

**ARIZONA GAME AND FISH DEPARTMENT  
 HABITAT PARTNERSHIP COMMITTEE  
 HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

Game Branch / HPC Project Number:	15-108
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**PROJECT INFORMATION**

**Project Title:** Railroad Allotment Grassland Restoration (Phase III – Walker Lake)

**Region and Game Management Unit:** Region 1 - GMU 3C

<b>Local Habitat Partnership Committee (LHPC):</b> • Show Low	<b>Was the project presented to the LHPC?</b> YES[X] NO[]
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**Has this project been submitted in previous years?** YES[X] NO[]  
**If Yes, was it funded?** YES[X] NO[] → **Funded HPC Project #(s):** #11-107 (Phase II)

**Project Type:** Mechanical Thinning

**Brief Project Summary:** The goal of the project is to continue with long term landscape restoration treatments in transition/winter range grassland habitat across the northeast region of Unit 3C. The project area provides year-round habitat for pronghorn, elk, and mule deer in addition to important winter range habitat for elk and deer herds south of Highway 260. The local Forest Service Ranger District (Lakeside) has been working closely with AGFD Wildlife Managers to identify treatment areas and complete archaeological clearances. Phase I of this project started in 2009 with the use of WCF dollars to complete P/J thinning in a 992 acre block. In 2010, Lakeside Ranger District used stimulus dollars and RAC grants to mechanically treat another 612 acres in the project area. Through cooperation with various partners 2,999 acres of grassland restoration were completed in Phase II of this project. Total area to be treated with funding of this project (Phase III) is 800 acres of a 1,025 acre block. AGFD and the Lakeside Ranger District have already started identification of treatment areas and Archaeological Clearances in Phase IV.

**Big Game Wildlife Species to Benefit (% benefit per species) :** Elk–40%, Pronghorn–40%, Deer–20%

<b>Implementation Schedule</b> (Month/Day/Year):  <u>Project Start Date:</u> March 2016  <u>Project End Date:</u> March 2017	<b>Environmental Compliance:</b> NEPA Completed: Yes[X] No[] N/A[] Projected Completion Date: <u>September 2007</u>  State Historic Preservation Office - Archaeological Clearance: (Provide Attachment) Yes[X] No[] N/A[] Projected Completion Date: <u>August 27, 2015</u>  Arizona Game and Fish Department EA Checklist: N/A[] To be Completed by: <u>Paul Greer</u> Projected Completion Date: <u>October 2015</u>
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**PROJECT FUNDING**

<b>Special Big Game License Tag Funds Requested:</b>	\$ 76,000
<b>Cost Share or Matching Funds:</b>	\$ 82, 500
<b>Total Project Costs:</b>	<b>\$ 158, 500</b>

<b>PARTICIPANT INFORMATION</b>		
<b>Applicant</b> (please print): Charlie Denton	<b>Address:</b> Lakeside Ranger District 2022 W. White Mountain Blvd Lakeside, AZ 85929	<b>E-mail:</b> cdenton@fs.fed.us
<b>Telephone:</b> 928-368-2128		<b>Date:</b> August 31, 2015
<b>AGFD Contact and Phone No.</b> (If applicant is not AGFD personnel): Paul Greer (Wildlife Manager Unit 3A/C) 928-358-8905		
<b>Project has been coordinated with:</b> Paul Greer –AZGFD, Phil Hagadorn – Livestock Permittee,		

**NEED STATEMENT – PROBLEM ANALYSIS:**

The Railroad allotment encompasses approximately 88,000 acres of National Forest land. Large portions of this allotment contain grasslands that have been invaded by relatively new stands of Pinyon/Juniper (P/J) vegetation. This encroachment of P/J trees has resulted in a decrease in the historic amount of herbaceous and woody browse plant production. The encroachment has also caused habitat fragmentation of the pronghorn habitat that exists within the grassland/juniper savannah. This project will treat the existing grassland openings by mechanical mastication of the P/J vegetation, as well as create a few corridors through thinning of P/J vegetation to improve connectivity of pronghorn habitat blocks. Additionally, the removal of this new P/J growth, in tandem with the newly developed grazing guidelines, will serve to allow for an increase in the production of herbaceous and woody browse plants.

**PROJECT OBJECTIVES:**

The goal of the project is to continue with long term landscape restoration treatments in transition/winter range grassland habitat across the Lakeside Ranger District. The Allotment Management Plan for the Railroad grazing allotment was reanalyzed and completed in September of 2007. This effort will allow appropriate livestock grazing levels for the allotment based on current range conditions. This analysis allows for a total of 10,000 acres each of grassland and woodland P/J thinning to be implemented on the allotment to restore woodland and grassland habitat structure and productivity. The project area contains year-round habitat for pronghorn as well as elk and mule deer. The project area also serves as critical winter range for mule deer and elk herds found south of Highway 260. Department personnel have worked cooperatively with Lakeside District personnel to initially identify 11,000 acres of grassland & pinyon-juniper habitat for restoration thinning treatments. A large block of approximately 1025 acres has been identified for this current proposal (Phase III). This block contains soil types that are conducive to the production of herbaceous vegetation (grasses and forbs). Additionally the woody browse component on the project area, including silver sagebrush and four wing saltbush, will benefit from the removal of the existing P/J canopy. Following are specific objectives to be accomplished by the mechanical mastication of P/J vegetation as proposed by this project:

- Restoration of grasslands and improved pronghorn, elk and mule deer habitat conditions.
- Improved forage quality and quantity within elk and mule deer winter range habitat.
- Increase connectivity of isolated pronghorn habitat blocks found in northern Unit 3C by the creation of open corridors among dense P/J vegetation.

- Modify vegetative class to allow for natural fire cycle to be reintroduced back into the ecosystem.
- Improve watershed conditions.

### **PROJECT DESCRIPTION AND STRATEGIES:**

Thinning activities will use mechanical mastication to remove invading P/J vegetation from up to 10,000 acres on the allotment that is grassland habitat. This is a landscape level project that includes 4,554 acres already treated (Phase I & II) which started with the funding of an HPC grant proposal submitted in 2008. The project has been tiered into 4 phases. The project is now in Phase III. With NEPA already complete, AGFD Region I in cooperation with the Lakeside Ranger District has identified funds to start Archaeological Surveys in treatment areas within Phase IV.

A block of approximately 1025 acres has been identified for this current proposal (Phase III). This funding request is to treat 800 acres of the 1025 acres block. This block contains soil types that are conducive to the production of herbaceous vegetation (grasses and forbs) that will benefit from the removal of the existing P/J canopy.

Thinning activities will use mechanical mastication to remove most trees within the proposed project area. Pinyon and juniper trees will be removed to restore grassland habitat and improve the quality and quantity of herbaceous and woody browse plant production. In larger treatment areas, some trees will be left in clumps or stringers to facilitate movement/use by elk in the form of hiding and thermal cover. The masticated area later may be prescribe burned to help reintroduce natural fire into the project area if future funding is obtained.

#### **Phase I (COMPLETED):**

Railroad Hand Thinning Block – 992 acres

Cost: \$54,750

Funding Sources: WCF dollars

Bull Hollow Block A (mechanical mastication) – 563 acres

Cost: \$42,000

Funding Source: ARRA federal stimulus money (USFS)

**Total Treatment Area: 1,555 acres (Completed)**

**Total Cost to Treat: \$96,750 (Already Spent)**

#### **Phase II (COMPLETED)**

Bull Hollow Block B (mechanical mastication) – 443 acres

Cost: \$35,000

Funding Source: (USFS)

Cactus Flat Block (mechanical mastication) – 1259 acres

Cost: \$93,000

Funding Source: HPC Grant #11-107

Cactus Flat Pronghorn Corridors (Hand Thinning) – 117 acres

Cost: \$16,505

Funding Source: (RAC Grant)

Umbrella Flat Block (mechanical mastication) – 736 acres

Cost: \$60,000

Funding Source: HPC Grant #11-107 and (USFS)

Pinedale-Taylor Rd Bock (mechanical mastication) – 444 acres  
Cost: \$33,400  
Funding Source: (RAC Grant)  
**Total Treatment Area: 2,999 acres**  
**Total Cost to Treat: \$237, 905**

**Phase III (Current HPC Grant):**

Walker Lake Block (mechanical mastication) – 1025 acres  
USFS funding to complete 225 acres mastication  
HPC funding proposal to complete 800 acres mastication

**Total Treatment Area: 1,025 acres**  
**Total Cost to Treat: \$87,125**

**Phase IV (Proposed for Treatment in 2016-2017):**

Antelope Block (mechanical mastication) – 1,760 acres  
Rattlesnake Block (mechanical mastication) – 2,240 acres  
Thistle Block (mechanical mastication) – 1,500 acres  
513 acres Archaeological Survey Completed 2015

**Total Treatment Area: 5, 500 acres**

**PROJECT LOCATION**

(Please provide lat/long in decimal degrees of project area using datum WGS84. If project is larger than one point, please provide multiple lat/long points or an existing shapefile of the project area)  
Townships: T 12N, R 19E, Sec. 24, 25, 31; T 12N, R 20E Sec. 19, 29, 30, 31 (See attached map).  
Lat/Long: 110.2699 34.41052

**LAND OWNERSHIP AT THE PROJECT SITE(S):**

(If the project area is private property, please state specifically and provide the landowner's name)

- USDA Apache Sitgreaves National Forest, Lakeside Ranger District. There is no private land within the project area.

*IF PRIVATE PROPERTY, IS THERE A COOPERATIVE BIG GAME STEWARDSHIP or LANDOWNER AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?*

YES[] NO[] N/A[X]

**HABITAT DESCRIPTION:**

Great Basin Grassland, P/J transition woodland. Elevation range: 6000 to 6300 ft.

**ITEMIZED USE OF FUNDS:**

P/J thinning in historic grassland habitat will be conducted by a private contractor utilizing mechanical mastication, likely a grinder attached to a skid steer. Thinning costs will be reimbursed at a rate of \$95 per acre or less, if bids from contractors come in less than \$95/acre treatment size will increase. If bids come in lower than these cost per acre estimates more acres than the 800 acre block will be treated.

Special Big Game License Tag Funds  
**\$76,000 (for mechanical mastication)**

Cost Share or Matching Funds (for volunteer labor rates please refer to the worksheet below)

\$42, 500 – USFS funding (mechanical P/J treatment)

\$40, 000 – USFS funding (Archaeological survey and clearance)

**\$82, 500 Total Cost Share**

**LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:**

Paul Greer, Wildlife Manager AGFD GMU 3A/C

Charlie Denton, Wildlife Staff, Lakeside Ranger District, USDA Forest Service

Brian Choate, District Archaeologist, Lakeside Ranger District, USDA Forest Service

Phil Hagadorn (Permittee)

**WOULD IMPLEMENTATION OF THIS PROJECT ASSIST IN PROVIDING, MAINTAINING,  
OR FACILITATING RECREATIONAL ACCESS?**

YES[] NO[] N/A[X]

**PROJECT MONITORING PLAN:**

Photo points will be established in selected areas of the overall project area to document pre and post project vegetative conditions.

**PROJECT MAINTENANCE:**

Resprout on these species is minimal and will not need further treatment.

**PROJECT COMPLETION REPORT TO BE FILED BY:**

Paul Greer, AGFD or Charlie Denton, USFS

**WATER DEVELOPMENT PROJECTS (please use the worksheet below):**

NA

**TREE CLEARING/REMOVAL PROJECTS (please use the worksheet below):**

See below

**ATTACHMENTS:**

(Please provide cultural clearance documentation from land management agency, e.g., FONSI, Inventory Standards, etc. Also attach any project pictures)

## **ARIZONA GAME AND FISH DEPARTMENT** **TREE CLEARING/REMOVAL WORKSHEET**

**PROJECT TITLE:** Walker Lake Grassland Restoration

- 1) **What is the estimated acreage of the project?**  
**1,025**
  
- 2) **How are the trees going to be cleared? (agra axe, chain saw, grubbing, push, chaining):**  
**Drum grinder attachment on front loader or equivalent - Mastication**
  
- 3) **What is the estimated number of trees per acre?**  
**20 trees per acre (low density) to 70 trees per acre (high density)**
  
- 4) **Describe trees to be cleared (species, estimated diameter, single stem, multi-stem):**  
**Shaggy bark juniper, multi-stem, estimated average diameter at root crown of 5 inches.**
  
- 5) **Describe terrain (slope, soil type, rocks)**  
**The terrain is gently rolling slopes with clay and loam soils. Rocky areas will not be treated.**
  
- 6) **Please list any special land management status for the project site (e.g. Wilderness, National Park, National Monument). If private land, list landowner.**  
**None – Project site is contained entirely within USDA National Forest**
  
- 7) **Please provide the following information about access to the proposed site:**  
Type of access (mark one): 2x4 vehicles    4x4 only    Foot only\*\*

\*\*If foot access only: Distance in miles:    Approx. hiking time:

Does access to this site require crossing private or tribal lands? YES[] NO[X]

Is the site relatively accessible for tree removal equipment? YES[X] NO[]

Please describe any restrictions to public access:

**None**





View of Walker Lake Project Area looking in from western boundary



Northeast portion of Walker Lake Project Area





Walker Lake Project Area (cleared area in upper right-hand corner is outside of project boundary)



