

PV Water drills new monitoring wells

By [Samantha Clark](#), *Santa Cruz Sentinel*

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WATSONVILLE >> Water officials are drilling new monitoring wells in downtown Watsonville to better understand the area's groundwater basin, which is stressed due to overdraft, saltwater intrusion and the drought.

Workers are wrapping up the noisy month-long project of drilling up to 930 feet into the ground in the Pajaro Valley Water Management Agency's parking lot, an ideal location because it's far from other pumping wells and in the center of the region. The new downtown wells cost \$175,000.

"We will be able to track changes in groundwater levels and quality, and it'll help us evaluate all our water projects," said Brian Lockwood, senior hydrologist for PV Water.

With four new wells that penetrate each of the four aquifers layered deeper and deeper underneath the surface, water managers can more accurately measure water levels and identify trends over long periods of time. Lockwood said it's important to dig the wells now to see where water levels are during the historic drought.

The data essentially will help paint pictures like the before-and-after images of California's empty lakes, which show the same startling hallmarks: stark slopes, past water levels exposed and cracked dry beds that are normally deep underwater.

"Aquifers are like lakes underground, but we can't see them," Lockwood said.

That data also will help PV Water determine whether its major water projects are working by tracking their progress. The agency has monitoring wells near the coast to measure saltwater intrusion and needs additional wells as seawater creeps farther inland, Lockwood said.

As part of Gov. Jerry Brown's emergency drought response efforts, PV Water secured \$4.58 million in grants sooner than expected, speeding up projects to combat the area's water problems.

Earlier this month, PV Water and the city of Watsonville [broke ground](#) on a new 1.5 million gallon storage tank and two new pipelines, which will increase the amount of recycled water available to about 35 growers on more than 50 coastal ranches.

"All the work that we're doing is to bring the groundwater basin in balance, and what we need to do is have very accurate measurements to demonstrate how close we've gotten to our goals," said Mary Bannister, PV Water general manager.

First-time state groundwater regulations signed last November require that basins are brought back into balance by 2040. The Pajaro Valley's basin needs an average of 12,100

acre feet of water returning back into it each year to make up for its deficit, according to the U.S. Geological Survey.

An acre foot of water is roughly 326,000 gallons — enough to irrigate a half-acre of strawberries or supply water to two families of four for a year.

During the last 10 years, PV water has been using an average of 55,000 acre feet of water. During the drought, that number has grown to about 60,000 acre feet of water.



PV Water hydrologist Brian Lockwood lays out core samples from four different aquifers from the wells being drilled in downtown Watsonville. (Dan Coyro -- Santa Cruz Sentinel)



PV Water hydrologist Brian Lockwood checks out the wells being drilled in downtown Watsonville. (Dan Coyro -- Santa Cruz Sentinel)