Farmer & Rancher Climate Leaders

State Water Efficiency & Enhancement Program Participants

SWEEP, administered by the California Department of Food & Agriculture (CDFA), provides grants to farmers and ranchers for irrigation management improvements that reduce greenhouse gas emissions and save water.

More info is available on CDFA's website: www.cdfa.ca.gov/oefi/sweep/

WINNER'S CIRCLE WINERY

Sebastopol, Sonoma County Award Amount: \$25,954



"In this region,
it's a big deal to figure out
the best time to start irrigation;
this equipment allows us to delay the
first irrigation of the summer laterweeks or months later—resulting in
significant irrigation savings."

- Mark Greenspan, Advanced Viticulture

"If you don't know what's happening below the ground, you're only getting half the information," says Mark Greenspan, President of Advanced Viticulture, a sustainability-focused wine-growing consulting and vineyard management company serving Sonoma and Napa Counties. Mark explains that overirrigation decreases grape quality. By thoughtfully managing

irrigation protocols particularly while establishing vineyards, Mark and his team encourage farmers' vines to root more extensively. The strategy yields vines that are more resilient in the face of drought and precipitation uncertainty, which leads to better health of the plants and vineyard as a whole. With funds from the State Water Efficiency and Enhancement Program (SWEEP), the team installed critical irrigation management equipment into 24 acres of establishing vineyards at Winner's Circle Winery. Installing weather and temperature stations has given them access to data to inform the timing of their irrigation decisions. Using a wireless soil moisture probe system, they are able to closely monitor the bottom of the root zone about four feet deep. By cross-referencing the sets of water-related data from above and below ground, the viticulturists can make wise water use decisions, cutting water and energy costs while boosting vineyard health. Mark explains that the more efficient irrigation systems may also translate to less nitrogen inputs in the future because the vines are more effective and efficient at sourcing both water and nitrogen from the soil.

The California Climate & Agriculture Network (CalCAN) is a statewide coalition that advances state and federal policy to realize the powerful climate solutions offered by sustainable and organic agriculture.