RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY

YEAR IN REVIEW 2020

Letter from RCDMC Board Vice President, Rebecca King

Despite a year of ever-changing drama and difficulties, the work of the RCD of Monterey County proceeded at a steady pace. Staff were able to conduct most office business from their homes and field work was able to continue with some adjustments. This was our seventh successful year of work on the Salinas River with the Arundo Control Program and Stream Maintenance Program in coordination with landowners and farmers along the river. Our staff were also out in the field educating farmers on irrigation efficiency and healthy soil practices, as well as providing engineering expertise on stormwater management projects.

In the late summer and fall, Monterey County was hit especially hard by the Carmel, River and Dolan Fires- which together burned approximately 180,000 acres. As a result of the devastating fires in Monterey County, 14 people were injured and over 100 structures were destroyed. RCDMC staff aided landowners in the aftermath of the fires through post-fire site assessments and erosion control recommendations. The site assessments were made in partnership with USDA Natural Resources Conservation Service's (NRCS) Emergency Watershed Program. In the coming year we will continue to work on forest health and fire mitigation projects through funding from the State Coastal Conservancy, CAL FIRE and continued NRCS funding to support various fire fuels reduction work throughout the County.

Though COVID-19, social and political unrest, economic uncertainty and devastating wildfires all contributed to making 2020 a most challenging year, I believe for many of us these challenges led to a better appreciation for the importance of personal relationships and cooperation, and for the value of conservation and restoration projects to prevent and mitigate future natural disasters.

Sincerely, *Rebecca King*

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Monterey County was hit especially hard by the Carmel, River and Dolan Fires in 2020. RCDMC assisted NRCS in offering site assessment and erosion prevention recommendations to fire-impacted landowners.

The Mission of the Resource Conservation District of Monterey County is to conserve and improve our natural resources, integrating the public interest for environmental protection with the needs of agricultural and urban users. We seek to achieve the sustainable management of natural resources including soil, water, vegetation and wildlife throughout Monterey County.

Who's Who

RCDMC Directors
Benny Jefferson, President
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John Doud, Director
Jennifer Clarke, Secretary
Jynel Gularte, Director
Ignacio Mendoza, Associate Director
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Joanna Devers
Emily Gardner
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RCDMC Staff
Paul Robins, Executive Director
Maggie Errea, Finance Manager
Emily Zefferman, Ecologist
Megan Barker, Environmental Scientist
Laura Murphy, Soil Scientist
Adrienne Carter, Civil Engineer
Natalie Solares, Ag Technical Specialist
Jamie Tuitele-Lewis, Forest Health Coordinator
Brandt Bates, Stream Maintenance Coordinator
Jasmine Ruvalcaba, Field Manager

Natural Resources Conservation Service
Ariel DeLara, District Conservationist
John Warner, Soil Conservationist (Retired)
Allison Tokunaga, Soil Conservationist
Javier Flores, Ag Engineer
Jennifer Nowark, Programs Specialist
Chelsea Rutt, Soil Conservationist (Student Trainee)

2020 Special Events

March 5 Monterey Farm Day

RCDMC presented a demo to third graders at Farm Day, which was held at the Monterey Fairgrounds in March just prior to the first COVID shelter-in-place order. Together with our NRCS partners, we taught over 200 children about erosion by presenting a rainfall simulator demonstration. NRCS mascot Sammy Soil also made a special guest appearance to add to the day's excitement. Farm Day is offered to all Monterey County third graders and provides them with the opportunity to take a field trip to learn about the world of agriculture up-close and in-person. The event is hosted each year by the local agricultural industry through the organization Monterey County Ag Education and a dedicated team of volunteers.

NRCS and RCDMC staff at Monterey Farm Day (pre-COVID). From left to right: NRCS Soil Conservationist Allison Tokunaga, RCDMC Stream Maintenance Program Coordinator Brandt Bates (as Sammy Soil), RCDMC Environmental Scientist Megan Barker, NRCS Soil Conservationist Drew Mather.

October 15 Speak-Off Contest

The 2020 Annual RCDMC Speak Off Contest was held virtually by Zoom and addressed the topic, "How should Resource Conservation Districts serve and engage the entire community in conservation work?" The Speak Off Contest winner was Gonzales High School Junior Jesus Gonzales. Jesus is part of the Center for Land-Based Learning's FARMS Advanced Program. He went on to represent Monterey County at the state competition in November (also on Zoom) where he placed third. Our guest judges for the RCDMC contest were Hannah Wallis (Monterey County Agricultural Commissioner's Office), Emily Gardner (Salinas Valley Basin Groundwater Sustainability Agency), Ignacio Mendoza (California Strawberry Commission) and James Booth (USDA Natural Resources Conservation Service).

December 7 FARMS Virtual Field Day

RCDMC partnered with NRCS to host a virtual field day for the Center for Land-Based Learning's FARMS Leadership Program. In past years, we have hosted high school students in our Annual Land Judging Contest, however, due to COVID restrictions and the magnitude of local wildfires this year, we went "virtual" with a fire-related theme. Through an online lesson, we taught the students about how RCDMC and NRCS have helped wildfire-impacted Monterey County residents by conducting post-fire assessments. The lesson offered students a glimpse into what a post-fire site assessment entails, including evaluating a site for safety concerns, how soil is impacted by wildfire, how to observe a landscape to assess burn severity, and erosion considerations. Students also participated in a hands-on activity made up of six different soil

At the FARMS Virtual Field Day, High scool students learned how to identify areas of high burn severity that could cause concerning post-fire erosion conditions after winter rains. Photo credit: Steve Auten

The Salinas River Arundo Control Program treated 143 new acres and retreated 198 previously-treated acres of Arundo in 2020. Photo Credit: Cammy Chabre

types where they had to determine if the soil was hydrophobic or hydrophilic. Under intense fire, soils can become hydrophobic and repel water, potentially increasing runoff during storms in burned areas. Watch the virtual field day

Programs and Results

Salinas River Arundo Control

The 2020 Salinas River Arundo Control Program had another successful year battling the non-native plant that chokes up the already constricted river corridor. In addition to spraying resprouts on 198 acres of *Arundo donax* treated in previous years, the program started work on another 143 acres of previously-untreated Arundo by mowing 117 acres and treating 25 acres with foliar herbicide.

Each year the program targets "new" Arundo stands and touches up or retreats the acres compounded from previous years' work. At most "old" sites, the percent cover of retreated Arundo sprouts hovers around 1-5%. Work activities occurred between Soledad and King City along 25.9 river miles working one and sometimes both sides of the Salinas river. This plant has such tenacity that at one site it grew 4 feet in the 2 months following a mowing treatment!

2020 was particularly exciting due to the wildlife monitoring work done by Pathways for Wildlife. Our partners Tanya Diamond and Ahiga Snyder with Pathways for Wildlife are monitoring the effects of arundo removal on wildlife movement. We have seen sign of badgers (burrows and digs) along the river corridor, but this year we had our first photographic proof of their presence! This year we captured a photo of a badger with a trail cam and we had our biologists' first visual observation of a burrowing owl along the Salinas River. We are very happy to hear this news and are optimistic that the Arundo abatement is creating better habitat for the Salinas River riparian ecosystem. We look forward to continuing our efforts to improve the Salinas River corridor.

Contact Emily Zefferman for information

Numbers from 2020

44	Spanish-language Irrigation Workshop Attendees
128	Technical Assistance Consultations & Site Assessments (nutrient management, irrigation, erosion control, post-fire)
442	Acres of Arundo treated & mowed along Salinas River
25	Stream Maintenance Program channels managed
17	FARMS Virtual Field Day Students

Pathways for Wildlife captured an image of a badger in a Salinas River arundo treatment area for the first time in 2020.

Salinas River Stream Maintenance

RCDMC managed the seventh season of the landowner and farmer-based Salinas River Stream Maintenance Program (SMP). In 2020, 25 'secondary channels' were either maintained or established as new maintenance areas. Work included 130 acres of secondary channel maintenance, 101 acres of Arundo control for mitigation, and 8 acres of sediment management. We have been glad to see continued growth in landowner program participation along the 95 mile stretch of Salinas River, and more is needed to ensure better flood protection in the valley. A new CA Integrated Regional Water Management Program grant will provide support to RCDMC and the Salinas River Management Unit Association for further expansion of the SMP over the next few years.

Amid challenges presented by the COVD-19 pandemic, RCDMC had to push through a permitting agency logjam in order for work to proceed, and the associated delays limited the acreage of arundo that could be treated in fall 2020. As a result of this process, RCDMC staff have improved communication with wildlife agency staff to assure more streamlined annual work approvals for future seasons.

Contact Brandt Bates for information

Looking southwest at a maintenance area along Salinas River. The Stream Maintenance Program creates secondary channels that mitigate flood risk by mowing vegetation and arundo.

Winter Cover Crop and Organic Amendments

In 2020, RCDMC assisted two Monterey County farmers through the winter erosion prevention cover crop seed reimbursement program, offered in partnership with the Monterey County Agricultural Commissioner's Office, to protect erodible hillside farmlands. We received interest from many farmers in neighboring counties as well, and RCDMC staff coordinated with partners in those counties (such as RCD of Santa Cruz County) to support them. RCDMC did not have funds

Winter furrow crops planted among strawberry rows are an effective technique for reducing runoff and erosion from winter storms.

available this year for organic amendments, but compost application remained among the most popular healthy soil practices for farmers in our region.

Contact Laura Murphy for information

CDFA Technical Assistance for Healthy Soils

Soil Scientist Laura Murphy supported nine farmers with project development for applications to the CDFA Healthy Soils Program in spring 2020. Although circumstances associated with the pandemic derailed the application process for those farmers, Laura and other RCDMC staff continued to provide Technical Assistance and guidance towards other funding sources to them and 35 other farmers planning to implement healthy soil practices.

Contact Laura Murphy for information

ALBA Small Farmers and Spanish-language Irrigation Efficiency Workshops

Soil Scientist Laura Murphy and Ag Technical Specialist Natalie Solares provided technical training to beginning farmers at the Ag Land-Based Training Association (ALBA) throughout the year. Laura and Natalie provided a number of virtual Spanish-language workshops to ALBA farmers about irrigation distribution uniformity, evapotranspiration-based irrigation scheduling, and tensiometer installations. They also led a Distribution Uniformity Workshop for 11 attendees in a joint program between Hartnell College and ALBA that provides continuing education for berry foremen, supervisors, and managers. Due to increased farmer interest in utilizing tensiometers for irrigation scheduling, RCDMC also produced a 'Use of Tensiometers' guide, now available on the RCDMC website in English and Spanish.

Contact Laura Murphy for information

RCDMC offered Distribution Uniformity workshops in Spanish and English at ALBA in early 2020 (pre-pandemic).

Engineering Services

RCDMC Civil Engineer Adrienne Carter continued her work around the county with private land managers either through private contracts, NRCS Environmental Quality Incentives Program (EQIP), or State Coastal Conservancy funds to develop stormwater drainage and erosion control solutions like underground pipes, vegetated swales, sediment basins and bank stabilization. Additionally, she and other staff laid the groundwork for a variety of new projects to assist with improving stormwater management and mitigating accelerated erosion issues. Several of these projects are also designed to incorporate wildlife habitat improvements.

Forest Health and Post-Fire Assessments

In 2020, the year began with new grants being awarded including a $204,670 State Coastal Conservancy grant for Forest Health and a $4.82 million CAL FIRE 'Fire Prevention' grant for the Los Padres Strategic Community Fuelbreak Collaborative Project (LPSCFC). The Forest Health grant is supporting regional collaboration among other Central Coast RCDs and forest management partners, and the RCD is leading the CAL FIRE grant with local, state and federal partners to install 1,735 acres of fuel breaks between Big Sur and Carmel Valley. The United States Forest Service and the local NRCS office were the recipients of a USDA Joint Chief's Landscape Restoration Partnership grant, which allotted another $2.57 million to the two agencies to

Central Coast Prescribed Burn Association analyzing a prescribed fire site near Carmel Valley in September 2020.

fund restoration and fire fuels reduction work in the Big Sur area of Monterey County, with coordination assistance from the RCD. In addition, Forest Health Coordinator Jamie Tuitele-Lewis assisted with the writing and planning for a $379,785 grant that was awarded to the University of California Cooperative Extension of San Benito County to kick off a local Prescribed Burn Association in San Benito, Monterey and Santa Cruz counties.

This year was also an unprecedented year for wildfires in Monterey County and throughout California. Over 4,177,855 acres burned across the state in 2020. There were three major wildfires in Monterey County- the River, Carmel and Dolan Fires, all of which occurred in the late summer and continued burning into the fall. These fires caused a fair amount of damage to structures in the County as well as significantly impacting local ecosystems. To help landowners impacted by the fires, RCDMC Engineer Adrienne Carter and Jamie Tuitele-Lewis worked closely with NRCS to conduct site assessments through the Emergency Watershed Program. The post-fire assessments provided fire-

Burned area on eastern flank of the Sierra de Salinas, October 2020. Photo taken by Jamie Tuitele-Lewis during a post-fire consultation.

impacted landowners with recommendations for erosion control measures. The engineers and forest health professionals provided landowners a summary of the state-generated post-fire risk assessment ('WERT' or 'BAER') reports that identified potential risks in and around the burned areas. Fortunately, the majority of site visits resulted in simple recommendations. For sites where the risk was higher, the NRCS worked with the handful of landowners to install protective measures to reduce the potential impacts from increased muddy runoff or small debris flows that could be triggered by very high-intensity rainfall. (Where employed, the protective measures were proven effective in the late January 2021 storms.) Since most of the burned areas in Monterey County had a low-to-moderate soil burn severity, the seeds in the soil and the burned plants that still have healthy root systems will likely sprout to provide green regrowth in our hills in 2021.

Contact Jamie Tuitele-Lewis for information

Monarch Working Group

With help from partners at CARCD, NRCS and the Xerces Society, RCDMC Ecologist Emily Zefferman and Soil Scientist Laura Murphy initiated the Monterey Regional Monarch Alliance, a group of diverse regional partners all interested in the vision "for monarch butterflies to thrive in the Monterey region as a result of having abundant, high-quality habitat, and for all people in the region to appreciate, understand, and support the protection of monarch butterflies." Between late September and December 2020 the Alliance met three times and developed a Mission, Vision, Goals and Strategies, and five subcommittees. There are currently 29 members participating in the Alliance who look forward to productive work together in 2021.

RCDMC and NRCS promote the use of diverse native flowering habitat, and milkweed where appropriate, in hedgerows and other habitat plantings. Such habitats benefit farmers by attracting and retaining pollinators and crop pest predators, and help sustain native insect populations including the Monarch butterfly. Through a grant offered by the National Center for Appropriate Technology in 2020, Laura coordinated with 12 small-scale farmers from the region who will receive Monarch-supportive native plants to establish more than 11,000 feet of hedgerows in the coming year.

Fish Passage Project Permitting Assistance for Trout Unlimited and Landowners

RCDMC Environmental Scientist Megan Barker worked with Trout Unlimited to provide permitting assistance for three Carmel Valley Fish Passage Improvement Projects including the No Name Road Ford Replacement at San Clemente Rancho. Trout Unlimited and San Clemente Rancho implemented the construction of the project with funding from California State Coastal Conservancy and labor and machinery operation from San Clemente Rancho. The project included removal of an old concrete ford on San Clemente Creek, installation of a free spanning timber bridge, and restoration of 95 feet of channel bed. We were proud to be a part of this important project that will allow federally threatened steelhead to migrate into Carmel River's upper tributaries to spawn. This is the first of five such barrier removal projects to be implemented in the upper Carmel River watershed over the coming years.

The No Name Road Ford Replacement and Fish Passage Project will make it easier for steelhead to migrate further up into San Clemente Creek, an important tributary to the Carmel River.

Contact Megan Barker for information

What's New

New Associate Directors Marissa Ritter and Ignacio Mendoza Join RCDMC Board

RCDMC is very grateful to have Marissa Ritter and Ignacio Mendoza join our team with their respective experience in marketing and with the Spanish-speaking farming community. Ritter has over seven years working in the ag industry as a marketing professional, having worked for the past four years at Naturipe Farms and at the Grower-Shipper Association prior to that. Mendoza currently works as a field research specialist at the California Strawberry Commission, and is a Pest Control Advisor and a California Certified Organic Farmer working with his family's farming company.

Summary of Financial Statements (July 2019 to June 2020)

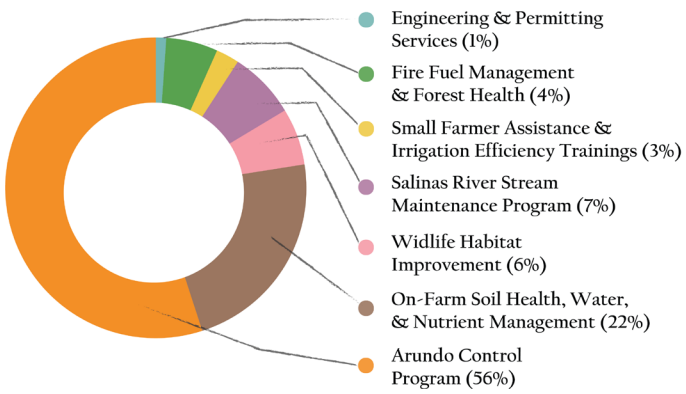
Despite the setbacks with COVID in the past year, RCDMC continued to build momentum for local and self-sustained funding as such efforts are essential for RCDMC's long term success. Locally-funded work included contracts with the County Ag Department and local farming companies to match state and federal grants for our Salinas River Arundo Program, a contract with the Resource Management Agency to match federal and state forestry and fire prevention funding, and private engineering and permit assistance contracts with area farms and non-profits. In 2020 we were able to establish a tax-deductible donation of stock program in partnership with the Community Foundation of Monterey County to increase the pathways by which community members can participate in supporting our important work.

As noted, donations to RCDMC are tax-deductible and very welcome, and can be targeted to support specific programs or purposes.
Donate

Expenses (per 2019-2020 audited reports)

Personnel	$ 812,418
Contract Services	$ 1,606,365
Office Expenses	$ 38,022
Project Permits	$ 5,606
Equipment & Field Supplies	$ 3,933
Vehicle & Travel	$ 16,584
Workshops, Meetings & Events	$ 2,614
Liability Insurance	$ 9,340
Total	**$ 2,494,882**

Income Sources (per 2019-2020 audited reports)

State grants	$1,743,125
Federal grants	$ 412,875
Local and Private Contracts	$ 326,554
Donations, Fundraising & Interest	$ 4,516
Total	**$ 2,487,070**

RCDMC Programs by Relative Budget