

# Otero Soil & Water Conservation District Report of Accomplishments



## Mission –

The Otero Soil and Water Conservation District promotes and facilitates effective stewardship of natural resources. District activities are directed primarily toward private lands.

Assisting Local Producers with Small Conservation Projects

## Local Funding –

Otero County has provided the operational funds for our district since 1975. Each year Otero SWCD board members petition the Otero County Commissioners for this funding. This funding provides administrative support, office expenses to include a fiscal year agreed upon procedures, and base funding for the noxious weed control program. These funds are used as leverage for federal funds to increase the scale of the local projects such as the noxious weed program. This year we had additional funds set aside to offer cost share to four local producers needing assistance with small conservation projects. Otero County Subdivision regulations require Otero SWCD to review and comment on Terrain Management Plans of proposed subdivisions. This year we completed one subdivision review.

Following the floods in 1941, 1951, 1954 and 1955, Otero SWCD sponsored construction of the Upper Penasco Watershed Project, which included constructing three floodwater-retarding dams. These dams were completed in 1960 and the program life of these structures is complete. Part of the districts responsibility as the sponsor is to carry out an annual maintenance check on each of the structures. This year's monsoon season took its toll on the dams. These photos show how high the water level was on Curtis Canyon Dam during a severe storm in September. We are currently working on the options to clean out this structure prior to 2022 monsoon season.



## **Watershed Information –**

The Sacramento Mountains are the principal source of the water which sustains communities, agriculture and industry over a significant portion of the state, including the Lower Pecos River, and the Tularosa and Salt Basins. In addition to the communities which are located in the Mountains, cities such as Alamogordo, Roswell, Artesia and Carlsbad depend on water which originates as rain and snowfall in the mountains. Understanding how the Sacramento Mountains function as a hydro-geologic unit is critical to make informed judgments concerning how the functioning of these watersheds can be optimized.

NM Bureau of Geology and Mineral Resources has completed the following studies to address this issue:

- 2012 Southern Sacramento Mountains Hydrogeology Study
- 2014 Northeastern Tularosa Basin Regional Hydrogeology Study
- 2014 Hydrologic Investigation at White Sands National Monument
- 2015 Sacramento Mountains Watershed Study
- 2016 Brackish Water Assessment in the Eastern Tularosa Basin

These reports are available at the NM Tech website <http://geoinfo.nmt.edu/resources/water/amp/publications/home.html> or the Otero SWCD website: [http://oteroswcd.org/index\\_files/Page754.html](http://oteroswcd.org/index_files/Page754.html). **An update on the groundwater level trends in the Tularosa Basin and Sacramento Mountains can be found at the end of this report.**

## **Education & Outreach -**

Interactive Mapping – We have expanded our website oteroswcd.org to include interactive mapping of our noxious weed program and to highlight our other projects with NM Tech and EMNRD. This tool allows the public to “see” where we work.

Otero SWCD owns a NM Mobile River Study Center (Rolling River Trailer). The **Rolling River** is a five by ten foot utility trailer with a six-inch deep trailer bed that is filled with sand (actually recycled plastic granules). A meandering river or two is scooped out running from one end to the other. Small figures of cows, horses, houses, a barn, corral and a parking lot with cars and farm equipment placed on top, form a simulated village. Trees, foliage and a few rocks line the riverbank. When water is turned on at the top of the watershed, it flows through the river and can be used to demonstrate a variety of water lessons.

Since 2009, we have partnered with the US Forest Service “Take It Outside NM!” (TIONM!) Program to fund opportunities to connect school children with the natural environment. Utilizing grants from the US Forest Service, National Park Foundation and the National Environmental Education foundation \$21,000 has been spent to pay for busses to transport elementary school students to White Sands National Monument, local water festivals and various locations in the Lincoln National Forest. There is \$6,000 remaining to continue this project.

In January 2020 representatives from Otero County Community Health Council and the US Forest Service asked for assistance with a project. Otero SWCD was successful in obtaining funding through the Paso del Norte Health Foundation. The project was completed in May of 2021 with the installation of the stone monuments.



### NEW at Washington Park!

Desert Critters Trail is a scavenger-hunt style trail, offering family fun & encouraging physical activity. Otero HEAL (Healthy Eating Active Living) developed this idea with the intention of getting people to walk more often, learn about local nature, and enjoy time together outdoors. Washington Park provides ADA- accessible sidewalks throughout.

Desert Critters Trail highlights 18 species of animals native to our area. Each animal has its own stone monument dedicated to it - somewhere in the park! Your mission is to find each one. More in-depth info about each animal can be found on the City's website.



PASO DEL NORTE  
HEALTH FOUNDATION  
HEALTHY EATING & ACTIVE LIVING

*This project is a collaboration between City of Alamogordo, Otero Soil and Water Conservation District, Otero County Community Health Council HEAL Action Team, US Forest Service - Lincoln National Forest, NM Department of Health, The Grindstone Group, and Eco-Servants. This project is funded by Paso del Norte Health Foundation.*



## Forest Restoration -

Otero SWCD has executed a Joint Powers Agreement with NM Energy, Minerals and Natural Resources Department to complete individual work plans. Ten work plans have been completed treating over 1,297.69 acres and totaling \$1,740,722.67. The following projects have been completed: Coleman Ranch, five Otero County Wildland Urban Interface Projects, Pine Springs Non-Federal Lands (NFL), Coleman Ranch Phase II, Timberon Block 2, High Rolls, and Karr Canyon NFL. The latest work plans approved include for another Otero County Wildland Urban Interface Project and the Two Goats and High Roll NFL. These funds provide landscape-scale areas to mitigate the spread of a catastrophic wildfire. In 2020 we entered into a Memorandum of Agreement to complete projects through the NM State Land Office. The first project completed was located on the Circle Cross Ranch for 200 acres. In fiscal year 2021 we treated 179.362 acres through the Coleman NFL and 162 acres on the Circle Cross Watershed Health Project.

South Central Mountain RC&D plays a pivotal role in implementing these work plans. A contract for services between Otero SWCD & South Central Mountain RC&D allows for the two agencies to share the workload and the administrative fees. The RC&D has the Rural Community Forester in place to perform the necessary field work. Otero SWCD (as an entity of state government) is the fiscal agent for all projects within Otero County.

These photos show the final work done through the Coleman NFL project.





Masticated material acts as erosion control mitigation

Unit thinned in 2019



## **Watershed Health -**

The Sacramento Mountain Watersheds are suffering from different levels of landscape degradation. This type of erosion is weakening the ability of the soils to store water. When the water runs rapidly through the soils they lose their structure, causing tunnel erosion. Eventually the soil collapses and gullies form. We have completed two projects funded by the Soil and Water Conservation Commission in the Sacramento Mountains. Photos were taken to show the amount of debris and sediment being held by the structures. A step-by-step guide has been printed and is available on the [oteroswcd.org](http://oteroswcd.org) website.

## Noxious Weeds –

Otero SWCD continues to manage the noxious plant control program for the county. Technical assistance is provided, and herbicides are available to control noxious plants on agricultural lands. We survey the area identifying where noxious plants exist and either cost share herbicide or arrange spraying to control these plants. Over 100 private landowners have participated in the program. Since 2007 the Bureau of Land Management has awarded us \$437,000 to treat noxious plants primarily on BLM administered lands in Otero County. Otero SWCD was contracted to treat 497 acres of African rue on county right-of-way's in conjunction with treatments on Otero County properties and BLM lands. Working with NM Energy, Minerals and Natural Resources Department we have treated private lands in the Sacramento Mountains for noxious plants such as Musk thistle. Utilizing our memorandum of agreement with the NM State Land Office we were able to treat 60 acres of African rue at the Tuli Motocross.

Species by Acres	Sprayed	Monitored	Inventoried
African Rue - Spring 2021	747	647	1697
African Rue - Fall 2020	647	697	742
Musk Thistle	380	755	1400
Russian Knapweed	75	50	300
Malta Starthistle	25	10	60
	1874	2159	4199

