Water on the Mountain

Do you know where the water comes from when you turn on the tap or take a shower? Unlike the City, where water is brought in from rivers hundreds of miles away, Palomar's water comes from underground storage of rainwater. Rain falling in the forest percolates through the soil to natural underground reservoirs in cracks and crevices in the rock, called aquifers. Wells drilled deep below the water table pump out this water for our use, like many straws drinking from the same cup. The amount of water in the cup is controlled by the amount of rain- and snowfall (precipitation) we get every year, and the amount of water we pump. While this is an oversimplification of a complex system, you get the idea.

To help understand the complexity of the groundwater system <u>everyone on the mountain shares</u>, the PMPO is collecting well water level data from anyone with a well that is willing to provide it. This data will be matched with precipitation data to try to understand the sensitivity of the system to drought conditions, and to evaluate new projects relying on groundwater



that may impact our community water supply. We are requesting that anyone who has a well provide monthly or weekly level measurements to the PMPO contact person Rob Hawk (<u>tecdelver@cox.net</u> or 619-287-4992). We would also like to get a GPS location of your well (Rob will to do that so contact him if you have any questions).

How to measure your well water level: water levels should be measured at least an hour (preferably more) after pumping stops. Never measure during pumping because the level will be artificially low. Be sure to measure from the same point on the casing, and record the depth, date, and time. Data can be submitted in paper or electronic form.

Use a water level probe if possible. However, if you're handy you can make one out of a weighted fabric measuring tape and speaker wire or uniaxial cable, by taping the wire to the tape with the bare ends exposed at the "zero" end. The other end should be hooked to a battery –light circuit (such as a flashlight) that causes the circuit to close when the bare ends touch the water. Lower the tape until the light glows; be sure the wire isn't touching the metal well casing. If you have any questions, please call Rob Hawk or a PMPO Board member.