

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP COMMITTEE
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**
Electronic version available here: <https://goo.gl/forms/NZ8uNdSYpqq0AoUL2>

HPC Project Number:

17-525

PROJECT INFORMATION

| | | | |
|--|--|-------------------------------------|---|
| Project Title: | South Legunita Grassland Habitat Enhancement – Phase 1 | | |
| Game Management Unit: | 36C | Region: | 5 |
| Local Habitat Partnership Committee (LHPC): | Was the project presented to the LHPC? | | |
| Tucson | Yes | | |
| Project Location: (Please provide <u>lat/long</u> in decimal degrees or meters of project area using datum WGS84 or NAD83. If project is larger than one point, please include them all. Provide an accompanying shapefile as an attachment for the project area). Please include enough maps to clearly demonstrate what the project will accomplish and where in Arizona the project is located (e.g. site specific map, and a larger overview map that shows where in the state the project is located). | | | |
| LATITUDE/NORTHING: 3497132.9 | | | |
| LONGITUDE/EASTING: 450516.5 | | | |
| MULTIPLE LOCATION COORDINATES: | | | |
| Project Type: | Habitat Restoration | | |
| Water Project Action (if applicable): | | | |
| Habitat Restoration Action (if applicable): | Mesquite density reduction/grassland restoration | | |
| Other Project Type and Action (if applicable): | | | |
| Has this project been submitted in previous years? | No | | |
| PROJECT SUMMARY | | | |
| Describe the proposed action only. Please use plain English, what action are you proposing? (If applicable, please reference any completed compliance including EAC#). | | | |
| Brief Project Summary: Mesquite will be mechanically removed from approximately 280 acres of former grassland in an area adjacent to recent grassland restoration activities. Trees will be reduced in density on ridgetops and swales, but left standing in drainages to provide cover for mule deer. The intent is to expand currently occupied pronghorn habitat in the southern reaches of the Altar Valley, complimenting 3,408 acres of grassland restoration work completed since 2010. | | | |
| Primary Big Game Wildlife Species to Benefit: | Pronghorn, Mule Deer, Javelina, Mtn lion | | |
| Implementation Schedule (Month/Day/Year) | START DATE: 04/15/18 | COMPLETION DATE: 10/15/18 | |

PROJECT FUNDING

| Project Funding | Itemized Use of Funds |
|---|--|
| <p>*Qualifying Cost Share should be restricted to support (materials, compliance, and or labor) of the proposed action ONLY (same time and place). Please do not include previously purchased supplies or past completed work.</p> <p><u>HPC Funds Requested</u></p> <p>Amount: \$19,350.00</p> <p><u>Cost Share or Matching Funds</u></p> <p>Amount: \$29,510.00</p> <p><u>Percent Match</u></p> <p>60%</p> <p><u>Total Project Cost</u></p> <p>Amount: \$ 48,860.00</p> | <p>Please email separate quotes if HPC funds are to be used to purchase materials or contracted labor: HPC@azgfd.gov.</p> <p>Funds will be used to hire a contractor experienced in mesquite removal, who can bring equipment they either own or rent, provide their own fuel, and do the labor. The HPC funds will be used for work to be done on ASLD leased property (129 acres). An approximate cost of \$150/acre was used for this estimate.</p> <p>Partners for Fish and Wildlife are willing to cost share on the work to be done on the 153 acres of private land.</p> <p>Landowner has completed an archaeology survey, and submitted the application to place an improvement, with a value of \$6,560 (\$150.00 application fee, plus 282 acres of the 1,300 surveyed x \$22.73/acre)</p> |

ENVIRONMENTAL COMPLIANCE

Please indicate the status of the Project's compliance. if you are unsure, please reference:

HPC Compliance Checklist (<https://www.azgfd.com/wildlife/hpc/forms/>).

If you have questions regarding the requirement of an EAC, contact AGFD's Project Evaluation Program:

(<https://www.azgfd.com/wildlife/planning/projevalprogram/>).

***Please email supporting compliance documents to HPC@azgfd.gov ***

| | | | |
|--|---------------------------------|-------------------------|--|
| AGFD EA Checklist Completed: | n/a | Completion Date: | Falls under statewide programmatic, since HPC money will be used on ASLD portion |
| NEPA Completed: | n/a | Completion Date: | |
| State Historic Preservation Office/ Archaeological Clearance: | (survey complete, SHPO pending) | Completion Date: | |

CONTACT INFORMATION

Applicant

The project applicant is the responsible party for seeing the work through to completion.

APPLICANT NAME: [REDACTED]
ORGANIZATION: Santa Margarita Ranch

PHONE: [REDACTED]

ADDRESS: [REDACTED]

EMAIL: (on file w/LRP)

AGFD Project Proponent

The Project Proponent is responsible for compliance, implementation, and annual/final reporting requirements.

AGFD CONTACT NAME: Rana Tucker

PHONE: 520-388-4471

Cooperators

COOPERATOR NAME(S), ORGANIZATION, ROLE IN PROJECT:

Walter Lane, Santa Margarita Ranch, Ranch Manager. Hire contractors and oversee work.

Rana Tucker, Arizona Game and Fish Dept, Landowner Relations Program. Map and flag project area, ensure paperwork/compliance is complete, coordinate funding. Write Stewardship Agreement.

Mark Freiburg, AZGFD, former WM for unit 36 C. Recommendations for treatment area and methods.

Brad Fulk, Sector Supervisor for unit 36 C. Project oversight and support.

[REDACTED], AZ State Lands Dept, Range Resource Area Manager. Approval of land treatment for ASLD lease.

[REDACTED], Partners for Fish and Wildlife, USFWS. Provide funding and oversight for work on private land.

[REDACTED], AZ Antelope Foundation. Provide funding, recommendations, and support.

[REDACTED], Arizona Deer Association. Provide funding, recommendations, and support.

PROJECT NEED AND DESCRIPTION

NEED STATEMENT – PROBLEM ANALYSIS:

The Altar Valley, south of Hwy 86, east of the Bobaquivari Mtns and west of the Sierrita, Los Guijas, and San Luis Mountains, encompasses approximately 457,000 acres of Arizona Rangeland in Game Management Units 36 A, B, and C. A study of grassland quantity and composition completed by the Nature Conservancy in 2012 categorized 347,000 acres in this valley as having <10%, 10-35%, or greater than 35% shrub canopy cover. Only 5% of this once open grassland had less than 15% shrub cover, at the time it was surveyed. The survey found 54% of the total area, or 248,959 acres, to have between 10-35% shrub cover, mainly mesquite, and therefore suitable for restoration activities. The remaining 184,750 acres were either >35% shrub invaded (85,388 acres), or not classified at all, likely due to urban encroachment.

This once open area, where shrub cover has not exceeded 35%, still supports a small population of pronghorn antelope, mostly in areas where grassland restoration has been completed, or shrub density was on the low end of the scale to begin with. It is the desire of the Department that shrub density be reduced to less than 10% on at least 20 square miles, or 12,900 acres, in the southern portions of the Valley in the interest of promoting pronghorn population growth and improving grassland species diversity (Altar Valley Pronghorn Status Update and Restoration Plan Draft--2/14/2017). In the MFA Plan for these units, the need for grassland restoration for the benefit of pronghorn antelope is listed as a Priority 1 Issue.

Since 2010, the Buenos Aires National Wildlife Refuge (BANWR), which encompasses 117,300 acres in the valley, has reduced mesquite density on a total of 3,408 acres, including 1,134 acres funded by the Department

in 2016. In addition to the already cleared acres, 8,229 acres have been surveyed for cultural resources, and are ready for additional treatment, as resources become available. The Santa Margarita Ranch, which borders the Refuge to the west, has expressed an interest in expanding upon grassland restoration work completed around the Refuge Headquarters, where over half of the 3k+ acres cleared are located. To show the sincerity of the Ranch's intentions, Walter Lane, the ranch manager, has contracted a cultural resources survey on 1,300 acres directly west of the 1,134 acres cleared in 2016-17, so that as resources are made available, mesquite might be mechanically reduced on the uplands in that pasture.

PROJECT DESCRIPTION AND STRATEGIES:

The South Legunita pasture, which lays directly west of the grassland restoration project completed in 2017, contains approximately 1,300 acres of loamy upland characterized by perennial grasses on ridgetops encroached upon by mesquite from drainages running through the pasture from northwest to southeast. Tree density is much less dense on the ridges than in drainages, where mule deer bed and travel. It is therefore desirable to remove mesquite from the uplands, but leave most of the trees in the major drainages, and a few scattered trees in the uplands for shade and cover. There are a small number (6) of heavy patches of trees, ranging in size from 1 acre to 35, scattered across the project area; those have been left out of the project area as well, to retain cover for wildlife. Total treatable acres in this pasture is 1,155 acres.

The first phase of this project will involve reducing density of mesquite on 282 acres, starting on the east end of the pasture, closest to previous restoration efforts. The 282 acres have been divided into blocks, for easier delineation of project boundaries, and tracking progress as work begins. 153 acres of these 282 occur on Deeded land owned by Santa Margarita Ranch. The remaining 129 acres are land leased from the Arizona State Land Department (ASLD). A permit to make this improvement has already been filed with ASLD, and is pending approval.

Individual trees smaller than 8" diameter at breast height, and more than 100' from major drainages, which will be delineated on a map and on the ground, will be uprooted using either a track hoe, or bulldozer, ensuring the root crown is severed below the soil surface. Tree carcasses will be piled with a bulldozer or front end loader, and burned when weather permits, following regulations set by the AZ Dept of Environmental Quality and the local Fire Department. Care will be taken to avoid disturbing soil more than necessary, and equipment will be offloaded/loaded in previously disturbed areas.

As funding becomes available, the remaining 873 acres will be grubbed, in blocks proportionate to the amount of funding.

The Altar Valley is also home to the Pima Pineapple Cactus, a listed plant species. A pedestrian survey following US Fish and Wildlife Service recommendations will be completed prior to project implementation, and any cactus located will be visibly marked and avoided. Surveys in adjacent areas indicate low potential for presence, as Lehman's Lovegrass dominates the site, and PPC are not often found in heavy grass cover.

LAND OWNERSHIP AT THE PROJECT SITE(S):

153 acres of Deeded, 129 acres ASLD

PROJECT MONITORING PLAN:

The Landowner Relations Specialist will monitor project progress by visiting the site every third week, and documenting completion of blocks.

PROJECT MAINTENANCE:

After trees are removed, project maintenance, such as monitoring for resprouts and controlling via herbicide, removal, or herbivory, will be the responsibility of the ranch manager. It is the expectation of the Department that reasonable efforts be undertaken to control resprouting mesquite.

PROJECT COMPLETION REPORT TO BE FILED BY:

Rana Tucker, Landowner Relations Specialist, R5

SUPPORTING DOCUMENTS LIST:

If you are unsure, please reference the Recommended Supporting Documents for your Application:
(<https://www.azgfd.com/wildlife/hpc/forms/>).

Map of project area on satellite image

Map of project area on topographic map

Map of project in relation to other projects in the Altar Valley

Statewide Location map

Email documenting Partners for Fish and Wildlife's intent to fund project

Photos of tree loading in area

Have supporting documents been submitted?

ARIZONA GAME AND FISH DEPARTMENT
WATER DEVELOPMENT WORKSHEET

PROJECT TITLE: _____

- 1) **Was a site visit completed (Date and with whom)?**

- 2) **If this is a dirt tank project, has the site historically held reliable water?**

- 3) **If this is a dirt tank project and soil data is available, what type of soil is at the site?**

- 4) **If this is a water catchment project, please list the Development Branch coordination date:**

- 5) **Is the water development listed as a priority in the most recent “Wildlife Water Development Annual Implementation Schedule?”**

- 6) **If this is a water catchment project, please list the Development Branch personnel coordinated with:**

- 7) **Is there a perennial water source available to big game within four miles of this project?**