NEW MEXICO STATE LAND OFFICE

Field Operations Division

Maudes Canyon Restoration Project

SLO Project 20-004

Silver City District

AUTHORIZATION PAGE

This plan has been reviewed and approved by the following individuals.

Project Coordinators:

Diego Villalba
DRM Silver City

Date

Mark K. Meyers

8/2/2019

Mark Meyers
Forester

Date

State Land Office Approval:

Will Barnes, Deputy Division Director
Field Operations

8.12.19

Date

Dana Vackar Strang, Division Director Field
Operations

8/14/19

Date

Howard Gross, Assistant Commissioner Field
Operations

8/14/19

Date

Stephanie Garcia Richard/SS

9/5/19

Stephanie Garcia Richard,
Commissioner of Public Lands

Date

PROJECT OVERVIEW

Name:	Maudes Canyon Watershed Health Project
District:	Silver City
Directions:	Travel approximately 2.5 miles on NM 180 east from Silver City to the site. Access is along the north side of NM 180.
Target Acres Treated:	*50 acres*

Legal Description:

Section:	36
Township:	17S
Range:	14W
County:	Grant

Current Leasing Information:

Agricultural/Grazing:	None
Rights of Ways:	None
Commercial:	None
Mining and Minerals:	None
Oil/Gas:	None
Water Developments:	None
Other:	None

Beneficiary Information:

Common (Public) Schools 100%

OBJECTIVES

The objectives for the *Maudes Canyon Watershed Health Project* are as follows:

1. Provide safety for all SLO personnel, project partners, contractors, and visitors during project activities.
2. Restore desired conditions in Maudes Canyon riparian area and adjacent meadows.
3. Increase forage quantity and quality for wildlife.
4. Increase ecological resiliency to stressors such as wildfire, pathogens, and drought.
5. Conduct monitoring to determine treatment effectiveness and adapt management accordingly for future treatments.

PROJECT SCOPE

The contractor will provide an itemized written bid to the NMSLO Field Operations Division by 5:00 pm on August 23, 2019 detailing full costs (including labor, equipment, materials, permits, seed and any other expense) for each line item listed in the project specifications.

The bid should be presented in table form as shown in the example below.

Specification Item No.	Description	Qty	Acres	Unit Price	Total
1	Chemical treatment, Manual spraying	10	acres		
2	Mechanical treatment, pinon/juniper	40	acres		
	GRT				

The project area will be treated according to the prescription. Slash, downed woody material and noxious weeds will be treated as described

Invoices may only be paid after inspection and approval by the NMSLO project coordinator.

PROJECT BACKGROUND

The project will restore desired conditions within a riparian corridor on state trust land that is currently supporting non-native, invasive plants such as Siberian elm, Russian olive, and salt cedar. Invasive species will be removed to improve ecological function and favor native species such as willow and cottonwood. Additionally, adjacent meadows will be restored that have been threatened by juniper expansion. The desired conditions will provide increased flexibility for fire suppression and management if necessary due to close proximity of homes and businesses. Secondary outcomes will include a more diverse plant community including grasses, forbs and shrubs and enhanced habitat conditions for wildlife.

PROJECT SPECIFICATIONS

Minimum allowable standards are the New Mexico State Forestry Division's New Mexico Forest Practices Guidelines and Water Quality Protection Guidelines for Forestry Operations in New Mexico.

- RIPARIAN RESTORIAN:

- Target species for herbicide treatment include tree of heaven, salt cedar, Siberian elm, and Russian olive.
- Manually apply Garlon 4 Ultra at a rate of 3 quarts/ acre with a basal oil at 25% volume to volume. A blue indicator dye should be added to the spray mixture to show prior treatment of stumps. Do NOT spray this mixture in the river/irrigation canals/ditches or other areas where water is present. Establish a buffer of 10 feet to prevent contamination of water sources.
- Extreme caution should be taken to avoid spraying willows, cottonwoods, and other native vegetation. Consider all factors such as drift and wind speed/direction to avoid contacting willows, cottonwoods, and native trees or shrubs with herbicide.
- All suckers/saplings located inside of or within 10 feet of a water source must be removed by hand.
- A basal bark treatment must be applied to individual saltcedar, Siberian elm, and Russian olive ≤ 6 feet tall or with stems less than 6 inches in basal diameter. Spray should be applied from the base of the stem to a height of 12-15 inches above the ground, thoroughly wetting the stems but not to the point where herbicide runs off and puddles.
- A cut-stump treatment will be performed on all mature non-native, invasive tree species including salt cedar, Russian olive, and Siberian elm. All stumps will be cut to within 5 inches of the ground.
- All woody material (target species) greater than 3 inches in diameter will be limbed and laid flat on the ground. All woody material (target species) less than 3 inches will be lopped and scattered not to exceed a height of 8 inches.

- All junipers within the riparian zone will be cut, lopped, and scattered not to exceed a height of 8 inches.
- Herbicide applicators must have all certificates or licenses required by state and federal laws.
- All herbicides must be stored, mixed, applied, stored, and disposed of according to the specific and detailed information outlined on the label.
- In advance of pesticide use, safety protocols will be developed for storing, mixing, transporting, applying, handling spills, and disposal of unused herbicides and containers. Applicators must wear all protective gear required on the label of the herbicide that is used.
- Contractor is responsible for ensuring an effective herbicide treatment. Considerations for an effective application include, but are not limited to, mixture rate, water chemistry, weather conditions, potential precipitation following application, and proper timing with understanding of target plant phenology.

The services described above and to be performed by the Contractor on State Trust Lands shall conform to all applicable state and local laws and regulations.

Total acres: 10 acres Mechanical Thinning
10 acres Chemical Treatment and Manual Spraying

➢ MEADOW RESTORATION:

- Remove approximately 80% of juniper trees of treatment area. Junipers with smallest diameter should be targeted for removal.
- Retain 20% of largest trees in mosaic variable shaped groups.
- Distances between untreated areas should vary depending on topography and existing vegetation structure.
- Treated and untreated areas should be irregular in shape and follow natural contours.
- Retain deciduous shrub species where possible. Decadent shrubs may be cut to stimulate growth.
- Retain all snags greater than 8 inches DBH for wildlife habitat.
- No leave trees will be limbed, pruned, lopped, or altered in any way.
- Mastication treatment should go all the way to the ground.
- Mastication depths should not exceed 3 inches. Masticated material should not exceed 2 feet in length.
- No new roads will be created. Any temporary access routes will be closed after use with slash placement and water bars if needed.

Total acres: 30 acres Mechanical Thinning

PROJECT TIMING

Start Date: September 1, 2019
Completion Date: June 15, 2020

PURCHASING PROCESS

The contractor will provide an itemized written bid to the NMSLO. Quotes shall be based on the terms and conditions within the **Price Agreement No. 70-539-16-00246 for Natural Resources Management Services** and at a price equal to or less than the amount in the vendors' current contract which meets the same standards and specifications as the project to be procured.

The bid should be presented in table form as shown in the example below.

Specification Item No.	Description	Qty	Acres	Unit Price	Total
1	Mechanical Thinning	40	acres		
2	Chemical treatment. Manual spraying	10	acres		
3	NM County GRT				

Invoices may only be paid after inspection and approval by the NMSLO project coordinator.

The project area will be treated according to the prescription.

A. New Mexico State Procurement Code will be followed.

Quotes will be due on Friday, August 23, 2019, by 5:00 pm via hand delivery, email, or postal mail.

Questions and all quotes should be delivered to:

David Padilla, Administrative Services Division
New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, NM 87501
505-827-5709
dpadilla@slo.state.nm.us

Vendor selection will take place within a reasonable time after the quote due date. Contractors will be selected based on Best Value: 1) responsiveness, 2) capability, 3) total cost to complete project, 4) time frame to complete project, 5) work history on NMSLO projects, 6) work history with other land management agencies and/or 7) ability to

complete project within the required timeline.

B. All vendors will be notified of the outcome.

C. No work shall occur until a purchase order is in place.

MONITORING/EVALUATION

The evaluation plan will incorporate the review of activities by contractual services to ensure prescription is adhered to. Evaluation of work will continue throughout the project.

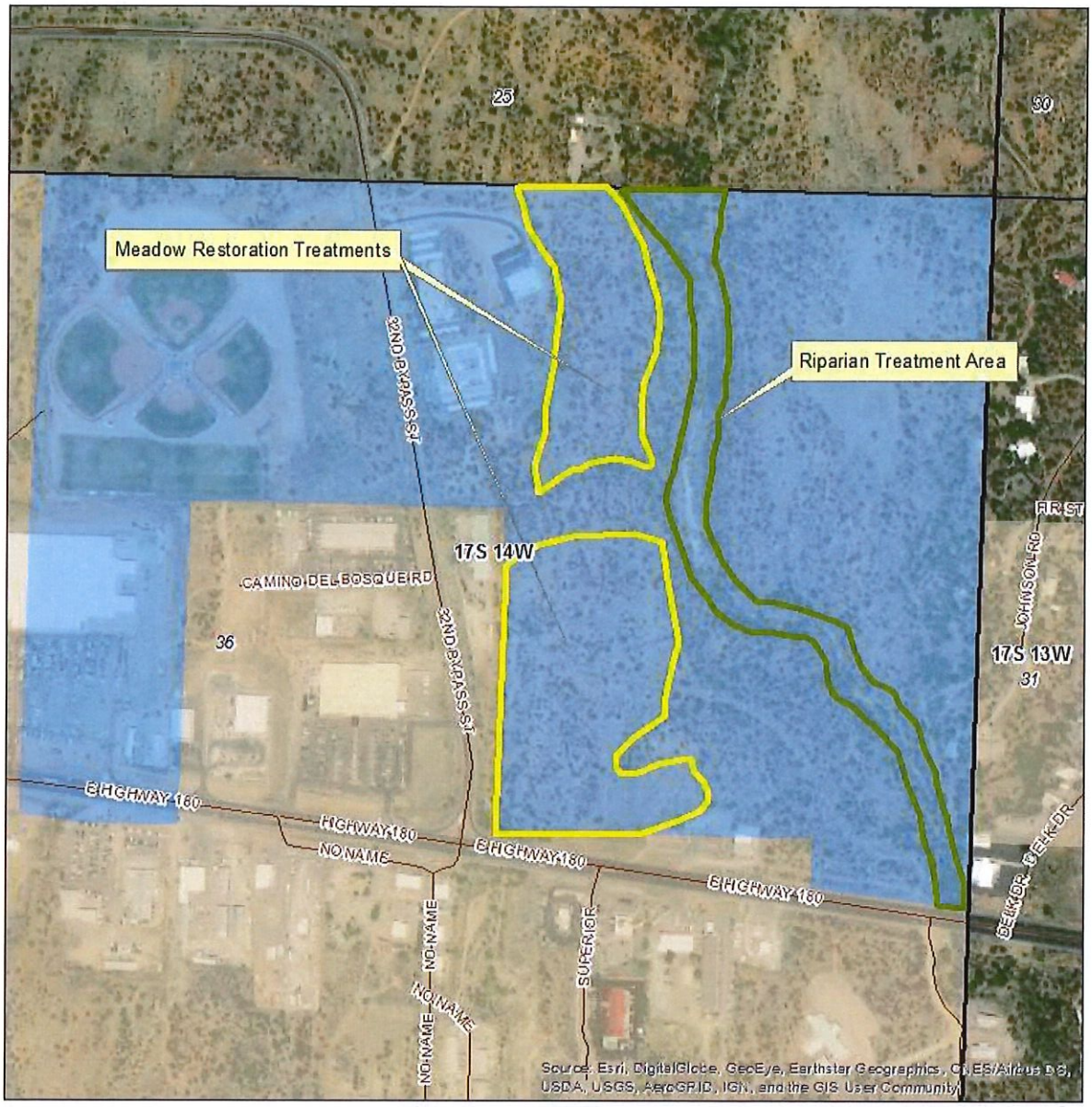
Monitoring will include permanent photo points. Permanent photo points will be established and will provide pictures prior to, during, and after the project.

Photo 1. *Russian olive within riparian corridor under canopy of cottonwood trees.*

Photo 2. *Representative conditions within the meadows with juniper encroachment.*

Photo 3. Junipers within riparian corridor under canopy of cottonwood trees.

Photo 4. Salt cedar within riparian corridor.



Maudes Canyon
Restoration Project

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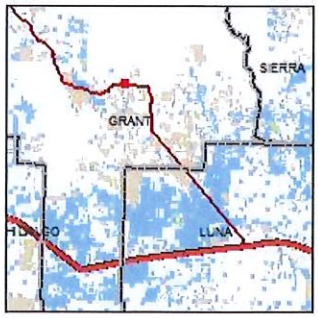

Stephanie Garcia Richard
Commissioner of Public Lands
505-827-5761
www.nmstatelands.org

Map Created by M. Meyers 8/2/2019

Map 1. *Project Areas and Location.*