



**COUNTY OF NEVADA
COMMUNITY DEVELOPMENT AGENCY
ENVIRONMENTAL HEALTH DEPARTMENT**

950 MAIDU AVENUE, SUITE 170, P.O. Box 599002 NEVADA CITY,
CA 95959-8617
(530) 265-1222 www.mynevadacounty.com

TO: All Interested Parties, Environmental Health
FROM: Randall Yun, Land Use Program Manager
DATE: June 22, 2021
RE: Well Yield Testing Guidelines.

To all interested parties, the following will help clarify the procedure for well yield testing in Nevada County for individual water supply systems. At this time, a current well yield test less than one year old showing an adequate amount of water is required to get a building permit released for construction. This would include a primary structure and an additional dwelling unit. All well requirements shall follow the current Land Use and Development Code Chapter X Well Ordinance.

See Sec. L-X 1.5 for Minimum Well Yield: If the source of the individual water system is a well or spring, then there shall be flow of not less than one (1) gallon per minute per service connection. Individual wells may be combined to provide the minimum flow required.

Sec. L-X 1.6 for Determination of Yield; The determination of yield shall be by a licensed well driller, licensed pump installer, registered engineering geologist or registered environmental health specialist.

- A. "The procedure for testing the yield of wells for an individual water supply system with yields of less than three (3) gallons per minute shall be to draw down the water in the well until the water level stabilizes. The well shall then be pumped continually for a minimum of four (4) hours or longer, if needed to produce a minimum of **seven hundred and twenty (720) gallons of water** as registered by an accurate meter or other approved method". An example would be a 2.5 GPM well yield test would take 4 hours and 48 minutes to produce exactly 720 total gallons (2.5 GPM X 288 minutes = 720 gallons). If during the well yield test, the well yield dropped to say 2.0 GPM then the well yield test would need to start over at that time and continue the yield test to produce the 720 gallons at the newly measured rate of 2.0 GPM (2 GPM X 360 minutes = 720 gallons) an additional 6 hours. Your report should chart the well yield in 10 or 15 minute intervals. EH wants to see the draw down and the time when the stabilized rate is

obtained. Continue to chart your readings and time intervals until a minimum of 720 gallons is pumped at the stabilized rate. Submit your well yield report with the time interval chart to EH for review and approval.

SEC. L-X 1.6 Determining the Yield:

- (B) “The procedure for testing the yield of wells for an individual water supply with yields of three (3) gallons per minute or more shall be in accordance with the standards specified in Bulletin 74-81 of the Department of Water Resources and its supplements or by an alternate method approved by the enforcement agency”. Nevada County Department of Environmental Health is the designated enforcement agency by the Department of Water Resources. The approved procedure for determining the well yield for individual water supply with yields of three (3) GPM or greater is to follow the procedure for the low producing well yield above. Chart your time intervals and yield rates. Draw down the water level in the well until the water level stabilizes. **Pump the well at the stabilized rate until seven hundred and twenty gallons (720) is produced.** Once the 720 gallon amount is produced at the stabilized rate, you can stop the pump test. The pump test for wells producing greater than three GPM will take less than 4 hours. A three GPM well yield test will take exactly four hours once the stabilized rate is achieved (3 GPM X 240 minutes = 720 gallons). If suction is lost or the GPM changes, you will need to readjust the pump and start the yield test over. Continue to chart the time intervals and yield. Submit your well yield report with the time interval chart to EH for review and approval.

“Stabilized Rate” or “Stabilized Water level”— typically when the amount of water pumped out of the well equals the amount of water entering the well. The well yield test would start when this water level is determined. In high production wells, you may not be able to determine the stabilized rate because your pump cannot produce that high of a production rate. In this case, do your best to determine the stabilized water level and follow the well yield procedure as above.