

CropSWAP Growing as Winning Water Saving Strategy for Southern California Agricultural Community



An idea born during the 2012-'16 drought at a single ACWA-member agency thrives today as a regional strategy that successfully incentivizes growers to save water by raising lower-water-use crops.

Earlier this year, Rancho California Water District's (Rancho Water) CropSWAP program expanded to five neighboring water agencies in Riverside and San Diego counties. CropSWAP — the SWAP standing for Sustainable Water for Agricultural Production — relies on state and federal grant funding to pay farmers to switch to more water thrifty crops.

A popular example is converting from avocados, which when farmed in quantity can require up to six acre-feet per year, to wine grapes, which can grow on as little as two acre-feet per year. A participating

farmer can receive up to \$22,500 per acre in return. But the program also includes paying farmers to switch from citrus and row crops to less water-intensive olives, cut flowers and passion fruit, to name a few examples.

Since 2017, 326 acres have been converted under CropSWAP with a documented savings of 800 acre-feet per year in imported water, which in itself is saving about \$1 million each year in costs.

Drought Inspired

Rancho Water's CropSWAP program is a classic example of adversity being the mother of invention. In this case, Temecula area growers were being heavily impacted by a series of hardships all at once during 2016.

As with farmers throughout the state, they struggled to raise profitable crops that year as severe drought constantly threatened water supply reliability. Many of them were growing avocado trees and keeping them productive depended on increasingly expensive imported water. Even then, when they raised a successful crop, increasing foreign competition cut into profits while factors such as high salinity levels in the water supply made the future even more uncertain.

The result for many was a cost to produce crops that outweighed the profit.

Rancho Water Board members Bill Wilson and Danny Martin (Martin passed away in 2020) owned vineyards and were aware of other growers' mounting challenges. They were also aware of grants aimed at



Opposite page: Growers served by Rancho Water and five neighboring ACWA member agencies can receive incentives through the CropSWAP program to switch from crops such as avocados, shown in this grove from a 2020 photo, to lower-water using crops like grapes. *Photo courtesy of Rancho Water*

Left: Workers at Wilson Creek Winery harvest grapes, which require a third of the water required by avocados. *Photo courtesy of Wilson Creek Winery*

strengthening water efficiency and local drought resiliency.

“These guys were really struggling,” Wilson recalled. “What if we can incentivize them with grants to rip out the avocados and other higher water using crops, and we’d help them pay for the replanting? They would lose a year or so of production, but they wouldn’t go so far in the negative that they’d never be able to catch back up. And people did it. We got the grant, and we fulfilled the grant.”

CropSWAP began in 2016 after Rancho Water was awarded \$3 million in grant funding from the Department of Water Resources and the U.S. Bureau of Reclamation. Rancho Water contributed another \$1 million and started actively promoting the CropSWAP program through digital advertising, a brochure sent to all new agricultural customers, and presentations about the program to growers during an annual meeting of farm managers and at local agricultural group meetings.

Word spread, growers signed up and today Rancho Water’s CropSWAP program is expanding through the Fallbrook Public Utility District, Rainbow and Valley Center municipal water districts and the

cities of Escondido and Oceanside — all ACWA member agencies.

Bigger Program, More Covered

Avocado rootstock replacement is by far the most popular among CropSWAP program applicants, accounting for a third of project types, according to Giovanni Rodriguez, the Water Use Efficiency Specialist at Rancho Water. However, the program now goes beyond comprehensive crop replacements to save water and also incentivizes irrigation efficiency upgrades and a variety of sustainable agriculture upgrades, such as using soil moisture sensors, nutrient management, mulching and utilizing cover crops.

Incentives can range from up to \$100 an acre for using cover crops, to \$4,500 an acre for crop rejuvenation and up to the \$22,500 an acre incentive cited earlier for switching from avocados to wine grapes.

“We not only incentivize switching crops, but we incentivize using best practices for water efficient irrigation,” said Justin Haessly, Water Use Efficiency and Grants Manager for Rancho Water, adding that Rancho Water hosted an international delegation interested in CropSWAP.

Wilson describes CropSWAP as a kind of agricultural equivalent to turf replacement, and like turf replacement, state, federal and regional agencies such as the Metropolitan Water District of Southern California, which supplies imported water to Rancho Water, are themselves incentivized to make grants available — especially if results in water savings can be proved.

“The more ROI that you can prove and show, the more you qualify for more grant money. And that’s what keeps the program moving forward in terms of being able to fund incentives,” Wilson said.

There is currently \$1.7 million that’s been reserved for regional CropSWAP projects, Rodriguez said.

“There are currently no concrete plans for further expansion at this time,” Rodriguez said. “However, the program has been a hit and word has spread about the benefits of CropSWAP throughout the agricultural world. We are hoping that this can lead to further expansion and growth.”

For more information about the Regional CropSWAP program, visit **RegionalCropSWAP.com**. ♦