEASURE

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant impact.

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4.15 TRANSPORTATION AND TRAFFIC

4.15.1 INTRODUCTION

This section of the Draft Environmental Impact Report (EIR) evaluates the potential impacts of the Nevada County Cannabis Cultivation Ordinance (proposed project or proposed NCCO) in terms of traffic and circulation on Nevada County roadways and intersections and describes the environmental and regulatory settings. This section describes the applicable federal, state, and local regulations and policies related to transportation and circulation; discusses the existing roadway network and transportation facilities in the county; describes existing transportation and circulation conditions within the county; and analyzes the potential impacts from project activities on transportation and circulation. While the proposed project would only apply to County lands, the traffic generated by the project would travel on highways and roadways maintained by the California Department of Transportation (Caltrans), County of Nevada (County), Nevada City, Town or Truckee, and City of Grass Valley as well as some private roads. Mitigation measures that would reduce impacts, where applicable, are also discussed. The regulatory setting is presented in *Section 4.15.3: Regulatory Setting*, while the project impacts and associated Mitigation Measures are analyzed in *Section 4.15.4: Impacts and Mitigation Measures*.

4.15.2 ENVIRONMENTAL SETTING

NEVADA COUNTY ROAD NETWORK

Nevada County is generally rural and encompasses 978 square miles in the eastern region of California. Transportation in the County is dominated by automobile traffic. This section discusses the existing conditions related to transportation and traffic in the County. The circulation system in the County is made up of a combination of state highways, county roadways, city-maintained roadways, and privately maintained roadways. Major components of the system are discussed below.

The County groups the highways, roadways, and streets into six basic functional classifications based on function, purpose, and importance of the roadway. The names and descriptions of these facilities is provided below:

- **Interstate Highways and Freeways** - Limited access highways carrying regional and interstate traffic (e.g., Interstate 80 and the Golden Center Freeway);
- **Principal Arterials** - Roadways carrying some regional traffic and connecting the major population centers within the County (e.g., State Route 49 and State Route 20);
- **Minor Arterials** - Roadways providing primary access from freeways and principal arterials to major origins and destinations (e.g., Brunswick Road and Donner Pass Road);
- **Collectors (Major and Minor)** - Streets connecting arterials to local roads (e.g., East Bennett Street and Alta Sierra Drive);
- **Locals** - Streets providing primary access to individual properties (e.g., Jones Bar Road and Hobart Mills Road); and
- **Regional Emergency Access** - Roadways providing emergency access between arterial or collector roads but are not needed by the County for general circulation purposes.

EXISTING MAJOR ROADWAYS

State Routes

Interstate 80 is a four-lane freeway running along the southern border of the county. It is the primary east-west interstate facility in this region connecting the large urban areas of Reno, Sacramento and the Bay Area. Consequently, it carries a significant amount of traffic destined outside of the County [Caltrans Transportation Concept Report (TCR) 2017].

State Route 20 runs from east to west beginning at Interstate 80 near Lake Spaulding and extending west through Nevada City and Grass Valley, Penn Valley and into Yuba County. It is a two-lane highway with a four-lane freeway section between the North and South Junctions of State Route 49. There is also an expressway segment with two-lane and four-lane segments between Penn Valley Drive to the Junction of State Route 49 South (Caltrans TCR 2013).

State Route 49 is the only north-south highway connecting the western portion of the County to the Sacramento region. Consequently, it is heavily travelled by commuters. Other than a four-lane freeway section between Nevada City and Grass Valley, it is a two-lane highway with many local access points (Caltrans TCR 2017).

State Route 89 is a north-south highway passing through the eastern portion of the County. Other than a four-lane section between Placer and the Nevada County line to Interstate 80, It is a two-lane facility connecting Truckee to Lake Tahoe at Tahoe City and serving both local and tourist traffic in the area (Caltrans TCR 2012).

State Route 174 is a two-lane highway connecting Grass Valley to Colfax at Interstate 80. The primary function of this facility is to serve local needs within and between the two cities (Caltrans TCR 2017).

State Route 267 is a two-lane expressway connecting Truckee to Kings Beach at Lake Tahoe through Martis Valley. Both local and tourist traffic are served by this facility (Caltrans TCR 2012).

County Roads

The County maintains approximately 569 miles of roadways. Numerous county roadways provide intermediate and localized access to rural areas of the county, as well as to the more populated cities of Grass Valley, Nevada City, and Truckee and the communities of Lake Wildwood, Alta Sierra, Lake of the Pines, and others. Most roads are two lanes. *Table 4.15-1: Nevada County Streets and Roads by Functional Class*, provides a more complete listing of major roadways as well as major and minor collectors throughout the County.

Table 4.15-1: Nevada County Streets and Roads by Functional Classification

Full Name	Functional Classification	Start	End
US Interstate 80	Interstate	Placer Co. Line	Sierra Co. Line
State Highway 20	Principle Arterial	Yuba Co. Line	Grass Valley
State Highway 49	Principle Arterial	Placer Co. Line	Grass Valley
State Highway 49/20	Principle Arterial	Nevada City	Grass Valley
Brunswick Rd.	Minor Arterial	Idaho Maryland Rd.	State Highway 174
Combie Rd.	Minor Arterial	State Highway 49	Magnolia Rd.

Table 4.15-1: Nevada County Streets and Roads by Functional Classification

Full Name	Functional Classification	Start	End
Nevada City Hwy	Minor Arterial	Nevada City	Grass Valley
State Highway 174	Minor Arterial	Grass Valley	Placer Co. Line
State Highway 49	Minor Arterial	Nevada City	Placer Co. Line
State Highway 89	Minor Arterial	Sierra Co. Line	Truckee
Alta Sierra Dr.	Major Collector	Dog Bar Rd.	State Highway 49
Alta St.	Major Collector	Grass Valley City Limits	Ridge Rd.
Dog Bar Rd.	Major Collector	La Barr Meadows Rd.	Bear River Bridge
Donner Pass Rd.	Major Collector	US Interstate 80	Truckee City Limits
Duggans Rd.	Major Collector	Lime Kiln Rd.	Wolf Rd.
E. Empire St.	Major Collector	Grass Valley City Limits	State Highway 174
Indian Springs Rd.	Major Collector	Penn Valley Dr.	McCourtney Rd.
La Barr Meadows Rd.	Major Collector	Grass Valley City Limits	State Highway 49
Lime Kiln Rd.	Major Collector	McCourtney Rd.	Duggans Rd.
Loma Rica Dr.	Major Collector	Brunswick Rd.	End of Co. Maintained
Magnolia Rd.	Major Collector	Combie Rd.	Red Dog Rd.
McCourtney Rd.	Major Collector	Grass Valley City Limits	Lime Kiln Rd.
Mount Olive Rd.	Major Collector	Dog Bar Rd.	State Highway 174
Old Tunnel Rd.	Major Collector	Banner Lava Cap Rd.	Town Talk Rd.
Penn Valley Dr.	Major Collector	Indian Springs Rd.	State Highway 20
Pleasant Valley Rd.	Major Collector	State Highway 20	State Highway 49
Ridge Rd.	Major Collector	Rough and Ready Hwy	Nevada City City Limits
Rough and Ready Rd.	Major Collector	State Highway 20	Grass Valley City Limits
Spenceville Rd.	Major Collector	Penn Valley Dr.	Indian Springs Rd.
Tyler Foote Crossing Rd.	Major Collector	State Highway 49	Grizzly Hill Rd.
Wolf Rd.	Major Collector	Duggans Rd.	State Highway 49
Alexandra Wy.	Minor Collector	Karen Wy.	Lawrence Wy.
Allison Ranch Rd.	Minor Collector	Grass Valley City Limits	State Highway 49
Auburn Rd.	Minor Collector	McCourtney Rd.	State Highway 49
Birchville Rd.	Minor Collector	Pleasant Valley Rd.	State Highway 49
Bitney Springs Rd.	Minor Collector	Pleasant Valley Rd.	Rough and Ready Hwy
Boulder St.	Minor Collector	Nevada City City Limits	Red Dog Rd.
Cement Hill Rd.	Minor Collector	Nevada City City Limits	End of Co. Maintained
Combie Rd.	Minor Collector	Magnolia Rd.	Darkhorse Dr.
Cruzon Grade Rd.	Minor Collector	Tyler Foote Crossing Rd.	Backbone Rd.
Derbec Rd.	Minor Collector	Back Bone Rd.	N. Bloomfield Graniteville Rd.
E. Bennett Rd.	Minor Collector	Grass Valley City Limits	Greenhorn Rd.
E. Lime Kiln Rd.	Minor Collector	State Highway 49	Karen Dr.
Eva Wy.	Minor Collector	Tammy Wy.	Gary Wy.
Francis Dr.	Minor Collector	Ball Rd.	Alta Sierra Dr.
Garden Bar Rd.	Minor Collector	Wolf Rd.	End of Co. Maintained
Gary Wy.	Minor Collector	Eva Wy.	Francis Dr.

Table 4.15-1: Nevada County Streets and Roads by Functional Classification

Full Name	Functional Classification	Start	End
Glenshire Dr.	Minor Collector	Truckee City Limits	Hirshdale Rd.
Gracie Rd.	Minor Collector	Nevada City City Limits	Banner Lava Cap Rd.
Greenhorn Rd.	Minor Collector	Brunswick Rd.	End of Co. Maintained
Grizzly Hill Rd.	Minor Collector	Tyler Foote Crossing Rd.	N. Bloomfield Graniteville Rd.
Hirshdale Rd.	Minor Collector	US Interstate 80	End of Co. Maintained
Idaho Maryland Rd.	Minor Collector	Brunswick Rd.	Banner Lava Cap Rd.
Karen Dr.	Minor Collector	E. Lime Kiln Rd.	Alexandra Wy.
Lake Vera Purdon Rd.	Minor Collector	Purdon Rd.	N. Bloomfield Graniteville Rd.
Lawrence Wy.	Minor Collector	Alexandra Wy.	Norlene Wy.
Lime Kiln Rd.	Minor Collector	Duggans Rd.	State Highway 49
McCourtney Rd.	Minor Collector	Perimeter Rd.	Lime Kiln Rd.
Mooney Flat Rd.	Minor Collector	State Highway 20	Pleasant Valley Rd.
N. Bloomfield Graniteville Rd.	Minor Collector	State Highway 49	Grizzly Hill Rd.
Newtown Rd.	Minor Collector	Pleasant Valley Rd.	State Highway 49
Norlene Wy.	Minor Collector	Tippy Wy.	Patricia Wy
Oak Tree Rd.	Minor Collector	State Highway 49	Tyler Foote Crossing Rd.
Patricia Wy.	Minor Collector	Alexandra Wy.	Norlene Wy.
Perimeter Rd.	Minor Collector	Harlow Pl.	McCourtney Rd.
Purdon Rd.	Minor Collector	Oak Tree Rd.	Lake Vera Purdon Rd.
Quaker Hill Cross Rd.	Minor Collector	Red Dog Rd.	Banner Quaker Hill Rd.
Rattlesnake Rd.	Minor Collector	State Highway 174	Dog Bar Rd.
Red Dog Cross Rd.	Minor Collector	Banner Lava Cap Rd.	Red Dog Rd.
Red Dog Rd.	Minor Collector	Boulder St.	You Bet Rd.
Retract Wy.	Minor Collector	Lime Kiln Rd.	End of Pavement
Rough and Ready Rd.	Minor Collector	Miners Wy.	Rough and Ready Hwy
Scotts Flat Rd.	Minor Collector	State Highway 20	Alpine Meadows Camp
Scotts Valley Rd.	Minor Collector	Willow Valley Rd.	Scotts Flat Rd.
Soda Springs Rd.	Minor Collector	Donner Pass Rd.	End of Co. Maintained
Spenceville Rd.	Minor Collector	Indian Springs Rd.	End of Co. Maintained
Squirrel Creek Rd.	Minor Collector	Rough and Ready Hwy	End of Co. Maintained
Stampede Meadows Rd	Minor Collector	Truckee City Limits	Sierra Co. Line
Tammy Wy.	Minor Collector	Norlene Wy.	Eva Wy.
Tippy Wy.	Minor Collector	Alta Sierra Dr.	Norlene Wy.
Tyler Foote Crossing Rd.	Minor Collector	Grizzly Hill Rd.	Cruzon Grade Rd.
Washington Rd.	Minor Collector	State Highway 20	Maybert Rd.
Wheeler Cross Rd.	Minor Collector	Dog Bar Rd.	Rattlesnake Rd.
Willow Valley Rd.	Minor Collector	Nevada City City Limits	State Highway 20
Wolf Rd.	Minor Collector	Lime Kiln Rd.	Duggans Rd.
You Bet Rd.	Minor Collector	State Highway 174	Red Dog Rd.

Source: Nevada County General Plan Circulation Element, 2010.

In addition to these facilities, the County has an extensive network of privately owned and maintained roads. These roads provide primary access to the majority of residential parcels in the County but are outside of the County’s control. For this reason, private roads have not been functionally classified, even in cases where they serve as collectors. Both private roads and County maintained roads are shown in re *Figures 4.15: 1a Roadways and Roadway Classifications in Western Nevada County*, and *Figure 4.15-1b: Roadways and Roadway Classifications in Eastern Nevada County*.

COUNTY ROADWAY LEVEL OF SERVICE

The level of service (LOS) of major roadways is a measure of the operating efficiency of a transportation facility. Letter designations from A (best) to F (worst) are assigned to a road or intersection to describe how well it functions. In Nevada County levels of service below C occur mainly in the more urbanized areas of Grass Valley, Nevada City and Truckee, and on access roads into major developments such as Alta Sierra, Lake of the Pines and Lake Wildwood. The worst level of service in the County is on Highway 49 south of Grass Valley. Although the level of service provides a general indication of the capacity of a roadway, the actual volume of traffic that can be accommodated at each level of service depends on several factors including: number of lanes, width of lanes, width of shoulder, topography, design speed, and vehicle mix (percent auto, truck, etc.). *Table 4.15-2: Two Lane Conventions Highway Level of Service* – provides a description of LOS major roadways and *Table 4.15-3: Two and Four Lane Freeways/Expressways Level of Service* provides a description of the LOS of higher volume roadways.

Table 4.15-2: Two-Lane Conventional Highways Level of Service Description

LOS	Demand/Capacity Ratio	Traffic Description
A	<0.34	Free flow, light
B	<0.45	Free flow to stable flow, moderate
C	0.46-0.65	Stable flow, moderate volumes, freedom to maneuver noticeable restricted
D	0.66-0.85	Approaches unstable flow, heavy volumes, very limited freedom to maneuver
E	0.86-1.00	Extremely unstable flow, maneuverability and psychological comfort extremely poor
F	>1.00	Forced delay measured in average flow travel speed (MPH). Signalized segments experience delays >60.0 seconds/vehicle.

Source: Transportation Research Board 2010

Table 4.15-3: Two and Four Lane Freeways/Expressways Level of Service

LOS	Demand/Capacity Ratio	Traffic Description
A	<0.34	Free flow
B	0.35-0.52	Free to stable flow, light to moderate volumes
C	0.53-0.69	Stable flow, moderate volumes, freedom to maneuver noticeable restricted
D	0.70-0.92	Approaches unstable flow, heavy volumes, very limited freedom to maneuver
E	0.93-1.00	Extremely unstable flow, maneuverability and psychological comfort extremely poor
F0	1.01-1.25	Forced flow, heavy congestion, long queues from behind breakdown points, stop and go

Table 4.15-3: Two and Four Lane Freeways/Expressways Level of Service

LOS	Demand/Capacity Ratio	Traffic Description
F1	1.26-1.35	Very heavy congestion, very long queues
F2	1.36-1.45	Extremely heavy congestion, longer queues, more numerous breakdown points, longer stop periods
F3	>1.46	Gridlock

Source: Transportation Research Board 2010

In some cases, the rural environment of Nevada County creates unique constraints in roadway capacity that affect the ability of the system to handle high volumes of traffic. Therefore, travel in the County tends to be highly concentrated on a few routes, such as State Route 49 (SR 49), which accommodates substantial local traffic, as well as through trips, reducing its level of service. Based upon the Level of Service (LOS) standards contained in the General Plan’s Circulation Element Policies, the existing regional road system serving Nevada County generally provides acceptable service. However, portions of Pleasant Valley Road south of Lake Wildwood; Brunswick Road north of State Route 174 (SR 174); and La Barr Meadows Road south of SR 49 operate at less than the minimum LOS “C” for Rural Regions.

The roadway system is the primary means of travel within Nevada County as transit options are limited. Transit facilities include Gold County Stage and the Tahoe Truckee Area Regional Transit (TART) which are described in further detail in the Transit Service and Facilities section below. Southern Pacific (SP) railroad owns and operates one set of tracks that follows Interstate 80 along the southern border of Nevada County. The rail line is used for the shipment of goods and provides passenger service with a mid-day train in each direction between Chicago and San Francisco. This line also has stops in Sacramento, Roseville, Colfax, Truckee, and Reno. The number of existing bicycle, pedestrian, and equestrian trails in Nevada County also is limited and further described in the Bicycle and Pedestrian Facilities section below.

Development impact fees provide a revenue source for roadway improvements to serve future growth. However, because such fees are not available for solving existing deficiencies, potential funding of improvements to address the existing deficiencies will need to rely heavily upon local sources, which are already committed to existing programs.

EXISTING ROADWAY TRAFFIC VOLUMES

Caltrans’ published data for 2016 provides peak hour traffic volumes for all State highways within the County. Table 4.15-4: *Existing LOS for County Highway Segments*, provides a summary of the two-way peak hour volumes and LOS achieved on State highway facilities for existing conditions. It should be noted that these traffic volumes include cannabis operations that were in existence in 2016. As stated in the Nevada County General Plan, Policies LU-4.1.1 and LU-4.1.2, the minimum level of service (LOS) LOS C for Rural Regions.

Figures 4.15-1a Roadways and Roadway Classifications in Western Nevada County

Figure 4.15-1b- Roadways and Roadway Classifications in Eastern Nevada County

Table 4.15-4: Existing LOS for County Highway Segments

Highway	Segment	Roadway Classification	Roadway Type	Maximum Peak Hour Service Volume to Satisfy LOS Threshold ¹	Existing (2006)	
					Two-Way Peak Hour Volume	Minimum LOS Achieved?
SR 20	Yuba/Nevada County Line to Penn Valley Drive	Two-Lane Arterial	Rural	1,539	1,350	Yes
SR 20	Grass Valley, Mill Street to Dorsey Drive OC	Four-Lane Arterial, Divided	Rural	3,219	5,200	No
SR 20	Brunswick Rd to Nevada City, East Junction SR 49	Four-Lane Arterial, Divided	Rural	3,219	3,050	Yes
SR 20	Scotts Flat Road to Junction I-80	Two-Lane Arterial	Rural	1,539	730	Yes
SR 49	Placer/Nevada County Line to South Wolf Creek Bridge	Two-Lane Arterial	Rural	1,539	2,850	No
SR 49	Alta Sierra Dr to South Grass Valley	Two-Lane Arterial	Rural	1,539	2,600	No
SR 49	Nevada City, Junction SR 20 to Newtown/Indian Flat Rd	Two-Lane Arterial	Rural	1,539	1,200	Yes
SR 49	Tyler Foote Crossing Rd to Nevada/Yuba County Line	Two-Lane Arterial	Rural	1,539	420	Yes
SR 89 ²	Placer/Nevada County Line to Junction I-80	Two/Four-Lane Arterial, Divided	Rural	1,850	2,350	No
SR 89 ²	Prosser Dam Rd to Nevada/Sierra County Line	Two-Lane Arterial	Rural	1,539	640	Yes
SR 174	Placer/Nevada County Line to Meadow View Dr	Two-Lane Arterial	Rural	1,539	600	Yes
SR 174	Brunswick Rd to Grass Valley, Race Street	Two-Lane Arterial	Rural	1,539	1,200	Yes
SR 174	Ophir St to Junction SR 20	Two-Lane Arterial	Rural	1,539	800	Yes
SR 267 ²	Junction SR 80/89/267 to Placer/Nevada County Line	Major Two-Lane Highway	Rural	1,309	1,950	Yes
I-80 ³	Blue Canyon Exit to Placer/Nevada County Line	4-Lane Freeway	Rural	N/A	N/A	No
I-80 ³	Placer/Nevada County Line to Donner Lake Rd	4-Lane Freeway	Rural	N/A	N/A	No
I-80 ³	Donner Lake Rd to Hirschdale Rd	4/6-Lane Freeway	Urban	N/A	N/A	Yes
I-80 ³	Hirschdale Rd to Nevada/Sierra County Line	4-Lane Freeway	Rural	N/A	N/A	Yes

Notes: ¹ Based on 2016 Nevada County Regional Transportation Plan
² Route is located in Eastern Nevada but uses Western Nevada County peak hour level of service thresholds for consistency.
³ Information on Interstate 80 (I-80) is based on 2014 Caltrans' Transportation Concept Report for I-80 since the route cannot be accurately characterized based on Western Nevada County thresholds.

NEVADA COUNTY REGIONAL TRANSPORTATION PLAN (RTP)

The adopted Nevada County Regional Transportation Plan (RTP) will guide transportation investments in Nevada County through 2035. The RTP is a cooperative effort between the Nevada County Transportation Commission (NCTC), the County of Nevada, the incorporated cities within the County, Caltrans, and the residents of Nevada and was adopted in 2017. Additionally, the RTP is consistent with the Regional Transportation Improvement Program (RTIP) and the Interregional Transportation Improvement Program (ITIP) and includes involvement and outreach to the general public as well as the Native American tribes within the County (NCTC 2016). This document identifies a range of improvements to address existing and future transportation deficiencies including: level-of service improvements; improvements that better balance roadway use between motorized vehicles, transit, bicycles, and pedestrians; and safety improvements. The RTP also includes a list of projected LOS conditions for 2035 for significant Western Nevada County roads and highways, which is shown in *Table 4.15-5: Estimated Future Traffic Conditions for Significant Western Nevada County Roads and Highways*, below.

**Table 4.15-5: Estimated Future Traffic Conditions
 for Significant Western Nevada County Roads and Highways**

Roadway Segment	Classification	2035 Estimated, Peak Hour	
		Two-Way Volume	LOS
Alta Sierra Dr E. of Hwy 49	Two-Lane Arterial	460	C
Alta Sierra Dr E. of Norlene Wy	Two-Lane Arterial	110	C
Alta Sierra Dr W. of Dog Bar Rd	Two-Lane Arterial	220	C
Alta St Grass Valley Corp Limit	Two-Lane Arterial	330	C
Alta St SE of Ridge Rd	Two-Lane Arterial	340	C
Alta Street S. Alta Hill Mine Road	Two-Lane Arterial	310	C
Brunswick Rd N. of Idaho Maryland Rd	Two-Lane Arterial	1,040	D
Brunswick Rd N. of Hwy 174	Two-Lane Arterial	730	C
Brunswick Rd NW of E. Bennett Rd	Two-Lane Arterial	960	D
Brunswick Rd NW of Loma Rica Dr	Two-Lane Arterial	1,200	D
Brunswick Rd Overcrossing Total	Four-Lane Arterial, Undivided	2,570	D
Brunswick Rd S. of Idaho Maryland Rd	Two-Lane Arterial	1,410	D
Brunswick Rd SE of E. Bennett Rd	Two-Lane Arterial	740	C
Brunswick Rd Nevada City Hwy to Maltman Dr	Four-Lane Arterial, Undivided	1,590	C
Brunswick S. Old Tunnel	Two-Lane Arterial	1,340	D
Brunswick S. Town Talk	Two-Lane Arterial	1,040	D
Combie Rd E. of Hwy 49	Two-Lane Arterial	1,410	D
Combie Rd W. of W. Hacienda & Magnolia	Two-Lane Arterial	1,400	D
Dog Bar Rd N. of Magnolia Rd	Two-Lane Arterial	130	C
Dog Bar Rd NW of Alta Sierra Dr	Two-Lane Arterial	550	C
Dog Bar Rd NW of Mount Olive Rd	Two-Lane Arterial	110	C
Dog Bar Rd S. of Alta Sierra Dr	Two-Lane Arterial	380	C
Dog Bar Rd S. of Labarr Meadows Rd	Two-Lane Arterial	680	C
Dog Bar Rd S. of Mount Olive Rd	Two-Lane Arterial	100	C
Dog Bar Rd SE of Magnolia Rd	Two-Lane Arterial	110	C
Dorsey Drive, East of Sr-49	Two-Lane Arterial	1,220	D
Dorsey Drive, West of Spree	Two-Lane Arterial	1,580	E

**Table 4.15-5: Estimated Future Traffic Conditions
for Significant Western Nevada County Roads and Highways**

Roadway Segment	Classification	2035 Estimated, Peak Hour	
		Two-Way Volume	LOS
Duggans Rd N. of Wolf Rd	Two-Lane Arterial	200	C
Duggans Rd SE of Lime Kiln Rd	Two-Lane Arterial	180	C
E. Empire St E. of Grass Valley Corp Limit	Two-Lane Arterial	370	C
E. Empire St W. of Hwy 174	Two-Lane Arterial	350	C
E. Main Street Idaho Maryland to Hughes	Two-Lane Arterial	1,620	E
East Main Street Bennet to Idaho Maryland	Two-Lane Arterial	1,160	D
Empire Street, East of Pine	Two-Lane Arterial	420	C
Gold Flat Rd Hawke Ln to Hollow Wy	Two-Lane Arterial	240	C
Gold Flat Rd S. of Gracie Rd	Two-Lane Arterial	240	C
Indian Springs Rd NW of Spenceville Rd	Two-Lane Arterial	70	C
Indian Springs Rd SE of Penn Valley Rd	Two-Lane Arterial	80	C
Indian Springs Rd SE of Spenceville Rd	Two-Lane Arterial	170	C
Indian Springs Rd W. of McCourtney Rd	Two-Lane Arterial	180	C
Labarr Meadows N. Old White Toll Road	Two-Lane Arterial	820	C
Labarr Meadows Rd N. of Dog Bar Rd	Two-Lane Arterial	730	C
Lime Kiln Rd SE of McCourtney Rd	Two-Lane Arterial	200	C
Magnolia Rd E. of Combie Rd (Eb)	Two-Lane Arterial	580	C
Magnolia Rd E. of Knolls Dr	Two-Lane Arterial	180	C
Magnolia Rd E. of Lakeshore North	Two-Lane Arterial	610	C
Magnolia Rd E. of Lkof Pines	Two-Lane Arterial	460	C
Magnolia Rd SW of Dog Bar Rd	Two-Lane Arterial	110	C
McCourtney Rd NE of Indian Springs Rd	Two-Lane Arterial	230	C
McCourtney Rd NE of Wolf Mountain Rd	Two-Lane Arterial	380	C
McCourtney Rd S. of Indian Springs Rd	Two-Lane Arterial	310	C
McCourtney Rd SW of Brighton St	Two-Lane Arterial	710	C
McCourtney Rd W. of Auburn Rd	Two-Lane Arterial	510	C
McCourtney Road Brighton Street to Sr 20 Ramps	Two-Lane Arterial	1,040	D
McCourtney Road Sr 20 Ramps to Mill Street	Two-Lane Arterial	870	D
McCourtney Road, Pola to Bonnie View Way	Two-Lane Arterial	560	C
Mill Street McCourtney Road to Sr 20 Ramps	Two-Lane Arterial	960	D
Mill Street Sr 20 Ramps to French Avenue	Two-Lane Arterial	560	C
Mill Street, Between French and Chapel	Two-Lane Arterial	550	C
Nev Cty Hwy SW. of Brunswick Rd	Two-Lane Arterial	1,000	D
Nev Cty Hwy NE. of Brunswick Rd	Two-Lane Arterial	1,370	D
Nevada City Hwy S. of Ridge Rd (Nc Corp Limit)	Two-Lane Arterial	510	C
Nevada City Hwy SW of Banner Lava Cap Rd	Two-Lane Arterial	470	C
Old Tunnel Rd S. of Banner Lava Cap Rd	Two-Lane Arterial	340	C
Old Tunnel Rd N. of Brunswick Rd	Two-Lane Arterial	430	C
Penn Valley Dr NE of Spenceville Rd	Two-Lane Arterial	580	C
Penn Valley Dr-- Se Easy St	Two-Lane Arterial	390	C
Penn Valley Dr SE of Easy St	Two-Lane Arterial	330	C
Penn Valley Dr SE of Pheasant St	Two-Lane Arterial	390	C
Penn Valley Dr SW of Hwy 20 (E End)	Two-Lane Arterial	630	C

**Table 4.15-5: Estimated Future Traffic Conditions
 for Significant Western Nevada County Roads and Highways**

Roadway Segment	Classification	2035 Estimated, Peak Hour	
		Two-Way Volume	LOS
Penn Valley Dr W. of Spenceville Rd	Two-Lane Arterial	400	C
Pleasant Valley Rd @ French Corral	Two-Lane Arterial	20	C
Pleasant Valley Rd N. of Bitney Springs Rd	Two-Lane Arterial	40	C
Pleasant Valley Rd N. of Hwy 20	Two-Lane Arterial	970	D
Pleasant Valley Rd N. of Lake Wildwood Dr	Two-Lane Arterial	560	C
Pleasant Valley Rd N. of Wildflower Dr	Two-Lane Arterial	260	C
Pleasant Valley Rd S. of Bitney Springs Rd	Two-Lane Arterial	80	C
Pleasant Valley Rd S. of Lake Wildwood Dr	Two-Lane Arterial	800	C
Pleasant Valley Rd W. of Hwy 49	Two-Lane Arterial	40	C
Ridge Rd E. of Rough and Ready Hwy	Two-Lane Arterial	600	C
Ridge Rd E. of Via Vista (W)	Two-Lane Arterial	550	C
Ridge Rd SW. of Hughes Rd	Two-Lane Arterial	870	D
Ridge Rd W. of Nevada City Hwy (Nc Corp)	Two-Lane Arterial	590	C
Ridge Rd W. of Upper Slate Crk (Gv Corp)	Two-Lane Arterial	840	C
Ridge Road N. Sierra College Blvd	Two-Lane Arterial	850	D
Ridge Road S. Sierra College Blvd	Two-Lane Arterial	750	C
Rough & Ready Highway W. of West	Two-Lane Arterial	530	C
Rough and Ready Hwy N. of Hwy 20	Two-Lane Arterial	300	C
Rough and Ready Hwy W. of Bitney Springs Rd	Two-Lane Arterial	400	C
Rough and Ready Hwy W. of Ridge Rd	Two-Lane Arterial	530	C
Rough and Ready Hwy W. of Squirrel Creek Rd	Two-Lane Arterial	450	C
Sierra College Drive, East of Ridge Road	Two-Lane Arterial	660	C
South Auburn Street, Between Badger and Adams	Two-Lane Arterial	500	C
South Auburn Street, North of Village Way	Two-Lane Arterial	760	C
Spenceville Rd NE of Indian Springs Rd	Two-Lane Arterial	180	C
Spenceville Rd SW of Penn Valley Rd	Two-Lane Arterial	450	C
Sutton Way, South of Brunswick Road	Two-Lane Arterial	1,740	F
Sutton Wy Solar Dr to Golden Gate Terrace	Two-Lane Arterial	810	C
Tyler Foote Crossing Rd NE of Hwy 49	Two-Lane Arterial	250	C
Tyler Foote Crossing Rd NE of Oak Tree Rd	Two-Lane Arterial	180	C
Tyler Foote Crossing Rd SW of Oak Tree Rd	Two-Lane Arterial	190	C
W Empire St Le Duc St to S Auburn St	Two-Lane Arterial	550	C
West Main Street South Auburn to Alta	Two-Lane Arterial	1,150	D
West Main, Between West Hill and Greenwood	Two-Lane Arterial	440	C
West McKnight Way Freeman to Taylorville	Two-Lane Arterial	1,020	D
West McKnight Way NB Sr 49 Ramps to La Barr Meadows	Two-Lane Arterial	1,310	D
Wolf Rd W. of Hwy 49	Two-Lane Arterial	580	C
Sr 49 Woodridge Dr to Combie Rd	Four-Lane Arterial, Undivided	2,410	D
Sr 49 Combie Rd to Cameo Dr	Four-Lane Arterial, Undivided	1,910	D
Sr 49 Meadowbrook Court to Alta Sierra Drive	Major Two-Lane Highway	1,980	E
Sr 49 Pingree Road to Little Valley Road	Major Two-Lane Highway	1,960	E
Sr 49 South of La Barr Meadows Road	Major Two-Lane Highway	2,400	E
Sr 49 Crestview Drive to W. McKnight Way	Major Two-Lane Highway	2,420	E

**Table 4.15-5: Estimated Future Traffic Conditions
for Significant Western Nevada County Roads and Highways**

Roadway Segment	Classification	2035 Estimated, Peak Hour	
		Two-Way Volume	LOS
Sr 49 W. McKnight Way to W. Empire Street (Northbound)	Two Freeway Lanes	1,490	B
Sr 49 W. McKnight Way to W. Empire Street (Southbound)	Two Freeway Lanes	1,870	B
Sr 49 Sr 20 to Coyote Street	Two-Lane Arterial	1,160	D
Sr 49 W. Broad St/Cement Hill Rd to Elks Lodge Entrance	Two-Lane Arterial	640	C
Sr 49 East of Newtown	Two-Lane Arterial	610	C
Sr 49 Newton Rd to John Barleycorn Rd	Two-Lane Arterial	440	C
Sr 49 North of Tyler Foote	Two-Lane Arterial	310	C
Sr 174 Central Ave to Ophir St	Two-Lane Arterial	470	C
Sr 174 Gold Hill Dr to Race St	Two-Lane Arterial	580	C
Sr 174 Partridge Rd to Empire Mine Cross Rd	Two-Lane Arterial	440	C
Sr 174 E. Empire Street at Church Entrance	Two-Lane Arterial	740	C
Sr 174 Brunswick Rd to Los Cendros Ln	Two-Lane Arterial	900	D
Sr 20/49 W. Empire St to S. Auburn St (Northbound)	Two Freeway Lanes and Auxiliary Lane	1,710	B
Sr 20/49 W. Empire St to S. Auburn St (Southbound)	Two Freeway Lanes and Auxiliary Lane	1,880	B
Sr 20/49 South Auburn St to E. Bennett St (Northbound)	Two Freeway Lanes	1,560	B
Sr 20/49 South Auburn St to E. Bennett St (Southbound)	Two Freeway Lanes	1,730	B
Sr 20, South of Idaho-Maryland (Northbound)	Two Freeway Lanes and Auxiliary Lane	2,140	B
Sr 20, South of Idaho-Maryland (Southbound)	Two Freeway Lanes and Auxiliary Lane	2,480	B
Sr 20/49 Idaho Maryland Rd to Brunswick Rd (Northbound)	Two Freeway Lanes and Auxiliary Lane	1,600	B
Sr 20/49 Idaho Maryland Rd to Brunswick Rd (Southbound)	Two Freeway Lanes and Auxiliary Lane	1,950	B
Sr 20/49 Brunswick Rd to Gold Flat Rd (Northbound)	Two Freeway Lanes	1,530	B
Sr 20/49 Brunswick Rd to Gold Flat Rd (Southbound)	Two Freeway Lanes	1,440	B
Sr 20/49 Gold Flat Rd to Sacramento St (Northbound)	Two Freeway Lanes	1,320	B
Sr 20/49 Gold Flat Rd to Sacramento St (Southbound)	Two Freeway Lanes	1,110	B
Sr 20 West of Penn Valley	Major Two-Lane Highway	620	C
Sr 20 Pleasant Valley Rd to Penn Valley Dr	Major Two-Lane Highway	660	C
Sr 20 Pleasant Valley Road to Rough & Ready Hwy	Major Two-Lane Highway	1,240	D
Sr 20 Brighton Street to Penn Valley Drive	Major Two-Lane Highway	1,410	E
Sr 20, Mill Street to Sr-49 (Eastbound)	Two Freeway Lanes and Auxiliary Lane	550	B
Sr 20, Mill Street to Sr-49 (Westbound)	Two Freeway Lanes and Auxiliary Lane	890	B
Sr 20 Sr 49 to Nevada Street/Manzanita Diggins Dr	Major Two-Lane Highway	390	C
Sr 20 West of Mooney Flat Rd (Gateway)	Major Two-Lane Highway	630	C
Sr 49 North of Heron Rd (Gateway)	Two-Lane Arterial	190	C
Sr 20 East of Harmony Ridge Rd (Gateway)	Major Two-Lane Highway	310	B
Sr 174 SE of Redberry Rd (Gateway)	Two-Lane Arterial	460	C
Dog Bar Rd South of Springfield Dr (Gateway)	Two-Lane Arterial	120	C

**Table 4.15-5: Estimated Future Traffic Conditions
 for Significant Western Nevada County Roads and Highways**

Roadway Segment	Classification	2035 Estimated, Peak Hour	
		Two-Way Volume	LOS
Sr 49 Overhill Dr to Linnet Ln (Gateway)	Four-Lane Arterial, Undivided	2,190	D
Source: Fehr & Peers, 2016.			

Table 4.15-5 is further discussed in the Impact 4.15-2 section below.

BICYCLE AND PEDESTRIAN FACILITIES

EXISTING BICYCLE FACILITIES

Bicycle facilities are grouped into the following four classifications:

- **Multi-use paths (Class I)** – Paths that provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized.
- **On-street lanes (Class II)** – Lane that provide a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles. Class II bicycle facilities are designated for use by bicycles through striping, pavement legends, and signs.
- **On-street bike routes (Class III)** – Routes designated by signage for shared bicycle use with vehicles but do not necessarily include any additional pavement width.
- **Protected bikeways (Class IV)** – Bikeways which provide a right-of-way designated exclusively for bicycle travel within a roadway and are protected from other vehicle traffic with devices including, but not limited to, grade separation, flexible posts, inflexible physical barriers, or parked cars. These are also known as “cycle tracks” or “protected bike lanes.”

Bikeways exist throughout Nevada County and as of 2016, the existing western Nevada County bikeway system consists of approximately 9.4 miles of bikeways, including approximately 4.1 miles of Class I bike paths and 5.3 miles of Class II bike lanes. Western Nevada County also includes 16.9 miles of multi-use shoulders on rural roadways which are not classified as bike routes, but they improve bicycling conditions. The existing eastern Nevada County bikeway system consists of approximately 78 miles of bikeways, including approximately 18 miles of paved trails (Class I bike paths) and 19 miles of Class II bike lanes. These trails are primarily oriented toward recreational use and do not typically provide connection for non-auto transportation within the urbanized areas of Nevada County.

To address the need for improved bikeway conditions, the NCTC adopted the 2013 Bicycle Master Plan in July 2013 and amended the Plan in January 2016 to include the Truckee Trails and Bikeways Master Plan. The Nevada County Bicycle Master Plan is primarily a Countywide coordinating and resource document for the City of Grass Valley, City of Nevada City, Town of Truckee and the unincorporated County areas. The plan proposes a number of bikeway routes in the region and outlines bicycle programs related to safety, education, and outreach which promote bicycling for all ages. A key goal of the plan is to promote policy integration and coordination with the County Department of Public Works and the County Planning Department, to ensure that proposed projects can be funded and implemented in a timely fashion.

EXISTING PEDESTRIAN FACILITIES

In the incorporated jurisdictions in Nevada County, pedestrian facilities most often consist of sidewalks and shared bicycle facilities, while in the unincorporated more rural areas, unpaved trails and shared bicycle/pedestrian paths are the most common facilities. While Nevada County is generally rural, walking is a common mode of transportation within the County's developed communities. Outside of the developed areas, walking is less common due to the distance between origins and destinations, lack of sidewalks, and automobile-oriented development. To increase the number of people who walk for utilitarian and recreational purposes, the NCTC adopted a Pedestrian Improvement Plan in March 2011 which was subsequently amended in May 2012 and July 2014 to add two projects.

TRANSIT SERVICES AND FACILITIES

Transit operations are managed separately in western Nevada County and the Town of Truckee which is in the eastern County area (NCTC RTP 2018). Transit services in western Nevada County are provided through a Joint Powers Agreement executed between Nevada County, the City of Grass Valley, and Nevada City. The Nevada County Transit Services Division (TSD) is responsible for the operation and management of the two public transit systems in western Nevada County. The two systems are the Gold County Stage (GCS) fixed route transit service, and the Gold Country LIFT Demand Response Paratransit Service. Transit services in eastern Nevada County are operated by the Town of Truckee which contracts with the private sector for transit management, supervision, vehicle maintenance, and operations. There are two fixed-route transit systems which are co-branded as Tahoe Truckee Area Regional Transit (TART). These systems include the Truckee TART and the Placer County TART.

Gold County Stage Fixed Route Transit Service consists of a fixed route transit system that connects population, commercial, and employment centers throughout western Nevada County. GCS operates six routes that serve the Nevada City/Grass Valley area and the unincorporated area of western Nevada County, and also provides regional connections to Placer County. Transfers can be made in Placer County at the Auburn Depot between Gold Country Stage Route 5, Placer County Transit, Auburn Transit, and Amtrak Capital Corridor trains.

Gold Country LIFT Demand Response Paratransit Service provides on demand transit service Monday through Saturday at set times. The paratransit service area is a 3/4-mile corridor on either side of Gold Country Stage fixed routes and includes the Grass Valley/Nevada City urban area as well as the communities of Penn Valley, Rough and Ready, Lake Wildwood, Cedar Ridge, and Alta Sierra. Service to outlying areas is also provided as resources allow. Reservations must be made at least one day in advance.

Truckee TART is operated by the Town of Truckee under contract with Paratransit Services and provided through a public-private partnership between the Town of Truckee and several private organizations. Service is provided during the winter season (mid-December through mid-April) between Henness Flats, downtown Truckee, Donner Lake, and various ski resorts. During the non-winter season (mid-April through mid-December) buses serve the Truckee-Tahoe Airport, Recreation Center, Downtown Truckee, 2 shopping centers, Donner State Park and the west end of Donner Lake.

Placer County TART is operated by Placer County Department of Public Works and is funded by the Town of Truckee and Placer County since the route serves both counties. The fixed-route service is between the Town of Truckee and Tahoe City.

4.15.3 REGULATORY SETTINGS

Traffic analysis in California is guided by policies and standards set at the state level by Caltrans and at the local level by the applicable jurisdictions. At the Federal level, for this project, regulation would be related to the airports that are within the County. Each level of regulation and the associated agencies are discussed below.

FEDERAL

There are no federal laws or regulations pertaining to transportation and circulation that are relevant to the project. However, as explained in *Section 3.2: Regulatory History and Background*, even though cannabis is “decriminalized” under State law, and even with the U.S. Department of Justice (USDOJ) issuance of memoranda guiding federal law enforcement related to cannabis activities within jurisdictions that have legalized cannabis, cannabis activities continue to be illegal at the federal level and are subject to the prosecutorial discretion of the federal government.

FEDERAL AVIATION ADMINISTRATION (FAA)

The Federal Aviation Administration (FAA) regulates aviation at regional, public, private, and military airports. The FAA regulates objects affecting navigable airspace. According to 49 Code of Federal Regulations Part 77.13, any person/organization who intends to sponsor any of the following construction or alterations must complete FAA form 7460 for FAA approval of:

- Any construction or alteration exceeding 200 feet above ground level.
- Any construction or alteration:
 - Within 20,000 feet of a public use or military airport, which exceeds a 100:1 surface from any point on the runway;
 - Within 10,000 feet of a public use or military airport, which exceeds a 50:1 surface from any point on the runway; and
 - Within 5,000 feet of a public use heliport, which exceeds a 25:1 surface.
- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed the above noted standards.
- When requested by the FAA.
- Any construction or alteration located on a public use airport or heliport regardless of height or location.

STATE

Government Code 665302 (b)(1) establishes the requirements for General Plan Circulation Elements. The code requires that a Circulation Element shall consist of “the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan.

This circulation element is intended to address circulation and capacity needs, safety and emergency access, and non-motorized transportation. In addition, the circulation element will identify the functional classification of Nevada County roads and level-of-service requirements.

CALIFORNIA DEPARTMENT OF TRANSPORTATION

California Department of Transportation Concept Records

The California Department of Transportation (Caltrans) is responsible for the planning, design, construction, operation, and maintenance of all state-owned roadways, including those in Nevada County (County). Interstate 80 (I-80), and SR-20, SR-49, SR-89, SR-174, and SR-267 are all located in the County, and are within Caltrans' jurisdiction.

Caltrans provides administrative support for transportation programming decisions made by the California Transportation Commission (CTC) for State funding programs. The State Transportation Improvement Program (STIP) is a multi-year capital improvement program that sets priorities and funds transportation projects envisioned in long-range transportation plans. The Caltrans Guide for the Preparation of Traffic Impact Studies provides general guidance regarding the preparation of traffic impact studies for projects that may have an impact on the State Highway System. The Caltrans Highway Design Manual (HDM) establishes uniform policies and procedures for State highway designs.

TCRs have been completed by Caltrans for the state highway system serving the County. TCRs are Caltrans long range (20-year) planning documents for each state highway route that describe the conceptual improvement options for each given transportation route or corridor. The TCRs identify existing and forecasted travel data, route maps, and a list of planned, programmed, and needed projects for each highway over the next 20 years. TCR's identify how a highway will be developed and managed in order to deliver a targeted level of service (Concept LOS) that is feasible to attain over a 20-year planning horizon. Concept LOS represents the minimum acceptable service conditions over the next 20 years. TCRs for the State highways in the County and their respective Concept LOS are listed below.

- Interstate 80 Transportation Concept Report (Caltrans 2017)
 - Concept LOS D on all segments
- SR 20 Transportation Concept Report (Caltrans 2013)
 - Concept LOS D on all expressways
 - Concept LOS E on 2-lane conventional highways
 - Concept LOS E on 4-lane freeways
- SR 49 Transportation Concept Report (Caltrans 2017)
 - Concept LOS D on all segments
- SR 89 Transportation Concept Report (Caltrans 2012)
 - Concept LOS D on one 2-lane conventional highway segment
 - Concept LOS E on one 2-lane/4-lane conventional highway segment
- SR 174 Transportation Concept Report (Caltrans 2017)
 - Concept LOS C on 2-lane conventional highways
- SR 267 Transportation Concept Report (Caltrans 2012)
 - Concept LOS D on 2-lane expressways

CALIFORNIA DEPARTMENT OF TRANSPORTATION STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM

The California Department of Transportation Statewide Transportation Improvement Program (STIP) is a multi-year, statewide, intermodal program of transportation projects that is consistent with the statewide

transportation plan and planning processes, and metropolitan plans. Caltrans prepares the STIP in cooperation with the Metropolitan Planning Organizations and Regional Transportation Planning Agencies. The STIP contains all capital and non-capital transportation projects or identified phases of transportation projects for funding under the Federal Transit Act and Title 23 of the U.S. Code.

CALIFORNIA DEPARTMENT OF TRANSPORTATION INTERREGIONAL TRANSPORTATION IMPROVEMENT PROGRAM

Caltrans' five-year ITIP is prepared pursuant to Government Code 14526, Streets and Highways Code Section 164, and the California Transportation Commission's STIP Guidelines. Regional agencies work with Caltrans to identify projects that will address improvements to the interregional transportation system and improve the movement of people, vehicles, and goods between regions.

California Vehicle Code (CVC), Division 15, Chapters 1 through 5 (Size, Weight, and Load)

Includes regulations pertaining to licensing, size, weight, and load of vehicles operated on highways.

California Street and Highway Code Sections 660-711, 670-695

Requires permits from Caltrans for any roadway encroachment during truck transportation and delivery, includes regulations for the care and protection of State and county highways and provisions for the issuance of written permits, and requires permits for any load that exceeds Caltrans weight, length, or width standards for public roadways.

REGIONAL

NEVADA COUNTY REGIONAL TRANSPORTATION PLAN 2016 UPDATE

The NCTC which is the designated Regional Transportation Planning Agency for Nevada County, is required by California law to prepare, adopt, and submit an updated RTP to Caltrans and the CTC every five years. The 2016 RTP documents Nevada County's regional transportation needs for the next 20 years and establishes a cost-feasible action plan to meet those needs. The RTP includes policies and guidelines for use of federal, state, and local funding. Development of updates to the RTP is a cooperative effort between NCTC, Caltrans, and other stakeholders, including but not limited to Native American tribes, local transit authorities, local service providers, and the general public (NCTC RTP 2018).

The 2016 RTP demonstrates close ties to the RTIP, ITIP, STIP, the Federal Transportation Improvement Program (FTIP), the California Transportation Plan, and the California Strategic Highway Safety Plan (NCTC 2016).

The 2016 RTP guides transportation investments in the region, with the goal of creating and maintaining a comprehensive, multimodal, safe and efficient transportation system. The plan outlines projects for roadway and transit networks, bicycle and pedestrian facilities, aviation, railroad facilities, goods movement, intelligent transportation systems, transportation system management, air quality, and transportation safety to provide an integrated, multimodal transportation system.

REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM

The RTIP is a 5-year program of proposed transportation projects submitted to the CTC by NCTC for state funding. The RTIP is updated every two years by the CTC (NCTC RTP 2018).

LOCAL**NEVADA COUNTY GENERAL PLAN (NCGP)**

The NCGP is written to satisfy the requirements of Government Code 665302 (b)(1). The NCGP shows the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan. The NCGP has multiple sections that address transportation and circulation. This includes Chapter 4: Circulation which describes circulation and capacity needs, safety and emergency access, and non-motorized transportation. The chapter also identifies LOS requirements for roads. Goals and Policies that are related to transportation and circulation include the following:

- Goal LU-4.1 Coordinate existing and future circulation systems with existing and future land use patterns.
- Goal LU-4.2 In *Rural Regions*, establish and maintain a desired level of service that supports sustainable growth and development.
- Goal LU-4.4 Maintain desired levels of service by balancing development of the circulation system with land use and development in the County.
- Goal LU-4.5 Provide for long-term ongoing roadway maintenance.
- Goal LU-4.7 Provide local and regional road and street systems that are consistent and compatible with local land use patterns and street networks.
- Policy LU-4.1.1 The minimum level of service allowable in the Rural Regions of the County, as identified in the General Plan, shall be level of service (LOS) C, except where the existing LOS is less than C. In those situations, the LOS shall not be allowed to drop below the existing LOS. Level of service shall be based on the typical highest peak hour of weekday traffic. Special events may be permitted which temporarily exceed this minimum LOS.
- Policy LU-4.1.5 Where it is determined by the County that a County road, road segment or intersection no longer provides the desirable or acceptable level of service as defined in Policy LU-4.1.1 and Policy LU-4.1.2, the County shall take action to ensure compatibility between future growth and the road system. Solutions to local road system problems may include funding of transportation-related facilities, transportation management techniques, or development limitations or restrictions.
- Policy LU-4.1.6 Relative to the State highway system, Nevada County recognizes the major funding limitations that exist within the State system and finds that as a matter of policy, additional growth and development may be allowed within the County, notwithstanding the adverse impacts which may result in the short term by this growth and development. Therefore, the County shall:
- b. Commit local moneys, when available, in the partial funding of critical State highway improvements. As a part of this commitment, the County shall continue to pursue the use of development fees from private development as a funding source;

- c. Acknowledge that short-term adverse impacts to the State highway system resulting from growth and development within the County will occur until adequate funding is made available and improvements made through projects identified in the adopted State Transportation Improvement Program.
- Policy LU-4.1.11 New roads built to serve discretionary projects shall be maintained through private maintenance agreements, homeowners associations, Permanent Road Divisions (PRDs), or Community Service Areas (CSAs).
- Program LU-4.1.1 Monitor the County and State road system to work toward timely solutions to documented safety problems and appropriate improvements for those components of the road system that are either at or approaching a level of service below D in *Community Regions* and a level of service below C in *Rural Regions*.
- Program LU-4.1.4 Implement the Nevada County Transportation Commission Regional Traffic Mitigation Fee Program and the Nevada County Local Traffic Mitigation Fee Program. These two programs impose development fees to mitigate the cumulative impact of development on the regional (non-local) highway and roadway network as defined in the Nevada County Road Functional Classification Plan and as shown on the Nevada County Circulation Plan Maps.
- Goal MV-4.1 Provide for the safe and efficient movement of people and goods in a manner that respects the rural character of Nevada County.
- Goal MV-4.2 Provide for a transportation system design that facilitates the transportation of people, goods and services in support of the General Plan and the local economy.
- Goal MV-4.3 Provide for alternative routes for efficient service and for emergency access.
- Goal MV-4.4 Reduce accident rates on County maintained roadways.
- Policy MV-4.2.1 Regional Emergency Access Roads - Roads that provide secondary access to various areas of the County during emergencies such as wildland fires and flooding, as well as secondary access to individual homes and future discretionary projects during site specific emergencies. Regional Emergency Access Roads are public roads for emergency purposes and connect between roads classified as collectors or greater and reduce the emergency travel distance by 1 mile or greater. They may be gated to limit non-emergency access.
- Policy MV-4.2.4 The County shall maintain the function and integrity of arterial and major collector roads by limiting access wherever possible. For all new development, allow access via the lowest roadway classification, consistent with safe operation of the roadways and environmental constraints.
- Policy MV-4.2.5 In the review of all discretionary permits, the County shall consider the effect of the proposed development on the area-wide transportation network and the effect of the proposed development on the road network and other transportation facilities in the immediate vicinity of the project site.

- Policy MV-4.2.10 Discretionary development served by a dead end road and located beyond the dead end road limit shall be required, at a minimum, to construct secondary access roads in accordance with Chapters XVI and XVII of the Nevada County Land Use Code. Secondary access roads shall meet Nevada County Fire Standard Access Road standards unless a Petition for Exception is approved granting lesser standards.
- Policy MV-4.2.11 To expand the County's network of Regional Emergency Access Roads, the County will accept existing offers of dedication and amend the General Plan to classify the Road as a Regional Emergency Access Road on a case-by-case basis where the road: 1) meets the definition of a Regional Emergency Access Road as follows, Regional Emergency Access Roads are defined as access roads that connect between roads classified as collectors or greater and reduce emergency travel distance by 1 mile or greater; 2) will not be gated or will be only be gated with an unlocked gate approved by the appropriate Fire District; and 3) meets the criteria shown in either a, b, or c.
- a. Where the Regional Emergency Access Road is identified as part of a discretionary project, the following must apply for acceptance:
 - i. Offers of dedication are available; and
 - ii. The discretionary project is responsible for the construction of and upgrade to fire safe standards and a PRD or CSA is formed for ongoing maintenance.
 - b. Where the Regional Emergency Access Road is initiated by existing owners in a neighborhood, the following must apply for acceptance:
 - i. Offers of dedication are available;
 - ii. The road meets the minimum fire safe standards; and
 - iii. At least 50% of the roadway maintenance costs are borne by a PRD or CSA.
 - c. Where the Regional Emergency Access Road is initiated by the County, the following must apply for acceptance:
 - i. Offers of dedication are available;
 - ii. The road meets fire safe standards; and
 - iii. Road funds are available for maintenance.
- Policy MV-4.2.12 Private roads that provide critical regional emergency access shall be maintained through a Private Road District (PRD) or County Service Area (CSA).
- Policy MV-4.2.13 Private roads that provide non-critical regional emergency access are encouraged to be maintained through a Private Road District (PRD) or County Service Area (CSA).
- Goal RD-4.4 Encourage land use patterns that reduce the need for new roadways and promote the use of alternative transportation modes.

- Policy RD-4.3.1 All discretionary and ministerial non-residential projects shall consider the feasibility of providing transit alternatives to automobile transportation and ways to reduce the dependence on the automobile. For projects generating 50 or more employees, the applicant shall prepare an analysis documenting means to reduce automobile dependence. Wherever feasible, measures documented in the analysis shall be incorporated into the project. This process shall be coordinated with the applicable Transportation Management Association (TMA) or successor agencies.
- Policy RD-4.3.4 Minimize the need to commute by:
- a. Providing for an adequate amount of residential, commercial, and industrial designations in proper balance, as shown on the General Plan Land Use Maps; and
 - b. Encouraging Economic Development and Public Facility policies that support local employment opportunities.
- Goal EP-4.1 *Minimize* adverse impacts of the circulation system on the natural and historic environment.
- Goal EP-4.2 Protect the natural environment in development and maintenance of the transportation system.
- Goal EP-4.3 To the extent feasible, encourage the reduction of Greenhouse Gas emissions during the design phase of construction projects.
- Goal EP-4.4 To the extent feasible, encourage the development of energy efficient circulation patterns.
- Policy EP-4.4.1 The County shall require environmentally sound practices for transportation facility construction and maintenance. New roads or improvements to the existing road system and all trails and pathways shall be located, constructed and maintained in a manner compatible with the environment.
- Policy EP-4.4.3 Recognize and protect, to the extent feasible, existing historical districts and other historical features during the development of roadway systems.
- Policy FP-10.7.1 Identify existing County-maintained roads not meeting design standards for current or anticipated use as designated on the General Plan Land Use Map.
- Policy FP-10.7.2 Ensure that proposed private roads are maintained.
- Policy FP-10.7.3 As a condition of development, require long-term maintenance of private roads to the standards of the original improvements, including roadside vegetation management.
- Policy FP-10.7.3 The following shall be included in the Comprehensive Site Development Standards as the basis for site plan review:
- a. Standards for roads and private driveways which will enhance the ability of emergency service providers to respond to structural and wildland fires, and calls for medical and law enforcement emergency assistance. The standards

shall provide for secondary road access to new projects where necessary for fire safety or emergency access;

- c. Sign and address standards which will provide for easy identification of roads, streets, driveways and buildings by emergency service providers.

NEVADA COUNTY LAND USE AND DEVELOPMENT CODE

Chapter XVII: Road Standards of Title 3 Land Use and Development Code, as defined in Section L-XVII 1.1, explains that the intent of the County Improvement Standards is to set design and construction standards for public and private works under the jurisdiction of Nevada County in order to provide for the coordinated development of facilities to be used by and for the protection of the public. Consistent with the General Plan discussion above, the zoning code does not address requirements related to private roads. Other sections of the Development Code provide guidance that would apply to the proposed project. These elements are discussed below:

Section L-II 4.19.9 Transportation Alternatives. The purpose of this code is to consider methods for reducing dependence on the automobile by exploring alternative modes of transportation in all projects.

Section L-XVI 2.1. refers to the Purpose and Intent for the Fire Safety Regulations and road standards to provide the necessary minimum wildfire protection standards that will minimize public safety effects with the establishment of land uses and buildings within State Responsibility Areas (SRA) lands within Nevada County. These regulations are intended to mitigate effects of wildland fire exposure to such land uses within the State Responsibility Areas and they are further adopted to equal, exceed, or provide the same practical effect contained in the California State Board of Forestry's Fire Safe Regulations. The fire safety regulations provide measures for emergency access, street name and building address signage, water reserves for emergency fire use, and vegetation modification. Conformance to these regulations is required of the following and applicable to the proposed project.

- Application for a use permit and all ministerial and discretionary site plans.

TRAFFIC IMPACT MITIGATION FEES

To offset the traffic impacts on the roadway network from development, the County Board of Supervisors adopted Board Resolutions 08-336, 08-337, 08-467, 08-479 establishing a Traffic Impact Fee Mitigation Program for the unincorporated area of the County. The County collects a Regional Transportation Mitigation Fee and a Local Traffic Mitigation Fee. There are two zones are part of the fee program: Zone 1 includes the western-portion of the County and Zone 2 includes the eastern portion of the County. Payment of these fees by the project applicants are contributed to the cost of necessary future improvements to the regional roadway network.

NEVADA COUNTY AIRPORT LAND USE COMPATIBILITY PLAN (ALUCP)

The Nevada County Airport Land Use Compatibility Plan (ALUCP) was adopted by the Nevada County Airport Land Use Commission (ALUC) on September 21, 2011. The plan sets compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to land owners in the design of new development. The influence area extends 1.7 miles from the airport's runway. The plan is used by the ALUC staff to define compatibility for noise, safety, airspace protection, and overflight as it pertains to newly proposed projects in the vicinity of the Airport. The ALUCP is shown in *Figure 4.9-9: Nevada County Airport Land Use Compatibility Map*.

TRUCKEE TAHOE AIRPORT LAND USE COMPATIBILITY PLAN (TTALUCP)

The Truckee Tahoe Airport Land Use Commission (TTALUC) serves as the land use planning agency for the Truckee Tahoe Airport. This special Airport Land Use Commission (ALUC) consists of representatives from Nevada and Placer Counties. The plan defines compatible land uses for noise, safety, airspace protection, and overflight. The influence area for the Truckee Tahoe Airport extends 3.6 miles from the airport runways. The Truckee Tahoe Airport Land Use Compatibility Plan (TTALUCP) is a document referred to by the Commission and individuals seeking to review standards for land use planning in the vicinity of the airport. The TTALUC performs consistency determinations for proposed projects in the area covered by the Compatibility Plan as needed. See *Figure 4.9-10: Tahoe Truckee Airport Compatibility Factors: Noise & Safety*. The TTALUCP was most recently revised and adopted on October 27, 2016 (TTALUP, 2016).

4.15.4 STANDARDS OF SIGNIFICANCE

ENVIRONMENTAL ANALYSIS

THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant traffic and transportation impact if it would:

- Conflict with an Applicable Plan, Ordinance, or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System;
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- Result in a change in air traffic patterns, including either an increase in traffic levels or change in location that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g. sharp curves or danger intersection) or incompatible uses (E.g. Farm equipment);
- Result in inadequate Emergency access; and
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

4.15.5 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

METHOD AND ASSUMPTIONS

The evaluation of potential impacts related to transportation is based on a review of existing transportation facilities and conditions, and transportation-related plans and policies relevant to the project. Due to the countywide scope of the implementation of the proposed ordinance and because exact locations of all future commercial cannabis operations are not known at this time, the analysis does not evaluate specific intersections of local roadways. Instead the analysis addresses general expectations of traffic along state highways and the potential environmental effects of the project. Per *Section 3.0: Project Description*, all cannabis cultivation areas shall not adversely affect the health, safety, or general welfare of persons at the Cultivation site or at any nearby residence by creating traffic. It should be noted

that many cannabis cultivation areas for the County are already in existence and thus are accounted for in previously reported LOS conditions.

LEVEL OF SERVICE THRESHOLDS

Analysis of the Nevada County roadway segments for this project was conducted using volume thresholds consistent with those developed for the 2018 Nevada County Regional Transportation Plan. *Table 4.15- 6: Western Nevada County Peak Hour Level of Service Thresholds* below presents these volume thresholds.

Table 4.15-6: Western Nevada County Peak Hour Level of Service Thresholds

Operational Class	LOS B	LOS C	LOS D	LOS E
Minor Two-Lane Highway	330	710	1,310	2,480
Major Two-Lane Highway	330	710	1,310	2,480
Two-Lane Arterial	-	850	1,540	1,650
Four-Lane Arterial, Undivided	-	1,760	3,070	3,130
Four-Lane Arterial, Divided	-	1,850	3,220	3,290
Notes: Based on Highway Capacity Manual, Transportation Research Board, 2010. Two-lane highway and arterial LOS based on HCM 2010, Exhibit 15-30, Class II Rolling, 0.09 K-factor, and D-factor of 0.6 Four-lane arterial LOS based on HCM 2010, Exhibit 16-14, K-factor of 0.09, posted speed 45 mi/h				

The traffic volumes thresholds were developed to characterize the circulation network of Nevada County by evaluating local roadway segments by comparing peak hour roadway segment traffic volumes (two-way total) to service thresholds based on the Highway Capacity Manual (2010).

4.15.6 POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACT 4.15-1: CONFLICT WITH AN APPLICABLE PLAN, ORDINANCE, OR POLICY ESTABLISHING MEASURES OF EFFECTIVENESS FOR THE PERFORMANCE OF THE CIRCULATION SYSTEM;

INCREASES IN TRAFFIC

Although commercial cannabis cultivation has been occurring for number of years, because it is still a relatively new phenomenon, and due to it having previously been an illegal activity both at the state and Federal Level. Therefore, established vehicle trip generation rates are not readily available and the estimates that do exist are highly variable. In addition, because different cultivation types (indoor, mixed-light, outdoor, and nurseries) have different components that require differences in work effort, they have different employment demands that can add to or reduce the daily vehicle trips. In addition, the density of cultivation activities (plants per square foot) and work such as on-site processing can substantially increase demand for employees. For example, an operation that grows cannabis to flower, and then only cuts and dries the cannabis, would require a less substantial workforce than a site which then processes, sorts, and packages the cannabis for off-site sales. The proposed NCCO would allow for indoor, mixed-use, and outdoor cultivation. However, under the proposed project, there would be no processing permitted. Cultivator could grow the cannabis, make an initial cutting and then dry. The cannabis would then be required to be shipped off-site for all additional, labor intensive, processing.

Based on these facts, this programmatic EIR uses estimates, while conservative, realistic to what would likely result from implementation of the proposed project at 100% build-out and; therefore, estimates reasonably foreseeable impacts resulting from increased traffic.

For analysis at the programmatic level, estimates of likely traffic increase are based on the conservative assumption that all parcels of land (2,684 acres) that are available for cannabis cultivation would be used for cannabis cultivation. Although this estimates likely over-estimates and represents a worst-case scenario for traffic impacts it reflects the total potential of the project to generate traffic as the project is proposed. *Table 4.15-7: Estimated Project Traffic Generation* shows the estimated new average daily trips (ADT) and vehicles miles traveled (VMT) generated as a result of cannabis cultivation under the proposed project.

Table 4.15-7: Estimated Project Traffic Generation

Cannabis Activity	Size (acres)	Trip Rate	New ADT	New Daily VMT ¹
Outdoor Cultivation ²	1,610	2 trips/acre ³	3,221	16,104
Mixed-Light Cultivation ²	804	11.7 trips/acre ³	9,421	47,104
Indoor Cultivation ²	268	67.3 trips/acre ⁴	18,063	90,317
Total	2,684	--	30,705	153,525

¹County average VMT per trip = 5 miles.
²Size assumptions for cannabis activities are based on a ratio of the total available cultivation area.
³Trips rates for outdoor and mixed-light cultivation have been taken from the Santa Barbara County Public Works Department based on similar agricultural activities.
⁴Indoor cultivation trip rate based on average trip rate assumptions derived from economic analysis of the cannabis industry.
 Sources: Santa Barbara Cannabis Land Use Ordinance and Licensing Program FEIR, ERA Economics, NCTC 2017.

Table 4.15-7 indicates that 30,705 additional trips could be added to the network in the 100-percent build-out scenario. In addition, an increase of 153,525 daily countywide VMT (4.9% of the County’s total VMT) would be generated by the proposed project were cannabis cultivation to occur on every available parcel at the allowable canopy densities. The increase in ADT could increase congestion on state highways and County roads. It should be noted that this number of trips is considered to be conservative, the County estimates there are a total of 3,500 existing cultivation sites that already use employees and those traffic trips are already part of the existing condition on the roadways as those owners and employees are already part of the existing workforce.

As noted in Section 4.12, Population and Housing, commercial cultivation could only occur on a parcel or premises with an occupied legally permitted residence, or on a vacant parcel adjacent to a parcel with an occupied legally permitted residence under common ownership and on AE, AG, and FR parcels. The proposed project also is analyzed on the assumption that 100% of eligible parcels would be used for cultivation. This is done for the purpose of a thorough CEQA evaluation and ensuring that the known environmental factors are discussed, and impacts are evaluated. Therefore; the hypothetical full development or worst-case buildout scenario is used to ensure the Draft EIR fully discloses the level of potential impacts. However, in the case of the proposed project there would be numerous development constraints for many of the parcels upon which commercial cultivation could occur. These constraints, such but not limited to irregularly shaped parcels that cannot provide adequate buffers, parcels that are within 1,000 feet of a sensitive site, parcels with sensitive biological habitat that cannot be used, sites with steep and rugged terrain or inclement weather, parcels with access and roadway issues, parcels that could not obtain electrical connections or sources of water, or the fact that some parcels would be too remote such as those in the Sierra Nevada Mountains, would be significant barriers to many parcels and property owners from entering the commercial cannabis cultivation market.

Development impacts fees are one means of reducing the direct impacts of the proposed ordinance on the overall performance of the circulation system and potential for increased demand for transportation

infrastructure and traffic congestion. The western Nevada County Regional Transportation Mitigation Fee (RTMF) program was established in 2001 through a partnership between the NCTC, Nevada County, the City of Grass Valley, and Nevada City. The purpose of establishing the RTMF program was to ensure that development impact fees are collected to help fund the construction of the transportation improvements on the regional system of roadways and highways that are necessary to accommodate planned growth. To offset the potential traffic impacts on the roadway network from future projects under the NCCO, the County would collect a Transportation Mitigation Impact Fee and a Local Traffic Mitigation Fee. For future projects located in Zone 1 (the western portion of the County), the County would collect a Western Nevada County RTMF and a Local Transportation Mitigation Fee (LTMF). For project located in Zone 2 (the eastern portion of the County), only a RTMF would be collected. Payment of these fees by future project applicants would ensure that the project contributes its fair share of the cost of necessary future improvements to the regional roadway network.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, would require registration with the enforcing officer through an administrative action. The cultivation activities of six plants for personal use in R1, R2, R3, or RA zones would be limited to indoor cultivation and the requirements to grow the six plants would not result in a substantial number of vehicle trips such that a conflict with an Applicable Plan, Ordinance, or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System would occur. Impacts in this regard would not occur and mitigation is not required.

Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cannabis cultivation less than 2,500 sf. Conformance to applicable regulations for either a CCP would be made during the plan review and approval process and could be made by the Planning Director. The Building Department would review all applications for completeness for CCPs. Payment of RTMF and LTMF, as applicable would be collected as part of this review. The fee would be based on the total number of trips anticipated based on the CCP application. Factors such as canopy size, accessory structures, and type of grow (i.e., outdoor, indoor, mixed light) would be factor in determining the traffic mitigation fee.

Cannabis cultivation for commercial or non-remuneration, would require processing of an Administrative Development Permit (ADP). An ADP could be used for cultivation activities from 2,500 sf to 10,000 sf. of canopy which is the maximum allowed under the proposed NCCO. Conformance to applicable regulations for an ADP would be completed during the plan review and approval process and could be made by the Planning Director. Payment of RTMF and LTMF, as applicable would be collected as part of this review. The fee would be based on the total number of trips anticipated based on the ADP application. Factors such as canopy size, accessory structures, and type of grow (i.e., outdoor, indoor, mixed light) would be factor in determining the traffic mitigation fee.

Commercial cannabis cultivation would have the potential to create a substantial increase in vehicle travel on a regional and local level. Traffic generated from commercial cannabis cultivation would be dispersed throughout a wide area of Nevada County, as the proposed commercial cannabis cultivation would be allowed in the AG, AE, and FR zones. Depending on the eventual siting of cultivation locations, some areas, due to existing LOS on the roadways in proximity to those location, would be more susceptible to concentrated traffic impacts. Accordingly, areas with relatively higher population density would be more likely to experience higher increases in traffic volumes than areas with more sparse development. Depending on parcel size and parcel density, it likely that traffic generation would be highly variable.

Due to the potential for the proposed project to contribute an additional 30,705 vehicle trips to location and regional roadways, there is a high likelihood that LOS standards and associated goals, policies, and objectives related to traffic service standards local, regional, and highways would make existing unacceptable LOS conditions worse. Based on 2016 Nevada County Regional Transportation Plan of the 18 listed highway segments, six currently operate below the minimum LOS during peak hours. In addition, of the listed 84 Principle and Minor Arterials, and Major and Minor collector roads listed in *Table 4.15-1: Nevada County Streets and Roads by Functional Classification* as well as other roadways and highway throughout the county, it is expected that some currently operate below minimum standards related to LOS. Contribution of the projected project vehicle trips would like further reduce LOS on failing streets and intersections, or cause streets and intersections to drop below standards.

Dropping below the minimum standards would result in inconsistencies with the certain general plan goals and policies related to LOS and congestion management. However, the proposed project would be consistent with the vast majority of the goals and policies. While some LOS thresholds would be exceeded, as part of the ADP process and development review, all existing and future projects applying for any discretionary permit would be subject to payment of fees which could be applied toward roadway improvement projects, provision of alternative transportation such as expansion of bus service as well as increasing bicycle and pedestrian corridors. Through the development review process the County also could ensure that emergency access is maintained and improved when needed, and additional funding to maintain existing roadways. More specific to alternative transportation, approval of a commercial cannabis cultivation permit, would require applicants to include the following information related to alternative transportation:

- Estimate of the number of employees/residents, and estimate of transportation demand created by the project;
- Identification of potential alternatives to automobile use (i.e. public transportation, bicycles, carpooling or bussing); and
- Proposal to include one or more measures to the proposed project.

Conformance with ADP process and conforming to the above three requirements would assist the county in assessing project-specific impacts and providing means for potential employees and residents to use alternatives to automobiles. Yet even with compliance to all applicable development regulations related to transportation and traffic, the addition of the worst-case vehicle trips could result in substantial impacts to some existing roadways. With a maximum 10,000 sf of canopy area, there is no individual project that would result in a significant increase in traffic on any roadway segments or intersections.

Other than the payment of fees, no additional feasible mitigation has been identified that could be implemented on an application by application basis that would reduce these impacts to less than significant. Therefore, traffic impacts in this regard impacts would be significant and unavoidable.

MITIGATION MEASURES

After the payment of the RTMF and LTMF fees, no feasible mitigation measures have been identified.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are significant and unavoidable.

IMPACT 4.15-2: CONFLICT WITH AN APPLICABLE CONGESTION MANAGEMENT PROGRAM, INCLUDING, BUT NOT LIMITED TO LEVEL OF SERVICE STANDARDS AND TRAVEL

**DEMAND MEASURES, OR OTHER STANDARDS ESTABLISHED BY THE COUNTY
CONGESTION MANAGEMENT AGENCY FOR DESIGNATED ROADS OR HIGHWAYS**

Program approval could lead to increased generation of vehicle trips on roads and at intersections from full-time and part-time employees, as well as movement of equipment and/or operational support vehicles. As of 2016, SR 20, SR 49, and SR 89 contain segments that operate unacceptably at LOS D or E. The proposed project could add vehicle trips to these segments that may exacerbate the LOS conditions. The 2018 RTP includes short-term and long-term planned roadway improvements that would improve congestion and provide adequate capacity for future traffic demand. Below is an abbreviated list of locations of regionally significant projects:

- | | | |
|---|---|--|
| ▪ Combie Road from SR 49 to Magnolia Road | ▪ SR 20/49 SB off Ramp at Ridge Road/Gold Flat Road | ▪ SR 20/49 NB Ramp/Idaho-Maryland Road |
| ▪ SR 20 EB Ramp at McCourtney Road | ▪ Dorsey Drive at Sutton Way | ▪ East Main Street – Bennett Street to Idaho-Maryland Road |
| ▪ East Main St.- Idaho-Maryland Road to Hughes Road | ▪ Ophir Street at Bennett Street | ▪ Idaho Maryland Drive/Centennial Drive |
| ▪ Donner Pass Road/Cold Stream Road/I-80 EB Ramps | ▪ Donner Pass Road/Bridge Street | ▪ Bridge Street/West River Street |
| ▪ Donner Pass Road/Pioneer Trail | ▪ SR 267/Brockway Road/Soaring Way | ▪ Glenshire Drive/Dorchester Road (West) |
| ▪ SR 89 North/Rainbow Drive | ▪ Brockway Road/Reynolds Way | ▪ Donner Pass Road/South Shore Drive |
| ▪ Church Street Extension | ▪ Glenshire Drive | |

Not all of the projects have been completed but some of the listed projects are in progress. *Table 4.15-5* displays the projected LOS conditions for 2035 for significant Western Nevada County roads and highways. This list is based on a travel demand model updated by the NCTC in 2014. While the majority of roadway segments are projected to be LOS C or better, there are several roadway segments that are projected to be LOS D or worse. While it is assumed that impacts to the transportation and circulation system as a result of cannabis cultivation would be dispersed throughout the County, impacts on LOS could occur at existing impacted intersections and highway segments within the County. As previously discussed, the County would collect a Transportation Mitigation Impact Fee and a Local Traffic Mitigation Fee. For future projects located in Zone 1 (the western portion of the County), the County would collect a Western Nevada County RTMF and a Local Transportation Mitigation Fee (LTMF). For project located in Zone 2 (the eastern portion of the County), only a RTMF would be collected. Payment of these fees by future project applicants would ensure that the project contributes its fair share of the cost of necessary future improvements to the regional roadway network. The proposed project would not result in any land use changes or changes to the roadway network that would conflict with applicable congestion management programs or policies related to the performance of the circulation system.

Although funding from Senate Bill 1, traffic impact fees, motor vehicle license fees, and other sources will generate more funding for roads, it may not be enough to improve all congested intersections, roads, and

highways to acceptable levels of service (2018 NCTC RTP). Impact fees are further discussed in Impact 4.15-1 above.

As stated in previous sections, under the proposed NCCO, county residents could legally engage in cultivation for personal use, commercial use, or non-remuneration. Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, and would require registration with the enforcing officer, and through an administrative action, obtain proof of registration. The cultivation activities for six plants, either indoors or outdoors, could only occur on a property with a legally permitted residence. Cultivation for personal use would not produce a substantial increase in traffic since county residents would likely use their existing residences for cultivation. Therefore, there would be little to no construction-related increases in traffic. Additionally, the number of trips a resident would take to obtain supplies for maintaining a maximum of six plants would be less than significant.

Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cannabis cultivation less than 2,500 sf. Conformance to applicable regulations for either a CCP would be made during the plan review and approval process and could be made by the Planning Director. The Building Department would review all applications for completeness for CCPs. Payment of RTMF and LTMF, as applicable would be collected as part of this review. The fee would be based on the total number of trips anticipated based on the CCP application. Factors such as canopy size, accessory structures, and type of grow (i.e., outdoor, indoor, mixed light) would be factor in determining the traffic mitigation fee.

Cannabis cultivation for commercial or non-remuneration, would require processing of an Administrative Development Permit (ADP). An ADP could be used for cultivation activities from 2,500 sf to 10,000 sf. of canopy which is the maximum allowed under the proposed NCCO. Conformance to applicable regulations for an ADP would be completed during the plan review and approval process and could be made by the Planning Director. Payment of RTMF and LTMF, as applicable would be collected as part of this review. The fee would be based on the total number of trips anticipated based on the ADP application. Factors such as canopy size, accessory structures, and type of grow (i.e., outdoor, indoor, mixed light) would be factor in determining the traffic mitigation fee.

Implementation of the development impact fees would reduce impacts to County transportation facilities. However, given the proposed project would increase traffic volumes, some of which would reasonably be dispersed to intersections located outside of the County's jurisdiction (i.e. Caltrans facilities) that currently and/or are projected to operate at or near deficient LOS, the proposed project may contribute towards an exceedance in LOS or exacerbate existing deficient LOS such that impacts would be significant. Impacts to these facilities would require coordination between the County and appropriate agencies to discuss remedies. As the facilities are located outside the jurisdiction of the County, they cannot feasibly be controlled or improved through County actions. Additionally, at a programmatic level, impacts to specific intersections or road segments, and the improvements necessary reduce such impacts are beyond the scope of this document.

MITIGATION MEASURES

No feasible mitigation measures have been identified.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

There is no mitigation that could be implemented that would further reduce these impacts. Therefore, some impacts would be significant and unavoidable.

IMPACT 4.15-3: CHANGE IN AIR TRAFFIC PATTERNS THAT RESULT IN SUBSTANTIAL SAFETY RISKS

Any existing as well as new commercial cannabis cultivation in operation or implemented as part of the proposed NCCO in the vicinity of public use airports would be subject to review by the respective ALUC. As described above, the ALUC's use criteria and polices set forth in the ALUCP's when assessing land use compatibility. These criteria outline the types, densities, and heights of land uses permitted within each airport land use compatibility zone to provide for both safe airport operation and airport land use compatibility. Only two of the airports in Nevada County have adopted ALUCPs. The other airports are smaller private airports that do not have restrictions on the surrounding land use patterns.

The Nevada County Airport lies in the western portion of Nevada County within the Loma Rica Industrial Area and east of the City of Grass Valley. The Nevada County ALUCP specifies that the influence area extends 1.7 miles from the airport's runways. As the Nevada County Airport is located adjacent to RA and AG zones which are eligible for cannabis cultivation, any cultivation sites within 1.7 miles of the runway would need to be compatible with the ALUCP based on noise, safety, airspace protection, and overflight.

The Truckee Tahoe Airport can be analyzed similarly. The Truckee Tahoe Airport is located approximately two miles east of the Town of Truckee off of State Route 267 and is located in the unincorporated areas of both Nevada County and Placer County. The TTALUCP specifies that the influence area extends 3.6 miles from the airport's runways. As the runway from Truckee Tahoe Airport is less than 1.5 miles away from the nearest AG zone, any cultivation sites within 3.6 miles would need to be compatible with the ALUCP based on noise, safety, airspace protection, and overflight.

The County does not anticipate, as part of the proposed project, that any new structures or accessory buildings would be tall enough to violate height restrictions or present a hazard to flights and aircraft at either public or private airports. Secondly, the proposed project does not propose any new development that would result in or attract a substantial number of new residents within the County or in proximity to airports. of all sizes

Cannabis cultivation project of less than 2,500 sf would require processing of a CCP to be reviewed and approved by the Building Department. An ADP would be used for all proposed commercial cultivation activities from 2,500 sf to 10,000 sf of canopy space and the Planning Director or designee would evaluate the project for consistency with the ALUCP. Therefore, because applicants would be required to comply with ALUC review requirements and would be subject to performance standards and design requirements set forth by the County, the project would not conflict with either ALUCP.

With this procedure in place and following the standard permitting process would ensure that all applicants for both personal and commercial cannabis cultivation activities obtain proper permits to obtain full compliance with the NCCO. In this way, the County could disapprove projects that do not meet all applicable requirements and maintain authority over any land use changes and proposals. This would ensure that any conflicts and associated environmental effects are avoided, minimized, or mitigated. Therefore, the project's impacts on air traffic are less than significant.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.15-4: SUBSTANTIALLY INCREASE HAZARDS DUE TO A DESIGN FEATURE OR INCOMPATIBLE USES

The proposed project would not result in any design or improvements of roadways or intersections and it does not have the potential to substantially increase hazards. The proposed project consists of adoption of a zoning ordinance that would permit the cultivation of cannabis on existing private property properties. Any connections from a private road to county road would be required to meet County standards.

Cannabis cultivation project of less than 2,500 sf would require processing of a CCP to be reviewed and approved by the Building Department. An ADP would be used for all proposed commercial cultivation activities from 2,500 sf to 10,000 sf of canopy space and the Planning Director or designee would evaluate the project for consistency with county roadway standards related to private roadway connections and driveways. With this procedure in place, and following the standard permitting process, conformance to this practice would ensure that all applicants for both personal and commercial cannabis cultivation activities obtain proper permits to obtain full compliance with the NCCO. In this way, the County could disapprove projects that do not meet all applicable requirements and maintain authority over any land use changes and proposals including private roadways and driveways. This would ensure that any conflicts and associated environmental effects are avoided or minimized and mitigation would not be required.

The project could result in some construction related activities for future cannabis related facilities. Construction of future cannabis related activities could occur anywhere within the appropriate zone districts within unincorporated Nevada County. Future cannabis related facility construction could require the delivery of heavy construction equipment to the future facility location. Delivery of heavy equipment would use area roadways. The use of oversized vehicles during construction could create a hazard to the public by limiting motorist views on roadways and by the obstruction of visible spaces. In certain locations these activities could increase traffic hazards; however, a substantial increase in construction activity is not expected because many cultivation sites would occur in areas where cultivation already occurs. Thus, the proposed project would not increase hazards due to design features or incompatible uses. Impacts are less than significant in this regard.

Similar to future construction activities, future cannabis cultivation activities would require the use of general farm equipment and delivery of equipment and supplies. Future cannabis cultivation upwards of six plants is allowed only in AG, AE, and FR zones. AG and AE zones currently experience large vehicles, delivery trucks, farm equipment, and other traffic trips and vehicle types related to agriculture and industrial uses, which would be similar to the needs of the proposed project. FR zones generally experience low traffic volumes and would likely not be negatively impacted by the presence of traffic trips and vehicle types related to agriculture and industrial uses. Therefore, the project's impacts associated with incompatible land uses are less than significant.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.15-5: RESULT IN INADEQUATE EMERGENCY ACCESS

Emergency access to cannabis operations would be provided primarily via existing public and private roadways, and access driveways that would be required to meet the County's Road Standards and the County's access standards (Nevada County 2010). The Nevada County Code establishes regulations for driveway construction in Chapter XVI – Fire Safety Regulations, and fire safe road construction and maintenance in Chapter XVII – Road Standards. Any new roads or driveways constructed in relation to cannabis operations would be required to satisfy these regulations. These roads would be evaluated on a project-by-project basis. Compliance with applicable laws and regulation would ensure that activities would not interfere with emergency access.

All existing and future commercial cannabis cultivation operations that apply for an ADP would be required to comply with all existing County and state codes related to fire safety. All projects subject to Section L-XVI 2.1, as listed above, would be required to be sent for review and comment to the appropriate fire district, to the California Department of Forestry Director (or designee) and/or any other designated fire official having expertise in wildland fire mitigation. Any conditions imposed by said fire agencies shall not be a substitute for or be less restrictive than the minimum requirements contained in these Chapters of the Nevada County Land Use and Development Code.

In addition, all projects located on State Responsibility Area (SRA) lands shall be reviewed for compliance with all regulations in the Nevada County Land Use and Development Code that provide fire safety requirements. No project may be authorized until the decision-making body or County agent has verified that all appropriate requirements have become a condition of project approval.

Cannabis cultivation project of less than 2,500 sf would require processing of a CCP to be reviewed and approved by the Building Department. An ADP would be used for all proposed commercial cultivation activities from 2,500 sf to 10,000 sf of canopy space and the Planning Director or designee would evaluate the project for consistency related to emergency access would be included to all commercial cannabis cultivation projects. Inspections of the various fire safety regulations on SRA lands would be completed by the County department under whose jurisdiction the fire safety standard exists, and which has inspection authority. The Board of Supervisors may, by Resolution, authorize a different County department, division or officer with fire protection responsibility to perform all or part of such inspection duties. Impacts in this regard would be less than significant.

It is important to note that Nevada County has an extensive private roadway network that is not controlled by the County. Owners living on private roads are required to maintain their roads by State law, California Civil Code §845, but this law does not provide specific guidance for emergency access. Prior to approval of a CCP or ADP, applicants pursuing a new cultivation site are required to demonstrate that adequate secondary access is provided onsite as required by the NCCO. This requirement may be waived if the fire authority having jurisdiction approve an exemption. achieve compliance as determined sufficient by the County. Therefore, potential impacts as a result of insufficient access are considered less than significant.

See discussions under Impact 4.7-7 and Impact 4.7-8 in *Section 4.7: Hazards and Hazardous Materials* for additional information related to impacts associated with an adopted emergency response/emergency evacuation plans and on wildland fire exposure.

MITIGATION MEASURES

No mitigation would be required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

IMPACT 4.15-6: CONFLICT WITH ADOPTED POLICIES, PLANS, OR PROGRAMS SUPPORTING ALTERNATIVE TRANSPORTATION

The proposed project would not include actions that would limit or adversely affect transit, bicycle and pedestrian traffic, infrastructure or activities in Nevada County. The proposed project's scope includes cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. Commercial cultivation would occur on parcels within the AE, AG, and FR zones. Due to the rural character of much of the transportation network and the anticipated distribution of the individual cultivation sites throughout the County, there would not be significant additional demand generated for transit, bicycle, or pedestrian facilities. Therefore, cannabis cultivation in the County would not create any conflicts with the implementation of adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

As discussed in Impact 4.15-1 above, part of the CCP and ADP review process, all existing and future projects applying for a commercial cannabis permit, would be required to include the following information related to alternative transportation:

- Estimate of the number of employees/residents, and estimate of transportation demand created by the project;
- Identification of potential alternatives to automobile use (i.e. public transportation, bicycles, carpooling or bussing); and
- Proposal to include one or more measures to the proposed project.

Conformance with the listed requirements would not conflict with the County's plans supporting alternative transportation such as the Bicycle Master Plan and the Pedestrian Improvement Plan, which are described above. Impacts would be less than significant, and mitigation is not required.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

4.16 UTILITIES AND SERVICE SYSTEMS

This section describes utilities and services systems within the proposed project area and evaluates the potential impacts to wastewater, water, electricity, and solid waste services in Nevada County that could result from the permitting of commercial cannabis activities under the Nevada County Commercial Cannabis Cultivation Ordinance. Potential impacts to utilities and energy conservation in the County that would result from the proposed project are evaluated based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. Where potentially significant impacts are identified, mitigation measures are recommended.

4.16.1 ENVIRONMENTAL SETTING

WASTEWATER

The County does not comprehensively provide wastewater collection and treatment to all areas of the County. Primarily there are eight Community Regions, two Rural Regions, one Rural Area and two districts in Eastern Nevada County, that have access to public sewage disposal. Much of Nevada County is served by on-site sewage disposal/septic systems. Seven different sewer service areas within the unincorporated area are identified as adequate to serve all types of housing development in Nevada County. These sewer areas include: City of Grass Valley near and long-term Sphere of Influence areas; City of Nevada City Five-year Sphere of Influence areas; Truckee Sanitation District Boundaries; Donner Summit Public Utility District (PUD); and the Lake of the Pines, Lake Wildwood, and Penn Valley Zones of the Nevada County Sanitation District No. 1. Of these seven sanitation districts, the County of Nevada is the sole operator of the Lake of the Pines, Lake Wildwood and the Penn Valley Sanitation Zones only. The County also provides wastewater collection and treatment for the North San Juan and Cascade Shores Sanitation Districts.

NEVADA COUNTY WASTEWATER DIVISION

The County of Nevada's Wastewater Division of the Public Works Department administers and maintains sewage collection systems and treatment facilities for Nevada County Sanitation District No. 1. The Sanitation District provides sewer service to 5,230 accounts in western Nevada County with a population of 14,000 persons. Currently, there are ten zones within the Sanitation District with facilities that collect and treat 1,245,000 gallons of wastewater each day. Three of these zones would be affected by the proposed project: Lake of the Pines, Penn Valley, and Lake Wildwood Zones. None of the sites are currently served by sewer but are near existing sewer lines or can be reached through the extension of existing sewer lines.

PENN VALLEY WASTEWATER TREATMENT PLANT

The Penn Valley Wastewater Treatment Plant (PV-WWTP) is located south of the community of Penn Valley. The Penn Valley collections system conveys septic tank effluent from individual septic tanks through a network of force mains to the Lake Wildwood-WWTP.

LAKE OF THE PINES WASTEWATER TREATMENT PLANT

As noted in the Nevada County General Plan, in 2008, the Lake of the Pines Wastewater Treatment Plan was expanded to accommodate an additional 500 equivalent dwelling units (EDUs) in addition to being upgraded.

EASTERN COUNTY

TRUCKEE SANITARY DISTRICT AND TRUCKEE SANITATION AGENCY

The Truckee Sanitary District maintained system collects the wastewater and conveys it to the Tahoe-Truckee Sanitation Agency regional water reclamation plant. Average daily dry weather flows in the system are 1.007 mgd with wet weather flow reaching 5.000 mgd. The District has approximately 200 miles of sewer line with a service area that currently encompasses approximately 31 square miles. The Tahoe-Truckee Sanitation Agency (TTSA) was created in 1972 to provide wastewater treatment services for the Truckee area as well as portions of Placer County, including north and west shores of Lake Tahoe and Squaw Valley and Alpine Valley.

DONNER SUMMIT PUBLIC UTILITY DISTRICT

The Donner Summit Public Utility District (DSPUD) serves customers in the Soda Springs area. The sewage treatment system currently treats an average of 520,000 GPD with an additional 300,000 GPD available. The Donner Lake Utility Company serves customers around Donner Lake from springs at the north side of Donner Lake, wells and Donner Lake.

SOLID WASTE

Nevada County provides solid waste collection service through a franchise for collection and disposal of waste from residential and nonresidential areas. The Nevada County Solid Waste Division is responsible for all solid waste and hazardous materials disposal and recycling services. Waste Management of Nevada County (Waste Management) is the current hauler for both solid waste refuse and collection of recyclables. Refuse collected by Waste Management and self-hauled refuse are collected at the McCourtney Road Transfer Station and Recycling Center located at 14741 Wolf Mountain Road in Grass Valley.

Nevada County does not have an active solid waste landfill; all solid waste refuse is hauled to out-of-County landfills under the contract with Waste Management of Nevada County. Solid waste, including green waste, generated in the County is taken to the McCourtney Road Transfer Station & Recycling Center in Grass Valley. Green waste, also referred to as organic waste, is hauled off to out-of-County landfills by Waste Management of Nevada County. The law considers cannabis waste a type of organic waste, and haulers can transport and recycle it like other organic waste. Effective January 1, 2019 any business that generates four or more cubic yards of solid waste per week must recycle its organic waste. Cannabis cultivators that generate four or more cubic yards of organic waste per week must either compost on-site, self-haul to a facility that recycles organic waste, or have it picked up by a hauler that recycles organic waste (CalRecycle, 2018b).

Currently, the waste management requirements for cannabis permits are regulated by three state licensing authorities: CalCannabis, Bureau of Cannabis Control, and California Department of Public Health's Manufactured Cannabis Safety Branch.

WESTERN COUNTY

LOCKWOOD REGIONAL SANITARY LANDFILL

Solid waste from western Nevada County is hauled to Lockwood Regional Sanitary Landfill located at 2700 East Mustang Road, Storey County, Nevada. Lockwood Regional Sanitary Landfill is operated by Waste Management. The Lockwood Regional Landfill has a capacity of 302.5 million cubic yards, with a disposal

area of 856.5 acres. Currently, the daily volume of waste received at the landfill, based on a five day work week, is approximately 5,000 tons. Based on an April 2010 aerial survey, the landfill contains a waste volume of approximately 32.8 million cubic yards. (Donner Summit Public Utilities District, 2011)

EASTERN COUNTY

EASTERN REGIONAL LANDFILL

The Eastern Regional Landfill is located at 900 Cabin Creek Road southeast of Truckee. The Eastern Regional Landfill accepts mixed loads of Construction and Demolition debris for processing over a sort line (Town of Truckee, 2008a).

EASTERN REGIONAL MATERIAL RECOVERY FACILITY

The Eastern Regional Material Recovery Facility (ERMRF) is located in Placer County and handles solid waste disposal for eastern Nevada County. ERMRF functions as a transfer station, which is ultimately transported to the Lockwood Regional Landfill.

WATER

WATER SERVICE

The County does not act as a domestic water supplier. Residential uses are typically served by groundwater, the Nevada Irrigation District, Truckee-Donner PUD or by smaller community water districts. The Nevada Irrigation District (NID) makes up the largest water purveyor in western Nevada County. NID supplies nearly 20,000 homes, farms and businesses with treated water in Nevada and Placer counties in the foothills of Northern California's Sierra Nevada Mountains. NID collects water from the mountain snowpack and stores it in an extensive system of 10 reservoirs. As water flows to customers in the foothills, it is used to generate clean hydroelectric energy and to provide public recreational opportunities. NID supplies both treated drinking water and irrigation water. Adequate water supply is not seen as a constraint to the development of housing during the current planning period.

WESTERN COUNTY

NEVADA IRRIGATION DISTRICT

Water is supplied to the both the County and Cities of Grass Valley (approximately half the City) and Nevada City by the Nevada Irrigation District (NID), an independent California special district that supplies irrigation, municipal, domestic and industrial water. NID was organized in 1921 under the California Irrigation District Act of 1897 as a nonprofit water agency, and operates under Division 11 of the State Water Code. Located on the western slope of the Sierra Nevada Mountain Range, NID encompasses 287,000 acres, mainly in Nevada and Placer Counties. NID's mountain watersheds cover 70,000 acres and include the upper portions of the Middle Yuba River above Milton Diversion, Canyon Creek above Bowman Reservoir, and Deer Creek. NID stores water in ten reservoirs that have a storage capacity of approximately 280,380 acre-feet and operates seven water treatment plants (WTPs) that supply approximately three billion gallons, or approximately 9,000 acre-feet, of treated drinking water per year. The proposed project areas are located within NID's service area.

NID has water rights to the majority of its water supply. Approximately three percent of NID's water supply is from outside sources. These include water contract purchases from PG&E and recycled water obtained from municipal wastewater treatment plants: Auburn, and Placer County at Joeger Road.

WASHINGTON COUNTY WATER DISTRICT

The Washington County Water District (WCWD) serves the small community of Washington in Nevada County. Washington which is located on the South Fork of the Yuba River. The district provides water through 122 hook-ups that serve approximately 140 residents and businesses, including a campground and a bar/hotel. The district's boundaries include approximately thirteen hundred acres in 268 parcels. Approximately 410 acres are undeveloped and in public ownership (LAFCO, 2015). The current system collects water from Canyon Creek via a small impoundment created by a diversion dam located near the creek's convergence with the South Fork of the Yuba River. Water is piped through a 4 inch (")-diameter PVC line to a slow-sand filter and chlorination system to treat the water. Treated water is then piped three miles to a 200,000-gallon storage tank which is the only major storage component in the system. The three-mile section of pipe running from the treatment plant to the storage tank serves 17 residences. The system operates entirely via gravity flow (WCWD, 2010).

Currently, the only water meter installed on the Washington County Water District (WCWD) water supply and distribution system is located at the treatment plant. With the entire service area unmetered, the District does not have the capability to readily locate leaks, monitor flows, develop performance and use specific conservation measures, and work with individual users to develop more efficient water use profiles (WCWD, 2010).

SAN JUAN RIDGE COUNTY WATER DISTRICT

The San Juan Ridge County Water District (SJRCWD), formerly known as the French Corral Water District, provides irrigation water service to a small area in western Nevada County. The district includes approximately two thousand acres in 143 parcels. Approximately 120 parcels are privately owned, with the remainder in public ownership. Altogether, the district supplies irrigation water to 24 connections. serves 20 to 22 irrigation customers, with approximately 19.6 million gallons of water are delivered per year. No domestic or treated water is provided. Water is supplied on a rotational basis between mid-May and mid-September. The waters are diverted from Shady Creek and stored in Pine Grove Reservoir which is earthen dam forty-two feet high and six hundred ten feet long and has a capacity of 155 acre-feet. The district holds a pre-1914 water right for diversion of 125 acre-feet per year. As of August 2015, no curtailment notice for this water right has been issued by the State Water Resources Board. The district has no plans to expand its facilities, though it does plan to encase selected portions of the ditch in order to reduce water loss from seepage and evaporation. the district has no plans for expansion and lacks capacity to serve additional properties (LAFCo, 2015).

EASTERN COUNTY

TRUCKEE DONNER PUBLIC UTILITY DISTRICT

The Truckee Donner Public Utility District service area includes downtown Truckee and surrounding area, Glenshire, Meadow Park, Gateway, Sierra Meadows, Prosser Lake area, Tahoe Donner, Ponderosa Palisades, Ponderosa Ranchos, Gray's Crossing, Olympic Heights, Old Greenwood, Prosser Heights, Prosser Lakeview, Donner Lake and Hirschdale. The District currently operations 12 potable wells and provides water from the Martis Valley Groundwater Basin (MVGB). The total capacity of these wells is about 9,920 gpm (14.3 mgd). The overall system potable water production is adequate to serve project demands through year 2041. However, due to a failure of Airport Well, the capacity of these existing facilities will be exceeded in the year 2025.

Currently, the TDPUD uses ground water as its sole source of water and uses a total of 35 storage tanks of which 32 are active and 3 are inactive, with a total storage capacity of active tanks of 9.4 million gallons. With a total water supply of 24,000 AFY, TDPUD estimates, based on this supply and existing and expected demand, that there is sufficient ground water available to meet the need at buildout conditions estimated to be approximately 4, 217. This accounts for the Truckee System estimated demand of 2, 733 million gallons per year and an additional, 240 million gallons per year of non-portable water demand. In addition to other withdrawals, buildout conditions will reach the 4, 217 volume. There are an estimated 484,000-acre-feet of water in storage in the MVGB. The project demand at buildout is equal to approximately 3 percent of the capacity which would provide 37 years of water if no recharge occurred. Therefore, considering the large amount of water in storage in relation to projected demand, even in multiple dry years, the basin would have adequate water supplies (TDPUD, 2016). The District does not provide either wastewater collection or treatment to customers within its service area.

DONNER SUMMIT PUBLIC UTILITY DISTRICT

The Donner Summit Public Utility District (DSPUD) is a bi-county special district formed in Nevada and Placer counties in 1948 (DSPUD, 2011). The DSPUD provides domestic water to customers in the Soda Springs area from sources at Lake Angela and Lake Mary. The water is processed through the nearby state-of-the-art treatment plant. The plant was recently upgraded to meet state requirements with respect to filtration and disinfection. The plant's capacity was approximately 0.50 million gallons per day (mgd) but has been upgraded to a capacity of 1.0 mgd. One significant upgrade included installing two clarification/filtration treatment basins, which addressed the high levels of turbidity recently found in the potable water supply. The new system will filter out the turbid conditions caused by the abundance of algae from the district's water source, Lake Angela. From the treatment plant, distribution lines run west along Donner Pass Road, and serve that corridor, as well as Soda Springs. While the capacity is much higher, water production varies from approximately 60,000 to 100,000 gpd during the periods when snowmaking is not occurring. The Donner Summit Public Utility District serves about 243 water customers, including, residential, commercial, lodging, and resort users (DSPUD, 2018).

DONNER LAKE UTILITY COMPANY

The Donner Lake Utility Company (DLUC) is a privately-owned company that serves 1,200 customers around Donner Lake. The source of water comes from springs at the north side of Donner Lake, wells and Donner Lake itself. The company has seven storage tanks with a total capacity of 457,000 gallons. In the summer of 2001, DSPUD took possession of the Donner Lake Water System (DSPUD, 2012).

GLENSHIRE MUTUAL WATER COMPANY

The Glenshire Mutual Water Company (GMWC), formed to serve the Glenshire subdivision, is supplied entirely by ground water wells. In February 2002, the Donner Summit Public Utility District took possession of the Glenshire Mutual Water Company's system (DSPUD, 2012).

GROUNDWATER WELLS

In areas not served by public or private water purveyors, private wells are used. There is little information available on the quantity and quality of well water on private property in western Nevada County. The Department of Nevada County Department of Environmental Health have been concerned with the long-term water quality impacts of septic systems on the chemical and bacteria constituents in the

groundwater. For use of a private well and septic system, County Ordinance requires a minimum of 3 acres per parcel. For areas supplied by a water purveyor, 1.5 acres is required.

MARTIS VALLEY GROUNDWATER BASIN

the Martis Valley Groundwater Basin (MVGB) is the only significant subsurface water resource in eastern Nevada County. The majority of groundwater basin recharge results from snowfall and snowmelt during the winter period [Truckee Donner Public Utility District (TDPUD), 2015]. The MVGB is traversed by the Truckee River, and exhibits a subsurface extent of approximately 36,000 acres. The northern two-thirds of the MGVB occur in Nevada County north to Hobart Mills, with the southern third occurring in Placer County extending southerly and roughly tracing the Martis and East Martis Creek from west to east (GEI, 2018). The basins water-bearing units include interbedded alluvial and volcanic deposits, but some groundwater closer to the surface may be disconnected from the deeper MVGB, due to conditions such as hydrologic separation and geologic structure.

According to the TDPUD, the MVGP is an unadjudicated water basin and will likely remain unadjudicated in the future. Additionally, the TDPUD states that the MVGB has a storage volume of 484,000 acre-feet (157,701 million gallons) and is able to support annual withdrawals of at least 24,000 acre-feet (7,820 million gallons) per year. Based upon current withdrawals of about 2,412 million gallons per there, there is over 65 years' worth of water supply even with zero recharge of the groundwater basin (TDPUD, 2015).

4.16.2 REGULATORY SETTING

FEDERAL

There are no federal plans or programs that address utilities and service systems and that would apply to the project.

STATE

WATER

California Water Code

The California Water Code governs the usage of water resources in the state of California as established under California Law by the California Environmental Protection Agency, State Water Resources Control Board.

State of California Water Rights Process

The State Water Resources Water Board (SWRCB) administers a water rights system for the diversion of surface waters. Water right permits granted provide permission to withdraw water from a river or stream for a "reasonable" and "beneficial" use. Water right holders, including riparian water right¹ holders, must report their diversions to SWRCB through a statement of diversion and use.

¹ A riparian water right is a legal right to divert water associated with a property located directly adjacent to a water source. As opposed to appropriative water rights, riparian water rights do not require a permit or license from SWRCB and diversions are not restricted by amount or season of use.

Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code Section 10631) requires every urban water supplier that provides water to 3,000 or more customers or provides over 3,000 acre-feet of water annually to prepare and adopt an urban water management plan (UWMP) (updated every 5 years) for the purpose of “actively pursuing] the efficient use of available supply.” In preparing the UWMP, the urban water supplier is required to coordinate with other appropriate agencies, including other water suppliers that share a common source, water management agencies, and relevant public agencies. When a city or county proposes to adopt or substantially amend a general plan, the water agency is required to provide the planning agency with the current version of the adopted UWMP, the current version of the water agency’s capital improvement program or plan, and other information about the system’s sources of water supply. The Urban Water Management Planning Act also requires urban water suppliers, as part of their long-range planning activities, to make every effort to ensure the appropriate level of reliability in their water service sufficient to meet the needs of their various categories of customers during normal, dry, and multiple dry water years. Senate Bill 610

Senate Bill (SB) 610 amended the Public Resources and Water Codes as they pertain to consultation with water supply agencies and water supply assessments. SB 610 requires that water supply assessments (WSAs) be prepared for projects that are subject to the CEQA, and propose to construct 500 or more residential units or the equivalent. SB 610 provides that when environmental review of certain large development projects is required, the water agency that is to serve the development must complete a WSA to evaluate water supplies that are or would be available during normal, single-dry, and multiple-dry years during a 20-year projection to meet existing and planned future demands, including the demand associated with a proposed project.

Porter-Cologne Water Quality Control Act

California’s Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act) grants the State Water Resources Control Board (SWRCB) and the RWQCBs power to protect surface water and groundwater quality, and is the primary vehicle for implementing California’s responsibilities under the Federal Clean Water Act. The SWRCB is divided into nine regions, each overseen by a RWQCB. The SWRCB is responsible for protecting California’s surface waters and groundwater supplies.

Each RWQCB must formulate and adopt a Water Quality Control Plan (Basin Plan) for its region. The Basin Plan must conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State Water Policy. The Basin Plan establishes beneficial uses for surface and groundwater in the region, and sets forth narrative and numeric water quality standards to protect those beneficial uses. Basin plans are updated every three years and provide the basis of determining waste discharge requirements, taking enforcement actions, and evaluating clean water grant proposals. The Porter-Cologne Act also states that an RWQCB may include water discharge prohibitions applicable to particular conditions, areas, or types of waste within its regional plan. The Porter-Cologne Act is also responsible for implementing Clean Water Act Sections 401 and 402 and 303(d) to SWRCB and RWQCBs.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) is a relatively new state law that will impact groundwater use in California. Under the SGMA, Groundwater Sustainability Agencies (GSA) must be formed to govern groundwater use over particular geographic boundaries. The GSA’s must develop Groundwater Sustainability Plans (GSP) that “sustainably” manage groundwater basins among the various

current and future water users. The development of GSP's in Nevada County is ongoing and are only mentioned to reiterate that there may be future regulatory standards for groundwater extraction in certain areas of the County that are derived from GSP development.

REGIONAL

Truckee River Operating Agreement

The Truckee River Operating Agreement (TROA) governs water supplies derived from the Truckee River watershed – a portion of which is located in Nevada County. TROA is an interstate compact ratified by the United States Government and the Pyramid Lake Paiute Indian Tribe to manage the water supplies in the watershed. TROA governs diversions from on the lee side of the Sierra Divide that includes Lake Tahoe, Donner Lake, Prosser Reservoir, and Boca Reservoir and their associated watersheds, portions of which are located in Nevada County. TROA also has limited jurisdiction over groundwater supplies that impact surface water supplies. Thus, areas in the Martis Valley that use groundwater have TROA conditions where supplies interact. Although TROA only governs a portion of the water supplies in this part of Nevada County, it is important to note that it is an additional regulatory mechanism that may impact cannabis cultivation with water supplies located in the TROA jurisdictional area.

FIRE PROTECTION

The California Fire and Building Codes address general and specialized fire safety requirements for buildings. Topics addressed in the code include, but are not limited to, fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions to protect and assist first responders, and industrial processes.

SOLID WASTE

STATE

California Integrated Waste Management Act

The Integrated Waste Management Act (AB 939) mandates that communities reduce their solid waste. AB 939 requires local jurisdictions to divert 25 percent of their solid waste by 1995 and 50 percent by 2000, compared to a baseline of 1990. AB 939 also establishes an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. The law also requires each state agency and large facility to submit an annual report to the California Department of Resources Recycling and Recovery (CalRecycle) summarizing its yearly progress in implementing waste diversion programs.

AB 939 requires each California city and county to prepare, adopt, and submit to the California Department of Resources Recycling and Recovery (CalRecycle) a source reduction and recycling element that demonstrates how the jurisdiction will meet the Integrated Waste Management Act's mandated diversion goals. Each jurisdiction's source reduction and recycling element must include specific components, as defined in Public Resources Code Sections 41003 and 41303. In addition, the source reduction and recycling element must include a program for management of solid waste generated in the jurisdiction that is consistent with the following hierarchy: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal. Included in this hierarchy is the requirement to emphasize and maximize the use of all feasible source reduction, recycling, and composting options in order to reduce the amount of solid waste that must be disposed of by

transformation and land disposal (Public Resources Code Sections 40051, 41002, and 41302) (CalRecycle 1997).

California Solid Waste Reuse and Recycling Access Act of 1991

AB 1327 was signed into law on October 11, 1991. This bill added Chapter 18 (commencing with Section 42900) to Part 3 of Division 30 of the Public Resources Code. Chapter 18 is known as the California Solid Waste Reuse and Recycling Access Act of 1991. Chapter 18 required CalRecycle to develop a model ordinance for adoption of recyclable materials in development projects by March 1, 1993. Local agencies were then required to adopt the model, or an ordinance of their own, governing adequate areas for collection and loading of recyclable materials in development projects by September 1, 1993. If by that date a local agency had not adopted its own ordinance, the model ordinance adopted by CalRecycle took effect and was to be enforced by the local agency (CalRecycle 2012).

WASTEWATER

Water Quality Control Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems

On June 19, 2012, the State Water Board adopted Resolution No. 2012-0032, the Water Quality Control Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems, which took effect on May 13, 2013. The purpose of this policy is to allow the continued use of Onsite Wastewater Treatment Systems (OWTS), while protecting water quality and public health. The Policy requires actions for water bodies specifically identified as part this Policy where OWTS contribute to water quality degradation that adversely affect beneficial uses. This Policy only authorizes subsurface disposal of domestic strength, and in limited instances high strength, wastewater and establishes minimum requirements for the permitting, monitoring, and operation of OWTS for protecting beneficial uses of waters of the State and preventing or correcting conditions of pollution and nuisance. This Policy also conditionally waives the requirement for owners of OWTS to apply for and receive Waste Discharge Requirements in order to operate their systems when they meet the conditions set forth in the Policy.

Waste Discharge Requirements

The Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the “Non Chapter 15 (Non 15) Program”) regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

LOCAL

The Nevada County General Plan includes the following goals, policies and objectives regarding utilities and service systems that would be applicable to the proposed project:

PUBLIC FACILITIES AND SERVICES ELEMENT

Goal 3.1 Provide for public facilities and services commensurate with development type and intensity.

- Objective 3.1 Public facilities and services shall be directed as follows: a higher level to Community Regions and a lower level to Rural Regions.
- Policy 3.1 The levels of service and provision of public facilities in Community Regions shall be based upon improving the capacity of public facilities to serve higher levels of development directed to Community Regions. Planning for future public facilities and services in Community Regions shall be based upon the following criteria:
- a. public water and sewer
 - b. retention of existing emergency response time
 - c. intercommunity-transit
- Policy 3.2 The County shall encourage development within Community Regions where higher density development can more efficiently be provided with a full range of public facilities and services.
- Policy 3.3 The land use pattern reflected in the Nevada County General Plan Land Use Map is correlated with the future provision of public facilities to adequately serve said land uses based upon the service criteria and levels of service identified in Policy 3.1 and Policy 3.10. All General Plan amendments shall be required to show that the public facilities and services necessary to serve the proposed development are also correlated with the future provision of facilities and services according to the same criteria.
- Policy 3.4 To enable public services to be provided with the greatest degree of efficiency and cost-effectiveness, development within Community Regions shall be encouraged at the maximum density under the respective land use designations shown on the General Plan Land Use maps, consistent with environmental, infrastructure and other site constraints.
- Policy 3.5 Within Community Regions with existing public sewer and water systems, all new residential land divisions shall be required to connect to public sanitary sewer and water systems. Temporary use of private on-site systems may be allowed where public systems are not yet available but where a specific improvement plan and funding mechanisms are in place. A legally binding mechanism shall be required to ensure that the development will connect to the public systems when available, and that the private systems will be discontinued.
- Objective 3.2 Ensure that the capacity, availability, financing, and capability of public services and facilities are sufficient to meet levels of service requirements for development.
- Policy 3.14 In order to ensure that capacity of public facilities is coordinated with the timing of development the County shall require for any development requiring a discretionary permit, and for any General Plan amendment, a determination of the adequacy of public facilities, or an impact fee program, to serve the proposed development.

- Policy 3.16 Where community sewer or water systems are installed or required as a condition of development, there shall be a contract, development agreement, formation of an area service district, or other legally enforceable mechanism to ensure long term maintenance of the community system.
- Policy 3.17 The use of community sewer and/or water systems are encouraged where such systems are economically feasible for the intended service area.
- Policy 3.18 All proposed land divisions shall be connected to a public water supply if the initial and long-term cost of extending the public water system to serve the land division is less than the installation of individual water supply system.
- Policy 3.19A For all discretionary development, increases in stormwater runoff due to new development, which could result in flood damage to downstream residences, commercial, industrial, active natural resource management uses (i.e., farming, ranching, mining, timber harvesting, etc.), public facilities, roads, bridges, and utilities shall not be permitted. Required retention/detention facilities, where necessary, shall be designed such that the water surface returns to its base elevation within 24 hours after the applicable storm event. The sizing of such facilities, when needed, shall be based upon the protection of downstream facilities.
- Policy 3.19B The County shall strongly encourage the use of geographically-limited independent or dependent entities (Community Service Area, County Service Area, special district or equivalent entities) for the purpose of maintaining drainage facilities to handle stormwater runoff.
- Policy 3.19C For all discretionary projects, the County shall require that maintenance of all onsite drainage facilities and all offsite facilities constructed as part of the project is assured through a permanent, legally-enforceable mechanism such as, but not limited to, a CSA or CSD.
- Policy 3.19D Discretionary development south of the Truckee River (excluding the Glenshire/Meadows area) that would result in a net increase in traffic at Highway 267 and Commercial Row, shall not occur until the Highway 267 Bypass is in place. This restriction shall expire by the year 2000 unless the Town of Truckee has provided for other transportation improvements which provide relief to Highway 267.
- Policy 3.21 Where water, sewer, and other underground utilities are extended through undeveloped natural areas, consideration shall be given to restoration of areas of cut, back-fill, and grading. All surfaces shall be revegetated with appropriate ground covers and plant materials.
- Policy 3.24 The County, in cooperation with other affected agencies, shall continue to implement the County Integrated Waste Management Plan. Preparation of a comprehensive long-range facilities plan for the County shall consider the need for transfer stations, composting sites, hazardous waste collection facilities, and other solid waste disposal facilities.

WATER ELEMENT

- Goal 11.1 Identify, protect and manage for sustainable water resources and riparian habitats.
- Objective 11.1 Promote and provide for conservation of domestic and agricultural water.
- Objective 11.2 Preserve surface and sub-surface water quality and, where feasible, improve such quality.
- Policy 11.6 The County shall continue to enforce its regulations concerning the installation and operation of private sanitary waste disposal systems in order to protect the quality of surface and ground water. The location of septic tanks and leach fields and their appropriate setbacks from water courses shall be in accordance with the guidelines of the Lahontan Regional Water Quality Control Board (eastern County) and the Central Valley Regional Water Quality Control Board (western County).
- Policy 11.6A New development shall minimize the discharge of pollutants into surface water drainages by providing the following improvements or similar methods which provide equal or greater runoff control: (a) include curbs and gutters on arterials, collectors, and local roads consistent with adopted urban street designs; and (b) oil, grease, and silt traps for subdivisions creating 5 or more parcels and commercial and industrial development of 1 acre or greater size. Maintenance of such facilities shall be assured through a legally enforceable mechanism.
- Objective 11.4 Preserve the integrity and minimize the disruption of watersheds and identified critical water courses.
- Policy 11.9A Approve only those grading applications and development proposals that are adequately protected from flood hazards and which do not add flood damage potential. This may include the requirement for foundation design which minimizes displacement of flood waters, as well as other mitigation measures.
- Policy 11.9B Require new utilities, critical facilities and non-essential public structures to be located outside the 100-year flood plain unless such facilities are necessary to serve existing uses, there is no other feasible location, and construction of these structures will not increase hazards to life or property within or adjacent to the floodplains.
- Policy 11.9C When constructed within a floodplain, require elevation of the habitable portions of residential structures to be above the 100-year flood level. Require flood-proofing or elevation of non-residential structures. Require that foundations do not cause floodwater displacement except where necessary for flood-proofing.

SAFETY ELEMENT

- Policy GH-10.2.1.4 Require that underground utility lines, particularly water and natural gas mains, be designed to withstand seismic forces.

NEVADA COUNTY LAND USE DEVELOPMENT CODE

Section 3.0 Project Description discusses the Comprehensive Development Standards found in Article 4 Comprehensive Site Development Standards and defined in Division 4.3 Resource Standards. In part, the purpose of the development standards is to avoid the impact of development projects on sensitive environmental resources and natural site constraints. The following discusses those standards applicable to energy conservation.

4.16.3 STANDARDS OF SIGNIFICANCE

ENVIRONMENTAL ANALYSIS

THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on utilities and service systems if it would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Have insufficient water supplies available to serve the project from existing entitlements and resources, thereby requiring new or expanded entitlements.
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Comply with federal, state, and local statutes and regulations related to solid waste.

4.16.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACT 4.16-1: EXCEED WASTEWATER TREATMENT REQUIREMENTS OF THE APPLICABLE REGIONAL WATER QUALITY CONTROL BOARD

Future cultivation activities under the proposed project could result in increased wastewater service demand for public wastewater systems. Cannabis requires high quantities of irrigation water and excess wastewater could be discharged to municipal wastewater systems. However, many of the existing cultivation areas utilize an existing onsite wastewater treatment system such as a septic system and would not require the use of off-site treatment. In addition, most cultivation would occur on properties with established residences that if not using OWTS, would already be using and not increase the demand for wastewater treatment such that new facilities would be needed. Typical runoff would come from outdoor cultivation sites and disposal of wastewater with contaminants such as sediments, chemicals, and trash.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, and would require registration with the enforcing officer through an administrative action. Personal use cultivation would not result in any new uses that would exceed wastewater treatment requirements

The proposed project would occur on rural parcels and would incorporate commercial cannabis cultivation related uses and potential construction of accessory structures. This use would not require substantial changes in existing drainage facilities. Cannabis cultivation projects of less than 2,500 sf would require processing of a CCP to be reviewed and approved by the Building Department. An ADP would be used for all proposed commercial cultivation activities from 2,500 sf to 10,000 sf of canopy space and the Planning Director and Public Works director or designee would evaluate the project for consistency with NPDES permit requirements and that the project has obtained proper permits from the appropriate regional water quality board. This would effectively reduce impacts from the proposed project and thus would not exceed wastewater treatment requirements of the applicable regional water quality control board.

MITIGATION MEASURES

No mitigation is not required

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.16-2: REQUIRE OR RESULT IN THE CONSTRUCTION OF NEW WATER OR WASTEWATER TREATMENT FACILITIES OR EXPANSION OF EXISTING FACILITIES, THE CONSTRUCTION OF WHICH COULD CAUSE SIGNIFICANT ENVIRONMENTAL EFFECTS.

As discussed above in Impact 4.16-1, future cultivation activities under the proposed project could result in increased water demand from public water systems. However, many of the existing cultivation areas utilize an existing onsite wastewater treatment system such as a septic system and would not require the use of off-site treatment. In addition, most cultivation would occur on properties with established residences that if not using OWTS, would already be using and not increase the demand for wastewater treatment such that new facilities would be needed. Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, would require registration with the enforcing officer through an administrative action. The cultivation activities of six plants for personal use in R1, R2, R3, or RA zones would be limited to indoor cultivation and would not exceed wastewater treatment requirements of the applicable regional water quality control board.

The proposed project would occur on rural parcels and would incorporate agricultural related uses and potential construction of ancillary structures. This would not require the demand for substantial drainage facilities, however, all CCP and ADP project applications would be required to comply with all storm water drainage permits including complying with NPDES and obtaining proper permits from the appropriate regional water quality control board. This would effectively reduce impacts from the proposed project and thus would not require expansion or construction of new water or wastewater facilities.

Commercial Cannabis operations may obtain water from the Nevada Irrigation District (NID). NID has noted that adequate water supply is available to serve the proposed project. Thus, impacts would be less than significant.

MITIGATION MEASURES

No Mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts are less than significant.

IMPACT 4.16-3: REQUIRE OR RESULT IN THE CONSTRUCTION OF NEW STORM WATER DRAINAGE FACILITIES OR EXPANSION OF EXISTING FACILITIES, THE CONSTRUCTION OF WHICH COULD CAUSE SIGNIFICANT ENVIRONMENTAL EFFECTS.

Implementation of the proposed project could generate stormwater runoff through an increase in impervious surfaces. However, the proposed project is an ordinance that would define the locations and zoning designations in which cannabis may be cultivated, set size limitations on cultivation areas, defines three types of cultivation, provides for a structured permitting process, implements standards to help address neighborhood compatibility concerns and the provision of services and utilities, and implements procedures to protect natural resources and the environment.

As discussed above, the commercial cultivation aspect of the proposed project would occur on rural parcels and would incorporate agricultural related uses and potential construction of ancillary structures. This would not require the demand for substantial drainage facilities, however, all uses would require that all applicants go through the development review process when filing for a CCP or ADP for any existing and proposed cultivation projects. *Impact 4.8-1 and Impacts 4.8-3 through 4.8-6 in Section 4.8 Hydrology and Water Quality* provide additional details on this impact. The Planning Director and Public Works Director or designee(s) would ensure that all proposed commercial cannabis cultivation complies with NPDES and has obtained proper permits from the appropriate regional water quality board. Thus, impacts would be less than significant.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than Significant.

IMPACT 4.16-4: HAVE INSUFFICIENT WATER SUPPLIES AVAILABLE TO SERVE THE PROJECT FROM EXISTING ENTITLEMENTS AND RESOURCES, THEREBY REQUIRING NEW OR EXPANDED ENTITLEMENTS.

Implementation of the proposed project would increase water demand as a result of both personal use and commercial cannabis cultivation. To determine what the projected water demands would be as a result of implementing the proposed project, a water supply evaluation (WSE) was prepared for the proposed NCCO. This report is included as Appendix E to this EIR.

It should be noted, that California's legalized cannabis production is in its infancy stage. And, in other areas in the United States, cannabis production is also in its early stages, limiting reliable data that is

applicable to California’s geographical conditions. As such, there is a distinct lack of scientifically developed and peer-reviewed published crop data supported by government institutions. Where information is currently available, it is typically from the few existing commercial operations where reporting is mandatory, from out of state operations with different climatic conditions, or from industry publications where transparency and impartiality should be questioned. Nevertheless, there is sufficient publicly available information that allows for an analytical evaluation to calculate water demands associated with cannabis production in Nevada County. The methodology in this WSE is conservative, erring on the side of additional water demand so that the water-related impacts associated with adoption of the Ordinance are not underestimated.

The water demand analysis is considered to be conservative because it assumes that all commercial grows are assumed to be outdoor grows and irrigated for a single grow season. This calculation methodology was used because outdoor cultivation accounts for higher water consumption rates than indoor and mixed light cultivation will result in a more conservative water demand and account for the inexperienced growers that may choose to start with outdoor cultivation. Additionally, the water demand analysis assumes that every parcel that is eligible for cannabis cultivation based on its zoning is used for cannabis cultivation without any regard for physical or regulatory constraints that may make cultivation infeasible. Last, the water demand analysis assumes that none of the eligible parcels has any existing water or irrigation use.

Table 4.16-1: Summary of Personal Use Cultivation Water Demand and *Table 4.16-2: Summary of Commercial Cultivation Water Demand* provide summaries of the total water demand for the proposed NCCO based on the eligible parcels.

Table 4.16-1: Summary of Personal Use Cultivation Water Demand

Personal Use Zoning	Parcel Count	Water Consumption Acre-Feet/Year (AFY)
R1	3,471	14
R2	226	1
R3	68	0
RA (<5 ac)	15,274	60
RA (>5 ac)	5,559	22
AG	1,785	7
AE	6	0
TPZ	604	2
Subtotal	26,993	106

Table 4.16-2: Summary of Commercial Cultivation Water Demand

Commercial Cultivation Zoning	Parcel Count	Max Use Gallons per Year (gpy) per parcel	Water Consumption Acre-Feet/Year (AFY)
AG (>2-5 acres)	6,263	24,594	473
AE (>2-5 acres)	20	24,594	2
FR (>2-5 acres)	553	24,594	42
AG (>5-10 acres)	7,604	112,969	2,870
AE (>5-10 acres)	25	112,969	9

Table 4.16-2: Summary of Commercial Cultivation Water Demand

Commercial Cultivation Zoning	Parcel Count	Max Use Gallons per Year (gpy) per parcel	Water Consumption Acre-Feet/Year (AFY)
FR (>5-10 acres)	599	112,969	226
AG (>10-20 acres)	5,095	245,938	3,845
AE (>10-20 acres)	12	245,938	9
FR (>10-20 acres)	591	245,938	446
AG (>20 acres)	4,225	491,875	6,378
AE (>20 acres)	389	491,875	587
FR (>20 acres)	1,831	491,875	2,764
Subtotal	27,207		17,650

Eligible parcels were identified directly from the County's public Geographic Information System (GIS) portal and with data first processed by County Staff. This data was processed to pull out the size, zoning type, and location of each parcel available for cannabis cultivation. First, any parcels within city limits were removed from the county-wide parcel count as those areas are not subject to the County's Ordinance. Next all public land was removed for the potential parcels because cannabis production on County-owned property and national forest land would not occur.

As a County-wide ordinance, water service or water supply would come from different sources depending on where in the County an individual parcel is located. For example, most parcels in the western portion of the County would likely be serviced by NID. However, parcels located in other areas of the County, outside of the NID's service area would likely get their water from other sources. To assess the water demand and supply from these different sources, the following analysis divides the County geographically into four areas as discussed below. The analysis regarding water demand and supply applies to CCPs and ADPs for commercial cannabis cultivation equally.

Area 1: Water Demand in the NID Service Area

Within this area 17,309 parcels that could grow cannabis for personal use in accordance with the proposed NCCO. There are 13,509 parcels where commercial grows are permitted. The maximum total demands for the residential parcels total 68 acre-feet while the maximum possible demands for the commercial parcels is 8,222 acre-feet. As noted above, the analysis assumes that all the demand identified here are additional demands for water in the NID service area. *Table 4.16-3: Area 1 – NID Area Water Demand* summarizes the total water demand for Area 1.

Table 4.16-3: Area 1 NID Area Water Demand

Demand Type	Water Demand (GPY)	Water Demand (AFY)
Personal Use Cultivation	22,112,248	67.86
Commercial Cultivation	2,657,133,344	8,154.44
Total	2,679,245,591	8,222.30

Area 1 Water Supply Analysis

Based on NIDs adopted Urban Water Management Plan, NID anticipates that it will have approximately 477,000 acre-feet of water available in normal years and approximately 359,000 acre-feet available in dry years for its wholesale, retail, and raw water deliveries. *Table 4.16-4: NID Available Water Supplies* summarizes NID’s normal year, single dry year, and multiple dry year supply reliability forecast. The large volume of NID supplies indicates that although there is variability in dry years, there are adequate supplies available to meet the various needs in this part of Nevada County – including potential additional cannabis cultivation which with a conservative approach represents approximately 2% of the total NID water supply in a dry year. Therefore, cannabis cultivation under the proposed NCCO could be served under existing entitlement and no new entitlements would be required. As such, potential impacts on NID water supplies are considered less than significant and no mitigation is required.

Table 4.16-4: NID Available Water Supplies

Supply	Average/ Normal Year	Single Dry Year	Multiple Dry Water Years		
			Year 1	Year 2	Year 3
	AFY	AFY	AFY	AFY	AFY
Watershed Runoff	221,500	221,500	221,500	221,500	221,500
Reservoir – Carryover Storage	201,985	129,400	129,400	129,400	129,400
PG&E Contract	54,361	8,000	8,000	8,000	8,000
Total	477,846	358,900	358,900	358,900	358,900

In some cases, a commercial cannabis applicant may wish to use existing surface water systems that are separate from NID’s system. In this case, the surface water supplies would be determined by the legal requirements governing California’s surface water rights. For new surface water appropriations from natural stream channels, the new diversions would require a full hydrological analysis of the identified watershed that shows that water is available for diversion and use for cannabis cultivation. The hydrological analysis is wholly governed by the State Water Resources Control Board (SWRCB) in allocating surface water supplies in California and generally limits water diversions to higher flow months – the winter and spring runoff periods. Moreover, construction of diversion facilities would be subject to Fish & Game Code requirements related to streambed alteration permits. For a normal water right application, the primary SWRCB finding would be that a water right permit may be issued so long as there are affirmative findings that (a) there is sufficient water in the system based upon the hydrological analysis to meet the applicant’s needs; and (2) there will be no harm to other legal users of water or the environment by issuing a water permit. Because the use of surface water would be governed by the specific performance standards of the SWRCB permitting process with regard to demonstrating no adverse impacts from water diversion, potential impacts are considered less than significant.

Once exception to the water supply availability within Area 1 would be for those parcels that are within the NID service area, but the proposed commercial cannabis cultivation would be irrigated by new or existing groundwater wells. Groundwater supplies in Nevada County have two primary characteristics. The groundwater supplies on the western side of the Sierra Divide are generally derived from fractured rock aquifers. Fractured rock aquifers are distinguishable from alluvial aquifers in that water in fractured

rock aquifers store water in fissures, cracks, joints and faults rather than unconsolidated materials (like gravel). As discussed in Section 4.8, Hydrology and Water Quality, there is little information on the nature and extent of the fractured rock aquifers in Nevada County on the western side of the Sierra Divide so aquifer yields are largely unknown. Fractured rock systems can be difficult to trace and sometimes have limited yield based upon underground flow conditions. In the event that a groundwater extractor is able to utilize groundwater from an aquifer attached to the overlying land, then the right to use that water is correlative (shared) among all water users connected to that system. In this case, impacts may occur to other overlying users on the groundwater system. If the supply of water on an existing property begins to decline because of an overlying users new groundwater extractions, there is no remedy other than to share in reduced yield. Neither the County nor the State has governing rules that would give one overlying groundwater user an advantage over a new overlying groundwater user for cannabis cultivation purposes. Neither the County nor the State have a mechanism in place to track or monitor groundwater production in individual wells. For these reasons, potential impacts on groundwater supply are considered significant. Mitigation measures for reducing impacts to groundwater use could include new County policies regarding groundwater extraction and monitoring. However, new County policy and regulations for groundwater use is beyond the scope of the proposed project and are not considered feasible. Therefore, groundwater impacts are considered significant and unavoidable.

Area 2: Water Demand West of the 6,000 Foot Elevation non-NID Area

Area 2 is the area west of the 6,000-foot elevation line that does not include areas served by NID but borders Placer, Yolo and Sierra counties. The data showed that Area 2 had 9,311 residential parcels that could cultivate cannabis and 11,976 parcels where commercial grows are permitted. The demands total 37 acre-feet and 7,431 acre-feet respectively. These demands would most likely be met with local groundwater supplies derived from groundwater wells and surface water supplies derived from water rights that are independent of the NID system. The majority of parcels in Area 2 are served by small wells in the fractured bedrock aquifers and the smaller alluvial aquifers that are not large enough to be identified (and quantified) by State Department of Water Resources (DWR). The demands per parcel, as described above, depend on canopy size as directed under the Ordinance. The canopy size methodology shows that the demands per parcel are small until a canopy of 2,500 square feet and above is attained. And even with this larger canopy area, the demands added would be typically smaller than the existing demands for irrigated agriculture or ranching operations that may already exist on any identified parcel. For example, if a 20+ acre property already had a house and irrigated crops or animal husbandry that used water from a well, the addition of the cannabis production would, at most, likely equate to existing use. *Table 4.16-5: Area 2 – West of the 6,000 Foot Elevation Non-NID Area Water Demand* summarizes the total water demand for Area 2.

Table 4.16-5: Area 2 - West of the 6,000 Foot Elevation Non-NID Area Water Demand

Demand Type	Water Demand (GPY)	Water Demand (AFY)
Personal Use Cultivation	11,894,803	36.50
Commercial Cultivation	2,421,599,000	7,431.61
Total	2,433,493,803	7,468.12

Area 2 Water Supply Analysis

The demand for cannabis cultivation in Area 2 could come from two sources: surface water rights derived from the natural flow of the surface streams and groundwater sourced either through fractured rock aquifers or small alluvial aquifers. There are no known contract water supplies available in this area. In all likelihood, the water supplies would be met from a combination of surface water and groundwater sources in these areas.

As discussed in the analysis for Area 1 above, the use of surface water would be governed by the specific performance standards of the SWRCB permitting process with regard to demonstrating no adverse impacts from water diversion, and potential impacts are considered less than significant. And as discussed in the groundwater analysis for Area 1, neither the County nor the State has governing rules that would give one overlying groundwater user an advantage over a new overlying groundwater user for cannabis cultivation purposes. Neither the County nor the State have a mechanism in place to track or monitor groundwater production in individual wells. For these reasons, potential impacts on groundwater supply are considered significant and unavoidable.

Area 3: East of the 6,000-foot Elevation Non-Martis Valley Area

Area 3 is the area within Nevada County that lies east of 6,000-foot area separating Area 2 and stretches all the way to the Nevada state line while excluding Area 4 (the Martis Valley Area). The data for Area 3 showed the potential for 360 lots with residential grows and 1,496 lots where commercial grows could be permitted. The residential demands total 1.4 acre-feet and 1,754 acre-feet respectively. Similar to Area 2, these demands would be met with local groundwater and surface water supplies. The majority of Area 3 is served by small wells in the fractured bedrock aquifers and the small alluvial aquifers that are not large enough to be identified and quantified by DWR. All of the demand impacts described in Area 2 apply to Area 3. However, the elevation and climate at the elevations in Area 3 will restrict the growing season and likely prevent outdoor cultivation being chosen as the preferred method for grows. Additionally, the majority of the commercial parcels were FR zoned parcels over a few hundred acres. The result of these large parcels is that the demands would be separated from each other by a significant distance and as such be unlikely to impact neighboring wells. *Table 4.16-6: Area 3 – East of the 6,000 Foot Elevation Non-Martis Area Water Demand* summarizes the total water demand for Area 3.

Table 4.16-6: Area 3 - East of the 6,000 Foot Elevation Non-Martis Area Water Demand

Demand Type	Water Demand (GPY)	Water Demand (AFY)
Personal Use Cultivation	459,900	1.41
Commercial Cultivation	571,583,344	7,431.61
Total	572,043,244	1,755.54

Area 3 Water Supply Analysis

The demand for cannabis cultivation in Area 3 could come from two sources: surface water rights derived from the natural flow of the surface streams and groundwater sourced either through fractured rock aquifers or small alluvial aquifers. There are no known contract water supplies available in this area. In all likelihood, the water supplies would be met from a combination of surface water and groundwater sources in these areas.

As discussed in the analysis for Area 1 above, the use of surface water would be governed by the specific performance standards of the SWRCB permitting process with regard to demonstrating no adverse impacts from water diversion, and potential impacts are considered less than significant. And as discussed in the groundwater analysis for Area 1, neither the County nor the State has governing rules that would give one overlying groundwater user an advantage over a new overlying groundwater user for cannabis cultivation purposes. Neither the County nor the State have a mechanism in place to track or monitor groundwater production in individual wells. For these reasons, potential impacts on groundwater supply are considered significant and unavoidable.

Area 4: Martis Valley Groundwater

Area 4 is the Martis Valley Area that is defined by the portion of the Martis Valley Groundwater Basin that lies within Nevada County. The Martis Valley area resulted in 13 lots with residential grows allowed and 226 lots where commercial grows are permitted. The demands total 0.05 acre-feet and 310 acre-feet respectively. The resulting demands in the Martis Valley area are so low that impacts to the groundwater levels would likely be below the season differences in existing pumping and therefore difficult to ascertain. It should be noted that although these parcels are on unincorporated County lands, many lie within the Truckee Donner Public Utility District sphere of influence. *Table 4.16-7: Area 4 – Martis Valley Groundwater Area Water Demand* summarizes the total water demand for Area 4.

Table 4.16-7: Area 4 - Martis Valley Groundwater Area Water Demand

Demand Type	Water Demand (GPY)	Water Demand (AFY)
Personal Use Cultivation	16,608	0.05
Commercial Cultivation	101,080,313	310.20
Total	101,096,920	310.26

Area 4 Water Supply Analysis

Area 4 encompasses the portion of the Martis Valley Groundwater Basin located in Nevada County. The Martis Valley Area is governed by two important water management programs: the TROA and the Martis Valley Groundwater Basin Groundwater Management Plan (MVGMP). The Martis Valley Area has also established a Groundwater Sustainability Agency under the Sustainable Groundwater Management Act and will produce a Groundwater Sustainability Plan by the statutory deadline in June of 2022. The Martis Valley Groundwater Sustainability Plan will be the governing document for managing groundwater in the entire Martis Valley groundwater basin in the future.

The potential additional water demands in the Martis Valley area are minimal. The total additional residential and commercial demands are 310.26 acre-feet per year. This total demand falls within the sustainable parameters as described in the MVGMP.

The use of surface water within Area 4 is governed by the TROA. The TROA is a broad settlement agreement that addresses all surface water supplies that impact the Truckee River from its origination point at Lake Tahoe to its terminus point in Pyramid Lake. As such, TROA governs the vast majority of surface water supplies in Nevada County on the eastern side of the Sierra Divide. Because of this agreement, there is extremely limited ability to appropriate new water supplies in the Truckee River watershed. As such, any diversion and use of water from surface water systems that are covered by the

TROA are subject to the requirements of TROA. And unless the terms of TROA are violated by the diversion and use of water, the stipulated settlement governs the impacts associated with water use. Therefore, the use of surface water would be governed by the specific performance standards of the TROA permitting process with regard to demonstrating no adverse impacts from water diversion, and potential impacts are considered less than significant.

With regard to groundwater use, the MVGMP has formal implementation actions that support basin management objectives. These high-level actions are:

- Manage Groundwater to Maintain Established and Planned Uses
- Manage Groundwater within the Provisions of the TROA
- Collaborate and Cooperate with Groundwater Users and Stakeholders in the Martis Valley Groundwater Basin
- Protect Groundwater Quantity and Quality
- Pursue and use the best available science and technology to inform the decision-making process
- Consider the environment and participate in the stewardship of groundwater resources

The coordination between the TROA and the MVGMP provide the implementing documents for sustainable groundwater basin management. And although the MVGMP may not have regulatory authority to prohibit new well drilling by individuals or districts, the TROA has injunctive authority where groundwater extraction imperils surface water systems.

Based on the MVGMP, the estimated total demand in 2013 was 9,341 acre-feet per year. Groundwater recharge rates were most recently estimated to be approximately 35,000 acre-feet per year. As such, the recharge rates for the entire basin exceed the total demands. Adding an additional 310.20 acre-feet of demand is within the sustainable parameters described in the MVGMP. Therefore, potential impacts from groundwater use within Area 4 are considered less than significant.

MITIGATION MEASURES

No feasible mitigation measures for impacts on groundwater supply have been identified.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and Unavoidable.

IMPACT 4.16-5: RESULT IN A DETERMINATION BY THE WASTEWATER TREATMENT PROVIDER WHICH SERVES OR MAY SERVE THE PROJECT THAT IT HAS INADEQUATE CAPACITY TO SERVE THE PROJECT'S PROJECTED DEMAND IN ADDITION TO THE PROVIDER'S EXISTING COMMITMENTS.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, would require registration with the enforcing officer through an administrative action. The cultivation activities of six plants for personal use in R1, R2, R3, or RA zones would be limited to indoor cultivation and would be required to prepare a materials management program as part of their cultivation and operation plans for existing and future cannabis operations that describes a description of the activities on site, detailed standard operations procedures, cleaning procedures and disposal methods as part of clearance and permit requirements. Potential impacts on wastewater treatment facilities from personal use cannabis cultivation are considered less than significant because cultivating a maximum of six plants is not anticipated to generate a significant amount of wastewater that would require treatment.

With regard to commercial cannabis cultivation, given the agricultural nature of cannabis cultivation, it is not anticipated that proposed cannabis operations would result in substantial new wastewater generation, as cannabis cultivation and other agricultural operations typically result only in the generation of agricultural runoff from outdoor cultivation sites. Given the requirement for compliance with adopted regulations relating the management of wastewater and individual permit review by the County as part of the CCP and ADP review process, impacts on wastewater services would be less than significant.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than Significant.

IMPACT 4.16-6: BE SERVED BY A LANDFILL WITH INSUFFICIENT PERMITTED CAPACITY TO ACCOMMODATE THE PROJECT'S SOLID WASTE DISPOSAL NEEDS.

Implementation of the proposed project would generate solid waste during operation of commercial cannabis cultivation sites and manufacturing operations. Potential solid waste generated would include soils that have been depleted of nutrient supplements, pesticides, and rodenticides during cultivation and manufacturing of cannabis. As discussed in Section 4.16.1, Environmental Setting, all solid waste is hauled to out-of-County landfills under the contract with Waste Management. Solid waste and green waste is taken to the McCourtney Road Transfer Station & Recycling Center in Grass Valley.

Solid waste generated in the western portion of the County is disposed of at the Lockwood Regional Sanitary Landfill in Nevada. Solid wastes generated in the eastern portion of the County are disposed of at the Eastern Regional Landfill in Placer County. The Lockwood Regional Landfill has a capacity of approximately 302.5 million cubic yards. The ERMRF, functioning as a transfer station, is located in Placer County and handles solid waste disposal for eastern Nevada County. Based on an April 2010 aerial survey, the landfill contains a waste volume of approximately 32.8 million cubic yards.

According to the Nevada County General Plan, none of the service providers appear to have significant capacity in existing facilities to accommodate additional development except for Tahoe-Truckee Sanitation District. Although most of the reported deficiencies were in staff or equipment, rather than facilities or sites, future abilities to provide adequate levels of service would also involve needs for expanded facilities and new sites.

Given the unpredictability of cannabis operations, it is difficult to predict how much solid waste would be generated by operation of licensed cultivation and manufacturing sites. Currently, the waste management requirements for cannabis permits are regulated by CalCannabis, Bureau of Cannabis Control, and Manufactured Cannabis Safety Branch. Implementation of the proposed project may increase the number of cultivation sites that would dispose of solid waste at McCourtney Road Transfer Station & Recycling Center and other transfer stations in the County.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, would require registration with the enforcing officer through an administrative action. The cultivation activities of six plants for personal use in R1, R2, R3, or RA zones would be limited to indoor cultivation and would be required to prepare a solid waste management plan as part of their cultivation and operation plans for existing and future cannabis operations that describes how solid waste would be disposed of as part of

clearance and permit requirements. For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain a CCP or ADP. Cannabis cultivation projects of less than 2,500 sf would require processing of a CCP to be reviewed and approved by the Building Department. An ADP would be used for all proposed commercial cultivation activities from 2,500 sf to 10,000 sf of canopy space and the Planning Director and Public Works director or designee would evaluate the project for conformance to applicable regulations regarding solid waste disposal. Therefore, impacts would be less than significant.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than Significant.

IMPACT 4.16-7: COMPLY WITH FEDERAL, STATE, AND LOCAL STATUTES AND REGULATIONS RELATED TO SOLID WASTE.

Implementation of the proposed project would generate solid waste during operation of commercial cannabis cultivation sites and manufacturing operations. As discussed in Section 4.16.1, Environmental Setting, all solid waste is hauled off to out-of-County landfills under the contract with Waste Management. Solid waste and green waste is taken to the McCourtney Road Transfer Station & Recycling Center in Grass Valley.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, would require registration with the enforcing officer through an administrative action. The cultivation activities of six plants for personal use in R1, R2, R3, or RA zones would be limited to indoor cultivation and would be required to prepare a solid waste management plan as part of their cultivation and operation plans for existing and future cannabis operations that describes how solid waste would be disposed of as part of clearance and permit requirements. Cannabis cultivation projects of less than 2,500 sf would require processing of a CCP to be reviewed and approved by the Building Department. An ADP would be used for all proposed commercial cultivation activities from 2,500 sf to 10,000 sf of canopy space and the Planning Director and Public Works director or designee would evaluate the project for conformance regarding regulations for solid waste disposal. Therefore, impacts would be less than significant.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than Significant.

4.17 ENERGY

This section describes the affected environment and regulatory setting energy use and was prepared pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15126 and Appendix C of the State CEQA Guidelines. The analysis in this section relies of some information previously discussed and disclosed in Section 4.3 Air Quality and Greenhouse Gas (GHG) Emissions, which in part analyzes GHGs emitted from use of energy. The analysis in this Section considered whether implementation of the proposed Nevada County Commercial Cannabis Cultivation Ordinance (proposed NCCO or proposed project) would result in wasteful, inefficient, or unnecessary consumption of energy.

Energy would be used to operate cultivation of cannabis for both personal, and commercial and non-remuneration purposes. Depending on the nature of the cultivation site and whether it consists of indoor, mixed-light, or outdoor cultivation and whether accessory structures are needed, potential energy impacts of the different projects would vary. Energy could be used for lighting, heating, cooling, and operation of equipment and machinery. While some cultivation operations would be expected to use onsite power generation from use of generators or solar, most are anticipated to utility electricity generated at power plants and transmitted to the site over the existing grid and transmission power lines. In addition, project is expected to utilize some vehicles during construction and during operation of project for transportation of both site personnel as well as materials such needed for cultivation and transportation of cannabis.

4.17.1 ENVIRONMENTAL SETTING

PHYSICAL SETTING

Electric and natural gas facilities are provided in Nevada County(County) by Pacific Gas & Electric Company (PG&E). There are 5 PG&E substations within the County. Four of these substations have distribution voltages of 12kV and one substation has a distribution voltage of 21kV. Three of the substations are served via 60kV transmission lines and two substations are served via 115kV transmission lines. The transmission lines are networked and generation for these transmission lines comes from generators located throughout the state. The transmission lines are operated by California Independent System Operators, CALISO. In 2017, according to the California Energy Commission, total energy usage for Nevada County was 750.441659 Million of kWh (GWh) [California Energy Commission (CEC), 2017], which was an increase of approximately percent from 2016 when total energy consumption was 661.054476 (CEC, 2016).

ENERGY AND SOURCES

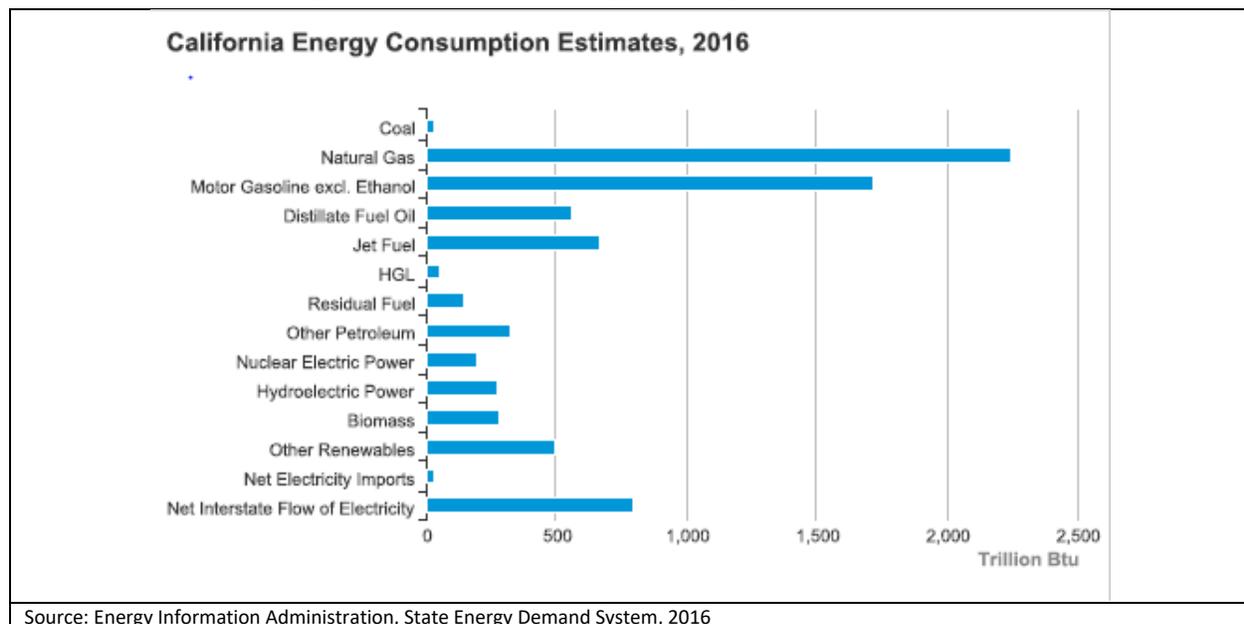
In 2016, California produced energy from five main sources. Almost half of California's net electricity generation was from renewable resources, including hydropower, in 2017. Natural gas-fired power plants fueled more than two-fifths of the total in-state net electricity generation. Nuclear power, which until 2012 provided almost one-fifth of the state's total net electricity generation, now supplies less than one-tenth of net generation, as one of the two nuclear power plants in the state was permanently retired in mid-2013 (EIA, 2018). More specifically, these sources and the energy that is derived are listed as follows: Natural Gas (approximately 225 trillion British thermal units (BTUs), Crude Oil (approximately 1,075 trillion

BTUs), nuclear electric power (approximately 195 trillion BTUs), biofuels (approximately 10 trillion BTUs), and other renewable energy (910 trillion BTUs).

The electricity generated in the state come from four primary sources. The sources and electricity generated in megawatts per hour (MWh) for August 2018 are as follows: Natural Gas fired powerplants (approximately 10,500 MWh), nuclear (approximately 1,950 MWh), Hydroelectric (approximately 2,500 MWh), and nonhydroelectric Renewable (approximately 5,500 MWh).

In addition to the sources and energy generation, in 2016, California derived the energy it uses from 14 different sources. The sources and energy derived are provided in *Figure 4.17-1 California Energy Consumption Estimates, 2016*, below.

Figure 4.17-1 California Energy Consumption Estimates, 2016



POWER GENERATION IN NEVADA COUNTY

Nevada County is home to 10 power generation facilities, all of which are hydroelectrically powered. According to the EIA, these plants, and their generation capacities are provided in *Table 4.17-1 – Nevada County Hydroelectric Generation*, below:

Table 4.17-1 – Nevada County Hydroelectric Generation

Facility and Technology	City	Total Nameplate Capacity	Utility Name
Combie South – Conventional Hydroelectric	Nevada	1.5 MW	Nevada Irrigation District
Chicago Park – Conventional Hydroelectric	Nevada	44 MW	Nevada Irrigation District
Dutch Flat 2 – Conventional Hydroelectric	Nevada	27.3 MW	Nevada Irrigation District
Scott Flat – Conventional Hydroelectric	Nevada	1 MW	Nevada Irrigation District

Table 4.17-1 – Nevada County Hydroelectric Generation

Facility and Technology	City	Total Nameplate Capacity	Utility Name
Deer Creek PH – Conventional Hydroelectric	Nevada	5.5 MW	PG&E
Narrows PH – Conventional Hydroelectric	Nevada	10.2 MW	PG&E
Spaulding 1 – Conventional Hydroelectric	Nevada	7MW	PG&E
Spaulding 2 – Conventional Hydroelectric	Nevada	3.7 MW	PG&E
Spaulding 3 – Conventional Hydroelectric	Nevada	6.6 MW	PG&E
Bowman – Conventional Hydroelectric	Nevada	3.6 MW	Nevada Irrigation District
EIA, 2016, profile overview.			

California accounts for less than 1% of total U.S. natural gas reserves and production and has experienced a gradual overall decline in the past three decades. California's natural gas output equals about one-tenth of state demand, and almost two-thirds of California households use natural gas for home heating, and more than two-fifths of California's utility-scale net electricity generation is fueled by natural gas. Several interstate pipelines bring natural gas into California from the Southwest, and from the Rocky Mountain region, as well as from western Canada, by way of Arizona, Nevada, and Oregon. As discussed, natural gas is not only used as on an industrial scale as a fuel source to generate electricity but is used in small scale residential, commercial, and private industrial uses for heating, cooking, and other domestic uses. Within Nevada County for 2017, approximately 20.515696 millions therms were used an approximate increase of 9% compared to 2016, when approximate 18.786564 million therms were used.

4.17.2 REGULATORY SETTING

FEDERAL

Energy production, use, and consumption is regulated at the Federal, State, and sometimes local level. Agencies regulate energy through various policies, standards, and programs. At the local level, individual cities and counties typically establish policies in their general plans and climate action plans, if applicable, related to the energy efficiency of new development and land use planning and to the use of renewable energy sources. Over the last few decades, an increased focus has been placed on energy conservation and use of renewable sources. This is exemplified by the above power generation showing the use of hydroelectric in addition to renewable sources (largely solar) as significant sources of electricity used in California. The use of renewable sources is encouraged at the federal, State, and sometimes local levels through the use of rebates and tax credits for installation of renewable energy systems and use of energy efficient appliances under the energy star program.

ENERGY POLICY AND CONSERVATION ACT, AND CAFE STANDARDS

The Energy Policy and Conservation Act of 1975 established nationwide fuel economy standards to conserve oil, which was largely in response to the 1973 oil embargo. Pursuant to the act, the National

Highway Transportation Safety Administration (NHTSA), established Corporate Average Fuel Economy (CAFE) standards to regulate how far our vehicles must travel on a gallon of fuel. NHTSA sets CAFE standards for passenger cars and for light trucks (collectively, light-duty vehicles), and separately sets fuel consumption standards for medium- and heavy-duty trucks and engines. NHTSA also regulates the fuel-economy window stickers on new vehicles (NHTSA, 2018). Based on CAFE, the Department of Transportation (DOT) is authorized to assess penalties for noncompliance under the Energy Independence and Security Act of 2007 which is described in additional detail below.

ENERGY POLICY ACT (1992 AND 2005) AND ENERGY INDEPENDENCE AND SECURITY ACT OF 2007

The Energy Policy Act (EPA) addresses energy production in the United States, including: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) Tribal energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology. For example, the Act provides loan guarantees for entities that develop or use innovative technologies that avoid the by-production of greenhouse gases. Another provision of the Act increases the amount of biofuel that must be mixed with gasoline sold in the United States (EPA, 2017).

In 2007, President Bush signed the Energy Independence and Security Act (EISA). The EISA has the intent to do the following:

- move the United States toward greater energy independence and security;
- increase the production of clean renewable fuels;
- protect consumers;
- increase the efficiency of products, buildings, and vehicles;
- improve the energy performance of the Federal Government; and
- increase U.S. energy security, develop renewable fuel production, and improve vehicle fuel economy.

EISA reinforces the energy reduction goals for federal agencies put forth in Executive Order 13423, as well as introduces more aggressive requirements. The three key provisions enacted are the Corporate Average Fuel Economy Standards, the Renewable Fuel Standard, and the appliance/lighting efficiency standards (EPA, 2016b).

STATE

CALIFORNIA ENERGY ACTION PLAN 2008

The first Energy Action Plan (EAP) emerged in 2003 from a crisis atmosphere in California's energy markets. In the October 2005 Energy Action Plan II, the Energy Commission and the Public Utilities Commission updated their energy policy vision by adding some important dimensions to the policy areas included in the original EAP. The emerging importance of climate change was first highlighted in EAP II; transportation-related energy issues and research and development activities were also added. In addition, with EAP II, the California Independent System Operator (California ISO) began a collaborative role with the Energy Commission and the Public Utilities Commission. The most recent 2008 update maintains the EAP process, does not supersede or replace the 2007 process, and remains the overall guiding document on energy policy.

ASSEMBLY BILL 2076: REDUCING DEPENDENCE ON PETROLEUM

Pursuant to Assembly Bill (AB) 2076 (Chapter 936, Statutes of 2000), CEC and the California Air Resources Board (CARB) prepared and adopted a joint agency report in 2003, Reducing California's Petroleum Dependence. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT. Further, in response to the CEC's 2003 and 2005 Integrated Energy Policy Reports, Governor Davis directed CEC to take the lead in developing a long-term plan to increase alternative fuel use.

SB 1078 AND SBX1-2 (RENEWABLE ELECTRICITY STANDARDS).

SB 1078 requires California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Executive Order S-21-09 also directed CARB to adopt a regulation by July 31, 2010, requiring the State's load-serving entities to meet a 33 percent renewable energy target by 2020. CARB approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23. SBX1-2, which codified the 33 percent by 2020 goal.

SB 350 (CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015).

Signed into law on October 7, 2015, SB 350 implements the goals of Executive Order B-30-15. The objectives of SB 350 are to increase the procurement of electricity from renewable sources from 33 percent to 50 percent (with interim targets of 40 percent by 2024, and 25 percent by 2027) and to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation. SB 350 also reorganizes the Independent System Operator (ISO) to develop more regional electricity transmission markets and improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

ASSEMBLY BILL 1007: STATE ALTERNATIVE FUELS PLAN

Assembly Bill 1007, the State Alternative Fuels Plan (SAFP) presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes cost and maximizes the economic benefits of in-state production. The SAFP evaluated fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce greenhouse gas emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality. The SAFP was initially focused on years 2012, 2017, and now is focused on year 2022 with the aim of reaching the petroleum reduction goals, greenhouse gas emissions outcomes, and possible Low-Carbon Fuels Standards impact (CARB and CEC, 2007).

CALIFORNIA'S ENERGY EFFICIENCY STANDARDS FOR RESIDENTIAL AND NONRESIDENTIAL BUILDINGS (TITLE 24)

The California Code of Regulations Title 24, California's energy efficiency standards for residential and non-residential buildings, was established by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, and provide energy efficiency standards for residential and non-residential buildings. In 2013, the CEC updated Title 24 standards with more stringent requirements. The 2013 standards are expected to substantially reduce the growth in

electricity and natural gas use. Additional savings result from the application of the standards on building alterations. For example, requirements for cool roofs, lighting, and air distribution ducts are expected to save additional electricity. These savings are cumulative, doubling as years go by. The 2016 standards have been approved and will go into effect on January 1, 2017. California's energy efficiency standards are updated on an approximate three-year cycle.

CALIFORNIA GREEN BUILDING STANDARDS

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt which encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code was adopted in 2013 and went into effect July 1, 2014.

ASSEMBLY BILL 32 (CALIFORNIA GLOBAL WARMING SOLUTIONS ACT)

Assembly Bill (AB) 32 instructs the CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. AB 32 directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. It set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

SENATE BILL 32 (CALIFORNIA GLOBAL WARMING SOLUTIONS ACT OF 2006: EMISSIONS LIMIT).

Signed into law in September 2016, Senate Bill (SB) 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

NEVADA COUNTY GENERAL PLAN

The Circulation Element and the Circulation Element of the Nevada County General Plan includes several goals, objectives and policies with respect to air quality, including the following:

CIRCULATION ELEMENT

Goal 14.1: To the extent feasible, encourage the development of energy efficient circulation patterns.

The Nevada County Housing Element encourages the use of energy efficient materials and building standards. Including a home and energy weatherization program; and has adopted the 2013 California Energy Code. In addition, the housing element also certain goals related to energy conservation and notes that there are programs to minimize the cost of energy conservation for projects such as solar and better insulation. Although many of the goals and policies relate to new larger scale development, the following would be applicable to individual projects under the proposed NCCO.

ENERGY CONSERVATION

- Goal EC-8.1: Provide for a variety of alternative housing options and the use of alternative innovative and appropriate technology.
- Goal EC-8.2 To the extent feasible, encourage the reduction of greenhouse gas emission during design phase of construction projects.
- Policy EC-8.6.4 In addition to Title 24, Part 6 of the California Code of Regulations, the County shall promote energy efficiency and alternative energy sources for new and rehabilitated housing using incentives and site plan review recommendations, which shall include the following:
- a. Passive solar design to maximize solar energy capture;
 - b. Preservation of native trees that provide shade, reduce energy costs, and slow structural deterioration;
 - c. Incorporation of adequate deciduous tree cover on the south and west side of dwellings and along streets to help reduce the cooling demand during summer months and capture maximum solar energy in winter;
 - d. Maximization of use of daylight and energy-efficient lighting, such as compact fluorescent lighting indoors and LED lighting outdoors;
 - e. Energy-Star rated appliances, solar hot water heating systems, and other plumbing, mechanical, electrical, and solar permits issued for systems that either produce energy or save natural resources, such as wind-generated electrical systems, tankless water heaters, and highly efficient heating, ventilation and air conditioning systems;
 - f. Water conservation features, including reclamation; landscaping appropriate to the site's climate, soils, and water resources; and water-saving irrigation practices;
 - g. Solid waste reduction and recycling.
- Policy EC-8.6.5 Continue to strongly support the current housing weatherization programs and Energy Crisis Intervention Program within Nevada County.
- Policy EC-8.6.6 Encourage residents and developers to increase energy conservation and efficiency by making improvements to existing housing stock that result in conservation of energy, water, and other natural resources, particularly in renter-occupied units, by offering workshops, individual consultations, education programs, and financial assistance for weatherization and other conservation measures.

In addition to the listed goals and policies, the Housing Element contain Appendix D: Opportunities for Energy Conservation. Appendix D recognizes that as non-renewable energy resources have been progressively depleted and energy costs continue to rise, people have become increasingly aware of energy conservation measures, primarily as a means to offset and control rising costs. Appendix D further notes that there are numerous energy-conserving measures, which can be retrofitted onto existing, and older housing and which conserve the use of nonrenewable fuels and save money, which had been incorporated to the Housing Element. While often applicable and focused on residential projects and

customers, some of these measures and programs such as those contained in Appendix D including the PG&E Customer Energy Efficiency Programs, and strategies to make HVAC systems more efficient and reducing energy use with retrofits and renovations, could would be applied to cultivation projects as applicable.

4.17.3 STANDARDS OF SIGNIFICANCE

ENVIRONMENTAL ANALYSIS

THRESHOLDS OF SIGNIFICANCE

Based on Appendix C (energy) of the State CEQA Guidelines, an energy impact is considered significant if implementation of the proposed ordinance would:

- result in wasteful, inefficient, and unnecessary consumption of energy, during cultivation site and noncultivation site construction or operation, as evidenced by a failure to decrease overall per capita energy consumption or decrease reliance on fossil fuels such as coal, natural gas, and oil;
- fail to incorporate feasible renewable energy or energy efficiency measures into building design, equipment use, transportation, or other project features, or otherwise fail to increase reliance on renewable energy sources; or
- exceed the available capacities of energy supplies that require the construction of facilities.

4.17.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

IMPACT 4.17-1: USE LARGE AMOUNTS OF FUEL OR ENERGY IN AN UNNECESSARY, WASTEFUL, OR INEFFICIENT MANNER

IMPACT ANALYSIS

The existing cannabis operations have been using the existing energy grid in the County supplied by PG&E. Implementation of the proposed project would increase electricity and natural gas consumption at future sites relative to existing conditions for temporary construction activities as well as long-term operational activities. Depending on the type and scale of the operation, electrical demands may vary considerably. If there is flexibility in site location, PG&E can recommend the optimum site for future businesses to alleviate or minimize system upgrades (PG&E, 2018). The proposed project is not anticipated to result in the substantial new demand for natural gas supplies. Natural gas is not typically required as part of cannabis cultivation or manufacturing operations but may be utilized during processes not directly related to these activities such as heating demands in the residence that would be on parcel on which the commercial cannabis or non-remuneration cultivation is occurring. These demands would represent a negligible increase in demand for natural gas supplies provided by PG&E.

It is likely that some existing or future parcels that would be under cannabis cultivation would be outside the PG&E service area. It is expected that these sites would be served by propane tanks and have those fuels trucked as demand arises. Similar to above, the demand for these services, such as natural gas, are anticipated to be required for operation of a residence and some ancillary structures that are not necessarily tied to cannabis cultivation and not a direct result of the proposed NCCO. Impacts in this regard are considered less than significant.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones. The cultivation activities of up to six plants would be the equivalent to a small garden and would not result in wasteful, inefficient or unnecessary consumption of energy on a per capita basis. Cultivation of this nature would not require the use of heavy equipment or machinery that would entail a substantial energy investment. There are approximately 26,993 parcels (not including AE, AG, and FR zones) that would be permitted to grow up to 6 plants for personal use. The energy used for these cultivation operations is anticipated to generally average about #2 or #3, with some using less in the #1 range and other using greater in the #4 range. Assuming an energy intensity of #3 this would, and very conservatively assuming each residence would grow six plants, this would result in an energy demand of 7,881,956 KWh. At the of #2 energy option, this would result in an approximate energy use of 2,890,603 KWh. In practice, it is anticipated that the increased energy demand for personal use would result in a smaller incremental increase from use of lighting to foster plant growth. It is not anticipated that every eligible residential use would cultivate cannabis and therefore, a substantial new or increased demand for electricity or natural gas from these activities is not anticipated. Additionally, as discussed above, natural gas is not typically required for cannabis cultivation and personal use cultivation is largely expected to occur within structures that would already be using natural gas for heating. As such, impacts in this regard would less than significant and mitigation is not required.

Construction

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during the construction activities associated with future commercial cannabis and non-remuneration cultivation sites. Construction activities would potential grading depending on the nature of the site, and building of any needed greenhouses, hoop houses, and other minor work requiring equipment or machinery could require energy. In addition, energy in the form of fuel would be needed to transport potential workers and construction materials. For these activities, there would be a one-time energy expenditure needed to facilitate construction of any physical buildings and other infrastructure associated with the project. This energy would be considered nonrecoverable. It is expected that most energy consumption would result from day to day operation of construction equipment and vehicle trips associated with commutes by construction workers and haul trucks supplying materials. The energy needs for project construction would be temporary and would not require additional capacity or increase peak or base period demands for electricity or other forms of energy.

Other factors that would reduce the effects of energy consumed during construction includes the fact that construction equipment would be required to comply with the latest EPA and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. It also is anticipated that some construction building materials would include recycled materials and products originating from nearby sources in order to reduce costs of transportation.

It should be noted that construction fuel use is temporary and would cease upon completion of construction. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or State. As such, it is anticipated that project construction would have a nominal effect on the local and regional energy supplies. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. Therefore, impacts in this regard would be less than significant.

Operation

Operation of the proposed project and associated commercial cultivation or cultivation for non-remuneration activities would consist of outdoor, indoor, and mixed-light cultivation operations. The indoor and mixed light would artificial lighting to extend the photoperiod, growth, and enhance the flowering of cannabis plants. Outdoor cultivation, by definition would not use artificial lighting and any energy use would be extremely minimal. Cannabis cultivation for commercial or non-remuneration, would require processing of a CCP for cannabis cultivation less than 2,500 sf, and an ADP for cannabis cultivation 2,500 sf to 10,000 sf of canopy is the maximum allowed under the proposed NCCO.

Cultivation energy usage is based on the State of Oregon Indoor Cannabis Cultivator Energy Use Estimator. Indoor cannabis cultivation is the most light intensive use. Energy use demand is created from HVAC systems including heating and air conditioning depending on outdoor climate and ventilation. Other indoor energy demands include dehumidifiers, water pumps, CO2 production, and other uses such as fluorescent indoor lighting as well as low to high intensity grow lights. Depending on the nature and intensity of the indoor cultivation operations the intensity of energy demand will vary. The State of Oregon breaks down energy usage into four categories. These categories are defined on the energy estimator as Options #1, #2, #3, and #4. These are defined in *Table 4.17-2: Energy Use Equipment Description*, below:

The calculations in the table, while maintaining a conservative estimate on energy use, used the energy factor of two for indoor cultivation. This was because the cost of installing and maintaining an energy-intensive facility as would be required under Option #4 could be prohibitive. To account for any discrepancies and for some larger cultivation areas that may use more light intensive installations all the cultivation site on parcels 2-5 acres that are limited to 500 sf were assumed to use the electricity demand shown in #3. It should be emphasized that the calculations also assumed each parcel would be cultivated to its maximum allowable sf.

Table 4.17-2: Energy Use Equipment Description

#1	Low energy usage. Use low wattage LED and CFL lighting, low light fixture density (greater than 60 sq. ft. per light). No supplemental cooling or heating to grow space. No mechanical ventilation and air circulation. No dehumidification, pumping, CO2 production, or additional energy usages.
#2	Medium-Low energy usage. High wattage HID fixtures at low light fixture density (greater than 60 sq. ft. per light). Very minimal or no supplemental cooling or heating to grow space. Minimal mechanical ventilation and air circulation (ventilation only used minimally and not continue to control temperature). No dehumidification, pumping, CO2 production, or additional energy usages.
#3	Medium-high energy usage. High wattage HID fixtures with medium light density (40 - 60 sq. ft. per light). Significant supplemental cooling and/or heating to grow space. High-volume ventilation and air circulation that is frequently on. Minimal dehumidification, pumping, CO2 production, or additional energy usages.
#4	High energy usage. High wattage HID fixtures, unvented, high light density (less than 40 sq. ft. per light). Significant supplemental cooling and/or heating to grow space. High volume ventilation and air circulation (high level of air changes) that operates majority of the time. Multiple other energy using equipment, including dehumidification, pumping and water temperature control, CO2 production, etc.
Source: Oregon Department of Energy, 2017 Notes: Calculations assume typical 12-18 hour per daylight operation for vegetative and flowering phases and a continuous growth cycle.	

There are approximately 27,207 existing parcels zoned AE, AG, and FR, on which commercial cultivation or cultivation for non-remuneration could occur. For the purpose of the analysis based on the proposed NCCO these parcels are broken down by acreage on which a maximum canopy of cannabis is defined.

This is presented in *Table 4.17-3: Energy Use Based on Parcel Acreages*, below, breaks out the acreage of those parcels, the calculation of total canopy sf per parcel and energy use were each parcel to be used for cannabis production.

As discussed in previous Sections; while, it is not likely that every parcel would be used to cultivate cannabis, in this and other sections worst case scenario is assumed for the purpose of ensuring a complete CEQA analysis. For the purposes of the energy analysis, it is anticipated that parcels used for commercial cannabis cultivation would likely employ a blending of indoor mixed light, and outdoor, cultivation. This a common way cannabis is cultivation, and this is expected to be especially true of larger parcels on which 10,000 sf of canopy may be cultivated. Due to the high cost of constructing a structure large enough to house 10,000 sf of cannabis, it is more likely in these instances that a combination of indoor cultivation would be used in conjunction with mixed light greenhouses or hoop house and outdoor cultivation. Within the table; therefore, the total number of eligible parcels within a given acreage range are divided i Outdoor operations do not require the same amount or types of equipment required to support growth of cannabis plants in comparison to indoor cultivation operations and no electricity demands are assumed for new outdoor operations n thirds to more closely represent what is anticipated to occur if the proposed NCCO is implemented.

Addition, it is unlikely due to other potential constraints such irregularly shaped parcels that limit cultivation area due to set back requirements; proximity to sensitive receptors; presence of sensitive resources; or otherwise eligible parcels that do not have a residence or are not on a contiguous parcel with a legal residence. It should be noted as well that these calculations do not exclude the estimated existing 3,500 cultivation sites. Although these sites are considered part of the baseline for the purpose of this Draft EIR, due to the nature of energy and the fact it would be an ongoing demand as the cultivation continued from year to year, and the fact these cultivation sites would contribute to the future demand for energy, for the purpose of this analysis they are included.

Table 4.17-3: Energy Use Based on Parcel Acreages

Acreage of Parcels	Total allowable Canopy SF	Number of Parcels	KWh Per month	KWh per year
2-5 acres	500 sf (Indoor Only)	6,836	5,833 KWh for 500 sf	39,847,388
5-10 acres	2,500 sf	8,228	16,667 KWH for 2,500 sf	
Indoor		2,742	16,667	45,700,914
Mixed		2,742	8,333	22,850,457
Outdoor		2,742	0	0
10-20	5,000 sf	5,698	33,333 KWH for 5,000 sf	
Indoor		1,899	33,333	63,299,367
Mixed		1,899	16,666	31,649,683
Outdoor		1,899	0	0
20 Acres and greater	10,000 sf	6,445	66,667 KWh for 10,000 sf	
Indoor		2,148	66,667	143,222,938
Mixed		2,148	33,333	71,611,469
Outdoor		2,148	0	0
TOTAL:				418,182,216 KWh

Source: ODEO, 2018.

Notes: For indoor only cultivation on 2-5 acres, the Energy Use Option of #3 was used. Based on this Option a Single 500 sf indoor cultivation site would use approximately 5,833 kWh per month.

-For indoor cultivation for parcels on 5-10 acres, the Energy Use Option #2 was used. Based on this Option a single 2,500 sf indoor cultivation site would use approximately 16,667kWh per month.

-For indoor cultivation for parcels on 10-20 acres, the Energy Use Option #2 was used. Based on this Option a single 5,000 sf indoor cultivation site would use approximately 33,333 kWh per month.

-For indoor cultivation for parcels on greater than 20 acres, the Energy Use Option #2 was used. Based on this Option a single 10,000 sf indoor cultivation site would use approximately 66,667 kWh per month

The kWh is based on a sf of cultivation based on the Energy Use in Table 4.17-2 Energy Use Equipment above.

-To more closely estimate the actual cultivation that would occur under the proposed NCCO, each cultivation type (indoor, mixed-use, and outdoor) is given 33% of the total cultivation parcels.

Operational Vehicle Emissions

If the proposed project is adopted, numerous new commercial cannabis cultivation sites and those used for non-remuneration would apply for permits under a CCP for cultivation less than 2,500 sf and an ADP for cultivation between 2,500 sf and 10,000 sf. Operation of these project would use energy in the form of vehicle fuels for travel to and from the cultivation sites. Trips would be generated by site owners as well as workers both for transporting materials used for day to day operations as well as for employees traveling to work. Owner and employee trips are assumed to be using light-duty passenger vehicles and light duty trucks. Operation of the vehicles would use energy derived from burning both gasoline and diesel fuels. Based on Section 4.15 Transportation and Traffic, the proposed project, if constructed at once would generate a total of 30,705 new average daily trips or 153,525 new daily vehicle miles traveled. Considering with the average vehicle in the US gets approximately 24.7 miles per gallon, the proposed

project would use approximately 6,214 gallons of fuel per day. This information is reflected in *Table 4.17-4: Estimated Vehicle Trips and Fuel Consumption*, below.

Table 4.17-4: Estimated Project Traffic Generation

Cannabis Activity	New ADT	New Daily VMT¹	Fuel Consumption⁵
Outdoor Cultivation ²	3,221	16,104	651 gpd
Mixed-Light Cultivation ²	9,421	47,104	1,907 gpd
Indoor Cultivation ²	18,063	90,317	3,656 gpd
Total	30,705	153,525	6,214 gpd
¹ County average VMT per trip = 5 miles. ² Size assumptions for cannabis activities are based on a ratio of the total available cultivation area. ³ Trips rates for outdoor and mixed-light cultivation have been taken from the Santa Barbara County Public Works Department based on similar agricultural activities. ⁴ Indoor cultivation trip rate based on average trip rate assumptions derived from economic analysis of the cannabis industry. ⁵ Based on average miles per gallon for US vehicles 24.7 miles per gallon. Abbreviations: gallons per day (gpd) Sources: Santa Barbara Cannabis Land Use Ordinance and Licensing Program FEIR, ERA Economics, NCTC 2017.			

Adoption of the proposed ordinance would result in an increase in vehicle miles traveled (VMT) and associated fuel use from worker and on-site resident commute trips. While the proposed project appears to generate a substantial number of new trips, the trips would be dispersed throughout the entire county and distribution of each trip would depend on actual cultivation site location. In many cases it is expected, because cultivation sites are required to have a permitted residence or be adjacent to a contiguous parcel with a residence and under the same ownership, that residents live on-site. This is expected to reduce the total VMT. It should be noted that the listed trips are worst-case travel scenarios and do not account for the cultivation season. Therefore; during the late fall, winter, and early spring, employee demand is expected to be lower and VMT during these months would be reduced. Nonetheless, incremental increases in VMT would be a factor of individual site location and operational-specific parameters, including harvest quantity, number of workers/residents, and number/type of daily trips required. Transportation energy consumption is anticipated to decrease because of federal regulations such as the CAFE standards, which require vehicles to obtain higher fuel efficiency. Cleaner vehicles that rely on alternative fuels are increasing throughout Humboldt County and California, and through the State’s Advanced Clean Car Program, more zero-emission and electric vehicles are anticipated to be adopted. Therefore, taken in sum with the other operational energy demands of the proposed project, impacts would be significant and unavoidable.

MITIGATION MEASURES

No feasible mitigation measures have been identified.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and Unavoidable.

The proposed project would result in a substantial increase in energy demand during operations. As discussed above, a relatively worst-case scenario was evaluated with reasonable reductions based on known constraints and likely cultivation types and energy uses. Even with the reductions, energy use at project buildout would be approximately 50% of the existing Countywide use. There is no mitigation that

would be feasible to reduce these impacts to less than significant. Impacts would remain significant and unavoidable.

IMPACT 4.17-2: CONSTRRAIN LOCAL OR REGIONAL ENERGY SUPPLIES, AFFECT PEAK AND BASE PERIODS OF ELECTRICAL OR NATURAL GAS DEMAND, REQUIRE OR RESULT IN THE CONSTRUCTION OF NEW ELECTRICAL GENERATION AND/OR TRANSMISSION FACILITIES, OR NECESSITATE THE EXPANSION OF EXISTING FACILITIES, THE CONSTRUCTION OF WHICH COULD CAUSE SIGNIFICANT ENVIRONMENTAL EFFECTS.

As discussed in Impact 4.16-8, existing cannabis operations have been using the existing energy grid in the County supplied by PG&E. Implementation of the proposed project would increase electricity and natural gas consumption at future sites relative to existing conditions for temporary construction activities as well as long-term operational activities. Based on PG&E's annual load forecasting and existing applications for new business, PG&E has no current plans for expanding or upgrading lines in Nevada County. Hence, PG&E's equipment in Nevada County has the capacity to serve the present estimated load growth demand. With that said, significant large new loads may require reinforcement of existing facilities (PG&E, 2018). The proposed project is not anticipated to result in substantial new demand for natural gas supplies, as natural gas is not normally required as part of cannabis cultivation but may be utilized during processes not directly related to these activities.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, would require registration with the enforcing officer through an administrative action. The cultivation activities of six plants for personal use in R1, R2, R3, or RA zones would be limited to indoor cultivation and would not conflict with existing energy standards, including standards for energy conservation. As part of this application process, the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with State, and local laws and regulations, related to energy efficiency. Compliance with state legislation such as SB 350, which requires energy efficient financing and tiered service rates would increase energy efficiency.

For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain a CCP or ADP. Cannabis cultivation projects of less than 2,500 sf would require processing of a CCP to be reviewed and approved by the Building Department. An ADP would be used for all proposed commercial cultivation activities from 2,500 sf to 10,000 sf of canopy space and the Planning Director or designee would evaluate the project for conformance to applicable regulations regarding energy efficiency.

In addition, the proposed project would also be required to conform to the requirements in Section L-II 4.3.9 Energy Conservation of the Nevada County Land Use Development Code. This section addresses conservation of energy resources without significantly increasing the cost of housing applies to all development and use permits.

While all of the above would be required and projects would be required to comply with energy saving regulations, it is possible that due to the substantial increased energy demand expected as part of the proposed project, the local and or regional energy supplies could become constrained resulting in an effect on peak and base periods of demand for electricity. Although, as discussed above, the proposed cultivation sites would be phased in over time, if that pace becomes too rapid or more parcels are

developed for cultivation than anticipated, a substantial increased demand for energy could result. Thus, impacts to regional energy supplies would be significant and could require construction of new electrical generation and/or transmission facilities.

MITIGATION MEASURES

No mitigation is available.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and Unavoidable.

IMPACT 4.17-3: CONFLICT WITH EXISTING ENERGY STANDARDS, INCLUDING STANDARDS FOR ENERGY CONSERVATION.

Implementation of the proposed project would not conflict with existing energy standards, including standards for energy conservation. However, licenses resulting from implementation of the proposed project would increase electricity demand over baseline conditions in the County. Electric and natural gas services are provided upon demand from consumers and consistent with local, state, and federal regulations, these services are expanded based on demand.

Cannabis cultivation for personal use could only occur on a property with a legally permitted primary residence in R-1, R-2, R-3, R-A, AG, AE, FR, and TPZ zones, would be limited to a total of six plants, would require registration with the enforcing officer through an administrative action. The cultivation activities of six plants for personal use in R1, R2, R3, or RA zones would be limited to indoor cultivation and would not conflict with existing energy standards, including standards for energy conservation. As part of this application process, the sites proposed for use for commercial or non-remuneration cultivation would be required to provide proof of compliance with State, and local laws and regulations, related to energy efficiency. Compliance with state legislation such as SB 350, which requires energy efficient financing and tiered service rates would increase energy efficiency.

For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain a CCP or ADP. Cannabis cultivation projects of less than 2,500 sf would require processing of a CCP to be reviewed and approved by the Building Department. An ADP would be used for all proposed commercial cultivation activities from 2,500 sf to 10,000 sf of canopy space and the Planning Director and Public Works director or designee would evaluate the project for conformance to applicable regulations regarding energy conservation. Thus, impacts in this regard would be less than significant and mitigation is not required.

MITIGATION MEASURES

No mitigation is required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than Significant.

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5.0 OTHER CEQA SECTIONS

5.1 CUMULATIVE PROJECTS

CEQA requires that an EIR evaluate a project's cumulative impacts. Cumulative impacts are the project's impacts combined with the impacts of other related past, present, and reasonably foreseeable future projects. As set forth in the CEQA Guidelines, the discussion of cumulative impacts must reflect the severity of the impacts, as well as the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone. As stated in CEQA, Public Resources Code, Section 21083(b) (2), "a project may have a significant effect on the environment if the possible effects of a project are individually limited but cumulatively considerable."

According to the CEQA Guidelines:

Cumulative impacts refer to two or more individual effects, which, when considered together, are considerable and which compound or increase other environmental impacts.

- (a) The individual effects may be changes resulting from a single project or a number of separate projects.*
- (b) The cumulative impact from several projects is the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonable foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, §15355).*

In addition, as stated in the CEQA Guidelines, it should be noted that:

The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable (CCR, Title 14, Division 6, Chapter 3, Section 15064[1][5]).

As previously stated, and as set forth in the CEQA Guidelines, related projects consist of "closely related past, present, and reasonable foreseeable probable future projects that would likely result in similar impacts and are located in the same geographic area" (CCR, Title 14, Division 6, Chapter 3, Section 15355). The cumulative project list and cumulative impact discussions for each environmental issue area based on these projects is provided further below.

An adequate discussion of significant cumulative impacts must include either a list of past, present, and probable future projects producing related or cumulative effects, or a summary of projections from an adopted local, regional, or statewide plan, related planning document, or related environmental document that describes conditions contributing to the cumulative effect (CEQA Guidelines Section 15130(b)(1)). The cumulative analysis in this Program EIR uses the list approach, and includes all reasonably foreseeable projects within the County, including those within adopted plans, in the development review process, and those being constructed.

The cumulative projects for the purpose of this environmental analysis include the following:

- Rincon Del Rio Project – 345 residential units (PD-CCRC Zoning);
- Soda Springs Area Plan – Mostly R1, and R2 zoning;
- Nevada County Housing Element;
- Nevada County Safety Element;
- South Woodland Project – 42 residential units;
- Wildwood Estates – 380 Units – Medium Density Residential Zoning;
- Higgins Marketplace – 30,000 square feet of commercial;
- Darkhorse – 56 Condo Units (Zoning change: Recreation to R-1);
- Dollar General – 2 stores, 9,100 square feet each;
- Harmony Ridge Estate – 54 Units;
- Deer Creek Part 2; and
- Ribo Industrial Park.

However, most of these projects are localized to specific properties or areas of the County, and most located in areas in which commercial cannabis would not be permitted due to the existing zoning. As a county-wide ordinance that affects property through the unincorporated area of Nevada County, the proposed project itself is similar to a cumulative project as future individual commercial cannabis cultivation sites could be dispersed throughout the County and not necessarily concentrated in one area.

For additional context, a summary of the Cannabis regulations in the counties adjacent Nevada County are provided to the extent that proposed project could influence commercial operations in these counties or that operations in these counties could be relocated to Nevada County.

CANNABIS REGULATION IN YUBA AND SIERRA COUNTIES

Yuba County prohibits outdoor cultivation for personal use but allows a maximum of six plants per parcel for indoor cultivation in a permitted accessory structure. Cultivation may occur within a greenhouse but fencing requirements may apply. Yuba County has no provisions for non-remuneration/medical caregiver cultivation and bans commercial activities.

Sierra County allows indoor or outdoor cultivation with 18 plants per person per property; however, it places a limit of 72 total plants for personal cultivation. Sierra County has no provisions for non-remuneration/medical caregiver cultivation and bans commercial activities.

CANNABIS REGULATION IN PLACER COUNTY

Placer County allows six plants on 50 sf of indoor or outdoor for non-medical, 50 sf for indoor or outdoor for medical with no mention of the number of plants for personal cultivation. In addition, only indoor or outdoor and only 50 sf is allowed per parcel, regardless of the number of people. Placer County has no provisions for non-remuneration/medical caregiver cultivation and bans commercial activities.

AESTHETICS

New commercial cannabis cultivation operations would include structures and features that are similar to agricultural activities. These include water storage ponds, accessory structures (e.g., barns and nurseries), caretaker housing, fencing, and roads. These structure and feature types are common in views along scenic vistas and state highways and are components of the rural and agricultural landscape of the County.

In addition to the requirements outlined in the proposed ordinance, existing regulations set forth in the County Land Use Development Code would also protect and maintain scenic resources and vistas within Nevada County. These regulations address lighting and visibility of equipment for operations that have the potential to affect both residential and agricultural zones and prevent development permitted in lands adjacent agricultural uses and residences from degrading the natural resource value of a given area. Future commercial cannabis operations would blend with the existing character of the County as viewed from scenic vistas and state highways and would not visually conflict with the rural/agricultural landscape character. Thus, the project's contribution to cumulative impacts on scenic vistas, scenic resources, and visual character of the County would not be cumulatively considerable.

Commercial cannabis operations permitted under the proposed ordinance could involve the use of lighting that would add to the existing and future nighttime lighting and glare conditions in the County. The proposed ordinance performance standards are intended to offset lighting and glare impacts by requiring cultivators to use items such as blackout tarps that would disallow light to escape from mixed-light cultivation and nursery structures during nighttime lighting sessions. While this is the intent, it would not be possible to ensure that all cultivators conform to this requirement and is not possible to ensure those that do, block 100% of artificial light. Therefore, some nighttime glow from artificially lighted nighttime cultivations may occur. Taken in sum, for all cultivation operations, this could result in a significant lighting impacts. Additionally, while security lighting would be required to be shielded and angled in such a way as to prevent light from spilling outside of the boundaries of the site, it is likely these sources would add some nighttime glow. Thus, the project's contribution to cumulative impacts on light and glare would be cumulatively considerable.

AGRICULTURAL AND FOREST RESOURCES

Prime Farmland, Unique Farmland, and Farmland of Statewide Importance comprise approximately 0.3 percent of the total land area of the County. Per the proposed ordinance, commercial cannabis is not considered an agricultural activity or operation under Civil Code Section 3482.5 or an Agricultural Product as defined in Section L-II 3.3 of the Nevada County Land Use and Development Code, or an Agricultural Operation as defined in Sections L-II 3.3, L-II 6.1 and L-XIV 1.1 of the Nevada County Land Use and Development Code. Therefore, cannabis cultivation on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, by definition, is considered a non-agricultural use on these agricultural lands. Conversion to cannabis cultivation from farmland used for other crops is, however, an important public policy consideration.

The prime farmlands in Nevada County are located in the western-most portion of the County, and most of this area is also zoned AG and AE where commercial cannabis is permitted. Based on the assumptions used for this analysis it is assumed that all eligible parcels that could support commercial cannabis operations would do so. Under the proposed project, cannabis cultivation sites would be required to conform to the standards listed in the resources standards requiring avoidance, minimization, or replacement from the reduction or loss of agriculture and forestry resources, however losses would still

occur and the extent of the conversion of prime farmlands is unknown at this time. It is unknown how many existing agricultural operations would convert from other types agricultural operations to commercial cannabis cultivation. Therefore, impacts as a result of agricultural land conversion would be considered significant.

Conformance to the development standards, and development of Management Plans for agricultural and forest resources would reduce the severity of the impact of the loss by protecting regional farmland/woodlands at a ratio of one acre protected for every one acre of farmland/woodland lost from conversion to cultivation. However, the proposed project, in combination with past, present, and reasonably foreseeable projects would impact conversion of agriculture and forest land to non-agriculture and non-forest uses, either directly or indirectly. Conformance with the development standards and use of Management Plans would reduce impacts to the maximum amount practicable. No feasible mitigation measures have been identified that would further reduce impacts.

As a State program, the Williamson Act, “agricultural preserves” are defined as areas devoted to agricultural use (producing plant or animal products for commercial purposes), recreational use, and/or open-space use. Commercial cannabis under the State definition is an agricultural use. Commercial cultivation of cannabis on a Williamson Act agricultural preserve, by definition, is an acceptable use. Cultivation of personal use cannabis on an agricultural preserve would be allowed so long as the area remained devoted to agricultural, recreational, and/or open-space uses as defined in the Act. No other provisions in the Williamson Act prohibit the growth of cannabis on land enrolled in the Williamson Act. The County; however, does not recognize cannabis as an agricultural project. None the less, the proposed NCCO would not change a zone or land use such that it would discourage future use of cannabis eligible parcels from growing a Williamson Act eligible crop. The proposed project also would not discourage cultivators from following applicable guidance, including the County’s Williamson Act guidelines, in order to remain licensed by CDFA. Therefore, the proposed project, in combination with past, present, and reasonably foreseeable projects would not conflict with existing zoning for agricultural uses, nor conflict with a Williamson Act contract. Impacts are less than significant.

There is a possibility that other farmland (Farmland of Local Importance) not under a Williamson Act contract could be converted to cannabis cultivation in such a manner as would not conflict with zoning for agricultural lands, therefore converting farmland to non-agricultural use. In addition, the project could involve other changes in the existing environment which could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. The proposed project, in combination with past, present, and reasonably foreseeable projects could result in new development in the vicinity of future cannabis cultivation operations, and thus direct conversion could lead to further loss of agricultural/forest lands.

Within the boundaries of the County, there are approximately 93,000 acres zoned TPZ and approximately 244,000 acres zoned FR. The California Forest Practice Act requires all commercial harvesting operations be subject to environmental review, and landowners submit Timber Harvest Plans to CalFIRE. To convert timberland to another use, owners of nonfederal timberland apply for a Timberland Conversion Permit from the Director of CalFIRE. CalFIRE may grant exemptions for conversions of less than three acres (completed by a Registered Professional Forester). Applicants would be required to comply with local requirements including zoning districts designated for forest land and timberland production. Therefore, the proposed project, in combination with past, present, and reasonably foreseeable projects would not

conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned timberland production. Impacts are less than significant.

For personal use cannabis cultivation, up to six cannabis plants would be allowed in FR and TPZ zone classifications, for indoor cultivation only. This is similar to a personal garden and would continue to allow the property to be maintained as forest. Commercial cannabis cultivation would be allowed in FR zone classifications, but not in TPZs. Within FR zones, commercial cannabis cultivation could occur only on a parcel or premises with a legally permitted residence or on a vacant parcel adjacent to a parcel with a legally permitted residence under common ownership. In addition, a maximum of three permits would be issued per person or entity for the purpose of engaging in commercial cannabis cultivation activities.

AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Implementation of the proposed ordinance would result in peak emissions of PM10 during the harvest season from road dust, which would contribute to an existing or projected air quality violation. As discussed in *Section 4.3: Air Quality and Greenhouse Gases*, feasible mitigation measures are not available to offset project PM10 emissions from unpaved roadway use. Thus, the proposed ordinance's contribution to this significant cumulative impact would be cumulatively considerable. Mitigation is not available to reduce the proposed ordinance's contribution to a less than considerable level for the reasons discussed for the project-level analysis. Thus, this cumulative impact would remain cumulatively considerable and significant and unavoidable.

To the extent that potential land uses within the cumulative context may occur, the level of odor-producing uses in adjacent communities is anticipated to be minimal. Odor impacts are typically not additive, in any event, as areas impacted by isolated local odor sources typically do not overlap with other areas affected by other isolated local odor sources. Sources of odors related to the proposed ordinance may include diesel exhaust from construction equipment, odor emitted from cannabis plants during final stages of cultivation, and the burning of excess plant materials.

Generally, odors from construction equipment would occur on an intermittent basis and would not be expected to occur on multiple parcels in a given area at once. In addition, diesel fumes tend to dissipate rapidly with increasing distance from a source. Implementation of Mitigation Measure 3.3-1 prohibits the burning of cannabis and other vegetative material. However, mitigation measures are not available to reduce impacts related to objectionable odors from outdoor cannabis plants during cultivation. While the proposed ordinance requires a minimum setback of 100 feet from property lines it does not preclude the potential for off-site residential receptors to be exposed to odors emitted by mature cannabis plants that they find objectionable.

Implementation of the proposed ordinance would result in an increase to the number of commercial cannabis outdoor and mixed-light cultivation operations throughout the County that are a significant source of cannabis odor, thereby increasing the potential cultivation-related odor sources throughout the County. Thus, the proposed ordinance's contribution to cumulative odor impacts would be cumulatively considerable and significant and unavoidable.

GHG emissions and their contribution to global climate change are inherently cumulative and are discussed in *Section 4.3: Air Quality and Greenhouse Gases*.

BIOLOGICAL RESOURCES

The cumulative setting for biological resources includes Nevada County and adjacent migration and movement corridors, including rivers and streams and the Pacific Flyway for migratory birds. While Nevada County is considered a rural county, past development in the region, including gold mining and timber harvest (beginning in the mid-19th century), has resulted in substantial loss and degradation of native habitat, including old-growth Douglas fir forest, and the degradation of aquatic habitat and water quality of County watersheds.

Implementation of the proposed ordinance would result in impacts related to the disturbance or loss of special status wildlife species and habitat, as discussed above. This would contribute to potentially significant cumulative impacts, because they would include ground disturbance, vegetation removal, and overall conversion of wildlife habitat in Nevada County where adverse effects on special status wildlife species and habitat are significant. Avoidance or minimization measures, or implementation of a management plan to address these issues would reduce impacts. Actions including preconstruction surveys, establishment of protective buffers, limits on surface water diversion, and avoidance of individual animals would reduce the potential impacts of injury, mortality or other disturbance on individual animals and habitat. Components such as these would offset the project's contribution to cumulative special status wildlife species and habitat impacts. Thus, while implementation of these plan elements may reduce potential impacts associated with an individual CCP or ADP, the overall project's contribution to significant cumulative impacts on sensitive natural communities, impacts would be cumulatively considerable and significant and unavoidable when considered over the unincorporated area of the County.

Actions under the proposed ordinance would also include ground disturbance, vegetation removal, and conversion of wetland habitat, which could result in the direct loss of special status plants or their habitat. This would contribute to potentially significant cumulative impacts in Nevada County. Avoidance or minimization measures, or implementation of a management plan to address these issues would reduce impacts and would offset the project's contribution within the County because these measures would require applicants to identify and avoid special status plants or provide compensation for the loss of special status plants. Thus, while conformance to these development standards is expected to reduce the potential impacts associated with an individual CCP or ADP the overall project contribution to significant cumulative impacts to special status plants, would be cumulatively considerable and significant and unavoidable when considered over the unincorporated area of the County.

Actions under the proposed ordinance could adversely affect riparian habitat, old-growth habitat, and other sensitive natural communities if they are present on the commercial cannabis operation sites. A majority of this habitat area is inland areas (forest areas and areas designated for timber uses) where new commercial cannabis operations would be allowed under the proposed ordinance. This would contribute to potentially significant cumulative impacts in Nevada County. Avoidance or minimization measures, or implementation of a management plan to address these issues would reduce impacts and would offset the project's contribution to this potentially significant cumulative impact on sensitive natural communities, riparian habitat and wetland vegetation because it would require applicants to identify and avoid sensitive resources, or provide compensation for the loss of riparian habitat through enhancement of existing populations, creation and management of off-site populations, conservation easements, or other appropriate measures. Thus, while conformance to these development standards is expected to reduce the potential impacts associated with an individual CCP or ADP the overall project contribution to

significant cumulative impacts to special status plants, would be cumulatively considerable and significant and unavoidable when considered over the unincorporated area of the County.

Implementation of the proposed ordinance would include land use conversion that could adversely affect wetlands and waters of the United States, such as streams, rivers, lakes. This would contribute to potentially significant cumulative impacts in Nevada County. Avoidance or minimization measures, or implementation of a management plan to address these issues would reduce impacts and would offset the project's contribution to this potentially significant cumulative impact because it would require no net loss of functions and acreage of wetlands and other waters through implementation of Corps, RWQCB, and CDFW mitigation guidelines. Thus, while conformance to these development standards is expected to reduce the potential impacts associated with an individual CCP or ADP the overall project contribution to significant cumulative impacts to special status plants, would be cumulatively considerable and significant and unavoidable when considered over the unincorporated area of the County.

Actions under the proposed ordinance would include land use conversion that could adversely affect resident or migratory wildlife corridors through habitat fragmentation, degradation of aquatic habitat (e.g., streams and rivers), or blockage of important wildlife migration paths (see Impact 4.4-5). This would contribute to potentially significant cumulative impacts in Nevada County. Avoidance or minimization measures, or implementation of a management plan to address these issues would reduce impacts and would offset the project's contribution to this potentially significant cumulative impact because they would prohibit the removal of old growth habitat, and retain features critical for habitat connectivity. Thus, while conformance to these development standards is expected to reduce the potential impacts associated with an individual CCP or ADP the overall project contribution to significant cumulative impacts to special status plants, would be cumulatively considerable and significant and unavoidable when considered over the unincorporated area of the County.

CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES

Currently, Nevada County has 23 sites listed on the National Register, 18 sites that are eligible for listing in the National Register, 1 National Landmark, 20 State Landmarks, 196 County Landmarks, 28 Points of Historical Interest, and 1,490 previously documented prehistoric and historic sites. Nevada County also contains approximately 500 vertebrate and invertebrate paleontological specimens.

The proposed NCCO, as stated above, would provide standards and conditions for future cannabis cultivation for both personal and commercial uses. Future ground disturbing activities associated with the proposed project would occur at outdoor cultivation sites or in areas where new structures are constructed. In addition, ground disturbing activities may also occur at sites where existing structures need improvements in order to house commercial cannabis cultivation. The implementation of the proposed NCCO could involve structural development including parking areas, circulation roads, visual screening and landscaping, wastewater treatment systems, and other related improvements. These elements could result in directly or indirectly impacted, documented, or unidentified prehistoric or historic district, site, building, structure, or objects.

Each incremental development resulting from the implementation of the proposed NCCO in combination with other past, present, and reasonably foreseeable projects in the County would be required to comply with all applicable State, federal, and County regulations concerning preservation, salvage, or handling of cultural and paleontological resources, including compliance with required mitigation. Mitigation measures have been added to amend the proposed NCCO to address existing and future projects potential

to encounter unknown historical, archaeological, paleontological, and/or buried human remains. The amended code is in an attempt to reduce the potential of the proposed project to cause a considerable contribution in combination with impacts from past, present, or reasonably foreseeable projects to result in cumulatively considerable cumulative impacts to cultural and paleontological resources. In addition, incorporation of the development standards from Section L-II 4.3.6 of the Land Use and Development Code also could be helpful to the purpose of protecting cultural resources. Thus, upon implementation of the mitigation measures and avoidance management plans for ADPs required in the Land Use and Development Code the project's contribution to cumulative impacts to historic and archaeological resources would not be cumulatively considerable and less than significant.

GEOLOGY AND SOILS

Geotechnical impacts tend to be site specific rather than cumulative in nature and each site would be subject to, at a minimum, site development and construction standards relative to seismic and other geologic conditions that are prevalent within the region (see *Section 4.6: Geology and Soils* for a discussion of these standards). Impacts regarding surficial deposits, namely erosion and sediment deposition, can be cumulative in nature within a watershed. These impacts are subject to permitting requirements and other regulations, as described in *Section 4.6: Geology and Soils*. These impacts are site-specific and would not combine such that a cumulative impact could occur. There would be no cumulative impact related to geology and soils.

HAZARDS AND HAZARDOUS MATERIALS

Impacts related to hazards and hazardous materials, as discussed in *Section 4.7: Hazards and Hazardous Materials*, are associated with transport, use, or disposal of hazardous materials; exposure to existing onsite hazardous conditions; and hazards to the public or environment because of upset and accident conditions. Topics related to the transport, use, or disposal of hazardous materials and hazard to the public or environment because of upset and accident conditions are subject to existing regulations that would reduce the potential for individual projects to create a hazard to the public or environment. These impacts are site-specific and would not combine such that a cumulative condition associated with hazards or hazardous materials could occur. The project's contribution to cumulative wildfire hazards would not be considerable as it would require compliance with County Code requirements for existing and new commercial cannabis operations. Thus, the project's contribution to this impact would not be cumulatively considerable.

HYDROLOGY AND WATER QUALITY

New and modifications to existing commercial cannabis operations in the County that may occur under the proposed ordinance would require ground-disturbing activities that could result in erosion and sedimentation, leading to degradation of surface water quality. In addition, commercial cannabis operations that may occur under the proposed ordinance have the potential to modify surface drainage and flows in such a manner that increased sedimentation and erosion could take place, leading to water quality degradation. The long-term operational use of pesticides, fertilizers, and other chemicals can also have a negative effect on water quality and ultimately affect the health and sustainability of organisms that rely on high-quality waters. Compliance with the Central Valley RWQCB Order R5-2015-0113 (requirements for discharges of waste from cannabis cultivation) would generally minimize the potential for erosion, sedimentation, and chemical transportation. For projects within the Lahontan RWQCB region, compliance with the statewide WRCB General Order WQ 2017-0023-DWQ associated with cannabis

cultivation activities would be required. As of July 19, 2019, all existing and future discharges would be required to transition to the statewide General Order. Compliance with the water quality requirements established by the SWQCB at a project-specific level would make the proposed ordinance's contribution to cumulative impacts on surface water quality less than cumulatively considerable.

The project would result in an increase in demand for local groundwater resources that could contribute to cumulative groundwater supply and impacts in areas of the County with limited groundwater resources (e.g., fractured bedrock conditions). The County currently does not monitor groundwater extraction for residential or agricultural uses. An increase in groundwater extraction in existing wells or new wells for commercial cannabis activities could result in unknown reductions in local groundwater levels that could adversely impact adjacent wells. In addition to ground water extraction, the proposed project would remove existing ground covers and replace them with cultivated areas of cannabis. This could change and reduce the water infiltration rates after storm events. In addition, some parcels used for cannabis cultivation also would result in the construction of accessory structures, which although minimal compared to the overall landscape, would add some amount of hardscape and decrease the amount of permeable soils. Therefore, with the potential decrease of water infiltration in addition to the cumulative increase in groundwater use being unknown at this time, the potential impacts would be cumulatively considerable and significant and unavoidable.

Implementation of proposed ordinance could alter drainage patterns that may contribute to cumulatively significant drainage and flooding impacts within the County watersheds. For projects under CCPs compliance with County required erosion control plans and other water quality standards would reduce impacts. Compliance with Land Use and Development Code Section L-II 4.3.10 for ADPs, which regulates development within the 100-year floodplain, would help address this issue. Therefore, compliance with the Land Use and Development Code would make the proposed ordinance's contribution to cumulative impacts from flooding would not be cumulatively considerable.

Additionally, compliance with the requirements of the Statewide WQCB General Order WQ 2017-0023-DWQ would address requirements for controlling surface water runoff. Surface water diversion for future cannabis irrigation under the proposed ordinance could substantially reduce or eliminate surface water flows on individual tributaries that are already affected by existing illegal cannabis cultivation operations. Low flows are associated with increased temperature. In addition, low flows also aggravate the effects of water pollution. This could occur along waterways listed as impaired under Section 303(d) of the federal Clean Water Act, thereby resulting in a considerable contribution to an existing cumulative impact. Cannabis-related surface water diversions are required to meet future flow rate standards set forth by the State Water Resources Control Board during a limited period of time through the year, which correlates to the greater level of water availability within watersheds in Nevada County. Thus, the proposed ordinance's contribution to cumulative impacts to surface water would not be cumulatively considerable.

LAND USE AND PLANNING

The cumulative setting for land use is Nevada County. It is anticipated that other past, present, and reasonably foreseeable projects contributing to regional growth would be reviewed for consistency with adopted land use plans and policies by the County in accordance with the requirements of CEQA, the State Zoning and Planning Law, and the State Subdivision Map Act, all of which require findings of plan and

policy consistency prior to approval of entitlements for development. Thus, no significant cumulative land use impact would occur.

The proposed ordinance contains permitting requirements that would manage conditions that currently create public nuisances by enacting restrictions on the location, type, and size of cannabis cultivation sites and commercial activities in unincorporated Nevada County, as well as other permitting requirements such as setbacks, security, and other protective measures. Because the project would include the above permitting requirements, land use conflicts that could result in the division of established communities would not occur. These topics are discussed in *Section 4.9: Land Use and Planning*. Inconsistencies with adopted land use plans and policies and division of established communities would be site-specific and would not occur in a way that would result in a cumulative impact. There would be no cumulative impact related to land use.

NOISE

Exposure to noise is a localized issue; cumulative noise impacts would be possible in instances where a receptor or group of receptors could be exposed to excessive noise from multiple sources (construction and operation). The extent to which cumulative impacts may exist would be based on site-specific conditions, considering all noise sources, including those associated with commercial cannabis activities. In light of the uncertainty regarding many of the exact locations where commercial cannabis operations would occur and whether other substantial noise sources exist that could combine to create a cumulative impact; it is difficult to determine whether and where significant cumulative impacts could exist or the extent to which the proposed NCCO may contribute to them. Although construction noise impacts are exempt from the County's noise standards future projects under CCPs would be relatively small and would be consistent with other agricultural operations, small reconstruction projects or remodels. These uses do not inherently produce loud punctuated noise events, nor consist of activities that would result in sustained increases to the noise environment. In addition, and as discussed above, many of these projects would be in rural and sparsely developed areas so their contribution to the cumulative noise environmental would be limited. In addition, operationally, the existing and future projects would be required to conform to the NCCO requirements for 100-foot setbacks and noise levels would not be allowed to exceed the standards set forth in Table L-II 4.1.7 (Exterior Noise Limits) of the Nevada County Zoning Ordinance. Taken in sum, all these facts would offset project operational and cumulative noise impacts. Therefore, the project's contribution to cumulative noise impacts would not be cumulatively considerable.

POPULATION AND HOUSING

Approval of the proposed project would contribute to cumulative impacts to population, employment, and housing associated with pending development projects in unincorporated Nevada County. Cumulative impacts associated with the proposed project would include the maximum buildout of a combined approximately 2,684 acres of canopy area if each of the eligible parcels were to cultivate the maximum amount of canopy area that would be permitted. The project would generate an increase in population, employment, and associated housing demand in the County. However, the project would not substantially increase population growth in the surrounding region because it would not require the construction of new housing. Many of the employees necessary during harvest and cultivation are already present within the County and adjoining counties, as evidenced by the level of commercial cannabis cultivation currently within the County. Additionally, the project would not remove barriers to population

growth because no new or expanded (beyond what is currently planned) public infrastructure facilities would be installed. Potential development associated with the proposed ordinance is not anticipated to meaningfully affect employment or other growth in the region, given the size of the regional economy and current conditions. Therefore, the project's cumulative impacts to population, employment, and housing would not be cumulatively considerable.

PUBLIC SERVICES

The cumulative context for public services is the unincorporated area of Nevada County. It is expected that overall increases in permitted cannabis activities would occur given the potential for growth in the agricultural zones under the proposed ordinance. Future permit requests enabled by the proposed ordinance must be found consistent with adopted County policies and current ordinances and development standards to be approved. Other past, present, and reasonably foreseeable projects would also be required to adhere to County policies and development standards pertaining to public services. Therefore, the cumulative projects, and forecasted buildout, would not result in cumulatively significant public service impacts and, therefore, would be less than significant. Compliance with fire and electric codes would lead to improved provision of fire protection because the locations of commercial cannabis facility sites would be known and subject to compliance inspections. The proposed ordinance requires that commercial cannabis operations submit and implement a security plan as part of the site plan review process. Therefore, the project's contribution to cumulative impacts on public services would not be cumulatively considerable.

TRANSPORTATION AND CIRCULATION

The construction of new commercial cannabis operations would add employee vehicle trips to the local roadway system. However, the low number of trips generated by each commercial cannabis operation during the construction phase would be distributed throughout the County roadway network, which has low existing traffic volumes on the local roadways and would not substantially contribute to future traffic operations (see *Section 4.15: Transportation and Circulation*). Additionally, the amount of traffic generated by each commercial cannabis operations during the fall harvest under cumulative conditions (year 2040) under the proposed General Plan Update would not result in traffic operations below level of service "C" on state highways. Each cannabis cultivation project approved under the proposed NCCO would be required to pay the County's traffic impact mitigation fees. The fees would be required to be paid at permit issuance based on the County's current fee schedule. Fees collected under the Traffic Impact Mitigation Fee program are applied to capital roadway improvement projects that have been identified as necessary to improve roadway conditions and traffic operations throughout the County. Thus, the proposed NCCO contribution to cumulative traffic operation impacts would not be cumulatively considerable.

The potential for inadequate emergency access is a site-specific issue. Emergency access to commercial cannabis operations would be provided primarily via existing public and private roadways, and access driveways that would be required to meet the County's road standard (or access design that has the same practical effect) and the County's access standards. Thus, the project's contribution to cumulative emergency access impacts would not be cumulatively considerable.

UTILITIES AND SERVICE SYSTEMS

Commercial cannabis operations would generate additional wastewater flows that contain contaminants and that may not be adequately treated by existing public wastewater treatment systems. The proposed

ordinance requires that all premises used for the cultivation of cannabis shall have a legal and permitted sewage disposal on the parcel or permit illegal discharges of water from the parcel. Thus, the project's contribution would not be cumulatively considerable.

The cumulative context for water supplies and infrastructure needs is the service area of the Nevada Irrigation District which supplies public water to most of western Nevada County. Other ground water sources in the unincorporated area of the County would come from groundwater wells. Future commercial cannabis facilities that would be allowed under the proposed ordinance could result in increased water demand from public water systems that could exceed supply and related infrastructure if they are located within these public water systems. Operation of individual wells and surface water diversions for new commercial cannabis operations outside of public water systems could also result in reductions in water supply availability to public water systems.

Although NID has indicated that they have adequate supply to provide water to potential cannabis cultivation sites to which they have existing lines, given that it is unknown whether the public water service providers would have adequate water supply to meet future development needs and potential commercial cannabis operations located within their service boundaries, and the existing ground water supply for some cultivation sites may be inadequate, the proposed NCCO's contribution to water supply would be cumulatively considerable and significant and unavoidable.

Solid waste in Nevada County is transferred to out-of-County landfills under the contract with Waste Management Systems, Inc. Solid waste is hauled to Lockwood Regional Sanitary Landfill in Storey County, Nevada and green waste is taken to the Feather River Organics facility in Marysville, California. Future commercial cannabis facilities that would be allowed under the proposed ordinance would generate solid waste from various materials and containers used during cultivation (e.g., soils, fertilizers, pesticides, pots), as well as waste generated by employees. The proposed NCCO in combination with the other cumulative projects would not substantially increase the amount of solid waste such that it would require new or expanded solid waste disposal facilities or a use substantial portion the remaining capacity at either facility. Therefore, the combined effects of the proposed project and cumulatively considered projects on capacity of solid waste facilities would not be cumulatively considerable.

ENERGY

The cumulative context for energy is Nevada County. Energy consumption is related to construction activities and operational-related energy demand from existing and new land uses. Construction-related energy would be used during construction activities and would not represent a long-term increase in energy demand.

Implementation of the proposed ordinance would require the use of energy, such as petroleum-based fuels for construction equipment and worker transportation. Construction cost is directly linked to the time and materials consumed to complete the work, thus it is assumed that minimal levels of energy would be used to reduce costs and, therefore, energy consumed by these operations would not be considered wasteful, inefficient, or unnecessary. Operational-related energy demand would result from energy use from both cultivation and non-cultivation operations use as well as increases in vehicular traffic from employee commute trips. The cultivation operations and non-cultivation facilities would comply with the most current energy-efficient standard (i.e., Title 24). These project requirements, combined, would reduce overall project energy use and current energy use by existing cannabis operations. Thus,

the proposed ordinance's contribution to this cumulative impact on energy demand would not be cumulatively considerable.

Extension of existing PG&E infrastructure to the more rural parts of the County where cannabis cultivation operations are located is not anticipated to occur because it would be cost-prohibitive for individual permitted sites. Furthermore, the cultivation operations that can use the existing energy grid in the County would be supplied by PG&E, which is anticipated to maintain sufficient capacity to provide power to and through the lifetime of cultivation and non-cultivation sites. Thus, the proposed ordinance's contribution to this cumulative impact related to expansion of energy infrastructure would not be cumulatively considerable.

5.2 SIGNIFICANT AND UNAVOIDABLE IMPACTS

Section 21100(b)(2)(A) of the State CEQA Guidelines provides that an EIR shall include a detailed statement setting forth "in a separate section: any significant effect on the environment that cannot be avoided if the project is implemented." Accordingly, this section provides a summary of significant environmental impacts of the project that cannot be mitigated to a less-than-significant level.

Sections 4.1 through 4.17 of this Draft EIR describe the potential environmental impacts of the project and recommend various mitigation measures to reduce impacts, to the extent feasible. *Section 5.0: Cumulative Impacts*, determines whether the incremental effects of this project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects. After implementation of the recommended mitigation measures, which require modification of draft language within the proposed ordinance, most of the impacts associated with implementation of the project would be reduced to a less than significant level. The following impacts are considered significant and unavoidable; that is, no feasible mitigation is available to reduce the project's impacts to a less than significant level.

AGRICULTURAL RESOURCES (SECTION 4.2)

- Conversion of Prime Farmlands to a non-agricultural use.
- Cumulative impacts from conversion of Prime Farmlands to a non-agricultural use.

AIR QUALITY (SECTION 4.3)

- Long-term operational emissions of criteria pollutants and precursors.
- Cumulative air quality impacts involving particulate matter (PM10) emissions.
- Exposure of people to objectionable odors.
- Cumulative impacts from exposure of people to objectionable odors.

BIOLOGICAL RESOURCES (SECTION 4.4)

- Cumulative impacts on special status wildlife species.
- Cumulative impacts on special status plant species.
- Cumulative impacts on riparian habitat, old-growth habitat, and other sensitive natural communities.

- Cumulative impacts on wetlands and waters of the United States.
- Cumulative impacts on resident or migratory wildlife corridors or nursery sites.

HYDROLOGY AND WATER QUALITY (SECTION 4.8)

- Groundwater extraction in existing wells or new wells for commercial cannabis activities could result in unknown reductions in local groundwater levels that could adversely impact adjacent wells.
- Cumulative impacts associated with groundwater extraction.

UTILITIES AND SERVICE SYSTEMS (SECTION 4.16)

- Provision of sufficient water supplies and infrastructure needs.
- Cumulative impacts associated with the provision of sufficient water supplies and infrastructure needs.

Section 6: Alternatives, considers alternatives to the project that may be capable of reducing or avoiding some of these impacts.

5.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The State CEQA Guidelines (Section 15126) require a discussion of the significant irreversible environmental changes which would be involved in a project should it be implemented. The irreversible and irretrievable commitment of resources is the permanent loss of resources for future or alternative purposes. Irreversible and irretrievable resources are those that cannot be recovered or recycled or those that are consumed or reduced to unrecoverable forms.

The project would result in the irreversible and irretrievable commitment of energy and material resources during construction and operation, including the following:

- Construction materials, including such resources as soil, rocks, wood, concrete, glass, roof shingles, and steel;
- Land area committed to new commercial cannabis-related facilities;
- Water supply for project construction and operation; and
- Energy expended in the form of electricity, gasoline, diesel fuel, and oil for equipment and transportation vehicles that would be needed for project construction and operation.

The use of these nonrenewable resources is expected to account for a minimal portion of the region's resources and would not affect the availability of these resources for other needs within the region. Construction activities would not result in inefficient use of energy or natural resources. Construction contractors selected would use best available engineering techniques, construction and design practices, and equipment operating procedures. Long-term project operation would not result in substantial long-term consumption of energy and natural resources because buildings would be designed using current energy efficient technologies as required by applicable building codes.

5.4 GROWTH INDUCING IMPACTS

CEQA specifies that growth-inducing impacts of a project must be addressed in an EIR (CCR Section 21100[b][5]). Specifically, Section 15126.2(d) of the State CEQA Guidelines states that the EIR shall:

Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also, discuss the characteristics of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Direct growth inducement would result if a project involved construction of new housing, which would facilitate new population to an area. Indirect growth inducement would result, for instance, if implementing a project resulted in any of the following:

- Substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises);
- Substantial short-term employment opportunities (e.g., construction employment) that indirectly stimulates the need for additional housing and services to support the new temporary employment demand; and/or
- Removal of an obstacle to additional growth and development, such as removing a constraint on a required public utility or service (e.g., construction of a major sewer line with available capacity through an undeveloped area).

The State CEQA Guidelines do not distinguish between planned and unplanned growth for purposes of considering whether a project would foster additional growth. Therefore, for purposes of this EIR, to reach the conclusion that a project is growth inducing as defined by CEQA, the EIR must find that it would foster (i.e., promote, encourage, allow) additional growth in economic activity, population, or housing, regardless of whether the growth is already approved by and consistent with local plans. The conclusion does not determine that induced growth is beneficial or detrimental, consistent with Section 15126.2(d) of the State CEQA Guidelines.

If the analysis conducted for the EIR results in a determination that a project is growth-inducing, the next question is whether that growth may cause adverse effects on the environment. Environmental effects resulting from induced growth (i.e., growth-induced effects) fit the CEQA definition of “indirect” effects in Section 15358(a)(2) of the State CEQA Guidelines. These indirect or secondary effects of growth may result in significant environmental impacts. CEQA does not require that the EIR speculate unduly about the precise location and site-specific characteristics of significant, indirect effects caused by induced growth, but a good-faith effort is required to disclose what is feasible to assess. Potential secondary effects of growth could include consequences; such as conversion of open space to developed uses, increased demand on community and public services and infrastructure, increased traffic and noise, degradation of air and water quality, or degradation or loss of plant and wildlife habitat that are the result of growth fostered by the project.

5.5 GROWTH-INDUCING IMPACTS OF THE PROJECT

The California Department of Food and Agriculture estimates that cannabis production in the state in the year 2016 was approximately 13.5 million pounds, with no anticipated increases in overall production from implementation of Medical Cannabis Regulation and Safety Act (MCRSA) and Adult Use of Marijuana Act (AUMA) by the year 2018 (California Department of Food and Agriculture 2017: 3-22 and 3-23). Thus, substantial growth in cannabis operations state-wide is not expected to occur.

Implementation of the proposed ordinance is intended to regulate commercial cultivation, processing, and distribution of cannabis in a manner consistent with the existing character and goals of the County. The number of new commercial cannabis operations does not represent a dramatic increase in development or the division of existing properties into numerous parcels for dense and intensified development. The project would not substantially increase population growth in the surrounding region because it would not require the construction of new housing. Commercial cannabis cultivation within the County must be connected with a legal residence. If new residences are built in association with commercial cannabis operations, new housing stock would be added to the County that could be used by cannabis operators. Many of the employees necessary during harvest and cultivation are already present within the County and adjoining counties, as evidenced by the level of commercial cannabis cultivation currently within the County. Additionally, the project would not remove barriers to population growth because no new or expanded (beyond what is currently planned) public infrastructure facilities would be installed as part of the proposed project. Potential development associated with the proposed ordinance is not anticipated to meaningfully affect employment or other growth in the region, given the size of the regional economy and current conditions.

The project would result in increased revenue with the County, both by residents and the County itself, however, with respect to increased revenue for the County, this is anticipated to increase the ability of the Nevada County Sheriff's Office, Nevada County Code Compliance, and the Nevada County Planning and Building Department to process, monitor, and enforce cannabis-related activities within the County, per the County's requirements. Therefore, the project would not contribute to substantial population growth or be considered growth-inducing.

6.0 ALTERNATIVES

An EIR also must compare and evaluate the environmental effects and comparative merits of the alternatives. This section describes alternatives considered but eliminated from further consideration, including the reasons for elimination, and compares the environmental impacts of several alternatives retained with those of the proposed project.

6.1 INTRODUCTION

Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines requires that an Environmental Impact Report (EIR) describe a range of reasonable alternatives to the proposed project or to the location of the project site that could feasibly avoid or lessen any significant environmental impacts of the project while attaining most of the proposed project's basic objectives. The EIR is not required to consider every conceivable alternative to a project but is guided by a rule of reason. An EIR is not required to consider alternatives which are infeasible. Section 15126.6(d) states that the EIR must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. The State CEQA Guidelines require that the EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative must be discussed, but in less detail than the significant effects of the project as proposed (CCR Section 15126.6(d)).

The lead agency is responsible for selecting this range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. This section describes four Alternatives to the Nevada County Cannabis Ordinance as proposed. These alternatives include the No Project Alternative, Thirty Percent Cultivation Alternative, No Groundwater Cultivation Alternative, and Cultivation allowed in RA Zones Alternative. The four alternatives are discussed in more detail below.

The key provisions of CEQA Section 15126.6, which pertain to the discussion and analysis of alternatives are summarized as follows:

- The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be costlier.
- The *No Project Alternative* shall be evaluated, along with its impacts. The no project analysis shall discuss the existing conditions at the time the notice of preparation was published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.
- The range of alternatives required in an EIR is governed by a "rule of reason;" therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.
- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.

- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

Alternatives were developed based on: information provided by the County; input received from comments on the NOP; feedback from the local cannabis industry; and review of other agency cannabis regulations and industry sources. Once a group of alternatives to the project were identified and after an initial review, the alternative was either retained for further analysis or discarded. Among the factors that may be taken into account when addressing the feasibility of alternatives, as described in Section 15126.6(f)(1) of the CEQA Guidelines include environmental impacts, site suitability, economic viability, availability of infrastructure, general plan consistency, regulatory limitations, jurisdictional boundaries, and whether the project proponent could reasonably acquire, control, or otherwise have access to an alternative site. An EIR need not consider an alternative whose effects could not be reasonably identified, whose implementation is remote or speculative, and that would not achieve the basic project objectives. The alternatives that were selected for additional consideration were done so in accordance with the above-listed CEQA Guidelines, represent a reasonable range, are feasible, and were selected to encourage discussion in a manner to foster meaningful public participation and informed decision making.

6.1.1 ALTERNATIVE SELECTION

As discussed above, one of the evaluation criteria for the alternative discussion is the ability of a specific alternative to attain most of the basic project objectives. The basic project objectives as listed in *Section 3.0: Project Description* are as follows:

- Provide a mechanism for the regulation of a legal commercial cannabis cultivation industry within the unincorporated county;
- Reduce the level of nuisance that existing commercial cannabis cultivation represents to adjacent areas of existing growers;
- Encourage existing cannabis businesses to secure a license to operate in compliance with County and state regulations;
- Reduce the adverse effects of commercial cannabis cultivation on the environment through implementation of these regulations and permitting process;
- Adopt an ordinance that defines specific zones within the County in which production of commercial cannabis cultivation will be allowed;
- Adopt an ordinance that defines, within the specific zones, the total area of commercial cannabis cultivation that will be allowed;
- Reduce the effects of potential adverse effects of commercial cannabis cultivation on sensitive receptors by ensuring compatibility with existing surrounding land uses;
- To align cannabis regulations with regulations applicable to other commercial activities.

6.2 SUMMARY OF PROJECT IMPACTS

The Draft EIR identified impacts to each resources area in *Section 4.1: Aesthetics* through *Section 4.16: Utilities and Service Systems*. Feasible Alternatives were developed to avoid or lessen the significant effects of the proposed project in the respective sections. The following details impacts that would be considered potentially significant or that were determined to be significant and unavoidable upon

adoption of the proposed project. It should be noted that not all future commercial cultivation projects would result in the same impacts as discussed below. Depending on the scale, locations, and resources surrounding future individual projects, impacts and the severity of impacts would likely differ. The following is a summary of the significant impacts that would result should the whole of the proposed project be implemented

AESTHETICS

Depending on the size of proposed cannabis cultivation areas, future construction could require grading to create pads for cultivation areas and proposed structures. In these instances, grading plans would be required to be submitted to the County for review and approval prior to the commencement of any site disturbance. All such activities would be subject to the County's Development Code and all future development would be subject to the County's Development Review process. Commercial cannabis cultivation and non-remuneration cultivation under 2,500 sf of canopy would be permitted under a CCP. For project with between 2,500 sf and 10,000 sf of canopy, cannabis cultivation project would be permitted under an ADP. Accordingly, all existing and future project would be required to comply with all applicable development standards and projects under ADPs would be required to comply with Section L-II 4.3.15 visually important ridgelines and viewsheds. All future commercial and non-remuneration cultivation areas would be required to maintain a 100-foot setback from the property line, and the NCCO requires that fencing or other screening device block views of the cultivation area such that it would not be visible from off-site public areas. In addition, as discussed in the construction impacts above, conformance with applicable development standards would similarly ensure impacts from operation of projects would be minimized. All cultivation areas also would be prohibited in any location where the cannabis (at any stage of growth) would be visible from the public right-of-way or publicly traveled private roads, as well as in violation of all other set back requirements required by the NCCO. To meet these requirements, areas under cultivation could be screened from view by materials such as intervening (non-cannabis) vegetation, structures, or fencing.

Therefore, although implementation of future commercial cannabis cultivation projects would represent a visual change within these localized environments, these changes are not considered substantial and impacts would be less than significant.

AGRICULTURAL RESOURCES

Operation of commercial cannabis facilities would conflict with the designations of farmland by the Farmland Mapping and Monitoring Program. Although the state Health and Safety Code Section 11362.777(a) and Business and Profession Code Section 26067(a) defines cannabis as an agricultural product, the proposed NCCO does not identify cannabis cultivation as an agricultural activity, and a conflict would remain. Therefore, the project would result in a conversion of farmland and impacts would be significant and unavoidable. The proposed project may also conflict with timberland zones, and the use of forest lands for cultivation of cannabis would result in a conversion to non-forest lands. Therefore, I impacts would be significant and unavoidable.

AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Cannabis cultivation that could occur under the proposed project would result in significant impacts related to air quality and greenhouse gas emissions. Construction emissions would exceed ROG, NOx and PM10 and operational emissions would exceed thresholds for NOX which would result in non-conformance to NSAQMD thresholds. These emissions also would contribute to the continued

exceedance of an existing or projected air quality violation under NSAQMD guidance. In addition, Because the proposed project at total buildout would result in these significant air quality impacts, and would conflict with applicable air quality plans, it is considered to contribute to significant cumulative air quality impact. Similar to emissions of criteria pollutants, construction and operations of commercial cannabis cultivation and cultivation for non-remuneration also would produce GHGs in exceedance of allowable thresholds. The proposed project includes mitigation measures to reduce these impacts; however, impacts in this regard would remain significant and unavoidable. The cultivation activities during the growth and maturation phases have the potential to result in objectionable odors that would be detectable to nearby residences and groups of people. Even with the required 100-foot setback of canopy from the property line and proposed mitigation, these impacts also would be significant and unavoidable. Cultivation; however, in terms of impacts to sensitive receptors through the use of the 1,000-foot buffer requirements, would be less than significant. Lastly, although the proposed NCCO would violate the above-listed quality thresholds; all existing and new cannabis cultivation would be required to comply to applicable greenhouse reduction strategies. Therefore, the proposed project would not conflict with the actual statewide strategies to reduce GHG emissions. Impacts would be less than significant in this regard.

BIOLOGICAL RESOURCES

Commercial cannabis cultivation and non-remuneration cultivation under 2,500 sf of canopy would be permitted under a CCP. For project with between 2,500 sf and 10,000 sf of canopy, cannabis cultivation project would be permitted under an ADP. The proposed NCCO has been amended to include mitigation that would require biological screening and subsequent biological inventories and other resources studies should existing and future projects be located in areas with known sensitive resources that are known to occur in various regions of Nevada County. Although mitigation is anticipated to reduce most of the future project-specific effects to biological resources, the proposed project would result in the disturbance or loss of special status wildlife species and their habitat; disturbance or loss of special status plant species and their habitat; Disturbance to or loss of riparian habitat or other sensitive natural communities; Disturbance to or loss of disturbance to or loss of waters of the United States; and Interference with resident or migratory wildlife corridors or native wildlife nursery sites. Even with mitigation and other minimization and avoidance measures, and compliance with Sections L-II 4.3.12 and 4.3.17 of the County's Land Use and Development Code as part of the ADP process, impacts would still be considered significant and unavoidable. Due to the overall scope and scale of the project, it is not possible to ensure all impacts would be reduced to less than significant. Impacts on Biological Resources would also be considered cumulatively considerable.

CULTURAL AND TRIBAL RESOURCES

Within Nevada County, there are areas containing cultural and historical resources. Implementation of cannabis cultivation projects under the proposed NCCO would result in disturbance of areas that may contain these resources resulting in damage or permanent loss. Mitigation would amend the proposed NCCO to include pre-screening for cultural resources and implement an inadvertent discovery protocol in the instance that resources are located. This would be in place for both projects under CCPs and ADPs. In addition projects would be required to comply with Section L-II 4.3.6 of the County's Land Use and Development Code, which would help further minimize impacts from causing a substantial adverse change in the significance of a historical resource; causing a substantial adverse change in the significance of an archaeological resource; or causing the direct or indirect destruction of a unique paleontological resource or site or unique geologic feature. In addition, the mitigation and inadvertent discovery would

minimize impacts from the potential disturbance to buried human remains, including those interred outside of dedicated cemeteries. The proposed project and all subsequent cannabis cultivation projects would be required to conform to county regulations and mitigation that amended the proposed NCCO to include evaluation for cultural and tribal resources through the CCP and ADP process. In addition, mitigation requiring an inadvertent discovery protocol also was added. Inclusion of these measures to the proposed NCCO would reduce impacts to cultural and tribal resources to less than significant.

GEOLOGY AND SOILS

Impacts to geology and soils under the proposed project are not anticipated to result in significant impacts in this regard. The proposed NCCO would result in a permitting vehicle for commercial cannabis cultivation and non-remuneration cultivation on parcels zones AE, AG, and FR, within unincorporated County lands. Although some of these areas may have properties or elements that would be considered unstable such as steep slopes or unstable grounds that may be susceptible to landslides, or have areas that may become unstable during ground shaking such as expansive soils, soils prone to liquefaction, or be located on a site at risk of ground rupture, adherence to state and County building codes and would substantially lessen the potential effects in consideration of geology and soils. In addition, the proposed project does not have the potential to increase seismic events. Future grading or location of cultivation sites; however, could result in the placement of or grading for cultivation sites and ancillary structures in locations in which these activities would exacerbate some geologic hazards such as landslides or avalanches. As discussed above, conformance to all applicable grading and building standards, and the plan review process to ensure proposed cultivation sites are not located in unstable areas, would reduce these impacts to less than significant.

HAZARDS AND HAZARDOUS MATERIALS

The proposed ordinance includes restrictions that prohibits the use of hazardous materials in the Cultivation of Cannabis except for limited quantities that are below State of California threshold levels. These levels are 55 gallons of a hazardous liquid, 500 pounds of a hazardous solid, or 200 cubic feet of compressed gas. Any Hazardous Materials stored on cannabis cultivation sites would be required to maintain a minimum setback distance of 100-feet from any private drinking water well, spring, water canal, creek or other surface water body, and 200 feet from any public water supply well. All projects requiring the transportation of hazardous materials also would be required to do so in accordance with all requirements of Caltrans. Lastly, qualifying projects would be required to submit a Hazardous Materials Business Plan to ensure materials are handled, stored, used, and disposed of in accordance with requirements. As such potential impacts would be reduced to less than significant.

HYDROLOGY AND WATER QUALITY

Operation of commercial cannabis sites could result in impacts to hydrology and water quality. Cultivation of six plants for personal use outdoors would be similar to a small personal garden and impacts would be less than significant. Commercial cannabis cultivation under the proposed NCCO; however, has the potential to result in violation of water quality standards or waste discharge requirements. Impacts are reduced to less than significant through compliance with the State Water Quality Control Board General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities (Cannabis General Order), which implements the Cannabis Policy (WQ 2017-0023-DWQ). Impacts on water quality and drainage would be less than significant.

Under the proposed project, cannabis cultivation operations could use ground water to irrigate their cultivation areas. This could substantially deplete groundwater supplies or interfere substantially with ground water recharge resulting in a net deficit of aquifer volume or lowering of the ground water table. there may be some projects that would extract groundwater from existing or future wells for water supply. Because the County does not have any control over the volume of water that is extracted from personally owned wells for the purpose of commercial cannabis cultivation, this could result in a substantial depletion of aquifers or ground water located in fissured in underlying granite. This is impact would be significant and unavoidable.

MINERAL RESOURCES

The proposed NCCO would not permit commercial cannabis cultivation or cultivation for non-remuneration within any areas zoned for mineral extraction. The proposed project would be required to conform to the development standard in Section L-II 4.3.11 of the Land Use and Development Code. The proposed NCCO has been designed to be consistent with applicable general plan policies related to the protection of valuable mineral resources against encroachment by urban or other uses such as those that would occur from implementation of commercial cannabis cultivation projects. This would ensure that existing and potential future mining operations are not affected by the proposed project and that they do not disturb commercial cannabis cultivation. As a result, implementation of the project would not result in the loss of availability of or preclude the recovery of mineral resources within the County. Impacts in this regard are less than significant.

NOISE

Future cannabis cultivation operations could generate noise that exceeds standards and disturbs nearby properties. The proposed project has the potential to result in impacts associated with the exposure of persons to, or the generation of, noise levels in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies; expose people to, or generate excessive ground borne vibration or ground borne noise levels. Conformance with applicable noise generation reduction requirements, as well implementation of Mitigation Measures BIO-1, which would require sound reduction for generators. would reduce impacts to less than significant with the incorporation of mitigation measures.

PUBLIC SERVICES

Cannabis-related development that would occur from the proposed ordinance has the potential to indirectly result in population growth from increase employment demand and from people moving to the County. This could result in a potential associated increase demand on other public facilities. Future development under the proposed NCCO would be phased in, as project complete the ADP application process. Given that the ordinance would be County-wide (within the applicable zones) it is expected that the applications would be dispersed from areas throughout the County and not concentrated all in one area. Additionally, it is expected that most applicants would come from the estimated 3,500 existing parcels on which cultivation is actively occurring. Existing County codes and policies for future planned expansion of public facilities and payment of associated development fees and taxes is expected to offset any incremental increase demand for these services. Impacts therefore, are considered less than significant.

TRANSPORTATION AND TRAFFIC

Due to the potential for the proposed project to contribute an additional 30,705 vehicle trips to location and regional roadways, there is a high likelihood that LOS standards and associated goals, policies, and objectives related to traffic service standards local, regional, and highways would make existing unacceptable LOS conditions worse. Contribution of the projected project vehicle trips would like further reduce LOS on failing streets and intersections, or cause streets and intersections to drop below standards.

Dropping below the minimum standards would result in inconsistencies with the certain general plan goals and policies related to LOS and congestion management. However, the proposed project would be consistent with the vast majority of the goals and policies. While some LOS thresholds would be exceeded, as part of the CCP process for cannabis cultivation less than 2,500 sf of canopy and an ADP for cultivation between 2,500 sf to 10,000 sf of canopy. All projects would go through the development review process. All existing and future projects applying for any discretionary permit would be subject to payment of Traffic Impact Mitigation fees which could be applied toward roadway improvement projects. However, because such fees are not available for solving existing deficiencies, potential funding of improvements to address the existing deficiencies would need to rely heavily upon local sources, which are already committed to existing programs. No feasible mitigation has been identified that could be implemented on an application by application basis that would reduce these impacts to less than significant. Therefore, traffic impacts in this regard impacts would be significant and unavoidable.

Additionally, implementation of the development impact fees would reduce impacts to County transportation facilities. However, given the proposed project would increase traffic volumes, some of which would reasonably be dispersed to intersections located outside of the County's jurisdiction (i.e., Caltrans facilities) that currently and/or are projected to operate at or near deficient LOS, the proposed project may contribute towards an exceedance in LOS or exacerbate existing deficient LOS such that impacts would be significant. Impacts to these facilities would require coordination between the County and appropriate agencies to discuss remedies. As the facilities are located outside the jurisdiction of the County, they cannot feasibly be controlled or improved through County actions. Therefore, traffic impacts in this regard impacts would be significant and unavoidable.

UTILITIES AND SERVICE SYSTEMS

Impacts from the proposed project would not exceed wastewater treatment requirements of the applicable regional water quality control board. NID has noted that adequate water supply is available to serve the proposed project within their service area. For all commercial and non-remuneration cultivation, applicants would be required to apply for and obtain either a CCP or an ADP issued by either the Building Department or the Planning Department and obtain proper permits from the appropriate regional water quality board. Thus, impacts in this regard would be less than significant. The project would not result in the need for new or expanded water or wastewater treatment facilities or substantial improvements to stormdrain facilities. The project would not result a need for new or expanded solid waste facilities or use a substantial amount of remaining capacity in a solid waste facility. As such, potential impacts would be less than significant.

6.2.1 ALTERNATIVES REMOVED FROM FURTHER CONSIDERATION

Alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially lessen any significant environmental effects (CEQA Guidelines, Section 15126.6[c]). Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, also do not need to be considered (CEQA Guidelines, Section 15126[f][2]). Per CEQA, the lead agency may make an initial determination as to which alternatives are feasible and warrant further consideration and which are infeasible. The following alternatives were initially considered but were eliminated from further consideration in this EIR because they do not meet project objectives, were infeasible, and/or they do not substantially lessen any significant environmental effects.

CANNABIS CULTIVATION BAN ALTERNATIVE

This alternative would result in a ban of all commercial cannabis cultivation and any other cannabis-related operation by removing Section G-IV 5.4, which defines the parameters of allowable cultivation activities found in Title 2, Chapter IV Article 5. Under this alternative, however, the allowances under the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA) related to cultivation for personal use of up to six living cannabis plants would not change. All existing cultivation sites would be required to be restored to pre-cultivation conditions. The responsibility of ensuring compliance and enforcement would be undertaken by the County and other responsible agencies. Under this alternative, however, it is anticipated that some amount of illegal cannabis operations would continue as is it did prior to implementing the current or any past County Ordinance related to cultivation. Although it would be feasible in terms of removing the code section, implementation in terms of compliance and enforcement without an expansion of existing code enforcement and law enforcement services is unknown. In this regard, this alternative would be infeasible. This Alternative, also would not be consistent with the project objectives. This Alternative would not do any of the following to satisfy the summarized project objectives:

- Provide streamlined licensing program with a framework for commercial cannabis cultivation in specific land use designations;
- Be responsive to public comments and provide legal entry to the cannabis market;
- Reduce potential adverse effects on sensitive site and populations;
- Reduce potential adverse effects on the environment from existing cultivation;
- Implement procedures meant to reduce energy consumption, water overdraft, obnoxious odors, noise, hazardous materials, fire, or effects on natural resources including streams, wetlands, and sensitive plants and wildlife; and
- Result expansion of the County tax base.

Because a ban would directly conflict with most of the project objectives through a prohibition on all commercial cannabis activities. If this alternative is implemented, it is likely that some of the existing cultivation activities would cease, however, it is equally likely that many current cultivation operations would continue in violation of this alternative potentially resulting in increased enforcement by the County. In the absence of the licensing procedures and establishment of protocols to ensure compliance with applicant environmental regulations, it is reasonable to assume that existing environmental impacts resulting from clearing, grading, unlawful use of fertilizers and chemicals, unchecked water use,

encroachment into sensitive habitats, and reduced aesthetic value, would continue or be increased. This alternative would result in cultivators selling cannabis on the unregulated market and remove the ability of the County to use this industry to increase the tax base and develop additional sources of revenue. Therefore, this alternative was removed from further consideration.

6.2.2 ALTERNATIVES ANALYZED IN THIS EIR

The following alternatives were selected for analysis because they would avoid or substantially lessen the significant effects of the proposed project and they would feasibly attain most of the basic project objectives. Impacts associated with each alternative as they relate to the impacts associated with the proposed NCCO are summarized in *Table 6-3: Comparison of Impacts of the Alternatives* located at the end of this section. The alternatives analyzed individually include the following:

NO PROJECT ALTERNATIVE

The State CEQA Guidelines further require that the “no project” alternative be considered (CCR Section 15126.6[e]). The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving a project with the impacts of not approving the project. If the “no project” alternative is the environmentally superior alternative, CEQA requires that the EIR “...shall also identify an environmentally superior alternative among the other alternatives” (CCR Section 15126[e][2]).

Under this Alternative, an amendment to Nevada County Code Title 2, Chapter IV Article 5 Section G-IV 5.4, which defines the current parameters of allowable medical cultivation activities based on the land use designations would not occur. This alternative would allow cultivation in accordance with the current ordinance and state law providing for cultivation for personal use and for medical purposes only. No commercial cannabis cultivation would be allowed. This alternative would not place any restriction on the number of properties on which cultivation could occur. This alternative would maintain that any cultivation undertaken outside the restrictions of the code would be considered a nuisance and may be abated by any legal means available. This alternative also would not permit commercial cultivation. A complete copy of the existing ordinance is provided in Appendix B. In summary, the No Project Alternative would do the following:

- A. Medical marijuana cultivation may be undertaken by:
 - 1. A qualified patient on a primary legal residence;
 - 2. A primary caregiver on primary legal residence of the primary caregiver or qualified patient;
 - 3. On a legal parcel with legal and permanent residence; and
 - 4. Only for medical purposes.
- B. Indoor medical marijuana cultivation must occur in a permitted residence and conform to all applicable Land Use Development Codes and cannot occur in a kitchen, bathroom, bedroom, common area, or other location intended for human occupancy.
- C. Medical marijuana cultivation will be limited as follows:
 - 1. Cultivation is prohibited in all R-1, R-2, and R-3 zones is prohibited;
 - 2. Cultivation in areas designated Residential and Estate and zoned R-A may occur as follows:

- a. Prohibited on parcels less than or equal to 5 acres;
 - b. On parcels 5 to 10 acres, up to 12 plants indoor only;
 - c. On parcels between 10 to 20 acres, a maximum of 16 plants indoors or outdoors, with a maximum of 12 plants occurring indoors. Outdoor is limited to a single 800 square foot (sf) area;
 - d. On parcel greater than 20 acres, a maximum of 25 plants indoors or outdoors, with a maximum of 12 plants occurring indoors. Outdoors is limited to a single 1,000 sf area.
- D. In areas designated primarily for AG, AE, FR, and TPZ and General Plan designations of Rural and R-A zoned cultivation may occur as follows:
1. Prohibited on parcels less than or equal to 2 acres;
 2. On parcels greater than 2 acres up to 5 acres, up to 6 plans outdoor only limited to a single 300 sf area;
 3. On parcels greater than 5 acres up to 10 acres, up to 12 plants indoors or outdoors, with outdoor in a single 600 sf area.
 4. On parcels greater than 10 acres up to 20 acres, up to 16 plants indoors or outdoors, with a maximum of 12 plants indoors. Outdoors is limited to a single 800 sf area.
 5. On parcels greater than 20 acres, a maximum of 25 plants indoors or outdoors, with a maximum of 12 plants occurring indoors. Outdoors is limited to a single 1,000 sf area.
- E. Setbacks from property lines would range between 100 feet (ft) to 300 ft depending on parcel size (ranges 2 acres to greater than 20 acres).
- F. Setbacks from cultivation premise to sensitive use would be 600 ft.
- G. All cultivation would also be required to be shielded from public view; shall not adversely affect public health or be a nuisance to neighboring properties; comply with all building, electrical, and plumbing permit requirements; not exceed electricity usage of 1,200 [(watts)]; conform to noise standards; obtain written permission from the legal owner; and conform to all accessory structure requirements.
- H. This Alternative also includes certain conditions, application requirements, and standards needed to obtain a permit from the Community Development Agency Director.

IMPACTS COMPARED TO THE PROPOSED PROJECT

An evaluation of the potential environmental impacts of the “No Project” alternative, as compared to those of the proposed project, is provided below.

AESTHETICS

Under this alternative cultivation would remain under the current regulations and would result in fewer impacts to aesthetic and visual resources than the proposed project. Under this alternative, fewer ancillary support structures, such as, sheds and greenhouses and hoop houses would be constructed or be visible as they exist because this alternative would not limit the number of properties that could be cultivated, due to the plant and size restrictions. While some cultivation would be allowed in TPZ zones,

because the overall number of cannabis plants allowed to be grown outdoors is limited, the visible canopies and cultivation areas would be reduced while the same 100-foot setbacks would still be in place. Although this alternative would only require 600-foot distances from sensitive sites, this is not expected to result in impacts substantially different from the proposed project, which would require 1,000 feet from sensitive sites. Cultivation in the TPZ zones would result in more potential for views to or from scenic resources in areas that would not be impacted by the proposed project, but because of the overall reduced scope and scale of this alternative, these impacts would be reduced. This is similar to views of cultivation from public right of ways and other public areas, as well as light and glare. Therefore, although visual impacts of the proposed project were determined to be less than significant, this alternative would further reduce the potential for the visual intrusion in the environment and impacts would be less than the proposed project.

AGRICULTURAL RESOURCES

Impacts to agriculture associated with this alternative would be reduced compared to the proposed project. Under this alternative, the overall cannabis cultivation footprint would be substantially reduced and would have the effect of reducing impacts to agricultural and forest lands within the AE, AG, and FR zones. Although this alternative would allow cultivation in the TPZ zones, overall loss of farmland to cannabis cultivation would be substantially less than the proposed project because the overall areas and plant number restrictions would be in place under this alternative. Similarly, impacts resulting in forest conversions would also be less than the proposed project. Neither this alternative, not the proposed project would conflict with lands under Williamson Act Contracts at the state level, but because cannabis is not considered an agricultural product at the County level there is no mechanism for Williamson Act conformance. However, neither this alternative not the proposed project would change agricultural land zoning or result in a permanent conversion that would disallow future use for a County recognized agricultural crop. Therefore, this alternative would have the effect of reducing impacts to agriculture and forest resources.

AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Impacts to air quality and greenhouse gas emission under this alternative would be reduced compared to the proposed project. This alternative would reduce the overall area that could be cultivated and place a limit on the number of cannabis plants that could be grown. This cultivation alternative would significantly reduce the demand for heavy equipment and machinery needed to grade and create larger cultivation areas that would be permitted under the proposed project. This would result in fewer air emissions from construction and maintenance activities. Similarly, under this alternative, there would be smaller cultivation areas, and permitting would only occur for medical and personal use. This alternative would reduce the demand for employees, and movement of equipment and materials so that the number of vehicle trips generated by the alternative would be reduced. This alternative would have a secondary effect of reducing potential conflicts with applicable air quality management plans and would have the potential for violations of air quality standards. The reduction in cultivation area and plant limits and maintenance of setbacks would reduce impacts to any sensitive receptors in the vicinity of cultivation. Lastly, the smaller permitted cultivation areas would generate fewer objectionable odors with the potential to migrate off-site and affect adjacent parcels. Therefore, this alternative would reduce impacts to air quality and greenhouse gas emissions compared to the proposed project.

BIOLOGICAL RESOURCES

Impacts to biological resources under this alternative would be reduced compared to the proposed project. Although this alternative would allow some cultivation in the TPZ zones, it would substantially reduce the overall cultivation area within the County. Accordingly, while the cultivation in TPZ zones could result in a greater frequency of impacts to species and forest habitats any potential for increased impacts to areas would be outweighed by the substantial reduction in the overall cultivation footprint that would occur under this alternative. The associated impacts to terrestrial habitats, sensitive species, wetlands, riparian areas, woodlands, nesting, breeding, and nursery habitat, foraging areas and migration corridors would be reduced. This alternative also would reduce the potential for instream water diversions because the reduced demand of water for cultivation would be much less costly, and therefore more likely to be supplied by NID or other water providers. In addition, due to the reduced cultivation area and maintenance of setbacks from sensitive streams and wetlands, subsequent downstream impacts to these resources and other waters from sedimentation and nutrient loading would be reduced. Because there are no habitat conservation plan areas within the County, impacts in this regard would be the same as the proposed project. Therefore, this alternative would reduce impacts to biological resources compared to the proposed project.

CULTURAL AND TRIBAL RESOURCES

Impacts to Cultural and Tribal resources under this alternative would be reduced compared to the proposed project. Unknown or buried cultural resources can be damaged, lost, or destroyed during ground disturbing activities. This alternative would reduce the overall area of disturbance by limiting plant numbers and the area that could be actively cultivated. Because of this, it is expected that less grading and clearing would occur, necessitating fewer large machines and thereby reduced the potential for disturbance to any cultural and tribal resources including buried human remains and burial sites that may occur within a cultivation area. This smaller over disturbance area also would reduce potential impacts to paleontological resources and any structures that may qualify as historical resources on within these areas. Therefore, this alternative would have the effect of reducing impacts to cultural and tribal resources compared to the proposed project.

GEOLOGY AND SOILS

Impacts to geology and soils under this alternative would be reduced compared to the proposed project. As discussed above, this alternative would substantially reduce the overall cultivation footprint and would result in less ground disturbance with less grading that could result in unstable slopes and landslides, or otherwise cause a soil unit to become unstable. Although this alternative would not increase the risk of ground shaking, this alternative would result in fewer accessory structures being constructed and thereby reduce the risk of strong seismic ground shaking affecting the habitable structures and reduce risks from expansive soils, liquefaction, fault rupture, or collapse. Similarly, the reduction in ground disturbance would result in fewer soil impacts. Neither this alternative nor the proposed project has the potential to increase seismic events. Lastly, because less groundwater would be needed for the reduced cultivation areas, potential for subsidence would be reduced. The demand for new alternative wastewater treatment systems would be similar. Therefore, compared to the proposed project, this alternative would reduce impacts to geology and soils.

HAZARDS AND HAZARDOUS MATERIALS

Impacts to hazards and hazardous materials under this alternative would be reduced compared to the proposed project. This alternative would reduce the overall cultivation footprint, reduce the potential for disturbance of buried hazardous materials and would reduce the use of and potential release of hazardous materials such as fertilizers and pesticides. Similarly, the need for transportation and storage of these materials resulting in an upset condition would be reduced and the potential for spills or upset in close proximity to schools or other sensitive receptors would be minimized. This alternative would result in less demand for new structures that would be required to conform to height restrictions and safety requirements in the vicinity of public or private airports. However, compared to the proposed project, impacts would not be substantially reduced as compliance to reduce impacts would be required under both. Therefore, this alternative would reduce impacts to hazards and hazardous materials compared to the proposed project.

HYDROLOGY AND WATER QUALITY

Impacts to hydrology and water quality under this alternative would be reduced compared to the proposed project. The substantial reduction in overall cultivation areas would reduce the total area of disturbance needed to create pads for cultivation and ancillary structures. This would reduce the potential for soil erosion and reduce the potential for the alteration of drainage patterns. As discussed above, water demand would be reduced and cultivators would need to obtain less water from NID and other municipal supplier, which would reduce the withdrawal of ground water from wells and reduce the potential for depletion of groundwater supplies. Similarly, instream water diversions would be less likely to occur and both direct and indirect impacts to water courses would be reduced. Additionally, if less water is diverted more water would remain in streams, which would help ensure that downstream flows remain more consistent. Lastly, although it is unlikely new residential or habitable ancillary structures would be permitted in a 100-year floodplain, this alternative would reduce the potential for impacts in this regard because fewer of these structures would be needed. Therefore, this alternative would reduce impacts to hydrology and water quality.

LAND USE AND PLANNING

While this alternative would reduce the cultivation areas within the AE, AG, and FR zones, and allow cultivation under the same restrictions, impacts to land use and planning under this alternative would be roughly equivalent compared to the proposed project. Although this alternative would have an overall reduced cultivation footprint, cultivation under the proposed project would also occur in accordance with the established requirements on permitted parcels, which are not located such that they have the potential to physically divide an established community. This alternative would also not conflict with any applicable land use planning and policy documents. The proposed project was found to be substantially consistent with the County's General Plan. This alternative would maintain the existing Zoning Code, and comply with the requirements, and therefore, be consistent with the associated rules and regulations. Hence, there are no inconsistencies associated with either the proposed project or this alternative that would result in a significant effect on the environment. Lastly, there is no applicable habitat conservation plan within the County, so impacts in this regard would be the same. Therefore, impacts to land use and planning would be similar as under the proposed project.

MINERAL RESOURCES

Neither this alternative nor the proposed project would provide for commercial cultivation in an area designated for the extraction of mineral resources. Although this alternative would result in a reduced cultivation footprint, it would not have a corresponding reduction to mineral resource impacts because the impacts would not occur. Thus, impacts would be the same as the proposed project.

NOISE

Noise impacts under this alternative would be reduced compared to the proposed project. This alternative would substantially reduce the overall project footprint and reduce the scale of cultivation areas within individual parcels. This would reduce the potential for noise generated by construction of new accessory structures and reduce noise from operation of equipment and machinery needed for cultivation such as tractors, fans and generators. Additionally, vehicle trips from a reduced demand for employees would generate less traffic noise. The potential for both this alternative and the proposed project to generate substantial ground borne vibrations is remote because neither are expected to require the use of heavy equipment, piling or blasting needed to create cultivation areas or enable the construction of accessory structures. Overall, this alternative would reduce the potential to violate noise standards and disturb people on adjacent properties. Cultivation of cannabis does not constitute a sensitive use and while there are public airports in the county, most of cultivation areas would be outside the noise buffers and impacts to those within would be minimal. Therefore, this alternative would result in fewer noise impacts compared to the proposed project.

POPULATION AND HOUSING

Impacts to population and housing under this alternative would be less than the proposed project. This alternative would not adopt the proposed NCCO, and no new cannabis cultivation would be permitted. This alternative is expected to result in a similar overall cultivation footprint to what currently exists. It is anticipated that most cultivation would continue to occur by existing residents within the County on existing parcels zones AE, AG, or FR and that there would be very limited induced population growth because commercial cultivation would not be legalized. While this alternative would allow cultivation to occur in the TPZ zone, this change would not induce substantial population growth to these areas because the housing densities are very low, and locations are in remote areas. Currently, the estimated existing 3,500 cannabis grows appear to be served by the existing population, but it is assumed that some seasonal labor is imported during the growing season. Under this alternative, this trend is expected to continue and not anticipated to result in a substantial importation of workers beyond what exists. Therefore, this alternative would not substantially increase the number of people that would move into the County. Accordingly, this alternative would not result in the involuntary displacement of any existing residents and would not result in the need for replacement housing that would result in impacts to the environment. This impact would result in impacts less than those of the proposed project.

PUBLIC SERVICES

As discussed in population and housing above, the proposed project is not expected to induce substantial population growth within the County and would not directly increase the demand for public services. It is expected that under this alternative, the existing public services including law enforcement, fire, schools, and parks for residents would remain the same if this alternative is implemented. In addition, all cultivation areas would be required to comply with applicable fire codes and implement a security plan which would assist in reducing impacts to these services. In sum, this would have the effect of maintaining

the existing demand placed on public services. Therefore, impacts under this alternative to law enforcement, fire, schools, parks, and any other public facilities is substantially the same and the proposed project.

RECREATION

An increase in demand on recreational resources is typically associated with an increase in population. As discussed above in population and housing and public services, neither the proposed project nor this alternative is expected to result in substantial population growth. Under this alternative, the allowable cultivation area would be reduced in the AE, AG, and FR, zones, and while it would open the TPZ zones to the cultivation under the same restrictions, due to the remote nature of the TPZ zones, it would not induce a substantial number of people to these areas, nor would it substantially change the existing land use patterns resulting in the demand or need for construction of additional recreational resources that would have an adverse effect on the environment. Therefore, impacts associated with recreation would be similar to the proposed project.

TRANSPORTATION AND TRAFFIC

Impacts to transportation and traffic under this alternative would be reduced compared to the proposed project. This alternative would substantially reduce the cultivation footprint in the AE, AG, and FR zones requiring fewer vehicle trips for employees and any construction needs. This alternative would open the TPZ zone to cultivation under the same restrictions as the other zones. This could increase some vehicle traffic to TPZ areas. However, these areas are generally remote, and the vehicle trips would largely come from existing residents and a few employees, so the increase would be minimal. This alternative does not provide for commercial cannabis cultivation so vehicle trips to transport these cannabis products would be eliminated. With this reduction in vehicle trips this alternative would reduce potential impacts to all applicable transportation management plans and overall reduced demand on the circulation system. Neither this alternative nor the proposed project would result in the construction of new public roads, interfere with emergency access, and neither has the potential to affect air traffic. Although similar in some regards, due to the reduced cultivation footprint, impacts would be less than the proposed project.

UTILITIES AND SERVICE SYSTEMS

Overall, impacts to utilities and service systems under this alternative would be reduced compared to the proposed project. Commercial cannabis cultivation under both the proposed project and this alternative would occur in AE, AG, and FR zones. This alternative would allow cultivation under the same restriction as the TPZ zone. Many of these areas would utilize an existing onsite wastewater treatment system such as a septic system and not require the use of off-site treatment. In addition, most cultivation would occur on properties with established residences that if not using OWTS, would already be using and not increase the demand for wastewater treatment such that new facilities would be needed. Both the proposed project and this alternative would occur on rural parcels and would incorporate agriculturally related uses and potential construction of ancillary structures. This would not require the demand for substantial drainage facilities, however, all uses would be required to comply with all storm water drainage permits including complying with NPDES and obtaining proper permits from the appropriate regional water quality control board. This would effectively reduce impacts from both the proposed project and this alternative. In both instances, NID has noted that adequate water supply is available to serve the proposed project and this alternative, although less water would be required under the “No Project” alternative. Therefore, impacts under this alternative would be slightly reduced compared to the proposed project.

ATTAINMENT OF PROJECT OBJECTIVES

The No Project Alternative would meet none of the project objectives described above in Section 6.3.2. Under this alternative, the proposed project would not be implemented, and cannabis cultivation would continue within the County without any additional regulations or environmental protections.

THIRTY PERCENT CULTIVATION ALTERNATIVE

This Alternative would reduce the number of eligible parcels zoned, (AG, AE, or FR) within the County that could be used for commercial cannabis cultivation from 100% to 30%. Within the County, there are a current total of 27,207 parcels zoned AG, AE, and FR. The Draft EIR presents a conservative analysis and assumes, for the purpose of analyzing impacts, that this is the total number of parcels that would be used for commercial cannabis cultivation. This is done to ensure that the Draft EIR captures the total cultivation area that could occur and fully discloses all potential impacts that would occur under the proposed NCCO. Under this alternative; however, the total number of AG, AE, and FR parcels on which commercial cultivation would be allowed would be reduced to 8,162 or approximately 30 percent of the above 27,207. As discussed above, the analysis of the proposed NCCO discloses the full measure of potential impacts from commercial and non-remuneration cannabis cultivation. The Thirty Percent Cultivation Alternative; however, is considered a more likely scenario to occur and is anticipated to more accurately reflect the interest of eligible property owners to cultivate commercial cannabis. Therefore, under this scenario, the total number of issued permits would be reduced by 19,045 and the County would cap the total number of permits at 8,162. The permits would be issued on a first come first served basis. To more fairly distribute the permits, each size category of parcel (2-5 acres, 5-10 acres, 10-20 acres, and >20 acres) would be eligible for 2,040 permits (25 percent of the total number of 8,126). *Table 6-1: Permits Issued by Parcel Acreage* shows this information. In addition, the estimated current 3,500 cannabis cultivation operations are included in the listed totals and also would be in a first come first served basis to received permits. This Alternative does not make any assumptions related to the number of CCP or ADP permits that would be applied for or issued and assumes, the same as the proposed project, that each parcel would be developed with the maximum canopy coverage allowed (30% of the proposed project).

Table 6-1: Permits Issued by Acreage for AG, AE, and FR Parcels

Acres	Number of Parcels	Reduced by 70%	Permits Issued
2-5 acres	6,836	4,786	2,050
5-10 acres	8,228	5,760	2,468
10-20 acre	5,698	3,989	1,709
>20 acres	6,445	4,512	1,933
Total:	27,207	19,047	8,162
*some numbers are rounded to simplify calculations			

IMPACTS COMPARED TO THE PROPOSED PROJECT

An evaluation of the potential environmental impacts of the Thirty Percent Cultivation Alternative, as compared to those of the proposed project, is provided below.

AESTHETICS

This alternative would reduce the overall number of parcels that could be used for commercial cannabis cultivation by 30%. Under this alternative, fewer accessory support structures, such as sheds, greenhouses, and hoop houses would be constructed. Under this alternative, the cultivation areas would

be subject to the same canopy restrictions, the same 100-foot setback from the property line, and 1,000 feet from sensitive uses, and installation or presence of visual screening. Because the number of cultivation areas would be reduced by approximately 19,047, to a total of 8,162, there would be a substantially reduced potential for views to or from scenic resources to be affected and fewer cultivation areas and associated structures would be visible from public right of ways and other public areas. Although, visual impacts of the proposed project were determined to be less than significant, this alternative further reduce the potential for the visual intrusion in the environment and impacts would be less than the proposed project.

AGRICULTURAL RESOURCES

Impacts to agriculture associated with this alternative would be reduced compared to the proposed project. As discussed above, this alternative would reduce the cannabis cultivation footprint by 70%. This would have the effect of reducing impacts to lands within the AE, AG, and FR zones designated as farmland of local importance, prime farmland, and farmland of statewide importance. There would be no change to impacts associated with Williamson Act Contracts. Therefore, this alternative would have the effect of reducing impacts to agriculture and forest resources.

AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Impacts to air quality and greenhouse gas emission under this alternative would be reduced compared to the proposed project. The 70% reduction to cultivation area would reduce the use of equipment and machinery that would generate emissions, such as CO₂, NO_x, CO, PB, O₃, and H₂SO₄. This alternative also would reduce the number of vehicle trips needed for employees and hauling of materials needed to facilitate cultivation such as grading, and construction of residences and ancillary structures. This would have a secondary effect of reducing potential conflicts with applicable air quality management plans and would reduce the potential for violations of air quality standards. The 30% Cultivation Alternative also would reduce impacts to sensitive receptors in the vicinity of cultivation areas compared to the proposed project and it would reduce the potential for objectionable odor to migrate off-site and affect people on adjacent and nearby parcels. Therefore, compared to the proposed project this alternative would reduce impacts to air quality and greenhouse gas emissions.

BIOLOGICAL RESOURCES

Impacts to biological resources under this alternative would be reduced compared to the proposed project. The 70% reduction to the number of parcels on which cultivation could occur would reduce the overall cultivation footprint and associated impacts to terrestrial habitats, sensitive species, wetlands, riparian areas, woodlands, nesting, breeding and nursery habitat, foraging areas and migration corridors. This alternative also would reduce the potential for instream water diversions and impacts to wetlands and other downstream waters that could result from sedimentation and nutrient loading. This alternative has less potential to cause erosion from disturbed areas and fewer fertilizers would have the potential to enter storm water and runoff. Because there are no habitat conservation plan areas within the County, impacts in this regard would be the same as the proposed project. Therefore, this alternative would result in reduced impacts to biological resources compared to the proposed project.

CULTURAL AND TRIBAL RESOURCES

Impacts to Cultural and Tribal resources under this alternative would be reduced compared to the proposed project. Unknown or buried cultural resources can be damaged, lost, or destroyed during

ground disturbing activities. This alternative would reduce the overall area of disturbance by 70%, and therefore, reduced the potential for disturbance to cultural and tribal resources including buried human remains and burial sites that may be present on sites that otherwise would have been used for cultivation. The reduced overall disturbance area under the 30% Parcel Cultivation Alternative also would reduce potential impacts to paleontological resources that may be located on cultivation sites that would otherwise be used. This alternative also would reduce the potential for impacts to structures that may qualify as historical resources. Therefore, this alternative would have the effect of reducing impacts to cultural and tribal resources compared to the proposed project.

GEOLOGY AND SOILS

Impacts to geology and soils under this the 30% Parcel Cultivation Alternative would be reduced compared to the proposed project. As discussed above, this alternative would reduce the overall cultivation area footprint by 70 percent. The reduced cultivation footprint would result in less areas of disturbance requiring less grading. The reduction of grading would reduce land disturbance and minimize the potential to create unstable slopes or exacerbate conditions and areas that are subject to landslides. Overall, this alternative would reduce the potential for a soil unit to become unstable. Although this alternative would not increase the risk of ground shaking, this alternative would reduce the potential for new residences to be constructed and would reduce the number of needed accessory structures and thereby reduce the risk to habitable structures being affected by strong seismic ground shaking. Similarly, the reduction in ground disturbance would result in reduced impacts to soils reduce the potential impacts from erosion, expansive soils, liquefaction, fault rupture, and collapse. Neither this alternative nor the proposed project has the potential to increase seismic events. Lastly, because less groundwater would be withdrawn the potential for subsidence would be reduced under the 30% Parcel Cultivation Alternative and the need for secondary wastewater treatment systems, such as septic would be reduced. Therefore, compared to the proposed project this alternative would reduce impacts to geology and soils.

HAZARDS AND HAZARDOUS MATERIALS

Impacts to hazards and hazardous materials under this alternative would be reduced compared to the proposed project. The 70 percent reduction in the overall cultivation footprint would reduce the potential for disturbance of buried hazardous materials and would reduce the overall volume of potentially hazardous chemicals (fertilizers and pesticides) that cultivators may use. This would reduce the potential for accidental release to the environment. Similarly, the need for transportation and storage of these potentially hazardous and hazardous materials resulting in an upset condition would be reduced and the potential for spills or upset in close proximity to school or other sensitive uses and receptors would be less than the proposed project. Although the construction of new structures would be reduced impacts associated with height restrictions in the vicinity of public or private airports would not be substantially reduced as compliance would be required under both this alternative and the proposed project. Therefore, this alternative would have the effect of reducing impacts from hazards and hazardous materials.

HYDROLOGY AND WATER QUALITY

Impacts to hydrology and water quality under 30% of Parcel Cultivation Alternative would be reduced compared to the proposed project. As discussed above, this alternative would reduce the overall cultivation area by 70%. This would reduce potential areas of disturbance needed to create pads for cultivation areas and ancillary structures. This would reduce the potential for soil erosion and reduce the

potential for alteration of drainage patterns. Because fewer wells would be used for irrigation, this alternative also would substantially reduce the potential for depleting groundwater supplies. Similarly, instream water diversions which would have direct impacts to water courses, would be reduced. This would help ensure that downstream flows are consistent with what currently exists. Lastly, although it is unlikely new residential or habitable ancillary structures would be permitted in a 100-year floodplain, this alternative would reduce the potential for impacts in this regard. Therefore, this alternative would have the effect of reducing impacts to hydrology and water quality.

LAND USE AND PLANNING

Although this alternative would reduce the cultivation area by approximately 70%, impacts to land use and planning under this alternative would be roughly equivalent compared to the proposed project. Although this alternative would have a reduced cultivation footprint, cultivation under the proposed project also would only occur on established parcels zoned AE, AG, and FR and would not be located such that they have the potential to physically divide an established community. This alternative also would not have any substantial conflicts with applicable land use planning and policy documents. The proposed project was found to be substantially consistent with the County General Plan and by its nature of being an update to the zoning code, it would be consistent with the associated rules and regulations proposed as part of the NCCO. This would be the same under this 30% Percent of Parcels Cultivation Alternative. Hence, there are no inconsistencies associated with either the proposed project or this alternative that would result in a significant effect on the environment. Neither this alternative or the proposed project would conflict with a Sphere of Influence. Lastly, there is no applicable habitat conservation plan within the County, so impacts would be the same. Overall, impacts to land use and planning would be substantially the same as the proposed project.

MINERAL RESOURCES

Neither this alternative nor the proposed project would authorize commercial cannabis cultivation in an area designated for the extraction of mineral resources. Both the 30% Parcels Cultivation Alternative and proposed project only would allow commercial cultivation on AE, AG, and FR parcels. Although this alternative would result in a reduced cultivation footprint of 70%, it would not have a corresponding reduction to impacts to mineral resources because the impacts would not occur. This impact would be the same as the proposed project.

NOISE

Noise impacts under this alternative would be reduced compared to the proposed project. This alternative would reduce the overall project footprint by approximately 70% which would have a similar reduction cultivation areas and construction of accessory structures and operation of construction equipment and machinery such as fans and generators, needed for cultivation. Because the overall cultivation area would be reduced the need for employees and associated vehicle trips, which would reduce the potential to violate noise standards and disturbance to people on adjacent properties. The potential for both this alternative and the proposed project to generate substantial ground borne vibrations is remote because the use of piledriving, significant grading, removal of rock outcrops, or blasting is not expected. Cultivation of cannabis does not constitute a sensitive use and while there are public airports in the county, almost all of the parcels that could be used for commercial cultivation are outside the noise buffer zones. Impacts in each regard, would be minimal. Therefore, this alternative would result in fewer noise impacts compared to the proposed project.

POPULATION AND HOUSING

This alternative would reduce the cultivation area by 70%. It is expected that most cultivation would occur by existing residents within the County. Commercial cultivation and non-remuneration cultivation would still occur on existing parcels zoned AE, AG, or FR, but this alternative would reduce the total number of parcels on which cultivation could occur. This Alternative would maintain the requirement to have an on-site residence or residence on a contiguous parcel (under the same ownership). Therefore, this alternative would reduce the demand for construction of new residences to enable cultivation on parcels that currently do not contain or are not adjacent to a parcel with a residence. Because 70% fewer parcels would allow cultivation, this alternative also would reduce the number of people whom may move to into the County to purchase property to cultivate and would reduce the demand for workers. This reduction is expected to be approximately 70% to a total of 6,600. Accordingly, this alternative also would not result in the involuntary displacement of any existing residents and would not result in the need for replacement housing that would result in impacts to the environment. This impact would be result in a reduction in the potential for these impacts to occur compared to the proposed project.

PUBLIC SERVICES

As discussed in population and housing above and in *Section 4.12: Population and Housing*, while the proposed project has the potential to induce substantial population growth within the County, it is unlikely due to numerous constraints. Similarly, the Thirty Percent Cultivation Alternative also has the potential to increase the demand for public services, but compared to the proposed project the number of eligible parcels on which commercial cultivation could occur would be substantially reduced. If the population increased by 70% less, resulting in a total estimated population increase of 6,600 people, impacts to existing public services including law enforcement, fire, schools, and parks for residents under this alternative would be less than the proposed NCCO. Under this alternative, all parcels used for cultivation areas still would be required to comply with applicable fire codes and implement a security plan which would assist in reducing impacts to these services. In sum, this alternative would have a reduction on the demand placed on public services compared to the proposed project.

RECREATION

An increase in demand on recreational resources is typically associated with an increase in population. As discussed above, the proposed project would be expected, if every eligible parcel is used for cannabis cultivation and the maximum expected number of employees is used, to induce a population increase of approximately 22,000 people. Under the Thirty-Percent Cultivation Alternative, the project would be adopted with 70% fewer parcels being eligible for commercial cannabis and non-remuneration cultivation. This would reduce, by approximately 70%, the demand for recreation facilities and similarly reduce the potential need for construction of additional recreational resources that, if they were constructed, could have an adverse effect on the environment. Therefore, impacts associated with recreation would be reduced compared to the proposed project.

TRANSPORTATION AND TRAFFIC

Impacts to transportation and traffic under this alternative would be reduced compared to the proposed project. This alternative would reduce the cultivation area by approximately 70% resulting in less demand for employees, less construction and construction-related traffic involving the movement of materials and workers, and fewer trips to transport cannabis to off-site processors. With the reduction in vehicle trips this alternative would reduce potential impacts to all applicable transportation management plans and

overall reduced demand on the circulation system. Neither this alternative nor the proposed project would result in the construction of new public roads, interfere with emergency access, and neither has the potential to affect air traffic. Although similar in some regards, due to the reduced cultivation footprint, impacts would be less than the proposed project.

UTILITIES AND SERVICE SYSTEMS

Overall, impacts to utilities and service systems under this alternative would be reduced compared to the proposed project. This alternative would reduce overall cultivation areas by 70%. Commercial cannabis cultivation under both the proposed project and this alternative would occur in AE, AG, and FR zones. Many of these areas would utilize an existing onsite wastewater treatment system such as a septic system and not require the use of off-site treatment. In addition, most cultivation would occur on properties with established residences that if not using OWTS, would already be using and not increase the demand for wastewater treatment such that new facilities would be needed would not occur. Both the proposed project and this alternative would occur on rural parcels and would incorporate agriculturally related uses and potential construction of ancillary structures. This would not require the demand for substantial drainage facilities, however, all uses would be required to comply with all storm water drainage permits including complying with NPDES and obtaining proper permits from the appropriate regional water quality control board. This would effectively reduce impacts from both the proposed project and this alternative. In both instances NID has noted that adequate water supply is available to serve the proposed project and this alternative, although less water would be required under this alternative. Therefore, impacts under this alternative would be reduced compared to the proposed project.

ATTAINMENT OF PROJECT OBJECTIVES

The Thirty Percent Cultivation Alternative would meet or partially meet most the project objectives described above in Section 6.3.2. This alternative would result in an overall reduction of potential environmental effects, and it would substantially limit the total number of permits issued for commercial cannabis cultivation and non-remuneration cultivation. A large focus of the proposed project is to provide a mechanism to permit and regulate existing as well as future cultivation operations. This alternative would substantially reduce the ability of the County to focus on that effort. Therefore, while environmental impacts would be reduced, this alternative would conflict with the regulatory intent of the proposed NCCO.

NO GROUNDWATER CULTIVATION ALTERNATIVE

This alternative removes the eligibility of cultivators from using personal wells to draw groundwater for irrigation of commercial cannabis operations. All water would be provided by either Nevada Irrigation District (NID) or other provider. In areas where ground water is the only water source, cultivation activities would be required to cease or an alternative source such as a water diversion or rainwater catchment could be used. Although this alternative would not directly restrict cultivation or change the zones in which cultivation would be permitted, it is expected to decrease the overall area that would be cultivated. Cultivation would still be permitted in the same areas as the proposed project, but the increased cost from purchasing water, or from developing alternative sources (diversion from a stream or spring or installing a rainwater catchment system) would increase the overall cost of cultivation. Growers also would have the option to purchase water to be trucked in, but this also is expected to be cost prohibitive. During the public scoping and commenting period for the Notice of Preparation (NOP), numerous comments were received questioning water supply and stating that groundwater was a valuable resource

and should be protected. Numerous commenters stated that they rationed their own well water during the dry season and were concerned that exiting cannabis cultivation and potentially more cultivation that would be allowed under the proposed project would exacerbate the problem. This alternative is responsive to those concerns by disallowing the use of onsite ground water wells for the purpose of commercial cannabis cultivation.

IMPACTS COMPARED TO THE PROPOSED PROJECT

An evaluation of the potential environmental impacts of the No Groundwater Cultivation Alternative, as compared to those of the proposed project, is provided below.

AESTHETICS

Impacts to aesthetics associated with this alternative would be reduced compared to the proposed project. As discussed above, through increased costs associated with obtaining an adequate water supply, this alternative would result in some cultivators growing on a reduced footprint or choosing not to cultivate. Most notably, a substantial reduction of cultivation would be expected outside of NID, and other providers service areas where increased costs would be most acute. Some cultivators may choose to install additional ancillary structures such as water storage tanks and ponds to store water during the summer months or use a system for rooftop water diversion. Although these structures and systems may be visible from off-site locations the increased visual intrusion is expected to be minimal. Most notably, this alternative is expected to reduce the total number of parcels used for cultivation and reduce the footprint on parcels where the cultivation remains. This would reduce the overall area under cultivation, and reduce the number of visible ancillary support structures, such as sheds, greenhouses and hoop houses. The reduction in cultivation also would reduce the potential for interference with views to or from scenic resources. Therefore, this alternative would have the effect of reducing the visual intrusion in the environment and would reduce impacts associated with aesthetics and visual resources.

AGRICULTURE AND FOREST RESOURCES

Impacts to agriculture associated with this alternative would be reduced compared to the proposed project. As discussed above, through increased costs associated with obtaining an adequate water supply, it is expected that this alternative would result in some cultivators growing on a reduced footprint or choosing not to cultivate. This would have the effect of reducing impacts to farmland of local importance, prime farmland, and farmland of statewide importance. There would be no change to impacts associated with Williamson Act Contracts. Lastly, this alternative would reduce the potential for the clearing and grading of forested areas. Therefore, this alternative would have the effect of reducing impacts to agriculture and forest resources.

AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Impacts to air quality and greenhouse gas emission under the No Groundwater Cultivation Alternative would be reduced compared to the proposed project. As discussed above, through increased costs associated with obtaining an adequate water supply, it is expected that this alternative would result in some cultivators growing on a reduced footprint or choosing not to cultivate. This would have the effect of reducing the use of equipment that would generate emissions and would reduce the number of vehicle trips needed for employees and hauling of materials needed to facilitate cultivation. These reductions would have a secondary effect of reducing potential conflicts with applicable air quality management plans and would reduce the potential for violations of air quality standards. Lastly, the reduced cultivation

would reduce impacts to sensitive receptors in the vicinity and reduce the potential for objectionable odors migrating and affecting people offsite. Therefore, this alternative would have the effect of reducing impacts to air quality and greenhouse gas emissions.

BIOLOGICAL RESOURCES

Impacts to biological resources under this alternative would be reduced compared to the proposed project. Through increased costs associated with obtaining an adequate water supply, it is expected that this alternative would result in some cultivators growing on a reduced footprint or choosing not to cultivate. The reduced cultivation footprint would result less areas of disturbance with less potential to disturb terrestrial habitats and species, however, this alternative would result in the increased potential for instream and riparian impacts associated with the use of water diversions, this could have a secondary effect of increasing sedimentation from instream work, but reduce nutrient loading due to less runoff carrying fertilizers because cultivation areas would be reduced. Water diversions also could result in a reduction of downstream flows potentially affecting aquatic species and habitats such as wetlands. Although these diversions would require proper permitting through the California Department of Fish and Wildlife (CDFW), impacts may still occur. Additionally, the introduction of water storage tanks may result in some additional disturbance from clearing and grading that could impacts sensitive biological resources. With the expected reduction of the overall cultivation footprint, any increased impacts to streams and rivers from water diversions are expected to be offset. Therefore, while this alternative would reduce some biological impacts, it has the potential to increase others. Impacts would be roughly equivalent compared to the proposed project.

CULTURAL AND TRIBAL RESOURCES

Impacts to Cultural and Tribal resources under this alternative would be reduced compared to the proposed project. Unknown or buried cultural resources can be damaged, lost, or destroyed during ground disturbing activities. The No Groundwater Cultivation Alternative is expected to result in reduced cultivation areas and therefore, would have a reduced potential to disturb cultural resources including buried human remains or burial sites. Because this alternative is expected to reduce the potential for ground disturbance needed to create gardens and areas for cultivation, the potential to damage, loose, or destroy cultural resources is similarly reduced. The reduced disturbance area also would reduce potential impacts to paleontological resources that may be located on cultivation sites that would be used under the proposed project. Therefore, this alternative would have the effect of reducing impacts to cultural and tribal resources.

GEOLOGY AND SOILS

Impacts to geology and soils under this alternative would be reduced compared to the proposed project. As discussed above, through increased costs associated with obtaining an adequate water supply, it is expected that this alternative would result in some cultivators growing on a reduced footprint or choosing not to cultivate. The reduced cultivation footprint would result less areas of disturbance with less potential for grading to disturb or create slopes resulting in landslides or otherwise causing a unit of soil to become unstable. Although no aspects of this alternative or the proposed project are expected to increase the risk of ground shaking, this alternative would reduce the construction of new structures and thereby reduce the risk of strong seismic ground shaking that could affect habitable structures or the placement of structures on expansive soils. Similarly, the reduction in ground disturbance would result in fewer soil impacts and potential for erosion and liquefaction. Neither No Groundwater Cultivation

Alternative nor the proposed project has the potential to increase the occurrence of seismically induced ground shaking. However, because less groundwater would be withdrawn the potential for subsidence would be reduced and the need for alternative wastewater treatment systems would be reduced. Therefore, this alternative would have the effect of reducing impacts to geology and soils.

HAZARDS AND HAZARDOUS MATERIALS

Impacts to hazards and hazardous materials under this alternative would be reduced compared to the proposed project. The reduced cultivation footprint would reduce the potential for disturbance of buried hazardous materials and would reduce the use and potential release of hazardous materials such as fuels, lubricants, and fertilizers and pesticide to the environment. Similarly, the need for transportation and storage of these resulting in an upset condition would be reduced and the potential for spills or upset in close proximity to school or other sensitive receptors would be minimized. Although the demand for new structures would be reduced, impacts associated with height restrictions in the vicinity of public or private airports would not be substantially reduced as the potential for impacts is already remote due to the relatively few areas with airport-related height limitations and use of the ADP process. Therefore, this alternative would have the effect of reducing impacts to hazards and hazardous materials.

HYDROLOGY AND WATER QUALITY

Impacts to hydrology and water quality under this alternative would be reduced compared to the proposed project. As discussed above, through increased costs associated with obtaining an adequate water supply, it is expected that this alternative would result in some cultivators growing on a reduced footprint or choosing not to cultivate. The reduced cultivation footprint would result less areas of disturbance with less potential for grading and baring of soils, and less potential for altering drainage patterns that could erode and be washed out affecting downstream waters. Because this alternative would remove the ability to use on-site water wells, it would substantially reduce the potential for projects on an individual and cumulative basis to deplete groundwater supplies. This alternative, however, would be expected to increase the demand for instream water diversions, which would have direct impacts to water courses. Although these changes are not expected to substantially alter the course of the stream or river they would reduce the volume of downstream flows. Lastly, although this alternative would likely result in fewer new residences or ancillary structures, through the permitting and ADP process, under this alternative and the proposed project, neither would not be authorized within a 100-year floodplain. This impact would be substantially the same. Overall; however, this alternative would have the effect of reducing impacts to hydrology and water quality.

LAND USE AND PLANNING

Impacts to land use and planning under this alternative would be roughly equivalent compared to the proposed project. Although this alternative would have a reduced cultivation footprint, cultivation under the proposed project also would occur on established parcels zoned AE, AG, and FR and would not be located such they have the potential to physically divide an established community. This alternative also would not conflict with any applicable land use planning documents. The proposed project was found to be substantially consistent with the County General Plan and by its nature of being an update to the zoning code, it would be consistent with the updated rules and regulations. Hence, there are no inconsistencies associated with either the proposed project or this alternative that would result in a significant effect on the environment. Lastly, there is no applicable habitat conservation plan within the County. Impacts in

this regard would be the same. Therefore, impacts to land use and planning would be substantially the same as under the proposed project.

MINERAL RESOURCES

Neither this alternative nor the proposed project would authorize commercial cannabis cultivation in an area designated for the extraction of mineral resources. Both the 30% Parcels Cultivation Alternative and proposed project only would allow commercial cultivation on AE, AG, and FR parcels. Although this alternative would result in a reduced cultivation footprint of 70%, it would not have a corresponding reduction to impacts to mineral resources because the impacts would not occur. This impact would be the same as the proposed project.

NOISE

Noise impacts under the No Groundwater Cultivation Alternative would be reduced compared to the proposed project. As discussed above, it is expected that this alternative would result in some cultivators growing on a reduced footprint or choosing not to cultivate. The reduced cultivation footprint would result in the need for less machinery, fewer vehicle trips, less construction, and a reduced potential to violate noise standards and disturb people on adjacent properties. The potential for both this alternative and the proposed project to generate substantial ground borne vibrations is remote. Neither this alternative or the proposed project are expected to require the use of heavy equipment or piling or blasting to create cultivation areas or create pads on which to construct ancillary structures. There are two public use airports in the County, but cultivation would be limited in overflight areas and substantial noise associated with airport operations would not occur. Impacts in this regard would be substantially the same. Overall, this alternative would result in noise impacts similar to but slightly reduced compared to the proposed project.

POPULATION AND HOUSING

The proposed project is not expected to induce substantial population growth within the County. It is expected that initially most cultivation would be undertaken by existing residents within the County but that long-term, some people may choose to relocate into the County to cultivate on parcels zones AE, AG, or FR. Although this alternative would result in fewer parcels on which it is economically viable to cultivate cannabis, it is not expected to substantially reduce the number of people that may move to into the County. Accordingly, this alternative would not result in the involuntary displacement of any existing residents and would not result in the need for replacement housing that would result in impacts to the environment. This impact would be substantially the same as the proposed project.

PUBLIC SERVICES

As discussed immediately above, the proposed project is not expected to induce substantial population growth within the County and would not result in a substantial direct increase in the demand for public services. It is expected that on parcels on which commercial cultivation would be permitted, AE, AG, and FR, the current use of the property and residents on the site would remain. This would have the effect of largely maintaining the existing demand on public services. Therefore, impacts under this alternative to law enforcement, fire, schools, parks, and any other public facilities is substantially the same and the proposed project.

RECREATION

An increase in demand on recreational resources is typically associated with an increase in population. As discussed above, neither the proposed project nor this alternative is expected to result in a substantial growth in population. Although the proposed project has greater potential to result in population growth, due to project constraints, full build-out is not expected. Under this No Groundwater Cultivation Alternative, although the use of properties for commercial cannabis cultivation are expected to be reduced, this alternative is not expected to substantially change the existing land use or future land use patterns resulting in the demand or need for construction of additional recreational resources that would have an adverse effect on the environment. Therefore, impacts associated with recreation would be substantially the same as the proposed project.

TRANSPORTATION AND TRAFFIC

Impacts to transportation and traffic under this No Groundwater Cultivation Alternative would be reduced compared to the proposed project. As discussed above, through increased costs associated with obtaining an adequate water supply, it is expected that this alternative would result in some cultivators growing on a reduced footprint or choosing not to cultivate. The reduced cultivation footprint would result in less demand for employees, less construction and construction-related traffic involving the movement of materials and workers, and fewer trips to transport cannabis to off-site processors. With the reduction in vehicle trips, this alternative would reduce potential impacts to all applicable transportation management plans and overall reduced demand on the circulation system. Similar to the proposed project, individual projects would be required to pay Traffic Impact Mitigation Fees. Neither this alternative nor the proposed project would result in the construction of new public roads, interfere with emergency access, and neither has the potential to affect air traffic. Impacts would be slightly less than the proposed project.

UTILITIES AND SERVICE SYSTEMS

Overall, impacts to utilities and service systems under this alternative would be reduced compared to the proposed project. The expected reduction in cultivation area would not substantially increase the demand for wastewater treatment or increase the demand such that new facilities would be needed. Commercial cannabis cultivation under both the proposed project and the No Groundwater Cultivation Alternative would occur in AE, AG, and FR zones. Many of these areas would utilize an onsite wastewater treatment such as a septic system and not require the use of off-site treatment. Additionally, similar to the proposed project this alternative is not expected to substantially increase the County population such that it would increase demand on a public service system. Both the proposed project and this alternative would occur on rural parcels and include agriculturally related uses and potential construction of ancillary structures. This would not increase the demand for substantial drainage facilities; however, all uses would be required to comply with all applicable storm water drainage permits. This would include complying with NPDES and obtaining proper permits from the appropriate Regional Water Quality Control Board. In both instances, NID has noted that adequate water supply is available to serve the proposed project and this alternative, although less water would be required under this alternative. Therefore, impacts under this alternative would be slightly reduced compared to the proposed project.

ATTAINMENT OF PROJECT OBJECTIVES

The No Groundwater Cultivation Alternative would meet or partially meet most the project objectives described above in Section 6.3.2. This alternative would result in an overall reduction of potential environmental effects, specifically impacts on groundwater use in the unincorporated areas of the County.

The overall total number of permits issued for commercial cannabis cultivation and non-remuneration cultivation would be reduced. A large focus of the proposed project is to provide a mechanism to permit and regulate existing as well as future cultivation operations. This alternative would substantially reduce the ability of the County to focus on that effort. Therefore, while environmental impacts would be reduced, this alternative would conflict with the regulatory intent of the proposed NCCO.

CULTIVATION ALLOWED IN RA ZONES ALTERNATIVE

DESCRIPTION OF THE ALTERNATIVE

This alternative would maintain the current cultivation proposed for the AE, AG, and FR zones but also, in response to public input and request during the scoping process and comment period on the NOP, includes commercial cultivation in some RA zoned areas. Cultivation that would be allowed in the RA zones is shown in *Table 6-2: RA Zone Cultivation*, below. With the increase cultivation allowed in the RA zones, this alternative would result in potential cultivation on approximately 20,833 additional parcels, an increase of approximately 76%.

Table 6-2: RA Zone Cultivation

Zone	Parcel Acreage	Cultivation Method		
		Indoor	Mixed-Light	Outdoor
RA	2.0 acres or less	Commercial Cultivation is prohibited		
	Parcels 2.00 acres to 4.99 acre	Maximum Canopy of 500 sf	Commercial Cultivation is prohibited	
	Parcels 5.00 acres to 9.99 acres	Up to a maximum of 1,500 sf of canopy for any method or combination thereof.		
	Parcels 10.00 acres to 19.99 acres	Up to a maximum of 2,500 sf of canopy for any method or combination thereof.		
	Parcels 20 acres or greater	Up to a maximum of 5,000 sf of canopy for any method or combination thereof.		

IMPACTS COMPARED TO PROJECT IMPACTS

An evaluation of the potential environmental impacts of the Cultivation allowed in RA Zones Alternative as compared to those of the proposed project, is provided below.

AESTHETICS

With the increase cultivation allowed in the RA zones, the number of parcels on which cultivation would be allowed to occur would increase by approximately 76 percent to a total of 48,040 parcels. This would substantially increase the impacts that would occur to aesthetics and visual resources. Much of the RA zoned areas occur in relatively close proximity to the Cities of Grass Valley and Nevada City and more densely populated areas that would be visible to more people from public areas. With the increase cultivation areas this alternative would have a greater likelihood of impacts to scenic resources, such as rock outcrops, trees, and buildings, would increase the potential to degrade scenic resources, and would increase the potential for light and glare impacts. Impacts associated with this alternative would be substantially increased.

AGRICULTURAL RESOURCES

Although this alternative would enable commercial cannabis cultivation on a substantial number of RA parcels, the increased effects on agriculture and forest lands compared to the proposed project would be minimal. The vast majority of RA zoned properties are in the areas surrounding Nevada City and Grass Valley. Most of the County lands surrounding Truckee are zoned as FR and TPZ, zones this alternative would not affect. The RA lands surrounding the two cities, do not contain lands under Williamson Act Contracts, and little if any land is mapped as farmland of local importance, prime farmland, farmland of statewide importance, or unique farmland. Much of the land, however, designated as RA contains thick stands of trees and according to the California Public Resources Code, these areas would be classified as forest land, woodland, or timberland although not formally designated as such. If these zones were open to cultivation it could induce removal of trees. Although these activities would be subject to the same permitting requirements under the California Forest Practice Act as the proposed project, the overall loss of timberlands would be greater, and impacts would incrementally increase.

AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Impacts to air quality and greenhouse gas emission under this alternative would be increased compared to the proposed project. As discussed above, this alternative would substantially increase the number of parcels that would be available to commercial cannabis cultivation. This would result in a substantial increase in the cultivation area footprint resulting in increased agriculture activity resulting in increased use of machinery, grading, and vehicle trips to transport materials and employees to and from project sites. These activities would increase air emissions including greenhouses gasses from burning of fossil fuels needed for vehicles and machinery. These emissions also could potentially result in violations of and conflicts with air quality and attainment plans. Additionally, some of the additional cultivation sites would increase the number of cultivation uses close to sensitive receptors. Additionally, because the RA parcels consist of smaller lots, odors from cultivation would have an increased potential to be transported off-site to adjacent and nearby residences and properties. Therefore, this alternative would have the effect of increasing impacts to air quality and greenhouse gas emissions.

BIOLOGICAL RESOURCES

Impacts Biological Resources under the Cultivation in RA Zones Alternative would be increased compared to the proposed project because it would substantially increase the area in which commercial cannabis cultivation could occur. This would result in increased impacts and disturbance to potentially sensitive habitats, plants, and wildlife. This alternative has the potential to increase cultivation on parcels that contain riparian habitat, wetlands and could result in the filling and loss of more of these areas, both directly and indirectly. Cultivation activities under this alternative also has a greater potential to affect sensitive aquatic environments and associated species and increasing conflicts with the Nevada County Watercourse, Wetland, and Riparian Ordinance. The increased cultivation also would result in a greater effect on habitat and would likely disturb more area used by species as movement and migration corridors, breeding, nursery, and nesting habitat. As discussed above, this alternative also would likely result in the removal of more trees which would increasing conflicts with the Nevada County Tree Preservation and Protection Ordinance. Because there is no habitat conservation plan or natural community conservation plan applicable to Nevada County, impacts in this regard would be the same. However; overall, this alternative would present additional challenges to efficiently and orderly integrate the planning of commercial cannabis cultivation with the protection of biological resources. Therefore, this alternative would result in greater potential impacts when compared to the proposed project.

CULTURAL AND TRIBAL RESOURCES

Impacts Cultural and Tribal Resources under this alternative would be increased compared to the proposed project. This alternative would substantially increase the area in which commercial cannabis cultivation could occur; this would result in increased ground disturbance and result in an increased potential to damage or destroy unknown buried cultural and paleontological resources. This alternative also has increased potential to result in impacts to culturally significant structures identified as historical resources. Although the same resources protection plan and development standards as described in the proposed project would be implemented, the potential for impacts to cultural and tribal resources remains greater compared to the proposed project.

GEOLOGY AND SOILS

Impacts to geology and soils under this alternative would be increased compared to the proposed project. This alternative would substantially increase the area in which commercial cannabis cultivation could occur, this would result in increased ground and soil disturbance, and would potentially exacerbate landslide hazards, and increase the potential for erosion through the baring of soils to create cultivation pads. The increased area open to cultivation; however, is not expected to substantially induce population growth in these areas because many of the parcels already contain residences. Accordingly, this would not result in a substantial number of new residences or habitable accessory structures that would be at risk from seismic ground shaking, or that would be built on expansive soils and subject to the secondary effects including, liquefaction, lateral spreading, fault rupture or collapse. Conformance with applicable building codes related to seismic safety would help ensure impacts are reduced and similar to the proposed project. However, this alternative would likely increase groundwater withdrawal from wells and increase the potential subsurface instability and subsidence. Therefore, although most geology and soils impacts would be similar, this alternative would result in incrementally greater impacts compared to the proposed project.

HAZARDS AND HAZARDOUS MATERIALS

Impacts to Hazards and Hazardous Materials under this alternative would be increased compared to the proposed project. The Cultivation Allowed in RA Zone Alternative would substantially increase the area in which commercial cannabis cultivation could occur. This alternative would increase of the use and transportation of hazardous and potentially hazardous materials including fuels and lubricant used for equipment and machinery and fertilizers and pesticides used for cultivation. This would increase the risk of potential upset conditions from use, transport, and disposal resulting in greater potential dangers to the public, sensitive uses such as schools, and other sensitive receptors in the vicinity of cultivation projects. This alternative also would result in a higher likelihood that cultivation could occur on a site listed pursuant to Government Code Section 65962.5 resulting in additional impacts related to upset and the need for more cleanup efforts. Impacts associated from cultivation areas being located within airport land use plans or private airstrips would be roughly equivalent because this alternative would not induce population growth to these areas and it would still be required to comply with all development restrictions. Similarly, this alternative would not interfere with the implementation of an adopted emergency response or evacuation plan. Although some impacts are similar to the proposed project, overall, this alternative would result in impacts that are greater than that of the proposed project.

HYDROLOGY AND WATER QUALITY

Impacts to Hydrology and Water Quality under this alternative would be increased compared to the proposed project. This alternative would substantially increase the area in which commercial cannabis

cultivation could occur and would increase areas of disturbance thereby increasing the potential for altering existing drainage patterns of project areas and creating additional runoff to streams and rivers, both on-site and to downstream areas. This could have the effect of exceeding drainage capacities causing flooding, as well as result in sedimentation and impacting water quality. The RA zones that surround both Nevada City and Grass Valley both contain areas designated by the Federal Emergency Management Agency as flood zones and some RA zones occur in these areas designated as 100-year floodplains. In addition, it is anticipated that some of the additional parcels that are used for cultivation would use ground water to irrigate the cannabis. This would have the effect of substantially increased ground water demand resulting additional drawdown compared to the proposed project. Therefore, impacts associated with this alternative are greater than the proposed project.

LAND USE AND PLANNING

Impacts to land use and planning under this alternative would be roughly equivalent compared to the proposed project, with the exception of conflicts with the Grass Valley and Nevada County Spheres of Influence (SOI). Although this alternative would have a larger cultivation footprint, it would be located on existing RA zoned parcels with existing uses and would not result in the physical division of an established community. The proposed project also would not substantially conflict with the policies of the County General Plan resulting a significant effect to the environment. Lastly, there is no applicable habitat conservation plan within the County and impacts in this regard would be the same as the proposed project. Relating to the SOI; however, because neither the Nevada City or the City of Grass Valley allow for commercial cultivation, cultivation within County designated RA zones could result in conflicts with future annexation efforts of these two cities of properties within their respective SOI's. This could result in substantial consistency issues with the local general plans and zoning ordinances and result in environmental effects. Because neither City has specific regulations or enforcement procedures to ensure that commercial cannabis cultivation conforms to environmental protections, the environmental effects could be substantial. Therefore, impacts in this regard would be greater than the proposed project.

MINERAL RESOURCES

Neither this alternative nor the proposed project would provide for commercial cultivation in an area designated for the extraction of mineral resources. Although this alternative would result in an increased footprint for commercial cultivation uses, as these parcels are zoned RA, it would not conflict with any area that would likely be used for future mineral extraction. This impact would be substantially the same as the proposed project.

NOISE

Impacts associated with noise under this alternative would be increased compared to the proposed project because it would substantially increase the area in which commercial cannabis cultivation could occur. This alternative would increase of the use vehicles and machinery needed to transport people and materials and to facilitate the cultivation activities. This alternative would likely increase construction activities to build accessory structures and bring equipment into areas in close proximity to other residences. This could expose people in adjacent residential locations to increased temporary noise increases. The increased areas of cultivation also would increase the overall ambient noise created by farm equipment including fans needed for ventilation of greenhouse and potential use of generators to power electrical equipment. Similar to the proposed project, it is not expected that substantial grading, piledriving, or blasting would be needed, so impacts from these potential noise and vibration generating activities would be similar. Although the cultivation activities in these areas would generate additional

noise sources, it is not expected to exceed standards. Additionally, all existing setbacks from property lines would remain in place, further ensuring noise violations are not substantially increased. Therefore, impacts associated with noise would be similar but slightly increased compared to the proposed project.

POPULATION AND HOUSING

This alternative would have a greater likelihood of inducing substantial population growth within the County than the proposed project. Under this alternative, in addition to the cultivation that would occur in the AG, AE, and FR the increased cultivation in the RA could substantially increase the parcels on which cultivation could occur. Although many of the RA parcels are smaller and cultivation canopy would be limited, because the RA parcels cover a substantial area, a substantial increase in overall cultivation would be expected. Although much of the RA zoned areas are already built, many areas are not and this could result in a correspondingly substantial increase in the number of people that would move into the County for the purpose of being able to cultivate cannabis. This, this alternative; however, would not result in the involuntary displacement of any existing residents and would not result in the need for replacement housing that would result in impacts to the environment. Therefore, because this alternative would include a larger area, the impacts would be greater than the proposed project.

PUBLIC SERVICES

Under the Cultivation Allowed in RA Zones, impacts to public services would be similar to that of the proposed project. Although this alternative would substantially increase the number of properties on which commercial cannabis could be cultivated, many of these properties already contain residential structures and are already served by the existing fire departments, sheriff's office, schools, and recreation facilities. As discussed above, this alternative is not expected to substantially increase the population requiring the need for additional public service facilities the construction of which, would result in impacts to the environment. Additionally, while this alternative would likely result in the construction and operation of newly constructed accessory support buildings, conformance with applicable building and fire codes and installation of required security measures would mitigate the potential increased demand for fire protection services and law enforcement services, respectively. Therefore, although this alternative would include a larger area, this impact would be substantially the same as the proposed project.

RECREATION

As discussed above, this alternative would induce additional population growth in the County compared to the proposed project. The increased population is anticipated to increase the use of existing recreational areas, and also could increase the demand for new recreational areas to be constructed both within the County, County communities, and incorporated cities. The significance on recreation is not only determined by increased demand and deterioration on existing facilities but also focusses on increases in populations such that new or replacement recreational facilities would be needed. If the construction of these facilities is required, they could result in negative physical impacts to the environment. Because this alternative would likely increase population at a greater rate than the proposed project and would be in areas that are more suburban in scale the demand for increased recreational opportunities could be substantial. Therefore; this alternative would result in an increased demand for these resources potentially resulting in new construction. Impacts would be greater than the proposed project.

TRANSPORTATION AND TRAFFIC

This alternative would result in a substantial number of additional RA zoned parcels being opened to commercial cannabis cultivation. The majority of these areas are within one to three miles of Nevada City and the City of Grass Valley. While the increased cultivation areas would increase demand for employees and increase some vehicle trips to obtain construction materials for ancillary structures and supplies for cultivation, the vehicle trips for these purposes would be localized to the immediate vicinity. Additionally, while 75% of these properties are less than five acres, and the cultivation area canopy would be limited to 500 sf given the total number of increased cultivation areas, this alternative is expected to increase the demand for employees to work these sites and would be an increase compared to the proposed project. Similar to the proposed project, individual projects would be required to pay Traffic Impact Mitigation Fees. All new projects in RA would be required to conform to the same emergency access requirements as the proposed project, and due to locations and required conformance to all height restrictions in the vicinity of airports, neither has the potential to affect air traffic. Therefore; while some impacts would be similar to the proposed project, due to the increased scope of cultivation under this alternative, impacts would be greater than that of the proposed project.

UTILITIES AND SERVICE SYSTEMS

This alternative would result in a substantial number of additional RA zoned parcels being opened to commercial cannabis cultivation and would increase the demand on existing utilities and service systems. While this alternative is expected to increase the overall number of commercial cultivation sites, these areas would be served by existing infrastructures including that for electricity, natural gas, water, and wastewater. The existing infrastructure is expected to be sufficient to serve this need such that new lines and infrastructure would not be required. Related to water supply, these sites are all within the NID service area and NID has indicated it has the capacity to serve all potential cannabis uses. Therefore, impacts would be similar to but slightly greater than the proposed project.

ATTAINMENT OF PROJECT OBJECTIVES

The Cultivation Allowed in RA Zones Alternative would meet or partially meet most of the Project Objectives described above in Section 6.3.2. This alternative would result in a regulatory framework under which commercial cannabis cultivation and cultivation for non-remuneration would occur. This alternative would be subject to the same environmental regulations and County permitting process as the proposed project. However; this alternative would result in a substantially increased area that would permit commercial and non-remuneration cultivation. This alternative, therefore; would not meet the project objectives aimed at protection of the environment and reducing the nuisance that cultivation can cause.

NO PERMANENT STRUCTURES IN DESIGNATED FARMLAND ALTERNATIVE

This alternative is proposed to avoid significant impacts on Prime Farmland, Unique Farmland, and Farmland of Statewide Importance (collectively identified as Designated Farmland). Under this alternative commercial cannabis would be permitted on designated farmland, but only without the development of any permanent structures that would result in the conversion of Designated Farmland to non-agricultural uses. This would include permanent structures such as buildings pads/ or permanent structures for use in support of commercial cannabis cultivation, permanent structures to be used as greenhouses or mixed light facilities, or other improvements such as paved roadways or other infrastructure improvements that would result on the conversion of designated farmland to a non-agricultural use. As noted in Section 4.1,

while commercial cannabis is not considered an agricultural product under the NCCO, the growing of cannabis would not preclude some other agricultural use from occurring either concurrently or in the future. The restrictions of this alternative would not apply to the development of a new single-family residence constructed consistent with the applicable regulations of the County's Land Use and Development Code. This alternative requires the NCCO to be amended to preclude the development of permanent structures on designated farmland which would provide County staff with an additional mechanism for managing agricultural resources beyond what is currently required in the County's Land Use and Development Code.

IMPACTS COMPARED TO THE PROPOSED PROJECT

An evaluation of the potential environmental impacts of the Plant and Wildlife Sensitive Species Alternative, as compared to those of the proposed project, is provided below.

AESTHETICS

Under the no permanent structures in designated farmland alternative, cultivation would result in fewer potential impacts to aesthetic and visual resources than under the proposed project. This alternative would constrain on development on designated farmland resulting in fewer ancillary support structures, such as, sheds and greenhouses and hoop houses that could be visible seen from off-site locations. This alternative would maintain the 100-foot setback of cannabis canopy from all property lines and the 1,000-foot setback from sensitive sites. This alternative would slightly decrease the potential for views to or from scenic resources areas to be impacted by cannabis cultivation projects. Similarly, views of cultivation from public right of ways and other public areas, as well as the generation of light and glare, and night glow would be reduced. Therefore, although visual impacts of the proposed project were determined to be less than significant, this alternative would further reduce the potential for visual intrusion and impacts would be less than the proposed project.

AGRICULTURAL RESOURCES

Impacts to agricultural resources associated with this alternative would be reduced compared to the proposed project. Under the no permanent structures in designated farmland alternative, only outdoor commercial cannabis would be allowed on any designated farmland and all permanent structures would be prohibited. While outdoor cultivation would remain and result in a temporary conversion based on County standards, as the cultivation areas could be reverted to use for a recognized agricultural project, a permanent conversion would be avoided. This alternative however would not address potential impacts to the conversion of forest lands and these impacts would be the same. Neither this alternative, nor the proposed project would conflict with lands under Williamson Act Contracts at the state level, but because cannabis is not considered an agricultural product at the County level there is no mechanism for associated Williamson Act conformance. Therefore, this alternative would reduce impacts to agriculture resources.

AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Impacts to air quality and greenhouse gas emissions under this alternative would be reduced compared to the proposed project. The no permanent structures in designated farmland alternative would reduce the overall area that could be cultivated using accessory structures which would reduce new construction. The reduced construction would reduce the demand for heavy equipment and machinery needed to grade and create level surfaces for greenhouses and hoop-houses, or other accessory structures. This would

have the effect of resulting in fewer air emissions from construction and maintenance activities. This alternative; however, would not necessarily reduce the demand for employees as the same square footage of cultivation could occur and hence the movement of cultivation related equipment, materials, and employee and vehicle trips would be roughly equivalent. This alternative could result in increased creation of dust due to outdoor cultivation being exposed to high winds. Therefore, this alternative would be expected to have a similar impact associated with potential violations of applicable air quality management plans and standards. Although the 100-foot setback from the property line, and 1,000-foot setback from sensitive receptors would remain, this alternative could expose more nearby residents and neighborhoods to additional odors because cultivation areas and odors would not be contained within structures. This increase; however, is anticipated to be negligible. Therefore, overall this alternative is anticipated to result in impacts to air quality and greenhouse gas emissions that would be roughly equivalent compared to the proposed project.

BIOLOGICAL RESOURCES

Impacts to biological resources under this alternative would be similar to the proposed project. Some impacts may be slightly reduced due to the placement of fewer structures; however, the overall land use that could be disturbed (use of areas for outdoor cultivation instead of indoor or mixed-light) would be substantially the same. Accordingly, the associated impacts to terrestrial habitats, sensitive species, wetlands, riparian areas, woodlands, nesting, breeding, and nursery habitat, foraging areas and migration corridors would be similar. This alternative; however, would reduce potential conflicts with noise and nighttime glare that could affect wildlife. Because fewer greenhouses, hoop-houses, and accessory structures would be used, the use of noise generating electrical equipment would be reduced. Similarly, because mix-light cultivation would be reduced, the negative effects of nighttime lighting on wildlife would be reduced. The no permanent structures in designated farmland alternative could result in additional erosion because more bare soil from outdoor cultivation would be exposed to rain and subsequent water run-off. Because there are no habitat conservation plan areas within the County, impacts in this regard would be the same as the proposed project. Overall however; this alternative would slightly increase impacts to biological resources compared to the proposed project.

CULTURAL AND TRIBAL RESOURCES

Impacts to Cultural and Tribal resources under this alternative would be substantially the same compared to the proposed project. This alternative is not expected to substantially reduce the overall area used for cultivation and would have a similar potential to result in the damage, loss, or destruction of unknown or buried cultural resources. Ground disturbing activities that could result in these impacts would be similar. Therefore, this alternative would similar impacts on cultural and tribal resources compared to the proposed project.

GEOLOGY AND SOILS

Overall, impacts to geology and soils under the no permanent structures in designated farmland alternative would be similar compared to the proposed project. Although the overall cultivation areas are anticipated to be similar, this alternative would reduce the overall number of greenhouses, hoop-houses, and accessory structures constructed. While this alternative is not expected to result in substantially less ground disturbance, less grading would be required to create level pads for ancillary and accessory structures. This would result in less potential for projects to result in unstable slopes and landslides, or otherwise cause a soil unit to become unstable. This alternative would not increase the risk of ground

shaking, but this alternative would result in fewer accessory structures being constructed. This would reduce the potential for strong seismic ground shaking to damage structures potentially built on expansive soils, liquefaction, fault rupture, or collapse resulting in harm to occupants. This alternative, however; would likely result in greater erosion potential because more bare ground would be exposed to both wind and water-driven erosion. Neither this alternative nor the proposed project has the potential to increase seismic events. The demand for new alternative wastewater treatment systems would be similar. Therefore, compared to the proposed project, this alternative would be roughly equivalent regarding geology and soils.

HAZARDS AND HAZARDOUS MATERIALS

Impacts to hazards and hazardous materials under no permanent structures in designated farmland alternative would be similar compared to the proposed project. This alternative is not anticipated to reduce the overall cultivation footprint because cultivators would likely transition from indoor or mixed-light to outdoor cultivation. Therefore, this alternative would not reduce the potential for disturbance of unknown buried hazardous materials and would not reduce the use of and potential release of hazardous materials such as fertilizers and pesticides. Similarly, the need for transportation and storage of these materials resulting in an upset condition would be similar because a similar overall cultivation area would be expected to be similar. This alternative would result in a reduced demand for new structures, the construction of which could require the use of potentially hazardous building materials, and fuels and lubricants needed for machinery resulting in less potential for accidental upset. No changes to impacts related to height restrictions and safety requirements in the vicinity of public or private airports are anticipated. Therefore; compared to the proposed project, impacts would be slightly reduced compared to the proposed project.

HYDROLOGY AND WATER QUALITY

Impacts to hydrology and water quality under the no permanent structures in designated farmland alternative would be greater compared to the proposed project. This alternative would reduce the cultivation areas that would use greenhouses and hoop-houses and increase outdoor cultivation. This would increase the areas exposed to erosive water forces and increase the potential for erosion. This could result in increased potential to alter on-site drainage patterns and result in downstream effects to water quality. The overall area of cultivation is anticipated to be similar and demand for water is anticipated to be similar. As a result, the withdrawal of ground water from wells and associated reduction in the potential for depletion of groundwater supplies would be similar. The effects on groundwater recharge from the reduction of impermeable structures is anticipated to be negligible. Other potential impacts from instream water diversions also would occur and similar direct and indirect impacts to water courses and downstream flows would result. This alternative would reduce the potential for impacts associated with structures placed in 100-year floodplains and impacts in this regard would be reduced. Therefore, this alternative would slightly reduce impacts to hydrology and water quality.

LAND USE AND PLANNING

This alternative would not change the zones in which cultivation could occur and all the same land use restrictions would remain. Impacts to land use and planning under this alternative would be roughly equivalent compared to the proposed project. This alternative is not expected to substantially change the overall cultivation footprint, and cultivation would still proceed in accordance with the established requirements on permitted parcels. This alternative would not increase the potential to located cultivation sites in areas that would physically divide an established community and would also not

substantially conflict with any applicable land use planning and policy documents. This alternative would comply with the Zoning Code and requirements and would be consistent with the associated rules and regulations of the General Plan. Lastly, there is no applicable habitat conservation plan within the County, so impacts in this regard would be the same. Therefore, impacts to land use and planning would be similar as under the proposed project.

MINERAL RESOURCES

Neither no permanent structures in designated farmland alternative nor the proposed project would provide for commercial cultivation in an area designated for the extraction of mineral resources. This alternative would not result in a reduced cultivation footprint and would not have a corresponding reduction to mineral resource impacts because the impacts would not occur under the proposed project. Thus, impacts would be the same as the proposed project.

NOISE

Noise impacts under this alternative would be reduced compared to the proposed project. This alternative would slightly reduce the potential for noise generated by construction of new accessory structures and reduce noise from operation of equipment and machinery needed for cultivation such as fans and generators. Noise generated from vehicle trips would be substantially the same because a similar number of employees who would commute to cultivation sites would be required. The potential for both this alternative and the proposed project to generate substantial ground borne vibrations is remote because neither are expected to require the use of heavy equipment, piledriving or blasting needed to create cultivation areas or enable the construction of accessory structures. Overall, this alternative would reduce the potential to violate noise standards during construction and operation of machinery such as fans and air conditioning units needed for ancillary and accessory structures. Cultivation of cannabis does not constitute a sensitive use and while there are public airports in the county, most of cultivation areas would be outside the noise buffers and impacts would be the same. Therefore, this alternative would result in slightly fewer noise impacts compared to the proposed project.

POPULATION AND HOUSING

The proposed project is not expected to induce substantial population growth within the County. It is expected that initially most cultivation would be undertaken by existing residents within the County but that long-term, some people may choose to relocate into the County to cultivate on parcels zones AE, AG, or FR. Although this alternative could result in fewer parcels on which it is economically viable to cultivate cannabis, it is not expected to substantially reduce the number of people that may move to into the County. Accordingly, the no permanent structures in designated farmland alternative would not result in the involuntary displacement of any existing residents and would not result in the need for replacement housing that would result in impacts to the environment. This impact would be substantially the same as the proposed project.

PUBLIC SERVICES

The proposed project is not expected to induce substantial population growth within the County and would not result in a substantial direct increase in the demand for public services. This alternative would result in a similar growth pattern and population increase on parcels on which commercial cultivation would be permitted, AE, AG, and FR. Although this would reduce the use of accessory and ancillary structures, the current use of these property and residents on the site would be similar. This would have the effect of largely maintaining the existing demand on public services. Therefore, impacts under this

alternative to law enforcement, fire, schools, parks, and any other public facilities is substantially the same and the proposed project.

RECREATION

An increase in demand on recreational resources is typically associated with an increase in population. As discussed above, neither the proposed project nor the no permanent structures in designated farmland alternative is expected to result in a substantial growth in population. Where the proposed project would result in the potential for greater cultivation sites using accessory structures, this alternative is expected to result in a similar amount of area used for cultivation. Therefore, both this alternative and the proposed project have a similar potential for increased population. Accordingly, this alternative is not expected to substantially change the existing land use or future land use patterns resulting in the demand or need for construction of additional recreational resources that would have an adverse effect on the environment. Therefore, impacts associated with recreation would be substantially the same as the proposed project.

TRANSPORTATION AND TRAFFIC

Impacts to transportation and traffic under this alternative would be substantially the same as compared to the proposed project. As discussed above, because the overall cultivation footprint is not expected to substantially change the expected vehicle trips from employees would be similar. This alternative may result; however, in a slightly decreased demand for construction-related vehicle trips because fewer accessory and ancillary structures would be built involving the movement of materials and workers. With the reduction in vehicle trips this alternative would reduce potential impacts to all applicable transportation management plans and overall reduced demand on the circulation system. Similar to the proposed project, individual projects would be required to pay Traffic Impact Mitigation Fees. Neither this alternative nor the proposed project would result in the construction of new public roads, interfere with emergency access, and neither has the potential to affect air traffic. Impacts would be slightly less than the proposed project.

UTILITIES AND SERVICE SYSTEMS

Overall, impacts to utilities and service systems under this alternative would be incrementally reduced compared to the proposed project. Although the proposed project is not expected to result in a reduction in the overall cultivation areas, because fewer ancillary and accessory structures would be constructed associated demand for utilities would be slightly reduced. Cultivation sites are expected to continue to use onsite wastewater treatment facilities such as a septic system and not require the use of off-site treatment. Additionally, similar to the proposed project this alternative is not expected to substantially increase the County population such that it would increase demand on a public service system. Both the proposed project and this alternative would occur on rural parcels and include agriculturally related uses and potential construction of ancillary structures. This would not increase the demand for substantial drainage facilities; however, all uses would be required to comply with all applicable storm water drainage permits. This alternative would result in additional outdoor cultivation which could increase erosion potential. Nonetheless, all projects would be required to comply with NPDES and obtaining proper permits from the appropriate Regional Water Quality Control Board. NID has noted that adequate water supply is available to serve the proposed project and this alternative is anticipated to use similar water volumes. Therefore, impacts under this alternative would be slightly reduced compared to the proposed project.

ATTAINMENT OF PROJECT OBJECTIVES

The No Permanent Structures in Designated Farmland Alternative would meet all of the Project Objectives described above in Section 6.3.2.

6.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126.6 (e)(2) of the State CEQA Guidelines requires that an environmentally superior alternative be designated and states that if the environmentally superior alternative is the No Project alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Based on the summary of information presented in *Table 6-3: Comparison of Impacts of Project Alternatives*, the environmentally superior alternative is the No Project Alternative. The No Project Alternative would leave the existing condition essentially unchanged and would not have the environmental effects of permitting new commercial cultivation grows that would be associated with any of the alternatives. However, it should be noted that adverse environmental effects associated with unregulated cannabis cultivation would remain. As such, this alternative has fewer environmental impacts than the proposed project or any of the other alternatives.

Section 15126.6(e)(2) of the State CEQA Guidelines states that if the “No Project” alternative is found to be environmentally superior, “the EIR shall also identify an environmentally superior alternative among the other alternatives. Aside from the No Project Alternative, the Thirty Percent of Parcels Alternative would have the least environmental impacts because it would permit substantially fewer commercial cannabis grows which would result in fewer adverse environmental impacts throughout the unincorporated County than the other alternatives.

The context of an environmentally superior alternative is based on the consideration of several factors including the reduction of environmental impacts to a less than significant level, the project objectives, and an alternative’s ability to fulfill the objectives with minimal impacts to the existing site and surrounding environment. According to Table 6-3, the “No Project” alternative would be the environmentally superior alternative because it would eliminate all of the potentially significant impacts of the proposed project. However, while the “No Project” alternative is the environmentally superior alternative, it is not capable of meeting any of the basic objectives of the proposed project.

After the “No Project” alternative, the environmentally superior alternative to the proposed project is the one that would result in the fewest or least significant environmental impacts. Based on the evaluation undertaken, Thirty Percent of Parcels Alternative is the environmentally superior alternative. This is the environmentally superior project alternative because it would have a less intense commercial cannabis cultivation footprint throughout the County compared to the proposed project. However, the limited number of allowed permits would substantially hinder the County’s objective of providing a legal and regulated process for commercial cannabis cultivation in the County.

Table 6-3: Comparison of Impacts of Project Alternatives

EIR Section	Alternative					
	Proposed Project Level of Impact	No Project	No Groundwater Cultivation	30 Percent of Parcels Cultivation	Cultivation Allowed in RA Zones	No Permanent Structures in Designated Farmland
4.1 – Aesthetics	Less Than Significant	+	+	+	-	+
4.2 – Agricultural Resources	Significant & Unavoidable (and Cumulative)	+	+	+	-	+
4.3 – Air Quality and Greenhouse Gasses	Significant & Unavoidable (and Cumulative)	+	+	+	-	-
4.4 – Biological Resources	Significant & Unavoidable (and Cumulative)	+	=	+	-	-
4.5 – Cultural and Tribal Resources	Less Than Significant	+	+	+	-	=
4.6 – Geology and Soils	Less Than Significant	+	+	+	-	=
4.7 – Hazards and Hazardous Materials	Less Than Significant	+	+	+	-	+
4.8 – Hydrology and Water Quality	Significant and Unavoidable	+	+	+	-	+
4.9 – Land Use and Planning	Less Than Significant	+	=	=	-	=
4.10- Mineral Resources	Less Than Significant	+	=	=	=	=
4.11 – Noise	Less Than Significant	+	=/+	+	=/-	+
4.12 – Population and Housing	Less Than Significant	+	=	+	=	=
4.13 – Public Services and Fiscal	Less Than Significant	+	=	+	=	=
4.14 – Recreation	Less Than Significant	+	=	+	=	=
4.15 – Traffic and Circulation	Less Than Significant	+	+	+	=/-	=/+
4.16 – Utilities and Service Systems	Less Than Significant	+	=/+	+	=/-	=/+
Attainment of Project Objectives	Meets all of the Project Objectives	Meets none of the Project Objectives	Meets Project Objectives, but limits number of permits	Meets Project Objectives, substantially limits number of permits	Meets Project Objectives	Meets Project Objectives
+: Impacts better/less than those of the proposed project. =: Impacts same as those of the proposed project. -: Impacts worse than those of the proposed project. =/+: Impacts equal to or slightly improved than those of the proposed project. =/-: Impacts equal to or slightly worse than those of the proposed project.						

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8.0 ORGANIZATIONS AND PERSONS CONSULTED

The below entities were either notified or contacted directly to ask for or directly receive consultation on their applicable area of expertise in respect to this proposed project. This may not be an all-inclusive list. In addition, the distribution list for the Notice of Preparation (NOP) is provided in Appendix A while the distribution list for the Draft Program Environmental Impact Report (EIR) is provided in the pages following the title page at the beginning of this EIR.

FEDERAL AGENCIES

U.S. Army Corps of Engineers

U.S. Fish and Wildlife Service

STATE AGENCIES

California Air Resources Board

California Highway Patrol

Caltrans District 3

Department of Fish and Wildlife Region 2

Department of Food and Agriculture

Department of Forestry and Fire Protection

Department of Parks and Recreation

Department of Pesticide Regulation

Native American Heritage Commission

Regional Water Quality Control Board – Central Valley Region

Resources Agency

REGIONAL AND LOCAL

Nevada Irrigation District

Northern Sierra Air Quality Management District

Nevada County Department of Agriculture

Nevada County Building Department

Nevada County Department of Code Compliance

Nevada County Department of Environmental Health

Nevada County Department of Farm Advisor

Nevada County Department of Public Works

Nevada County Planning Department

Nevada County Sheriff's Department
Pacific Gas & Electric Company
Waste Management

NATIVE AMERICAN CONSULTATION

Susanville Indian Rancheria
Tsi Akim Maidu
United Auburn Indian Community of the Auburn Rancheria
Washoe Tribe of Nevada and California

In addition, in accordance with Assembly Bill (AB) 52 and the California Tribal Consultation guidelines, the appropriate native groups were provided copies of the NOP on August 10, 2018. In addition, the County has sent five (5) AB 52 letters to tribal contacts that have requested consultation. As of the publishing of this EIR, no comment letters have been received with respect to the proposed project's potential impacts on Native American places, features, and objects.

9.0 LIST OF PREPARERS

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10.0 COMMONLY USED ACRONYMS AND ABBREVIATIONS

A

AB.....	Assembly Bill
ACM.....	Asbestos-Containing Material
ACP.....	Annual Cannabis Permit
ADAM.....	Aerometric Data Analysis and Measurement System
ADT.....	Average Daily Trips
ADT.....	Average Daily Traffic
ADP.....	Administrative Development Permit
ADWF.....	Average Dry-Weather Flow
AE.....	Exclusive Agriculture
AG.....	General Agriculture
ALUCP.....	Airport Land Use Compatibility Plan
amsl.....	Above mean sea level
AP.....	Annual Permit
APN.....	Assessor’s Parcel Number
APS.....	Alternative Planning Strategy
ASCE.....	American Society of Civil Engineers
ATCM.....	Airborne Toxic Control Measures
AWS.....	All Way Stop

B

Basin.....	Mountain Counties Air Basin
BAU.....	Business As Usual

bgs Below Ground Surface
BLM Bureau of Land Management
BMP Best Management Practice
BOD Biochemical Oxygen Demand
Board..... Nevada County Board of Supervisors
BP Business Park
BRHS..... Bear River High School

C

C1 Neighborhood Commercial
C2 Community Commercial
C3 Service Commercial
C₂F₆..... Hexafluoroethane
CAAQS California Ambient Air Quality Standards
CAG Community Advisory Group
CAL FIRE California Department of Forestry and Fire Protection
Cal/EPA..... California Environmental Protection Agency
CalEEMod California Emissions Estimator Model
Caltrans California Department of Transportation
CARB..... California Air Resources Board
CAT Climate Action Team
CBC..... California Building Code
CC Community Commercial
CCSD..... Clear Creek School District
CCR..... California Code of Regulations
CDA..... Community Development Agency

CDFA.....	California Department of Food and Agriculture
CDFW	California Department of Food and Agriculture
CDFG.....	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CDO	Cease and Desist Order
CDOC	California Department of Conservation
CDOF	California Department of Finance
CE	California Endangered
CEC.....	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA.....	Comprehensive Response Compensation and Liability Act
CESA	California Endangered Species Act
CF ₄	Tetrafluoromethane
CFC	Chlorofluorocarbon
CFP	California Fully Protected
CFR	Code of Federal Regulations
CH.....	Highway Commercial
CH ₄	Methane
CHP.....	California Highway Patrol
CHWMP	County Hazardous Waste Management Plan
City	City of Grass Valley
CIWMB	California Integrated Waste Management Board
CLUP.....	Comprehensive Land Use Plan
CNDDDB.....	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CPSD.....	Chicago Park School District

CSA	Controlled Substances Act
CNPS.....	California Native Plant Society
CO.....	Carbon Monoxide
CO ₂	Carbon Dioxide
CO ₂ eq	Carbon Dioxide Equivalent
COD	Chemical Oxygen Demand
Cortese List.....	State of California Hazardous Waste and Substances Site List
County	Nevada County
County General Plan	Nevada County General Plan
CPUC.....	California Public Utilities Commission
CR	California Rare
CRHR	California Register of Historical Resources
CSC	California Species of Concern
CT	California Threatened
CTR	California Toxics Rule
CUA	Compassionate Use Act
CUP.....	Conditional Use Permit
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
CWHR	California Wildlife Habitat Relationships
CWIB.....	California Workforce Investment Board

D

dB	Decibel
dba.....	A-weighted Decibel
dbh	Diameter at Breast Height

DEA..... Drug Enforcement Administration
DEH..... Department of Environmental Health
DEIR..... Draft Environmental Impact Report
DMA 2000 Disaster Mitigation Act of 2000
DO Dissolved Oxygen
DOF..... Department of Finance
DOSH Division of Occupational Safety and Health
DOT Department of Transportation
DTSC..... Department of Toxic Substance Control
du/acre..... Dwelling Unit per Acre

E

EAC..... Early Action Compact
EB Eastbound
EDU Equivalent Dwelling Unit
EIR Environmental Impact Report
ELI..... Extremely Low Income
EPA..... United States Environmental Protection Agency
ESA Environmentally Sensitive Area

F

FAA..... Federal Aviation Administration
FBI Federal Bureau of Investigation
FCAA..... Federal Clean Air Act
FE..... Federal Endangered

FEMA Federal Emergency Management Area
FESA..... Federal Endangered Species Act
FHWA Federal Highway Administration
FIDR Facilities Improvement Design Report
FIRM Flood Insurance Rate Map
FMMP Farmland Mapping and Monitoring Program
FP..... Federal Proposed Species
FR Forest Reserve
FRA Federal Responsibility Area
FT..... Federal Threatened
FTA Federal Transit Administration

G

GCJC Green Collar Jobs Council
General Permit General Construction Activity Stormwater Permit
General Plan..... Nevada County General Plan
General Plan EIR..... Nevada County General Plan Environmental Impact Report
GHG Greenhouse Gas
GVTIF Grass Valley Traffic Impact Fee
GVFD Grass Valley Fire Department
GVPD Grass Valley Police Department
GVSD Grass Valley School District
GWP Global Warming Potential

H

- H₂O Water Vapor
- HCD Housing and Community Development
- HCAP Higgins Corner Area Plan
- HCFC..... Hydrochlorofluorocarbon
- HCM Highway Capacity Manual
- HCP..... Habitat Conservation Plan
- HFC..... Hydrofluorocarbon
- HFPD..... Higgins Fire Protection District
- Higgins Area Higgins Corner – Lake of the Pines Village Center
- HMR Hazardous Materials Regulations
- HP Historic Preservation
- HPLV..... High-Pressure-Low-Volume
- HSC..... Health and Safety Code
- HWCL..... Hazardous Waste Control Law

I

- I-80 Interstate 80
- IBC International Building Code
- IDR..... Interim Development Reserve
- IDR-SP..... Interim Development Reserve – Site Performance
- IPCC Intergovernmental Panel on Climate Change
- ISO Insurance Services Office
- ITE..... Institute of Transportation Engineers

K

km Kilometer

L

LAFCO Local Agency Formation Commission

LRWQCB Lahontan Regional Water Quality Control Board

LBP Lead-Based Paint

LCFS Low Carbon Fuel Standard

L_{dn} Day/Night Average Sound Level

L_{eq} Equivalent Sound Level

L_{max} Maximum Sound Level

L_{min} Minimum Sound Level

LEO Law Enforcement Officer

LOS Level of Service

LPG Liquefied Petroleum Gas

LRA Local Responsibility Area

LRAP Loma Rica Drive Industrial Area Plan

LTMF Local Traffic Mitigation Fee

LUST Leaking Underground Storage Tanks

M

M1 Light Industrial

M2 Heavy Industrial

MAUCRSA Medicinal and Adult-Use Cannabis Regulation and Safety Act

MBTA Migratory Bird Treaty Act

ME Mineral Extraction

MEP	Maximum Extent Practicable
Measure W.....	Urgency Ordinance 2405
MCRSA.....	Medical Cannabis Regulation and Safety Act
MH.....	Mobile Home Parks
MMCO.....	Medical Cannabis Cultivation Ordinance
MMP.....	Mitigation Monitoring Program
MMRSA	Medical Marijuana Regulation and Safety Act
mgd	Million Gallons per Day
mm	Millimeter
MMRP	Mitigation Monitoring and Reporting Program
mpg	Miles Per Gallon
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
msl.....	Mean Sea Level
MT	Metric Tons
MUTCD.....	Manual on Uniform Traffic Control Devices

N

N/A.....	Not Applicable
N ₂ O.....	Nitrous Oxide
NA.....	Not Applicable
NAAQS.....	National Ambient Air Quality Standards
NAHC.....	Native American Heritage Commission
NB.....	Northbound
NCFD	Nevada City Fire Department
NCCFD	Nevada County Consolidated Fire District

NCCO	Nevada County Commercial Cannabis Cultivation Ordinance
NCGP	Nevada County General Plan
NCSD	Nevada City School District
NCTC.....	Nevada County Transportation Commission
County.....	Nevada County
NFIP	National Flood Insurance Program
NFS	National Forest System
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic and Safety Administration
NID	Nevada Irrigation District
NIH	National Institute of Health
NJUHSD	Nevada Joint Union High School District
NM	Not Measured
NO ₂	Nitrogen Dioxide
NOA.....	Naturally Occurring Asbestos
NOC	Notice of Completion
NOP	Notice of Preparation
NO _x	Nitrogen Oxides
NPDES.....	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NPS.....	National Park Service
NRCS.....	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSAQMD	Northern Sierra Air Quality Management District
NSJAP	North San Juan Area Plan
NSJFPD	North San Juan Fire Protection District

NSNFVP Northern Sierra Nevada Foothills Vegetation Project

NUHS Nevada Union High School

O

O₃..... Ozone

OEHHA..... State Office of Environmental Health Hazard Assessment

OES Office of Emergency Services

OP Office Professional

OPR..... Office of Planning and Research

OP-SC-SP Office Professional – Scenic Corridor Combining District – Site Performance

OS Open Space

OSHA Occupational Safety and Health Administration

P

Pb Lead

PCFPD..... Pearldale Chicago Park Fire Protection District

PCT Pacific Crest Trail

PD Planned Development

PFC Perfluorocarbon

PG&E Pacific Gas and Electric

PHD Public Health Department

PM₁₀ Particulate Matter 10 microns in diameter or less

PM_{2.5}..... Particulate Matter 2.5 microns in diameter or less

ppb Parts Per Billion

ppm Parts Per Million

ppt.....	Parts Per Trillion
PPV.....	Peak Particle Velocity
PRC.....	Public Resources Code
PRUSD.....	Pleasant Ridge Union School District
PSAA.....	Potential Snow Avalanche Area
PST.....	Pacific Standard Time
PVAP.....	Penn Valley Village Center Area Plan
PVFPD.....	Penn Valley Fire Protection District
PVSD.....	Pleasant Valley School District
PVUSD.....	Penn Valley Union School District
PV-WWTP.....	Penn Valley Wastewater Treatment Plant

R

R1.....	Single-Family
R2.....	Medium Density
R3.....	High Density
RA.....	Residential Agriculture
RCRA.....	Resource Conservation and Recovery Act
RH.....	Regional Housing Need
RH.....	Relative Humidity
RHNA.....	Regional Housing Need Allocation
ROG.....	Reactive Organic Gas
RPS.....	Renewable Portfolio Standard
RRFD.....	Rough and Ready Fire Department
RSSD.....	Ready Springs School District
RTMF.....	Regional Traffic Mitigation Fee

T

TAZ	Traffic Analysis Zone
TFPD	Truckee Fire Protection District
TNF	Tahoe National Forest
TKN.....	Total Kjeldahl Nitrogen
TMDL.....	Total Maximum Daily Load
TOC.....	Total Organic Carbon
TRSD.....	Twin Ridges School District
TPD.....	Truckee Police Department
TPZ.....	Timberland Production Zone

U

U.S.	United States
U.S.C.....	U.S. Code
USDOJ.....	United States Department of Justice
U.S. EPA.....	United States Environmental Protection Agency
UHD	Urban High Density
UHSD	Union Hill School District
UMD.....	Urban Medium Density
USACE.....	United States Army Corps of Engineers
USF	Urban Single-Family Residential
USFS	United States Forest Service
USFWS.....	United States Fish and Wildlife Service
USGS.....	United States Geological Survey

UV-B Ultraviolet Rays

UWMP Urban Water Management Plan

V

V/C Volume to Capacity

VELB Valley Elderberry Long Beetle

VMT Vehicle Miles Traveled

VOC Volatile Organic Compound

W

WB Westbound

WSA Water Supply Assessment

WTP Water Treatment Plant

WWTP Wastewater Treatment Plant

X

X Subdivision Limitation

Y

yr Year

Z

Zoning Ordinance Nevada County Zoning Ordinance

Numbered

401 Permit.....Regional Water Quality Certification