

# Socorro SWCD Annual Report – FY 2013

Socorro Soil & Water Conservation District 103 Francisco de Avondo Socorro, NM 87801 (575) 838-0078 (575) 838-0978 (fax)

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# **Socorro SWCD Board Members:**

Richard Ritter, Chairman Dr. Mark Person, Vice-chairman Chris Lopez, Secretary/Treasurer Gordon "Corky" Herkenhoff, Supervisor Eddy Harris, Supervisor

Staff:

Nyleen Troxel Stowe, Director of Special Projects, Program Manager Will Kolbenschlag, Range Technician, Noxious Weed Specialist

## **WATER CONSERVATION:**

The Socorro Soil & Water Conservation District's Cost Share Program remains the top priority of the fiscal year. It is designed to assist landowners implement water conservation measures on their farms, ranches, and residences. The following is a summary of the available programs and the combined benefits of the District's multifaceted programs:

This year \$34,623.19 was reimbursed to landowners for installing beneficial agricultural and residential conservation projects.

## **Agricultural Projects**

Agriculture is perennially the most active segment of our cost share program. This year we assisted landowners with five land leveling projects moving 7,656 cubic yards of dirt on 24 acres, installation of 380' feet of 18 inch irrigation pipeline on 7 acres, installation of 260 feet of 15 inch irrigation pipeline on 7 acres, a subsoiling project improving soil quality on 16 acres, 1,513 feet of concrete ditch benefitting 16.5 acres, one turnout replacement benefitting 4 acres, and 3 livestock pipeline projects totaling 4,442 lineal feet and benefiting approximately 2,000 acres.

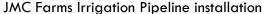
## Residential Projects

This was the first year for our newest and most successful residential cost share program; rain harvesting barrels. We assisted 7 landowners with rain harvesting systems, reimbursing a total of \$3,302. Continuing this year with our other residential programs, we assisted 9 landowners with \$2,592 in cost share for drip irrigation systems, 4 landowners with \$398 of assistance for water saving low flow toilets, and 1 landowner was provided \$27.34 of cost share for soil testing.

Conservation Technical Assistance with numerous other individuals resulted in many practices being applied on the agricultural land within our district.

The application of resource management systems in conjunction with the benefits of this versatile program has resulted in significant water and soil savings in the Socorro SWCD this fiscal year. Other benefits derived from the application of these conservation practices include improved water quality in the irrigated valley as well as the grazing lands in the district, improved wildlife habitat, improved watershed health and an overall improvement in the quality of life for the residents in our area. Our programs for drip irrigation, low flow water devices and rain harvesting barrels have expanded our cost share to reach more urban residents and have a greater overall impact on our community.







Installed rain barrel system

#### **RIO GRANDE RESTORATION FUNDING:**

This year's funding was used to complete the work on the Bourne tract, which was aerially treated in 2004. We also completed removal and restoration on the internal acreage which is owned by the Babcock's. In December, Boss Reclamation LLC extracted and piled the Salt cedar and Siberian elm on twenty-three acres. In February 2013 these piles were burned by Lopez Five Farms. Then in May 2013, Lopez Five Farms used a bulldozer and road grader to smooth out the entire tract. This was followed by herbicide treatment of the noxious weed Russian knapweed but the Socorro SWCD Range Technician. In July 2013 as the monsoon season began, the Range Technician also planted a native grass seed and shrub mixture on the tract. The Socorro SWCD staff had also planted fifty Rio Grande cottonwoods in February 2013 along the perimeter of the tract. The landowners wanted to put this tract back into agricultural production, however, the check gate in the Middle Rio Grande Conservancy ditch was removed some time ago. The new check gate would have been very cost prohibitive for the landowners, so native grass restoration was decided on as the best alternative.



Bourne/Babcock prior to treatment.



Bourne/Babcock post extraction.



Bourne/Babcock cottonwood pole planting.



Bourne/Babcock post smoothing and planting of native seeds.

## **POLE PLANTING:**

As part of our continuing effort to re-vegetate the Middle Rio Grande valley with Rio Grande Cottonwood trees, we harvested, prepared, and planted 295 trees this year, and provided 50 more to a landowner who had the equipment to plant himself.



Planting Rio Grande Cottonwoods on the Rhodes property.

These plantings typically replace noxious trees such as Salt cedar, Russian olive and Siberian elm on restoration sites that have already had full control of the noxious species. Going forward, we have decided that best use of taxpayer resources is to plant larger numbers of trees on fewer restoration plots, effectively completing 2 or 3 properties per year. The district board will select the properties and the appropriate number of trees for each location.

## **Noxious Weed Control:**

The Socorro SWCD continues to offer control of all designated noxious weed and tree species to the public. We employ a licensed herbicide applicator for all chemical treatments, and we also own a Bobcat E35 Mini-Excavator for non-chemical removal of these species when possible.

This year's chemical treatments included Salt cedar and Russian olive re-sprout control at Parkview Elementary School, follow up treatment of Russian knapweed at the San Antonio Riverine Park, Russian olive re-sprout treatment following mechanical removal and chipping at the Bailey-Bowman farm, and an extensive treatment to control a Russian knapweed outbreak threatening surrounding alfalfa fields for a private landowner. We also continued on the largest ground spraying project we've ever undertaken, controlling large, established stands of Salt cedar spread across the more than 1,000,000 acres of BLM land in our district.

Using our Bobcat excavator, Range technician Will Kolbenschlag was able to remove Salt cedar re-sprouts covering over 53 acres for 4 private landowners. These are all ongoing projects that are showing great results, both with noxious species control and our revegetation efforts.



A dirt tank in Taylor canyon formerly infested with Spiny cocklebur. This photo is from June 2013, with the most recent herbicide application being from fall of 2012.

## **EDUCATION:**

The Socorro SWCD received a Soil & Water Conservation Grant for the Rio Grande Watershed Watch Program with Cottonwood Valley Charter School. The fifth grade students from Cottonwood Valley Charter School went out once a month to the Otero Park in the Rio Grande Bosque. They measured the flow of the Rio Grande by wading out into the river and dropping a tennis ball and measuring the length of time it took for the ball to travel a certain distance. They also monitored leaf litter, ran soil tests and ran several water tests such as salinity, pH, dissolved oxygen and nitrogen levels. The grant we received was for \$10,849. This was used to purchase full waders for the class and adults, soil and water testing kits and meters, thermometers, leaf litter kits, bug kits, supplies for the kids to assist with monitoring and to pay for the school bus and driver to go out to Otero Park each month. The Socorro SWCD volunteer, Amy Galanter, a Master's of Science in Hydrology student at NM Tech, went out with the students and assisted them with their water quality studies.



Cottonwood Valley Charter School students observing flow in the Rio Grande.



Students testing phosphorus level in water.



Students observing the Rio Grande without any water.



Socorro SWCD Volunteer and NM Tech Master's student, Amy Galanter working with students on different measurements regarding water quality.

## **PUBLIC OUTREACH:**

The Socorro SWCD staff had a booth at the Socorro County Fair over Labor Day Weekend. The cost share program for agricultural practices and for urban water conservations projects is promoted at this event.



Socorro SWCD booth at the Socorro County Fair, Labor Day weekend, 2012.

On October 16, 2012, Range Technician Will Kolbenschlag gave a PowerPoint presentation to the New Mexico Garden Club at their annual meeting held at The Bodega Burger Company in Socorro. Will's presentation covered our water conservation cost share program, highlighting rain harvesting, low flow water devices, and drip irrigation. T

The majority of the presentation covered the installation and maintenance of different drip irrigation systems. The presentation included a question and answer session and was approximately 60 minutes long.

The Socorro SWCD staff also gave a presentation to the Socorro Rotary Club on the various programs for landowners within the District in January of 2013.

The Socorro SWCD staff gave a presentation at the annual meeting of the Society for Range Management on the Salt cedar work that the District does. This was in January 2013.

## **FISCAL YEAR 2012 BUDGET:**

Amount	
12,990	
146,590	
95,569	
34,272	
289,421	
116,840	
34,623	
34,316	
8,720	
36,390	
9,205	
32,782	
272,876	
	12,990 146,590 95,569 34,272 289,421 116,840 34,623 34,316 8,720 36,390 9,205 32,782