

**ANNUAL REPORT**

**July 1, 2010 – June 30, 2011**

**MOJAVE DESERT RESOURCE CONSERVATION DISTRICT**

**14393 Park Avenue, #200, VICTORVILLE, CA 92392**

*Meetings are held the first Wednesday of each month at 1:00 P.M. at the District Office located at  
14393 Park Ave., #200, Victorville, CA 92392*

**BOARD OF DIRECTORS**

President.....Chuck Bell  
Vice President.....J. Peter Lounsbury  
Secretary/Treasurer.....Neville Slade  
Director.....Paul Johnson  
Director..... Tom Irwin

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Associate Director.....Logan Olds

**DISTRICT STAFF**

District Coordinator.....Jackie Lindgren  
Assistant District Coordinator.....Dana Raponi  
Publications Coordinator..... Marie Sovitsky  
Project Technician .....Craig Bost  
ReLeaf Coordinator.....Cheryl Nagy

**TECHNICAL STAFF**

**USDA NATURAL RESOURCES CONSERVATION SERVICE**

District Conservationist.....Hugo Calvillo  
Area Resource Soil Scientist ..... Peter Fahnestock  
Area Range Specialist..... Dustin Detweiler  
Cluster Engineer..... Travis Godeaux  
Soil Survey Project Leader .....Carrie Ann Houdeshell  
Soil Scientist.....Paul Reinfleish  
Soil Scientist.....Stephen Roecker  
Soil Scientist.....Judith Ball  
Soil Scientist.....Emily Merik  
Soil Conservationist.....Veronica Lopez  
Soil Conservationist.....Cindy Montepagano



**MISSION STATEMENT: The Mojave Desert Resource Conservation District is committed to the development of a land stewardship ethic that promotes long-term sustainability of the region's rich and diverse natural resource heritage.**

### **NATURAL RESOURCE OBJECTIVES OF THE DISTRICT:**

- Provide resource management information to the community
- Promote the reduction of wind and water erosion
- Promote the proper utilization of our natural resources
- Promote water conservation
- Provide information for improved irrigation water management
- Demonstrate urban and agricultural practices that sustain and improve water quality and fish and wildlife habitat
- Work with the public and private sector toward land development practices that protect and enhance the region's natural resources and systems

### **TAMARISK/ARUNDO/RUSSIAN-OLIVE ERADICATION/CONTROL PROJECT**

Phase IV of our eradication project began October 28, 2010 and was completed November 5, 2010. During this time, 351 weed acres (approx. 700 full acres) were treated by our contractor (SWEAT). This work began in the Barstow area, beginning at the 15 Freeway and extending east to just past the Barstow Marine Base. NRCS determined in their amended "Evaluation of the Effects of Removing Invasive Plants from the Mojave River" study that removal could be done in the majority of this area. SWEAT was able to accomplish this by having 60 crew members on the ground doing the work. The methods used were foliar, basal bark, and cut stump.

Retreatments continued throughout this fiscal year with a 3<sup>rd</sup> retreatment being completed in Phase I, a 2<sup>nd</sup> retreatment in Phase II and a 1<sup>st</sup> retreatment in Phase III. We are finding that the target weeds are diminishing significantly with each retreatment. Staff and board President, Chuck Bell, retreated for the work area that the RCD is responsible for – approximately 35 weed acres from Bear Valley Rd. south to the San Bernardino National Forest. This is the 3<sup>rd</sup> retreatment for this area also.

Funding for the majority of this work was provided by an NRCS earmark via Mojave Water Agency (MWA) and funding directly from MWA. Funding from the CDFA Base Funding grant was used to retreat the RCDs work area.

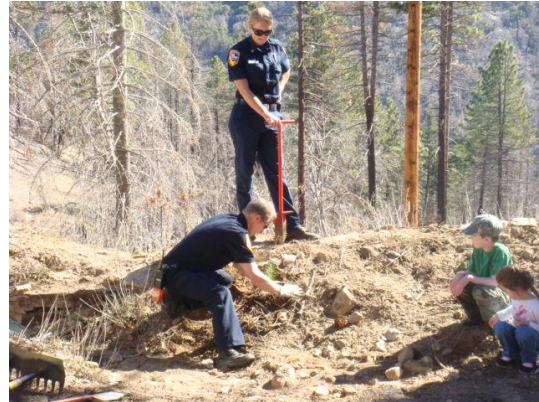
With the exception of a few acres located in the Barstow area, we have completed all the actual removal that can be done. We have had to leave some areas in place due to lack of landowner permissions and/or locations located in sand blow/erosion areas that NRCS has required us to leave in place. Certain portions of the eastern bank were also left in place to maintain bank stabilization. Retreatments will continue for the next 3-5 years to make sure all weeds stay eradicated and any new sprouts are taken care of before they go to seed. The majority of the funding for these retreatments will be provided by the Mojave Water Agency.

Benefits of this project are:

1. Implement the Mojave Basin Area Judgment (improve riparian habitats, maintain ground/surface water saturation at root zone, increase downstream flows).
2. Reduce evapo-transpiration of ground and surface waters (water conservation).
3. Reduce salt deposition in the riverbed (water quality).
4. Reduce wildfire potential.
5. Keep channels open – reduce debris damming and severity of flooding.

## **MOUNTAIN COMMUNITIES RELEAF**

At the close of the Releaf program's seventh season the District, under the leadership of Cheryl Nagy, continues to oversee the reforestation efforts in the San Bernardino Mountain area devastated by the bark beetle decimation and 2003 and 2007 Wildfires. Funding for each planting season has mainly been funded by grants received from American Forest. American Forests has again funded ReLeaf for the seventh season. CALFIRE (California Department of Forestry) also continues to play an important role in the project as technical advisors and hands on assistance. Approximately 60,000 seedlings were purchased from CALFIRE Magalia Nursery and planted during spring of 2011 in the San Bernardino Mountains, Riverside area and San Diego area affected by the 2007 wildfires. These seedlings were propagated at CALFIRE Magalia Nursery where the seeds have been previously collected in the burned areas as well as current cone crops.



Volunteers for this year's plantings were recruited through previous planting projects and media notifications. The ReLeaf volunteer database continues to hold at around 325 volunteers from current and previous planting seasons. Media coverage for the 2011 planting season consisted of news print and internet news. Volunteers traveled from all over Orange, Riverside, LA and San Bernardino Counties. Two volunteers joined us from the US Coast Guard Station in Venice Louisiana while home on leave to the mountain communities. In the San Bernardino Mountains alone over 45,000 seedlings were planted in a two week period – using volunteers and planting crews. We are still finding seedlings from our first season that are now 6 years old and approximately 4-5 feet high. We have gone back into several areas to re-evaluate the growth and success rate of this project.

The goal of this project is to educate the public and to create a mixed conifer/hardwood forest with all native species spaced in a fashion that provides for a healthy forest. Erosion control in these areas will protect the waterways and natural resources as well as the neighboring properties from runoff and sediments. This season we were able to plant near a running stream that feeds to the Mojave Desert. These plantings will also provide different types of food and cover for the variety of wildlife in the forest.

Composed of federal, state, regional and local agencies, as well as local stakeholders, this partnership includes, but is not limited to: CALFIRE California Department of Forestry and Fire Protection, USDA Natural Resources Conservation Services, American Forests Global ReLeaf, Sempra Energy, Actor – Matthew Modine, Inland Empire Resource Conservation District, Greater San Diego RCD, Windermere Real Estate, Arrowhead Lake Association, Mountain Rim FSC, Arrowhead Communities FSC, Big Bear Valley FSC, Running Springs Area Chamber of Commerce, Lake Arrowhead Community Service District, California ReLeaf, Crestline and Lake Arrowhead Municipal Advisory Committee, MAST, Southern California Edison, US Forest Service, and Mountain-Desert Resource Conservation and Development Council. A Statement of Cooperation has been completed and endorsed by all partners.

## **MOJAVE WEED MANAGEMENT AREA (MWMA)**

The Mojave WMA is coordinated by the District, which organizes and hosts quarterly meetings and oversees ongoing projects and outreach efforts. We are working with our partners on prevention and control of noxious/invasive weeds on both public and private lands in the Mojave Desert. San Bernardino County continues to work on the grant received through the California Department of Food and Agriculture (CDFA) eradicating two known infestations of Halogeton in the Mojave

WMA/San Bernardino County. One area is near Barstow and the second is the Shadow Valley area near Cima Road, midway between Baker and Stateline. By eradicating these infestations, the Mojave WMA will prevent the spread of Halogeton further in the Mojave National Preserve (NPS), Bureau of Land Management property (BLM), Caltrans highway roadsides and private property. This will protect the native plant communities within the Mojave WMA. Perennial Pepperweed will also be eradicated at a known site in Helendale with funding from this grant. Due to funding restraints, any future weed removal performed by the County will be spent strictly on the higher ranked invasive weeds.

The San Bernardino National Forest submitted and received funding from the California Department of Food and Agriculture (CDFA) base funding grant to remove 3 acres of Spanish broom on national forest system lands along State Highway 138 in the Silverwood Lake area. This project is part of a larger effort to control and reduce the spread of Spanish broom along 4 state highways utilized as evacuation routes on national forest system lands.

The District continued to receive funding from the California Department of Food and Agriculture Base funding grant for retreatment on 35 weed acres (1,704 full acres) of tamarisk and arundo. This area is located in the upper reaches of the Mojave River (headwaters to Bear Valley Rd.) The initial removal of these weeds (with funding through an MOU with Mojave Water Agency) took place in January 2008 by District staff, volunteers and Cal Fire Pilot Rock Conservation Crew. The District received funding from this grant for a 3<sup>rd</sup> retreatment in the fall of 2010.

The District was asked by the California Invasive Plant Council (CalIPC) to set up a meeting with key WMA partners for the statewide weed mapping effort on the USGS quad level. The meeting consisted of representatives from San Bernardino County Agriculture, Barstow Marine Corps Base, Mojave National Preserve, San Bernardino Forest Service and the Desert Managers Group. Information for 48 invasive species was collected quad by quad.

Unfortunately, all of the funding for the WMA Program has been eliminated from the CDFA budget as of June 30, 2011. This means there will be no further funding for Base or Supplemental grants. The current WMA year funding is unaffected (contracts already executed or pending for January 2, 2011-December 31, 2011).

We will continue to work with our partners on collaborative projects, and secure alternate funding to continue local weed control work.

### **CONSERVATION FIELD TRIALS**

The District is working with the NRCS Lockeford Plant Materials Center to conduct revegetation studies in riparian zones in the Mojave River. The two sites for this study are at the Lewis Center in Apple Valley and Victor Valley College in Victorville. The objective of these field trials are to determine the potential suitability and sustainability of applied revegetation strategies, technologies, and selected plant materials for site restoration/revegetation on riparian saltcedar infestation sites along the Mojave River. This study will emphasize: a) native species selection and adaptation; b) revegetation species response to seeding and planting techniques, including mechanical techniques for seedbed preparation; and c) augmentation of the soil moisture regime with polyacrylamide polymer and Zeolite columns.

The benefits derived from implementation of this study are twofold:

1. Environmental Education - Students and support staff on the Lewis Center's Mojave River Campus that prepare the study site, conduct the fieldwork, apply the methodology, collect and analyze data and draw conclusions, will all gain firsthand experience in how a rigorous, real-life, scientific investigation is carried out. The investigation will yield useful and significant

information that may have broad applications through the Mojave Desert and Pacific Southwest. With prior permission, students participating in this study will be able to use their experience and data for their use during school, district, county, state, and national science fair competitions. Students at VVC will see similar benefits as well and use this as a case study in the Sustainable Leadership Program.

2. Balancing Regional Conservation Goals - A number of natural resource management agencies and community organizations (NRCS, RCD, MWA, AWAC, Sierra Club, VVC, LCER) are charged/interested in health and sustainability of this watershed. These field trials will provide a unique opportunity/mechanism for the community of Victor Valley to collaborate to balance these needs and goals for a sustainable future, in special light of the Mojave River Adjudication.

Funding for this CFT is being made available through an NRCS grant and Partnership Funding through Mojave Water Agency.

## **DAIRY WORKSHOPS**

The District, in partnership with NRCS, has held three workshops to assist dairyman on Nutrient Management on a Confined Animal Feeding Operation. These workshops went into detail on how Nutrient Management is addressed in the Comprehensive Nutrient Management Plans (CNMP) that is offered through NRCS. The CNMP can help producers utilize their manure sources available for nutrient application and to reduce nitrate intrusion into surface and/or ground water. It will also help with the infrastructure and in obtaining management resources available to aid in delivery and monitoring of nutrient and irrigated water applications to the cropland (i.e., flow meters, pipeline, manure spreading, pond liners, etc). The Lahontan Regional Water Quality Control Board was present at two of these workshops to discuss ongoing regulations and what is to be expected. These workshops will continue over the next year to address other issues/concerns of the dairyman.



## **ALLIANCE for WATER AWARENESS and CONSERVATION**

The District remains an active participant in the Alliance for Water Awareness and Conservation (AWAC). This dynamic coalition of 25 regional organizations mission is to promote the efficient use of water and increase communities' awareness of conservation as an important tool to help ensure an adequate water supply.

The three specific goals of AWAC are:

- Educate the local community with the understanding of the importance of water conservation.
- Provide the local community with the tools to effectively reduce water consumption.
- Reduce regional water use by 10 percent gross per capita by 2010 and 15 percent by 2015 (5 percent in the Morongo Basin by 2015) to achieve a sustainable, reliable supply to meet regional water demands.

Current efforts are focused on reducing the large amount of water used for landscape irrigation in the High Desert. To this end, several public workshops have been held promoting everything from drip irrigation and design, to soils, plants and erosion conservation.

A calendar that features low water use plants is published annually to heighten the public's awareness of water efficient landscaping. These calendars are freely available to the public through AWAC members.

## **MITIGATION AND EASEMENTS**

The District remains actively engaged in providing mitigation/compensation and environmental credits for developers wanting to build in the San Bernardino County portion of the High Desert area.

Mitigation practices include the removal of tamarisk, arundo and Russian-olive in the Mojave River. To date, the District has 5 active contracts totaling 33 full acres. Five contracts have been fulfilled since the start of this program in 2006. The latest mitigation contracts are with So Cal Gas (2 acres), Terra-Gen Power (16 acres) and Cal Trans (12 acres). We have pending mitigation projects for San Bernardino County Flood Control and the City of Victorville. These projects will be for 5 years of retreatments, monitoring and trash removal.

### **MOJAVE DESERT SOIL SURVEYS**

The USDA's Natural Resource Conservation Service (NRCS) Victorville Soil Survey Office is currently doing field work across the Mojave Desert in three main areas: the private lands of San Bernardino County (in and around the towns of Johnson Valley, Yucca Valley, Joshua Tree and Twentynine Palms), Mojave National Preserve, and BLM lands near Desert Center and I-10. The following surveys have all field work completed and are in data compilation stage and/or manuscript development stage: Fort Mojave Indian Reservation, Chemehuevi Indian Reservation, Sandy Valley (near the NV border) and Joshua Tree National Park. The manuscript for the Joshua Tree National Park Soil Survey is planned to be released by NPS and NRCS at the beginning of 2012. It will be available for the public on NRCS's Web Soil Survey: <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>. Field work for Anza Borrego State Park Soil Survey continued this field season, and has been completed for the year. The remaining of the fiscal year will be spent compiling data and maps. Field work will start for that survey again in November of 2011.

### **CIMIS STATIONS**

The District continues to maintain two California Irrigation Management Information System (CIMIS) stations, one in Barstow and one in Victorville. This information is downloaded daily and converted to table format for various crop data. In order to make CIMIS data easily accessible, the district has established two hotline phone numbers and a webpage ([www.mdrcd.ca.gov](http://www.mdrcd.ca.gov)). Information provided on these phone lines assists not only agricultural producers but also urban landowners. Evapotranspiration data for alfalfa and turf grasses is updated Monday through Friday by district staff.



Funding for maintenance of these CIMIS stations is provided through a Memorandum of Understanding with Mojave Water Agency.



### **MOJAVE DESERT-MOUNTAIN RC&D**

The District continues to support and participate in the Mojave Desert-Mountain RC&D. This six county organization works as an extension of the Resource Conservation District and assists in the economic development of the rural segments of San Bernardino County.

### **HAZARDOUS TREE REMOVAL PROGRAM**

From November 1, 2010 to March 31, 2011, over 37 projects have been planned within the Districts' boundary. These projects consist of: Emergency Projects - usually single trees threatening single homes; Small Block projects - several homes in one area removing many trees and brush to protect the area; and Fuel Modification Projects - large portions of land removing trees and thinning brush to

create fire breaks and protect homeowners. During this time frame the planned projects are scheduled to remove 1,151 trees; over 214 parcels covering 718 acres would be protected with an estimated cost of \$259,688.00. With the storms this year being severe, planning on many projects was postponed until the snow melted. This interagency fuel removal team, made up of NRCS, San Bernardino County Fire, The Department of Public Works and the USFS, will continue fuel modification and tree removal on private lands in the San Bernardino Mountains. More projects will consist of thinning the brush and removing woody fuel, thereby reducing the fuel for a fire to burn large areas undeterred. Not only homes will be protected but emergency access roads for residents and emergency personnel.

### **ENVIRONMENTAL QUALITY INCENTIVES PROGRAM (EQIP)**

The Victorville Field Office received more applications than were able to be funded for FY 2011 EQIP. A total of six applications, with a total combined acreage of 2,371, were approved funding in San Bernardino County; three were cropland producers and three were projects on forested land. In Kern County, four applicants (three rangeland producers and one cropland producer) were approved for funding with a combined acreage of 8,011.

The National Organic Initiative application cutoff date was March 4, 2011. There is one application being processed for this out of San Bernardino County.

### **ORO GRANDE FLOODING ISSUES**

The District has been involved in assisting the Oro Grande residents and farmers as well as the San Bernardino County Flood Control District to help resolve flooding problems in the Mojave River within the Oro Grande area.