

Santa Cruz County water experts take cue from solar industry

PV Water launches groundwater rebate program

By Samantha Clark, Santa Cruz Sentinel

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WATSONVILLE >> Water customers in the Pajaro Valley have a chance to receive rebates for helping replenish parched aquifers.

“Net metering” allows consumers to benefit financially from the extra solar energy their rooftop systems may generate that’s given to the grid. It’s one incentive that’s been a big boost for the solar industry while helping fight climate change.

Now water experts working in the Pajaro Valley hope to take the concept of net metering and use it to address the region’s and the state’s groundwater problems with a new pilot program. Californians have been guzzling water from aquifers faster than rainfall could replenish them for decades. This unprecedented drought exacerbated the problem.

But it also forced the state to take action. A landmark law signed in 2014 requires water agencies to bring basins back into balance by 2040.

To help get there, the Pajaro Valley Water Management Agency teamed up with UC Santa Cruz and the Resource Conservation District of Santa Cruz County to try “recharge net metering.” The partners will offer financial incentives to landowners who participate in the program, which they hope can also be a model for other parts of the state.

“When you have a really intense rain, a lot of the water goes into the river and goes out into the ocean,” said UC Santa Cruz hydrologist Andrew Fisher, who’s leading the research team. “So if you can find places where a lot of runoff is being generated, where water could be infiltrated into the ground, then those might be good locations to install projects.”

He and the project partners plan to work with about 10 willing landowners to dig ditches, or other systems specific to each property, that capture runoff and carry it to basins where it can refill the aquifers below.

A formula will be used to calculate the rebate, which will be 50 percent of the cost that PV Water charges to customers for pumping water.

There will be meetings later this year at which interested landowners can request to have their properties evaluated for inclusion in the pilot program, which is schedule to begin in October. The initial program will be limited in scope, as each project requires funding for design, construction, instrumentation and evaluation, PV Water stated.

“Over the next five years, we hope the projects will generate 1,000 acre feet per year,” Fisher said.

That would be a decent dent. The Pajaro Valley needs an average of 12,100 acre feet of water returning back into it each year, according to the U.S. Geological Survey. An acre foot of water is 326,000 gallons — enough to irrigate a half-acre of strawberries or to supply water to two families of four for a year.

The program is expensive, however, so the partners are actively seeking grants and working out the kinks that might be barriers for other water agencies that could adopt a similar program, said Brian Lockwood, senior hydrologist with PV Water.

“The three of us working together have the ability to see this become a successful project,” he said. “But the key ingredient is the landowner.”

Recharge Net Metering Program

The Pajaro Valley Water Management Agency’s Recharge Net Metering pilot program will offer rebates to landowners who work with a team that will install systems on their properties that capture storm runoff and use the water to replenish underlying aquifers. For more information: pvwma.dst.ca.us.