

AWQA OVERVIEW

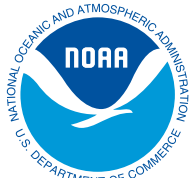
The Central Coast of California abounds in natural resources. Its rugged coastline and rolling valleys support a diverse, \$5 Billion dollar agricultural industry that produces more than 200 crops. The region is also home to the Monterey Bay National Marine Sanctuary – the largest national marine sanctuary in the United States. As land use intensifies in this rich but fragile landscape, the protection of water resources grows increasingly urgent. Farmers are up against a number of challenges to stay viable, comply with regulations, and protect natural resources. In response to these challenges, farmers and agencies on the Central Coast have formed the Agriculture Water Quality Alliance (AWQA).

AWQA is a unique regional partnership that brings together farmers, ranchers, resource conservation agencies, researchers, and agricultural and environmental organizations to protect the health of Sanctuary waters and the productivity of Central Coast farmlands. Since 1999, AWQA partners have worked together to reduce the runoff of sediments, nutrients, and pesticides from agricultural and rural lands through education and outreach, technical and financial assistance, research and monitoring, permit streamlining, and watershed coordination. AWQA's regional approach focuses on industry led initiatives and voluntary, collaborative solutions to tackling water quality problems.

From 2011-2013 AWQA has worked to serve a broad community of growers by expanding multi-cultural outreach programs. We continued to tackle the challenges of managing for food safety and natural resource conservation on farms through the Farm, Food Safety & Conservation Network. Record numbers of producers tapped into federal cost-share programs to implement conservation practices across the landscape. 2011-2013 has been a time of transition for AWQA, as we adapt to changing economic realities and evolving regulations. Throughout it all, Central Coast growers and ranchers have demonstrated a commitment to collaborative problem solving that is critical to the success of achieving AWQA's mission of protecting water quality and the productivity of farmlands in the watersheds of the Monterey Bay National Marine Sanctuary.



RESOURCE
CONSERVATION DISTRICT



Cover photo credits: NOAA – Monterey Bay National Marine Sanctuary.

AGRICULTURE WATER QUALITY ALLIANCE

AWQA

PROTECTING THE WATERS AND WATERSHEDS OF
THE MONTEREY BAY NATIONAL MARINE SANCTUARY



2011-2013 ACCOMPLISHMENTS



COMANAGING FOOD SAFETY

Co-Managing Food Safety & the Environment: On their farms, growers are active stewards of the land, protecting soil and water quality as well as supporting wildlife populations by preserving their habitat. At the same time, growers must ensure that their crops are free from contamination by fecal matter, which may introduce pathogens that can cause foodborne illnesses. Achieving food safety and conservation objectives while maintaining a strong bottom line is extremely challenging for the produce industry at all levels of the supply chain.

The Farm Food Safety and Conservation Network (FFSCN) brought together 100 people for both the fifth and sixth annual Food Safety and Water Quality Co-management Forums in Watsonville, held on April 18, 2012 and August 21, 2013. Strategies to ensure food safety while protecting natural resources was the subject of lively discussion among conservation and food safety professionals, auditors, federal and state agencies, environmental groups, scientists and members of the agricultural industry. In both 2012 & 2013, a panel of industry leaders discussed the evolving food safety guidelines and policy. In 2012, scientists led a discussion on the fate and transport of pathogens in the farm landscape and how science can be applied to assess risk and inform co-management decisions in the field. In 2013, scientists discussed the importance of simultaneously managing several different agricultural pollutants: pathogens, nutrients and pesticides. Both years farm tours followed panel discussions, allowing for engaging discussions among growers, agencies and food safety professionals regarding the issues associated with co-managing for food safety and environmental quality given the contrasting demands of different buyers and markets.



Field tour gathering and introduction to conservation practices at ALBA's Triple M Ranch. Photo credit: Pam Krone-Davis.

Hank Giclas, senior vice president for strategic planning, science and technology at Western Growers said, "Despite the challenges, growers are committed to providing safe food while ensuring conservation of vital natural resources and these forums are important settings in which a free flow of ideas and experiences are exchanged to further both objectives."

COMANAGING FOOD SAFETY

Co-management takes into consideration that practices designed to conserve natural resources may impact food safety, and food safety practices may impact natural resources. For example, produce buyers often prefer bare ground around crops because they allow food safety managers to observe tracks indicating animal intrusion in the crop, but vegetation buffers may be more effective at reducing movement of pollutants to surface waters. A co-management approach might minimize the use of bare-ground buffers near waterways to reduce adverse impacts on water quality management. Food safety professionals with co-management savvy will also recognize that vegetated buffers between areas frequented by wildlife, such as rangeland, can minimize the movement of pathogens in surface waters flowing toward the crop, particularly on sloped terrain.



Vegetated buffers near fields can help remove nutrients, and attract beneficial insects. Adjacent trees house raptors for rodent control. Photo credit: Kay Joy Barge

"Co-management requires networking among stakeholders to understand different types of risks in the produce industry," explained Mary Bianchi, UC Cooperative Extension advisor in San Luis Obispo & Santa Barbara counties.

"We had a very diverse group attending the Forum, which matches the goal of the Farm Food Safety and Conservation Network: To bring together diverse stakeholders in the hopes of building collaborative relationships around the topic of co-management," said Greg Komar, then of Growers Express. "This forum, in my opinion, was very successful at doing just that."

For more information on the FFSCN and Annual Co-Management Forum, visit www.awqa.org/ag/FFSCN.html or contact Mary Bianchi at mlbianchi@ucanr.edu, 805-781-5949 or Pam Krone-Davis at pam.krone-davis@noaa.gov, 831-647-4238.

MANA Manejo Agrícola con Nuevos Amigos

In 2010 the Resource Conservation District of Santa Cruz County (RCDSCC) was awarded funding from the US Department of Agriculture's Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers Program. For the past three years, this program, called Manejo Agrícola con Nuevos Amigos (MANA) has been supporting the RCDSCC initiative to provide accessible education and technical assistance to Spanish speaking growers, focusing on water and soil conservation practices.



“Trabajar con el RCD fue una buen experiencia, porque cosas que no sabes tú, ellos te lo enseñan y te ayudan en los proyectos de conservación. Ellos tienen personal preparado.” —Rogelio Fernandez, Grower.

“Working with the RCD was a great experience. They can teach you things you don't know about and help you implement conservation projects. They have well prepared staff to do so.”

Photo credit RCD Santa Cruz County.

MANA Manejo Agrícola con Nuevos Amigos

The MANA program has three main goals. First, the program seeks to foster new relationships between RCD, Natural Resources Conservation Service (NRCS), and Spanish speaking growers. Second, MANA aims to reduce barriers farmers may have for putting conservation measures into practice due to language or economic factors. The third goal of the MANA program is to improve economic outcomes for Spanish speaking growers, by designing programs that improve access to markets and help implement cost-saving conservation measures. The RCD has accomplished these goals by reaching out to over 350 Spanish speaking farmers and developing on-going working relationships with approximately 40 growers and managers in Santa Cruz County. The MANA program has developed tools and resources specifically targeted to Spanish speaking farmers in Santa Cruz and Monterey Counties, offering assistance on: erosion control, farm water quality regulatory compliance, irrigation and nutrient management. It has also assisted growers with conservation planning and practice cost-sharing and implementation through NRCS' Environmental Quality Incentives Program (EQIP). MANA staff also supported partners' workshops by providing Spanish language translation and interpretation and helping recruit Spanish speaking participants.

The program was designed after conducting a comprehensive needs assessment — a process of interviewing and communicating with a wide range of Spanish speaking growers to determine what services they might consider useful or beneficial. The results from this assessment identified four priority areas where Spanish speaking growers required additional assistance and support: 1) increase resource efficiency in production (irrigation efficiency, nutrient management, erosion control and pest management); 2) improve understanding of and compliance with agricultural regulations (specifically the rules and regulations surrounding Central Coast RWQCB's "Ag Waiver"); 3) improve growers' access to markets; and 4) support growers on strategic business planning, finance and record keeping. Based on the needs assessment, the RCDSCC developed five technical assistance workshops, including a bilingual option, outlining the RCD and NRCS' technical assistance services related to water-risk and a workshop on winter erosion control.

Over the last two years, the RCDSCC has made great strides in reaching out and providing assistance to Spanish speaking growers in the community, and the hope is to expand the program services throughout the Central Coast region. During this period RCDSCC also applied for and received a USDA grant to start a farmer's market, specifically targeted at providing new markets for local Spanish speaking growers.

For more information on MANA contact Sacha Lozano, Program Manager, at slozano@rcdsantacruz.org , 831-464-2950 ext. 11.

AMERICA'S GREAT OUTDOORS

Farmers and Ranchers are Stewards of the Great Outdoors. President Obama launched the America's Great Outdoors (AGO) Initiative in April 2010 to develop a 21st Century approach to conservation, designed by and accomplished in partnership with the American people. This initiative turns to communities for local conservation solutions. In 2011, the USDA selected the Monterey Bay region as one of three priority areas in the nation to implement the AGO. This selection was based largely on the history of collaboration in the region demonstrated through the AWQA partnership. The purpose of the Monterey Bay AGO Initiative is to identify, support and highlight collaborations that enhance water quality and other natural resources in the watersheds that flow to the Monterey Bay National Marine Sanctuary.



Jim Kjelgaard (NRCS engineer) and Manuel Alvarez Jr. discuss farm management practices. Photo credit Robert LaFluer.

On June 17, 2011 over 100 representatives of diverse interest groups came together to kick-off the initiative. Community members provided input on the importance of the working landscape and outdoor recreational resources around the Monterey Bay, and identified critical needs and partnership opportunities to benefit resources and communities. This input was synthesized into a Work Plan for the Monterey Bay America's Great Outdoor's (MBAGO) Initiative (<http://www.awqa.org/involved/mbago.html>)

AMERICA'S GREAT OUTDOORS

Since 2011, the NRCS has advanced the MBAGO Initiative by securing additional federal cost-share dollars to fund relevant conservation work in the Monterey Bay region. In fiscal years 2011 and 2012, NRCS allocated more than \$2.6 million in additional Environmental Quality Incentives Program (EQIP) dollars to support conservation practices through 98 contracts with farmers and ranchers in the region. Planned conservation practices include water-saving micro-irrigation systems and irrigation water management, watering facilities for livestock, pipelines, fencing, brush management, and nutrient management.

"This is a win for both our innovative agriculture and our spectacular environment we enjoy on the Central Coast because it will reduce nutrients, pathogens and sediment loads entering Monterey Bay." – Congressman Sam Farr.



Stock Watering System with a solar powered pump to fill a small tank which then gravity feeds to a trough. Photo credit John Warner.

Farmers and ranchers are investing more time and money than ever on making conservation improvements on their land. Record levels of producers are tapping into federal cost-share programs. In addition to the MBAGO from 2011-2013 the NRCS invested over \$4 million in 181 contracts to treat over 78,000 acres across the watersheds flow into the Monterey Bay National Marine Sanctuary. This was matched by a similar investment of resources from the participating landowners.

For more information on MBAGO or EQIP contact Robert LaFluer, NRCS Monterey Co. at 831-424-1036 x101, Robert.LaFleur@ca.usda.gov.

GULLY STABILIZATION

The Fiscalini Ranch Preserve is located on California's unique central coast, just south of the ecologically rich Monterey Bay National Marine Sanctuary. The rare coastal environment of the Ranch safeguards nine habitat communities, including sensitive habitats and an array of special-status species. However, alterations to the natural environment have caused major erosion on the Ranch. A gully running through a main section of the Ranch was eroding at a rate of 6 feet per year washing silt, debris and other pollutants into the Monterey Bay National Marine Sanctuary.

Partnering with Sustainable Conservation, Cambria Community Services District, Friends of the Fiscalini Ranch Preserve, Natural Resource Conservation Service and US Fish and Wildlife Service, the Upper Salinas-Las Tablas Resource Conservation District recently completed a project at the Ranch to stabilize the eroding gully. The project consisted of installation of a series of log check dams along the gully to arrest erosion and allow re-introduced native vegetation to permanently stabilize the site. The check dams are an innovative technique designed to gradually decay and provide nutrients to the soil over time, enhancing re-vegetation and stabilization of the site.



BEFORE



AFTER

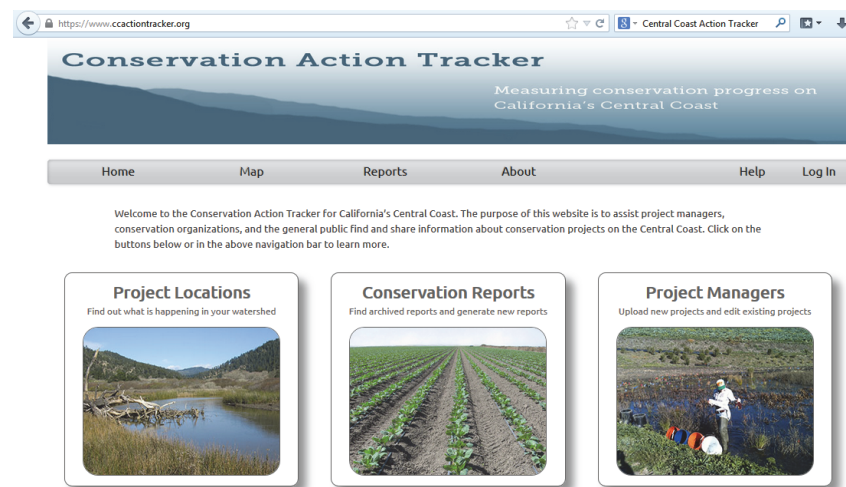
Before and after photos demonstrate the effectiveness of the gully stabilization practices and show the erosion problem abated. Photo Credit: Jillian Cole

This project has accomplished our goals and has been a great learning experience for those that manage and volunteer on the Ranch. The tools and methods used on this project will be implemented on other parts of the Preserve." -Carlos Mendoza, Cambria Community Services District

For more information, contact: The Upper Salinas-Las Tablas RCD, 805-434-0396 x 5, info@us-ltrcd.org

CONSERVATION ACTION TRACKER

The Central Coast Conservation Action Tracker (CCAT) website is a new web-based tool for entering and reviewing information related to conservation projects on the Central Coast. The purpose of this website is to assist project managers, conservation organizations, and the general public to track and share information about conservation projects on the Central Coast. CCAT is designed to include photos, maps, project descriptions and will aid in generating reports on conservation projects. Website: www.ccactiontracker.org:



An interactive CCAT map allows users to reference projects by using keywords. Projects can be tracked by watershed, county, MBNMS watersheds, or the entire Central Coast. The viewing audience for projects is determined by the organization entering the data, and can be constrained to that organization, CCAT partners or the general public. Organizations can add data to CCAT once they have been assigned a user name and password. As a new website, not many programs are currently viewable; however through time the site will provide insight into the rich array of conservation projects undertaken by diverse groups on the Central Coast.

How will REGIONAL project data tracking be useful? It will:

- Aid in strategic planning and adaptive management
- Assist with reporting and accountability
- Disseminate information never before available
- Promote programs and successful practices

For more information contact: Sierra Ryan at 831-771-4463, sryan@mlml.calstate.edu or Pam Krone-Davis at 831-647-4238, pam.krone-davis@noaa.gov.

SERVING CANTONESE SPEAKING GROWERS



Linda Chu translates for other members of the Bay Area Chrysanthemum Growers Association at an Outreach Workshop. Photo Credit Susan Meyer.

Ethnic Chinese growers operate about 75 small vegetable farms in Santa Clara County. These growers seek access to water quality education and technical assistance programs that are culturally appropriate and offered in their native language. In response to this need, the Loma-Prieta Resource Conservation District partnered with the Hollister branch of the NRCS, UC Cooperative Extension, and the Bay Area Chrysanthemum Growers Association to provide conservation outreach and assistance to Cantonese-speaking growers. During the fall and winter of 2011-2012 they hosted four workshops interpreted in Cantonese. About 70 growers attended the meetings, which focused on conserving water and minimizing the leaching nutrients. Topics included nutrient management, roof runoff structures, irrigation design for greenhouses, nitrate testing, and interpreting soil test results. Growers also learned about technical and financial assistance programs. Following the workshops, 60 growers decided to work with the NRCS to improve their irrigation system and better manage nutrient applications. Participating growers kept records of their nutrient applications and irrigation events.

The NRCS provided funds through EQIP to help offset the costs of sampling their soil, water, and compost annually over 3 years. A soil conservationist then helped

SERVING CANTONESE SPEAKING GROWERS

growers interpret the laboratory results of these samples to inform their irrigation and nutrient management decisions.

“Working with NRCS has helped me a lot,” said Bob Kuang, a Santa Clara County farmer and EQIP participant in 2012. “NRCS funding has helped me to improve my irrigation system, which is saving water and energy. They have also showed me how to use less fertilizer.”

“This program is a good example of how providing a financial incentive, together with the right technical information, and with resource people willing to work with new clients can really make a difference. We needed all three to build trust and to encourage the farmers to try new ways of doing things.” Athena Pratt, NRCS District Conservationist, Santa Clara County.



Bruce Quintana-Jones, NRCS Engineering Technician, discusses irrigation system modifications with growers. Photo credit Susan Meyer

For more information contact Athena Pratt at Athena.Pratt@ca.usda.gov, 831-637-4360 x110 or Susan Meyer at susanm@lomaprietarcd.org.

LEARN MORE ABOUT AWQA

Website: www.awqa.org

Find local contact information for technical and financial assistance, education and research at: <http://www.awqa.org/farmers/workwith.html>

Calendar of events and continuing education: <http://www.awqa.org/involved/workshops.php>