



Socorro SWCD  
Annual Report – FY 2023

Socorro Soil & Water Conservation District  
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Socorro SWCD Board Members:

Eddy Harris, Chairman  
Chris Lopez, Vice-chairman  
Vernon Leseberg, Secretary/Treasurer  
Jose "Lencho" Vega, Supervisor  
James Sanchez, Supervisor

Staff:

Nyleen Troxel Stowe, District Manager  
Will Kolbensschlag, Assistant District Manager  
Daniela Rivera, Natural Resource Specialist

## SOIL & WATER CONSERVATION

The Socorro Soil & Water Conservation District's Cost Share Program continues to be the top priority of the fiscal year. It is designed to assist landowners with 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 \$35,666.97 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 the cost share assistance maximum was increased to \$6,000 per landowner due to the massive increase in inflation. We assisted landowners with seven land leveling projects moving 12,180 cubic yards of dirt on 81 acres; installation of 4,905 feet of livestock pipeline benefitting 600 acres; and one livestock well conversion to solar with a new 5,200-gallon storage tank benefitting 595 acres. We also provided conservation technical assistance (cta) to landowners on 175 acres of cropland.



*CTA provided to a local farmer installing concrete ditch.*

Residential Projects for FY 2023 included the installation of two drip irrigation systems and two low flow toilets.



*Installation of a six-zone drip irrigation system.*

Socorro SWCD also hired a third employee in August. Daniela Rivera was hired as our Natural Resource Specialist and has been training and learning surveying, designing for land leveling, irrigation pipelines, etc. She has successfully taken the tests and received her NM Department of Agriculture Pesticide Public Applicator’s license. She has taken over writing and distributing the quarterly newsletter as well as website design for the Socorro SWCD.



*Daniela Rivera performing a check out on a laser leveled field.*

## RIO GRANDE RESTORATION FUNDING

The Socorro SWCD used this year's "Plan, Design, Implement and Construct Habitat Restoration on the Rio Grande Socorro County" funding for extraction and mastication of Salt cedar on a 100-acre tract belonging to Ms. Monica Davis in Contreras, New Mexico. The contract was awarded to Lanford Excavation, LLC for extraction and mastication of 12.7 acres for a total cost of \$31,780.00



Lanford Excavation LLC extracting Salt cedar.



Lanford Excavation LLC masticator



Close up of the masticator head.



Completed extraction and mastication of Salt cedar on Davis tract.



Summary of Tracts and Practices Funded by the NM Legislature-Socorro County, NM	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-extract and pile for burning	26 acres	FY 2018	\$25,500
Chavez and Tafoya tracts-root plow and raking into piles for burning	35.5 acres	FY 2019	\$30,975
Gonzales tract, Hart tract, Esquibel tract-extraction, root plow/root raking followed by burning	17 acres	FY 2020	\$31,780
Extraction of Rudy Gonzales, Bobby Contreras and Michael Thom tracts-extraction and piling	33.2 acres	FY 2022	\$31,780
Monica Davis tract-extraction and mastication	12.7	FY 2023	\$31,780

## NOXIOUS WEED CONTROL

This year, the Socorro SWCD used our BLM noxious weed funding to treat over 212 acres of land.

There are three main categories of treatments that the Socorro SWCD performs for the BLM. These include recreation areas, BLM land that is leased to ranches, and private lands adjoining BLM land.

For each treatment or monitoring session, we complete the provided BLM spray report, take pictures of the area, and create a map of the precise treatment areas using GPS. This information is periodically provided to the BLM Socorro field office, along with a spreadsheet summarizing the work completed (attached).

In September of 2022, the Socorro SWCD contracted with Ferranti Natural Resources to spray 117.5 acres of Salt cedar in the Sawtooth mountains near Datil, NM.

### Public Recreation Areas

The public recreation areas are the most challenging areas to perform weed treatments. Care must be taken when spraying herbicide in proximity to the public. Generally speaking, the Socorro SWCD will schedule treatments of these areas when they are closed to the public. When this is not possible, we choose the times with the least amount of public activity and take extra precautions to never spray weeds in proximity to public land users.

The Socorro SWCD implements treatments on the weeds in the common areas at the Socorro Nature Area, Fort Craig, Box Canyon Recreation Area, Datil Well Campground, and the Socorro County Fairgrounds.

#### Socorro Nature Area

The Socorro Nature area is one of the more popular public spaces in Lemitar, NM. Dog walkers and joggers can be seen there nearly every morning, year-round. Recent improvements have caused soil disturbance, which always means weeds are soon to follow. We spray the parking areas, roads, trails, and campsite areas at the Nature Area, while leaving the open areas undisturbed.



*Keeping the roads clear of weeds*  
Fort Craig



*Weeds caused by soil disturbance.*



Fort Craig is a popular day use recreation area, with many trails, a large parking lot, and several small public areas that we keep free of weeds. The BLM has installed a new product on much of the trail system that has made a significant difference in suppressing weed growth, as well as making the trail harder and more compact, allowing better wheelchair access.



Top left – Part of the trail system at Fort Craig

Below left -- Parking area at Ft. Craig.



### Box Canyon

Box Canyon Recreation Area, aka “The Box”, is a very popular spot for hikers and rock climbers. Many tour buses and vacationers will also visit here, making it a likely spot for weeds to be spread. There was a small infestation of puncture vine near the restroom this year, and snakeweed encroaching on the parking lot. Fortunately, there were a few days this year without visitors present so we were able to get treat the weeds.



*The Box parking lot*

## Datil Well Campground

There are two treatment areas at the Datil Well Campground; the camping area and the group shelter. Due to the compact nature of the campsites and their proximity to each other, it can be difficult to find appropriate times to spray weeds. This year we have begun using an electric weed whacker and shovels so that we can treat weeds without the need to spray when the presence of campers precludes it.



Above - Datil Well Campground entrance area.

Below – Group Shelter area.



## Socorro County Fairgrounds

We have been treating a Russian knapweed infestation at the Fairgrounds for 3 years, and it has been eradicated. There was no sign of Knapweed all season. There is, however, a persistent African rue colony in the former mud bog area. This area is within sight of A-1 ready mix, whose yard is completely ridden with African rue, and they refuse to address the issue. Unfortunately, since they send trucks all over several counties every day, African rue will soon become common here. It is becoming well established and can even be seen in the Burger King parking lot in Socorro.



*The former mud bog area at the Socorro County Fairgrounds. The bright green plants are African rue.*

## Ranch Land

The majority of the acres that we treat for the BLM is the public land leased to ranches. Ranch land presents special challenges that can make control difficult. The archaic practice of creating earthen retention dams in arroyos to store water is a noxious weed perfect storm. They get all the sunshine and water they need to flourish, and the cattle are very effective at fertilizing them and moving their seeds everywhere. This outdated method of watering cattle creates large problems on the ranches that still use it. Modern ranchers know that wells connected to distribution systems provide cleaner, purer water, provide it much more consistently, drastically reduce water waste, and don't have the noxious weed problems that the others do.

The primary ranch areas that we treat include the Abo Canyon abandoned mine site, Armijo Ranch, Bernardo area dirt tanks, Caleb Kerr's Ranch, Rhodes Ranch, Harliss Ranch, and the Pound Ranch.

## Abo Canyon

This abandoned mine site near Mountainair NM has a series of cascading dirt retention dams to impound water for cattle. This allows for a perfect environment for Salt cedar to become established, which it has. Last year was the first treatment for this area, and the areas that we could access last year show good mortality. Some of the areas were not able to be sprayed, as they were full of water that cattle were actively drinking. Fortunately, we visited the area during a dry period this year and were able to get a good application on all of the remaining live trees.



Treated & Dead Salt cedar with a foreground of Spiny cocklebur (also treated).



*Salt cedar at the Abo mine site, successfully killed with one application.*

## Bernardo Dirt Tanks

The dirt tanks near Bernardo, between the Sevilletta NWR and the Rio Puerco contain some of the largest dirt tanks in Socorro County. Although Johnny Chavez, who formerly ranched the area, is installing water storage and drinkers throughout the ranch (with assistance from the Socorro SWCD cost share program), many of these tanks have been growing Salt cedar for two generations. We have achieved complete control of the Salt cedar in many of the tanks, but a few persistent areas require further attention. As in all Salt cedar infestations, the presence of *Diorhabda elongate* spp. (the salt cedar bug) complicates the process. One of the tanks in this area appears impervious to herbicide. It has been sprayed every year for 5 years and shows no signs of damage. The only apparent difference between this site and a typical site is a heavy presence of gypsum in the soil.



*One of the largest dirt tanks in Bernardo, control in progress.*



*This tank shows excellent mortality, with no live trees found this year.*



This bizarre spot shows no sign of herbicide damage, despite being sprayed every year for many years in a row.



Above is a picture of the “Lake Tank”, by far the largest tank in the area, and it is full of Salt cedar from one end to the other. This tank is nearly always full of water, making access impossible. Last year, the very active monsoon season caused this tank (and many others) to over-bank and destroy the earthen dam retaining them. Normally this would make treatment possible, as all the water has drained out of it, but the large rain event not only destroyed the dam, but also the road leading to it, making access impossible, other than on foot. This year, the tank was equally inaccessible. We are considering treating this area by helicopter or with heavy equipment next year.

## Caleb Kerr's Ranch

The Kerr Ranch, formerly the Zimmerly Ranch, has a small dirt tank containing some Salt cedar, which has been eradicated. It also has small patches of African rue, because this is a road used fairly heavily by A-1 ready mix. The Salt cedar has been eradicated, but the African rue population has grown, partly due to earthwork done by a bulldozer.



*Eradicated Salt cedar at the Kerr Ranch.*

## Rhodes Ranch

The Rhodes Ranch is an approximately acre ranch of mostly private land, which also includes a BLM lease North of Bosquecito. The BLM lease includes a strip of land that splits the ranch in the middle, and connects the upland area to the riparian area of the Rio Grande. The Socorro SWCD has been treating noxious species on this ranch for over 15 years, both on our own and with the BLM's help. A Russian Knapweed problem on the Rio Grande side of this property has now been completely controlled using Milestone, and no targets remain. Although there will likely always be Salt cedar here due to the neighboring properties, this property is mostly controlled and serves an example of how Salt cedar can be managed with persistence.



*Native Goodding's Black Willow trees thriving at the Rhodes Ranch property.*



*The area of the Rhodes Ranch formerly infested with Russian knapweed.*



Just North of the Rhodes Ranch is the Arroyo de las Canas, which is a large arroyo that runs through the Chavez Ranch before reaching the Rhodes property. The Chavez Ranch has a productive natural spring in the arroyo, creating a perfect environment for the Salt cedar. At some point in the past year, a fence has been installed across the arroyo that prevents access to the East. All of the Salt cedar from the Rio Grande to the fence has been treated and is approximately 98% dead. This year only 2 small resprouts were found.



*Dead Salt cedar on the banks of the Arroyo de las Cañas.*

#### Harliss Ranch

The Harliss ranch was aerially treated by helicopter in the fall of 2013. The treatment was minimally effective, and treating the trees from the ground has been a grind. Persistence is the key to Salt cedar control, and we are clearly making ground on this property, but it will take more work. Control is estimated at 80%. This year, we also found a large patch of Locoweed along the Eastern edge of this project. Rancher Bill Luther was notified of the infestation, which was also sprayed. It should be noted that multiple dead cows were seen in the area, and it's clear that the Locoweed has been grazed.



*New employee Daniela Rivera finishing off a Salt cedar at the Harliss Ranch*



*Above left – Locoweed found*



*Above right – multiple dead cattle.*

## Pound Ranch

This ranch is another that is on a road used by A-1 Ready Mix, and therefore has African rue. Again, it is a dirt tank that is holding water and collecting seeds, allowing the Rue to thrive. Despite treatment, there are more plants each year here. We will bump up the treatment schedule here for next year.



*African rue on the Pound Ranch.*

## Sawtooth Mountain Project

This year we were tasked by the BLM with treating 215 acres of Salt cedar growing in an arroyo in the Sawtooth Mountain area, NW of Datil, NM. Apparently, there was a cut stump project here in the previous year, which does not appear to have had any effect. No dead trees and no herbicide damage were observed. This area needs special precautions when spraying as there are multiple Cottonwood groves in the arroyo, which can be sensitive to Imazapyr use.

The Socorro SWCD contracted with Ferranti Natural Resources to spray 117.5 acres with Imazapyr with Sunset surfactant. Results will be monitored in the spring.



BLM Spraying & Monitoring 2022

Location	Primary Species	Acres Treated	Date	Acres Monitored
Socorro Nature Area	None	2.70	5.18.22	2.40
Socorro Nature Area	R.Thistle, Kochia	2.40	6.19.22	
Socorro Nature Area	R.Thistle, Kochia	2.40	6.29.22	
Socorro Nature Area	R.Thistle, Kochia	2.30	7.21.22	
Socorro Nature Area	R.Thistle, Kochia	0.25	8.31.22	
Datil Well Campground	None	0.00	5.19.22	8.00
Datil Well Campground	Kochia, Rocket	1.50	7.7.22	
Datil Well Campground	Kochia, Rocket	0.80	8.11.22	
Datil Well Campground	Kochia, Goat Heads	0.50	8.17.22	
Fort Craig	None	0.00	5.23.22	2.30
Fort Craig	Common Purslane	4.31	7.5.22	
Fort Craig	Tumbleweed, Silver	2.70	8.23.22	
Box Canyon	None	0.00	5.24.22	2.00
Box Canyon	Puncture Vine	0.80	8.11.22	
Box Canyon	Kochia	0.00	8.30.22	2.00
Pound Ranch	African Rue	2.50	6.30.22	
Socorro County Fairgrounds	African Rue	1.00	6.30.22	
Socorro County Fairgrounds	African Rue	8.56	7.6.22	
Caleb Kerr Allotment	Salt Cedar	0.00	8.30.22	2.00
Rhodes Ranch	Salt Cedar	9.49	9.6.22	20.00
Harliss Ranch	Salt Cedar	36.92	9.13.22	10.00
MRGCD Office	Malta Starthistle	0.00	9.13.2022	5.66
Datil Well Campground	Kochia,Russian thistle	0.00	9.15.2022	10.00
Saw Tooth Datil Project	Salt Cedar	0.00	9.15.2022	170.00
Saw Tooth Datil Project(Bill Ferranti)	Salt Cedar	117.50	9.18.2022	
Saw tooth Datil Project(Bill Ferranti)	Salt cedar		9.20.2022	33.33
Bernando earthin retention dam	Salt Cedar		9.22.2022	2.00
Abo Silver mines	Salt cedar	3.70	9.27.2022	
Arroyo de las Canas	Salt cedar	0.30	9.27.2022	
Fort Craig	Salt cedar		9.28.2022	2.30
Bernardo Area Salt cedar	Salt cedar	10.70	9.28.2022	
Armijo ranch	Salt cedar	0.75	9.29.2022	
		212.08		271.99

FY 2022 - 2023 Budget

Socorro SWCD

Fund	Department	Object Code	Original Budget	BAR October 2022	BAR April 2023	BAR July 2023	1st Q	2nd Q	3rd Q	4th Q	YTD
11000 General Op	0001 No Departmen	10101 Unrestricted Cash	277,949.00	-10,023.00							
		Budget transfer from Gen Fund to cover Debt S		10,023.00							
40400 NMFA Loan	0001 No Departmen	46900 Miscellaneous-Other	11,000.00	0.00							0.00
11000 General Op	0001 No Departmen	41500 Property Tax - Current	150,000.00			170,000.00	6,917.48	63,193.47	58,067.43	42,293.93	170,472.31
11000 General Op	0001 No Departmen	41510 Property Tax - Prior Year	12,000.00				4,036.56	5,787.49	3,770.38	2,498.92	16,093.35
11000 General Op	0001 No Departmen	46030 Interest Income	150.00				20.60	21.70	29.87	21.87	94.04
11000 General Op	0001 No Departmen	44990 Other Charges for Service	70,000.00				35,000.00		17,500.00	17,500.00	70,000.00
11000 General Op	0001 No Departmen	44010 Administrative Fees	1,000.00								0.00
11000 General Op	0001 No Departmen	46091 Sale of Fixed Assets	0.00	10,000.00			1,897.50				1,897.50
11000 General Op	0001 No Departmen	47190 State Allotment to Soil &	16,000.00		19,200.00		17,250.47	1,916.72			19,167.19
11000 General Op	0001 No Departmen	47398 Other State Distributions	34,000.00		53,805.00			31,780.00	21,025.00	2,580.00	55,385.00
30600 NMFA Proje	0001 No Departmen	46060 Reimbursements/Refunds	175,000.00		0.00						0.00
		Total Income:	469,150.00		316,155.00	336,155.00	65,122.61	102,699.38	100,392.68	64,894.72	333,109.39
11000 General Op	2002 General Admin	51020 Salaries - Full-Time Positio	121,200.00		148,000.00		34,040.89	38,881.19	37,589.48	37,060.03	147,571.59
11000 General Op	2002 General Admin	52010 FICA - Regular	9,300.00		11,000.00		2,330.99	2,582.66	2,997.26	2,591.60	10,502.51
11000 General Op	2002 General Admin	52020 Retirement	11,900.00		15,700.00		3,560.54	3,640.86	4,247.67	3,640.86	15,089.93
11000 General Op	2002 General Admin	52030 Health and Medical Prem	11,570.00		14,000.00		2,875.20	4,119.66	4,119.66	4,119.66	15,234.18
11000 General Op	2002 General Admin	52100 Workers' Compensation F	800.00		1,200.00			162.00	1,016.30	48.00	1,226.30
11000 General Op	2002 General Admin	52110 Workers' Compensation E	35.00		48.00		8.60	12.90	12.90	12.90	47.30
11000 General Op	2002 General Admin	54010 Maintenance & Repairs -	1,000.00				1,629.55	590.00			2,219.55
11000 General Op	2002 General Admin	55010 Contract - Audit	5,000.00						2,262.76		2,262.76
11000 General Op	2002 General Admin	55999 Contract - Other Services	124,000.00		85,000.00		13,540.31	38,547.91	31,786.87	3,513.72	87,388.81
11000 General Op	2002 General Admin	56020 Supplies - General Office	8,000.00				1,535.75	2,688.42	1,748.61	2,066.09	8,038.87
11000 General Op	2002 General Admin	56120 Supplies - Vehicle Fuel	8,000.00		4,000.00		624.60	795.48	399.25	1,055.08	2,874.41
11000 General Op	2002 General Admin	56121 Supplies - Vehicle Lubrica	1,000.00				423.74	90.37	359.21	1,369.80	2,243.12
11000 General Op	2002 General Admin	56122 Supplies - Vehicle Tires	2,000.00		0.00						0.00
11000 General Op	2002 General Admin	57040 Election Costs	500.00								0.00
11000 General Op	2002 General Admin	57050 Employee Training	500.00					300.00	150.00	165.00	615.00
11000 General Op	2002 General Admin	57060 Grants to Sub-recipients	40,000.00		59,000.00		9,253.01	634.25	8,767.53	36,592.18	55,246.97
11000 General Op	2002 General Admin	57070 Insurance - General Liabil	7,500.00				1,121.00	20.00	5,274.00	131.00	6,546.00
11000 General Op	2002 General Admin	57080 Postage	500.00				154.04	58.45	228.75	385.90	827.14
11000 General Op	2002 General Admin	57150 Subscriptions & Dues	4,000.00				1,828.40	810.34	203.81		2,842.55
11000 General Op	2002 General Admin	57140 Rent of Land/Building	7,200.00				1,800.00	1,800.00	1,800.00	1,800.00	7,200.00
11000 General Op	2002 General Admin	57160 Telecommunications	5,000.00				1,671.64	1,212.66	951.27	1,571.35	5,406.92
11000 General Op	2002 General Admin	57170 Utilities - Electricity	1,500.00				288.52	345.59	458.40	663.71	1,756.22
11000 General Op	2002 General Admin	57173 Utilities - Water	2,500.00				194.28	185.51	1,370.96	1,292.81	3,043.56
11000 General Op	2002 General Admin	58010 Buildings and Structures			154,000.00				25,132.89	92,965.47	118,098.36
11000 General Op	2002 General Admin	58020 Equipment & Machinery			15,000.00				3,025.00	9,744.00	12,769.00
30600 NMFA Proje	2002 General Admin	58010 Buildings and Structures	175,000.00		0.00						0.00
40400 NMFA Loan	2004 Finance/Budge	59010 Debt Service - Principal Pa	8,223.00				2,277.57	2,276.25	2,276.23	1,183.48	8,013.53
40400 NMFA Loan	2004 Finance/Budge	59020 Debt Service - Interest Pa	1,800.00				222.22	196.64	169.97	152.24	741.07
		Total Expenditures:	558,028.00		561,171.00		79,380.85	99,951.14	136,348.78	202,124.88	517,805.65