

Socorro SWCD
Annual Report – FY 2024

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

Socorro SWCD Board Members:

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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 \$14,666.97 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. We assisted landowners with two land leveling projects moving 4,716 cubic yards of dirt on 81 acres; installation of 1,180 feet of livestock pipeline with one new stock tank benefitting 300 acres; and one Middle Rio Grande Conservancy District turnout/pipe replacement for delivering irrigation water. We also provided conservation technical assistance (cta) to landowners on 326 acres of cropland.



Sichler Farms-freshly leveled cropland.



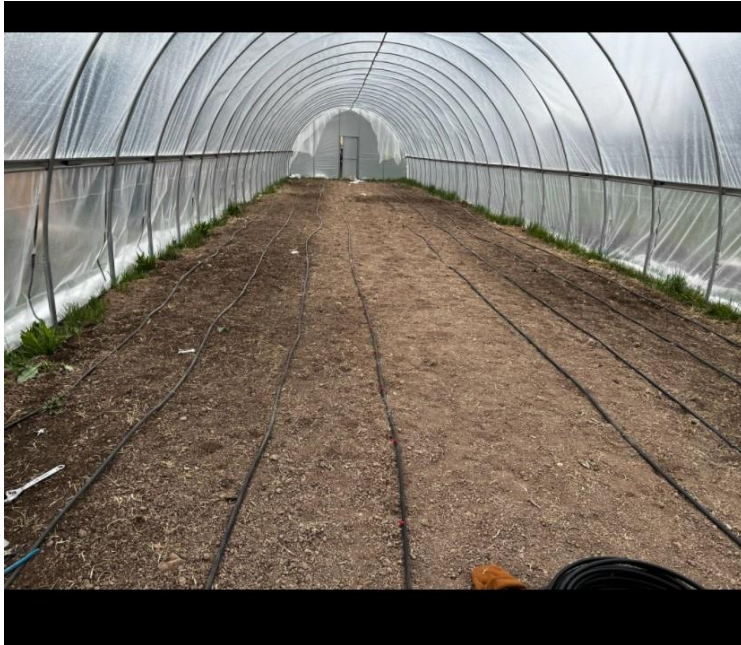
Newly replaced irrigation turnout.



Livestock water tank.

Residential Projects:

This year we assisted residential landowners with cost share assistance on two drip irrigation systems, three rainwater harvesting barrels, and three low flow toilets.



Drip irrigation lines installed in a greenhouse.



Rainwater harvesting barrel.

HEALTHY SOILS PROGRAM

The District assisted two landowners with their Healthy Soil applications in the spring of 2024. The USDA-NRCS refused to write conservation plans for the landowners within the Socorro SWCD. The District assisted the first landowner with getting in touch with the acting District Conservationist to request that he have his staff at the Socorro Field Office write their plan. The District was also able to get a waiver from the NM Department of Agriculture for the second land owner who had a conservation plan written but it was over a year old. This landowner also wanted to downsize his project. Both Healthy Soils Projects were awarded grants for fiscal year 2025.

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 New Mexico Statewide Purchasing Agreement for Vegetation Management Services was utilized and the District contracted with Lanford Excavation, LLC for extraction and mastication of 14.96 acres for a total cost of \$31,780.00

The Socorro SWCD contracted for treatment of 14.96 acres of Salt Cedar and Russian Olive on the Davis property in Contreras, NM. With a recurring funding this treatment area will provide a fire break from the La Joya Acequia to the San Francisco riverside drain. This area has historically burned frequently due to the thousands of acres of Salt cedar in this corridor, and this funding has helped us create several fire breaks in the area. This has helped stop the spread of wildfires and provided access for firefighters.

Last year, we hired Lanford Excavation, LLC after an open bidding process. Both the SWCD and the landowner were very satisfied with their work, so this year we hired them directly through the New Mexico Statewide Purchasing Agreement, which will allow us to complete more acreage with the same funding. This work started January 2024 and was completed February 2024. The work encompassed the extraction including root ball and the majority of laterals of the Salt cedar followed by mulching to the woody material.

With the water table being so high and the drain running up against the treatment acreage, the masticator got stuck in the mud. Lanford Excavation was able to get the machine out and get back to work with just a short delay. Mulching was a great option for Mrs. Davis because it protects the native seed source, minimizes soil erosion, holds moisture in the soil and reduces weed growth.



Salt cedar being extracted on the Davis Property by Lanford Excavation.





The above three pictures are of the completed acreage-extracted and mulched Salt cedar trees.

Summary: 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	\$30,975
Extraction of Rudy Gonzales, Bobby Contreras and Michael Thom tracts	33.2 acres	FY 2022	\$32,965.98 (\$31,780 State funding)
Extraction/ Mulch of Monica Davis tract	12.7 acres	FY 2023	\$31,780
Extraction/ Mulch of Monica Davis tract	14.96 acres	FY2024	\$31,780

NOXIOUS WEED CONTROL

This year, The Socorro SWCD used our BLM noxious weed funding to treat 200.39 acres of noxious weed infestations. We now have 2 licensed herbicide applicators who accomplish this; Daniela Rivera and Will Kolbenschlag.

There are three main categories of treatments that the Socorro SWCD performs for the BLM. These include recreation areas, public land 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 provided to the BLM Socorro field office throughout the year, along with a spreadsheet summarizing the work completed (attached).

Public Recreation Areas

Socorro SWCD schedules treatments of these areas when they are closed to the public whenever possible. When it 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 public recreation sites are the most challenging areas to perform weed treatments because they are heavily used.

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 popular public spaces in Lemitar, NM. It is a popular spot for dog walkers and joggers, mostly in the early mornings year-round. This year BLM is improving their fence on the low flow side of the area, and the pond. As the project progressed, lots of soil was moved and disturbed. With soil being disturbed seeds are spread, both native and noxious. We treated the parking areas, roads, trails, and picnic areas. Recently, in the pond area, we noticed lots of new sprouts of Salt cedar and Kochia. It is a challenge for Socorro SWCD to keep up with sites that have lots of soil disturbance.



The amphitheater at the Socorro Nature Area.



Pond Area (Disturbed area with Salt cedar sprouts).

Box Canyon

Box Canyon Recreation area known as “The Box” is also a popular spot for rock climbers and hikers. This is a beautiful spot for tourists visiting Socorro and a popular spot for students attending New Mexico Tech. This is also another difficult site to manage weeds because visitors like to camp. This year

we performed several mechanical treatments in the main parking area (weed eaters and hoes) and treated the remaining areas with herbicide.



Datil Well Campground

Datil Well Campground is also known as a popular place to cool off in the summer months. Visitors bring weed seeds from all over the country to germinate here. Chemical treatments were carefully done as well as mechanical treatments around restrooms and picnic tables.





Fort Craig

Fort Craig is an active historic area that draws visitors daily. Thankfully, the area receives little rain and benefits from new trail improvements that greatly reduce the number of weeds present.





Socorro County Fairgrounds

New Mexico Tech has hosted a mud bog event at this site for many years; lots of soil has been disturbed and many people from out of the county would attend. These trucks have the potential to spread seeds. In previous years, the Socorro SWCD has worked on a large infestation of Russian knapweed here. This has been eradicated, and now African Rue has taken hold, spreading from A-1 ready mix across the street, which is completely infested with African rue. This year, many new sprouts were coming up and we were able to treat the weeds before they went to seed.





Ranch Land

There are many ranches that are infested with Salt cedar, Spiny cocklebur, and African rue. In every case, noxious weeds take hold in earthen retention dams from an archaic and outdated method of retaining water for cattle. The main areas that we treat are adjoining with private landowners that are leasing ranch land from BLM. Ranch land is difficult to treat due to most infestations being very remote and difficult to access. Another reason why it is so difficult to treat is that cattle spread the seeds when grazing. The main areas where seeds sprout are the earthen retention dams and the arroyos that they are part of.

The primary ranch areas that we treat include the Abo Canyon, Taylor Canyon, Lutz Canyon (Chupadera Mesa), Arroyo de Tajo, Sawtooth Mountains, Harliss Ranch, Bernardo area dirt tanks, Caleb Kerr's Ranch, Rhodes Ranch, and the Pound Ranch.

Abo Canyon

This site is near Mountainair and is a hidden old mine site with an arroyo running through the middle of it. In 2021, this site was first treated for salt cedar, and we currently have a 95% kill rate. This site will likely be considered to be eradicated next year.



Taylor Canyon

This Canyon is near the Carrizozo Valley of fires. This Canyon is infested with Spiny cocklebur. This year the seeds spread everywhere; in some areas there are carpets of it. We made four trips out there this year before it went to seed to try and prevent more spread. This ranch is very poorly managed, and leaky water tanks/intentional overflowing cause much of the problem.



Lutz Canyon

This canyon also feeds into Taylor Canyon but is at a lower elevation than the Chupadera Mesa. Lutz Canyon has four earthen retention dams that were infested with spiny cocklebur as well. These areas were boom sprayed with herbicide.



Chupadera Mesa

Chupadera Mesa is higher in elevation and feeds into Taylor Canyon and Lutz Canyon. There are lots of earthen retention dams that feed into each other which causes all the seeds to spread into one another. Cattle are also another factor in seed spreading and fertilizing.



Arroyo del Tajo

Arroyo del Tajo is located off Bosquecito road. It is the first arroyo just off Highway 60. This arroyo flows downstream into the Rio Grande and above the stream is Fite ranch. The arroyo upstream has an infestation of Salt cedar on private land, which we cannot get to. When the Arroyos run, they carry Salt cedar seeds that flow down the arroyo. Salt cedar love water and this arroyo frequently runs in the summer causing it to spread everywhere downstream.



Harliss Ranch

Harliss Ranch is located several miles north of highway 380 in the eastern part of Socorro County. This infestation was treated aerially in 2013, with little success due to small size of the individual trees. We have been spot spraying from ATVs every year since then, and are finally starting to see good progress. This spot is tricky to access because of the huge population of Giant sacaton grass.



Bernardo Earthen Retention Dams

In Bernardo there are numerous large earthen retention dams spread across hundreds of square miles. Like everywhere else, the dams hold water that grow Salt cedar, and the cattle spread it around. Many of these areas have been completely eradicated, but a few stubborn tanks remain, primarily due to an inability to treat very large infestations from the ground.





Caleb Kerr Ranch

Caleb Kerr is also another BLM lease; his property adjoins Box Canyon Recreation Area as well. This earthen retention dam has Salt Cedar and African rue. The reason for the African Rue is because A1 Quality Redi-mix has a gravel pit down the road from this dam and their vehicles transport the seeds.



Rhodes Ranch

The Rhodes Ranch is located on Bosquecito Road. This area was cleared of Salt Cedar in 2017 using a bulldozer and root plow, and we have had success treating both Salt cedar and Russian knapweed. This year the Rio Grande rose in the spring and early summer flowing over its banks. The water flowed on to the Rhodes property about six feet deep brining salt cedar seeds and germinating them. When the water receded, it left millions of seeds behind that grew a carpet of Salt cedar across 20 acres.





Pound Ranch

The pound ranch is located adjacent to Caleb Kerr's ranch. This is also another dirt tank trying to grow noxious weeds, although we have eradicated 95% of it. This is along another road that A1 Quality Redi-mix uses.



Sawtooth Mountains

The Sawtooth Mountain area in Alamocito contains a large arroyo full of natural springs that run year-round. It is infested with Salt cedar. Last year we contracted 117 acres of Salt cedar to be treated, and there is approximately a 90% kill. There are 9.27 acres that were not treated because it was not included in the original shape file from BLM. We will return to this area next year and treat the minimal resprouts, as well as the 9.27 acres. There is still approximately 75 acres of Salt cedar to treat, and it will be addressed as funding is available.



BLM Spraying & Monitoring 2023

10.1.22-9.30.23

Agreement#: L19AC00303

Daniela Rivera, License #68991

Will Kolbensschlag, License #54016

Location	Primary Species	Acres Treated	Date	Acres Monitored
Socorro Nature Area	Flix weed,koshia,London Rocket		4.05.2023	2.40
Socorro Nature Area	Russian thistle,Kochia,Puncturevine	2.40	4.24.2023	
Socorro Nature Area	Kochia,Russian thistle	2.40	5.15.2023	
Socorro Nature Area	Kochia,Russian thistle	2.40	6.21.2023	
Socorro Nature Area	Puncture vine ,Russian Thistle ,Kochia	2.00	7.17.2023	
Socorro Nature Area	Puncture vine ,Russian Thistle ,Kochia	1.67	7.24.2023	
Socorro Nature Area	Kochia,Russian thistle	2.40	8.17.2023	
Socorro Nature Area	Salt cedar,Russian thistle ,kochia	2.78	9.27.2023	
Datil Well Campground	Russian Thistle		6.29.2023	7.92
Datil Well Campground	Russian Thistle, Palmer Amaranth,Puncturvine	7.92	8.1.2023	
Datil Well Campground	Russian Thistle, Palmer Amaranth,Puncturvine	3.25	8.22.2023	

Fort Craig	Russian thistle,hog potato weed, misc noxious weeds	4.31	5.02.2023	
Fort Craig	Hog potato weed	2.15	6.22.2023	
Fort Craig	Russian thistle		8.07.2023	4.31
Fort Craig	Nodding Beggarticks	4.31	9.07.2023	
Box Canyon	Russian Thistle, hog potato weed,broom snake weed		4.25.2023	0.66
Box canyon	Russian thistle, hog potato weed	0.11	4.25.2023	
Box Canyon	Russian thistle, hog potato weed,puncture vine	0.66	7.03.2023	
Box Canyon	Russian thistle,		7.03.2023	0.20
Pound Ranch	African rue	2.50	5.16.2023	
Pound Ranch	African Rue,Buffalobur	0.20	7.26.2023	
Socorro County Fairgrounds	African rue,Arizona scorpionweed	5.97	4.25.2023	
Socorro County Fairgrounds	Arizona scorpion weed	6.50	5.16.2023	
Socorro County Fairgrounds	African Rue	2.00	7.26.2023	
Caleb Kerr Allotment	Salt cedar,African rue		4.25.2023	0.73
Caleb Kerr Allotment	Salt cedar,African rue	1.50	7.03.2023	
Rhodes Ranch	Salt cedar	9.13	8.28.2023	
Harliss Ranch	Salt cedar	13.59	8.29.2023	
Harliss Ranch	Salt cedar	10.40	8.31.2023	
MRGCD Office	Malta Starthistle,russian thistle,Arizona Scorpionweed	6.39	5.03.2023	
MRGCD Office	Russian thistle, Arizona Scorpion weed,Puncture vine	2.00	7.26.2023	
Taylor Canyon	Spiny Cocklebur		5.04.2023	15.00
Taylor Canyon	spiny cocklebur,yellowspinethistle,common cocklebur	11.97	7.20.2023	
Taylor Canyon	Spiny Cocklebur	6.59	8.03.2023	
Taylor Canyon	Spiny Cocklebur	15.00	8.15.2023	
Sale Barn African Rue	African rue,Arizona scorpionweed	14.80	5.04.2023	
Sale Barn African Rue	African rue	14.80	7.27.2023	
Chupadera mesa	spiny cocklebur,yellowspinethistle,common cocklebur	5.48	7.18.2023	
Sawtooth Datil	Salt Cedar		5.22.2023	58.50
Sawtooth Datil	Salt Cedar	8.70	6.29.2023	9.27
Dale Muncy Dirt tank	Salt cedar		5.09.2023	1.44
Bernardo Dirt Tanks	Salt Cedar	10.18	9.06.2023	
Abo Mine Site	Salt cedar	1.40	9.05.2023	
Arro del Tajo	Salt cedar	2.00	9.18.2023	
Lutz Canyon	Spiny cocklebur	10.53	8.16.2023	
		200.39		100.43