



Socorro SWCD
Annual Report – FY 2020

Socorro Soil & Water Conservation District
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Socorro SWCD Board Members:

Eddy Harris, Chairman
Chris Lopez, Vice-chairman
Brian Durkin, Secretary/Treasurer
Jose "Lencho" Vega, Supervisor
James Sanchez, Supervisor (July - December 2019)
Vernon Leseberg, Supervisor (January - June 2020)

Staff:

Nyleen Troxel Stowe, Director of Special Projects, Program Manager
Will Kolbensschlag, Range Management and Noxious Weed Specialist

SOIL & WATER CONSERVATION

The Socorro Soil & Water Conservation District's Cost Share Program is the top priority of the fiscal year. It is designed to assist landowners in implementing 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 \$35,119.04 was reimbursed to landowners for installing beneficial agricultural and residential conservation projects.

Agricultural Projects:

Agriculture is the most active segment of our cost share program. This year we assisted landowners with seven land leveling projects moving 50,276 cubic yards of dirt on 100 acres; installation of 1,575 lineal feet of concrete ditch lining servicing 15 acres, installation of 110 feet of eighteen inch irrigation pipeline benefitting 1 acres; drilling of two livestock wells with solar pumps; one 2,100 gallon storage tank for livestock; one livestock well solar panel conversion benefitting 320 acres; two Middle Rio Grande Conservancy ditch turnout upgrades from 15" to 24" and 12 to 18"; and removal of Siberian elm on 1.5 acres of irrigated farmland.



RIO GRANDE RESTORATION FUNDING

This year the Socorro SWCD used its recurring treatment and restoration funding to contract with CSpears, LLC to have the Salt cedar on three tracts root plowed/raked/piled and then burned. This year seventeen acres were treated.



Gonzales Tract--piles of Salt cedar root plowed/raked ready to be burned.



Gonzales Tract-Post treatment.

Following is a summary of the acreage that has been completed to date using the Socorro SWCD Riparian Restoration Funding from the New Mexico State Legislature.

Tract and Practices	Acreage	Funding Year	Funding Amount
Thomas tract, Whitaker tract, Lawrence tract/extraction and mulching	17.17 acres	FY 2008	\$42,000
NM Department of Game & Fish Extraction and mulching.	26 acres	FY 2009	\$42,000
Valdez tract, Pepllar tract Root plowing/raking into burn piles	73.1 acres	FY 2010	\$38,558
NM Department of Game and Fish-Ladd S Gordon Refuge Extraction, piling, seeding	102 acres	FY 2011	\$36,549
Carangelo tract Root plowing/raking followed with reveg planting Herkenhoff tract-Paddle scraping	119.1 acres	FY 2012	\$34,720
Bourne/Babcock tract Extraction and piling, grass seeding	23 acres	FY 2013	\$34,720
Armijo tract Extraction/windrowing	51.8 acres	FY 2014	\$34,720
Bruton tract Root plowing/raking Armijo/Gonzales and Bourne/Babcock tracts Fencing and Noxious weed treatment	101 acres	FY 2015	\$34,625
Gonzales tract Root plowing/raking Shrub purchase for follow up plantings	31.2 acres	FY 2016	34,417.25
Dean tracts Extraction/root plow and raking into piles for burning	35 acres	FY 2017	\$31,375
BLM (Rhodes) tract Bulldoze above ground vegetation	3.625 acres (10 acres total)	FY 2017	\$725
Rudy Gonzales tract	26 acres	FY 2018	\$25,500
Chavez and Tafoya tracts	35.5 acres	FY 2019	\$31,780
Gonzales, Hart and Esquibel tracts	17 acres	FY 2020	\$31,780

The Socorro SWCD received a Soil & Water Conservation Commission Grant for \$7,999 for the purchase of a 2019 Honda ATV Model TX420FA2. Socorro SWCD added braces to hold the TopCon Hyper V rover and the survey rod/Tesla control unit.

With this setup, the edges of the field can be surveyed and added into the design of the irrigation practice without a change in rod height. This helps eliminate potential errors in calculating the design. With the use of the ATV when surveying, large acreage can be completed in a timely manner. The Socorro SWCD is now set up to survey, design, and set grade stakes without leaving the field. This will get designs to cooperators faster so they may start on their projects faster.



In the above picture, the Tesla unit is strapped onto the top right side of the ATV; the Hyper V rover is on the rod to the right of the Tesla unit; and to the right of that is the tri-pod with the Hyper V Base. This survey equipment purchase was funded by a SWCC Grant that the Socorro SWCD received in FY 2015.

The Socorro SWCD used the ATV to survey 247.9 acres of farmland for our Cost Share Program for eleven landowners. It was also been used to survey 100.8 acres for five landowners for Conservation Technical Assistance.

The Socorro SWCD has used Federal noxious weed funding to purchase a spray tank trailer. Staff used the ATV/equipment to apply pre-emergent to Spiny cocklebur infested Bureau of Land Management dirt tanks. The Socorro SWCD also used the ATV/equipment to spray over 100 acres of noxious weeds for the Bureau of Land Management on many different sites including historic sites, campgrounds, open space and ranchland.

The ATV can also be used for seeding restoration sites.



30 gallon spray tank trailer



Disc harrow



ATV with disc harrow attached



Spreader mounted on ATV

Item	Grant Funding	SSWCD Funding
Honda 2019 ATV Model TX420FA2, Winch mount plate, survey rod brackets	\$7,999	
ATV ball clamp to hold the Topcon Hyper V Tesla data collector		\$31.56
Black Boar Implement Lift		\$561.00
KFI Rear Receiver Hitch		\$73.58
Black Boar Disc Harrow Implement		\$339.06
ATVS100 All -purpose Broadcast Seeder		\$157.68
30 gallon Trailer Sprayer		\$418.99
Total	\$7,999	\$1,581.87

NOXIOUS WEED CONTROL

This year the Socorro SWCD continued its long-standing partnership with the BLM by treating noxious weeds on public land, on both recreation and rangeland sites. Keeping the recreation sites weed free and attractive to the public users of the land is a key component of our partnership. There is an expectation that trails, benches, and other public areas should be kept weed free, both as an aesthetic and to prevent wildlife, such as rattlesnakes, hiding amongst them. This includes the Socorro Nature Area, Box Canyon, Ft. Craig, and the Datil Well Campground. Equally as important is the treatment on range land.

While maintaining the above-mentioned areas, the area of particular interest this spring was on the Chupadera Mesa; specifically in Taylor Canyon, Lutz Canyon, and Lobo Canyon. This area is badly infested with Spiny Cocklebur, an aggressive annual weed that will occupy any clear area it can find. In this case, its seeds find their way into the earthen retention dams in the area (used to hold water for cattle) and take hold. A combination of herbicide treatments and cultivation were used to attempt to control this noxious weed. Over 40 acres of Spiny Cocklebur were treated in this area before the weed set seed.

The Socorro SWCD continued working on the Rhodes Ranch property owned by the BLM using an integrated pest management approach. Re-sprouts were removed over the winter using a Bobcat mini-excavator, and were added to the piles that BLM fire staff will burn. Herbicide treatments were used to maintain the road between Bosquecito Road and the Rio Grande, and to control outbreaks of Russian Knapweed and Skeletonweed. Native Black Willow and Cottonwood trees are flourishing in this area now that the Salt Cedar has been removed. New Mexico Olive, Seep willow, Four-Wing Saltbush, and other natives are beginning to grow as well. Grass will be seeded in this area this fall to compete with the noxious weed infestations.

This fall will also bring another round of herbicide treatments on our valley's woody noxious tree species. These include Salt cedar, Russian olive, and Siberian Elm. These treatments are most effective in the fall, while the tree retains foliage but is storing carbohydrate reserves in its root system to survive the winter. Salt Cedar is by far the biggest concern, and management has become mostly a matter of timing since the Salt Cedar beetle has become prevalent in the area. *Diorhabda elongata*, and 3 other related species, have been nesting here for 4 growing seasons now. They damage the trees enough to slow their spread, but prevent a fatal dose of herbicide from entering the tree. In between generations of the bug (thought to be 3 per growing season) the trees can be effectively treated. Wherever possible, herbicide treatments will continue in a few months.



A large Spiny Cocklebur infestation, post-treatment



Treating weeds at the Rhodes Ranch Property

PUBLIC OUTREACH:

Staff gave a presentation at the NACD 2019 Summer Forum-Southwest/Pacific Region Meeting held in Santa Fe on Riparian Restoration on the Rio Grande on August 5, 2019. Staff showed photos from various projects and discussed the various forms of Salt cedar control and follow-up restoration activities that have been completed through the years.

Staff gave a presentation at the Middle Rio Grande Conservancy District (MRGCD) Board Meeting held February 24, 2020 in Socorro about their cost share program. This was a MRGCD meeting for the farmers to find out about the irrigation season predictions and available assistance programs.

The Socorro SWCD also helped sponsor the NM Envirothon, the State 4H/FFA Competition and the Women in Agriculture Conference with monetary donations. The funding is being held over to 2021 as these events had to be cancelled for 2020.

FISCAL YEAR 2019 BUDGET:

Item	Amount
Income:	
State funding	53,693
Mil levy	164,556
Grant Income	73,855
Sale of Fixed Assets	15,828
Total:	307,932
Expenditures:	
Staff	137,301
Cost share program	35,669
Audit	2,481
Office supplies, postage, meetings, dues, telephone, travel, trainings, rent, utilities, equipment repair	41,683
Auto	6,927
Grant expenditures	45,691
Capitol Purchase-new SUV, ATV	35,533
Loan repayment to ISC	1,604
Total:	306,889