

DAN BALBAS AND REITER BERRY FARMS

Dan Balbas has been farming berries in the Pajaro Valley for the past 13 years for Reiter Berry Farms, producing conventional and organic strawberries, blackberries, and raspberries that are sold under the Driscoll's label. After graduating from Cal Poly, Dan worked in the wine industry where he met a wine grape grower, who also worked for Driscoll's, who inspired Dan to become a farmer. At the time not many farmers were utilizing biological pest control, and Dan was impressed by Driscoll's onsite green house where they raise predatory (persimilous) mites for the purpose managing the two-spotted spider mite. Although Dan comes from a family who ran a small-scale walnut farm and cattle operation, it wasn't until Dan observed Driscoll's cutting edge and comprehensive approach to farming that Dan knew he wanted to become involved in agriculture as a Driscoll's grower.



WATER CONSERVATION IN THE PAJARO VALLEY

Farmers in the Pajaro Valley are facing declining groundwater supplies that jeopardize the future of crop production. Along the Central Coast many acres of farmland lie at or below sea level and overdraft of the aquifer has allowed seawater to move further inland contributing to saline groundwater unsuitable for irrigation. Water conservation and Managed Aquifer Recharge (MAR) are two tactics the community has implemented to help sustain the aquifer. MAR is the intentional recharge to aquifers for subsequent recovery or environmental benefit. Recharge replenishes the aquifer; and higher groundwater levels in coastal areas slow the penetration of saltwater into the aquifer.



Dan Balbas and The Bokariza Managed Aquifer Recharge (MAR) Team

BEGINNINGS

The Community Water Dialogue formed in 2010 to provide a forum for a diverse group of Pajaro Valley stakeholders to learn about critical local water issues, discuss viable solutions and foster collaborative action within the community. Driscoll's is a stakeholder and leader within the Community Water Dialogue and it was the Driscoll's Sustainability Manager that first approached Mr. Balbas about the concept of creating Managed Aquifer Recharge sites throughout the Pajaro Valley. Together, Driscoll's, Dan Balbas, and the Resource Conservation District of Santa Cruz County (RCD) co-chaired a CWD MAR team. Dan farms a piece of land known as the Bokariza ranch and proposed that a portion of the land be converted into a recharge site, where water that runs off of the Santa Cruz Mountains could potentially be re-directed and infiltrated into the aquifer.

"The first and most important thing we can do as growers is to learn to live with less water. This requires a change in mindset and adoption of helpful new technologies. Our focus is on water conservation over any other strategy."

- Dan Balbas

The Bokariza landowners were interested in the importance of addressing water scarcity throughout the region and shortly thereafter the Bokariza ranch was tested for infiltration suitability. Dr. Andy Fisher from University of California Santa Cruz and (UCSC) and Dr. Marc Los Huertos of California State University, Monterey Bay (CSUMB) conducted percolation tests to ensure adequate infiltration rates. The MAR team reached out to the Natural Resources Conservation Service (NRCS) for assistance with surveying, the calculation of drainage area and project design. RCD used their permit coordination program to streamline the permitting process for the project and Driscoll's and Reiter Berry Farms funded the construction and also installed a culvert to guide additional water to the basin. Currently UCSC and CSUMB are analyzing data to determine the amount of water that infiltrated from Bokariza into the aquifer for winter 2013.

IMPLEMENTATION AND MANAGEMENT

In addition to MAR, Dan's water saving farming practices include mulching to reduce the evaporation of water, drip irrigation and soil moisture monitoring for improved irrigation efficiency. Utilizing irrigation and soil tensiometer technology takes the guesswork out of irrigating by informing the grower of the soil moisture to improve water usage while tracking all irrigation data. In addition to striving for increased irrigation efficiency, Dan also strategically implements fallowing on some of his ranches. Each year Dan sets aside a portion of his land for both temporary and permanent fallowing to provide valuable wildlife habitat and reduce water use. The Santa Cruz Land Trust and the Borina Foundation have been key partners in these efforts, providing rent reductions and financial incentives for fallowing land.

FOSTERING SUCCESS

Dan practices environmental stewardship by protecting the valuable agricultural lands that he relies upon for farming. He has partnered on a variety of projects, including the Bokariza recharge basin, to proactively address his water resource concerns. As Bokariza was the first privately funded recharge basin in the Pajaro Valley, Dan Balbas and the project partners hope Bokariza will serve as an inspiration for additional MAR projects. Dan Balbas' exemplary leadership highlights the Pajaro Valley community effort to take important steps towards preserving agriculture while maintaining their water resources.

PROJECT PARTNERS

The Community Water Dialogue (CWD),
Natural Resources Conservation Service (NRCS),
Resource Conservation District of Santa Cruz County (RCDSCC), Dr. Marc Los Huertos (California State University, Monterey Bay), Dr. Andy Fisher (University of California Santa Cruz), Driscoll's, Reiter Berry Farms, Santa Cruz Land Trust, Estelle Bassor and Nick Drobac and family at the Bokariza ranch and The Borina Foundation