

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

Game Branch / HPC Project Number: 17-203

PROJECT INFORMATION

Project Title: Anderson Mesa – Antelope Tank Area Habitat Restoration

Region and Game Management Unit: FOR2, GMU 5BN

Local Habitat Partnership Committee (LHPC):

- FRSG Group

Was the project presented to the LHPC?

YES ☐ NO ☒

Has this project been submitted in previous years? YES ☐ NO ☒

If Yes, was it funded? YES ☐ NO ☐ → **Funded HPC Project #(s):**

Project Type: Habitat Restoration by Hand Treatment

Brief Project Summary: Invading junipers will be removed from grassland and savannah areas in the Antelope Tank area of Anderson Mesa to return the treated area to its former forage and browse production potential. Trees will be cut and left in place by one, possibly two, prison crews, contracted through the Arizona State Forestry Division, utilizing chain saws and other hand tools. Forest Service crews will burn tree carcasses after needles have adequately dried to reduce carcass debris. Before initiating any of the prescribed burning activities that are part of this project, the Flagstaff Ranger District Archaeologist will be notified to ensure the proposed activities have cultural resource clearance. All prescribed burning activities must receive archaeological clearance prior to implementation.

The Management Focus Area Plan for the Game Management Unit this project falls within, GMU 5; states elk population within these GMUs supports the greatest amount of elk hunting opportunity within the state, so management focus is placed on maintaining a healthy population of elk within the habitat's biological and social carrying capacity. The MFA further states as a priority 1 issue: "Grassland habitat continues to be impacted by encroachment of pinion and juniper trees, thus reducing grass, forb, and browse productivity and diversity" and identifies as an action: "Anderson Mesa/adjacent areas: 38,500 acres are identified to be treated over the next 10 years..."

Big Game Wildlife Species to Benefit: Elk, Deer, Pronghorn

Implementation Schedule (Month/Day/Year):

Project Start Date: 06/01/2017

Project End Date: 06/01/2019

Environmental Compliance:

NEPA Completed: Yes ☒ No ☐ N/A ☐

Projected Completion Date: _____

State Historic Preservation Office - Archaeological Clearance:

Yes ☐ No ☐ N/A ☐

Projected Completion Date: _____

Arizona Game and Fish Department EA Checklist: N/A ☒

To be Completed by: _____

Projected Completion Date: _____

PROJECT FUNDING

Special Big Game License Tag Funds Requested:	\$ 60,000
Cost Share or Matching Funds: Arizona Department of Forestry and Fire Management (ADFFM) (ADFFM Crew, Crew Boss and Crew Coordinator) US Forest Service – Coconino NF (Cost of implementing burn to remove tree carcasses including Fuels Specialist, Silviculture Specialist, and burn crew)	\$ 33,210 \$ 12,140
Total Project Costs:	\$ 105,350

PARTICIPANT INFORMATION

Applicant (please print): [REDACTED]	Address: [REDACTED] [REDACTED]	E-mail: [REDACTED]
Telephone: [REDACTED]		Date:

AGFD Contact and Phone No. (If applicant is not AGFD personnel):
Steve Cassady, Landowner Relations Program Specialist, FOR2, ph. 928-214-1270

Project has been coordinated with:
[REDACTED], Flying M Ranch; [REDACTED] and [REDACTED], USFS; [REDACTED], Arizona Department of Forestry and Fire Management, Luke Apfel, Wildlife Manager GMU 5B.

NEED STATEMENT – PROBLEM ANALYSIS:

For decades, juniper and pinyon pine trees have encroached into former grasslands and savannahs, resulting in reduced diversity and total production of grasses, forbs and shrubs as well as smaller, more fragmented blocks of grassland habitat. The planned treatment is a component of pinyon pine, juniper and ponderosa pine vegetation treatments identified in the selected alternative of the “Final Environmental Impact Statement for the Bar T Bar and Anderson Springs Allotments Management Plans”, February 2005. Shrub and woodland invasion into historic grasslands is identified as an item of high importance in Arizona's State Wildlife Action Plan: 2012 - 2022.

The Management Focus Area Plan for the Game Management Unit this project falls within, GMU 5; states as a priority 1 issue: “Grassland habitat continues to be impacted by encroachment of pinion and juniper trees, thus reducing grass, forb, and browse productivity and diversity” and identifies as an action: “Anderson Mesa/adjacent areas: 38,500 acres are identified to be treated over the next 10 years...”

PROJECT OBJECTIVES:

The purpose of this project is to increase both the diversity and production of grasses, forbs and shrubs thereby increasing the available forage and browse for big game species as well as reducing fragmentation of grassland and savannah habitat.

PROJECT DESCRIPTION AND STRATEGIES:

A total of approximately 1,011 acres of invaded grasslands and PJ savannahs, occurring in several distinct polygons, has been identified for treatment through this application. These individual

polygons, or treatment areas, have been prioritized by the coordination team represented by individuals from the Flying M Ranch, USFS-CNF, Arizona Department of Forestry and Fire Management and Arizona Game and Fish Department. The treatment area priority, Forest Service identified treatment type, and acreage are:

1. Grassland maintenance of PJ, 118 acres
2. Grassland maintenance of PJ, 28 acres
3. Grassland maintenance of PJ, 22 acres
4. Grassland maintenance of PJ, 475 acres
5. PJ restoration to grassland, 189 acres
6. PJ restoration to grassland, 39 acres
7. PJ restoration to grassland, 9 acres
8. PJ restoration to grassland, 43 acres
9. PJ restoration to grassland, 88 acres

The prescriptions for “Grassland maintenance of PJ” and “PJ restoration to grassland” are found in Chapter 2 of the “Final Environmental Impact Statement for the Bar T Bar and Anderson Springs Allotments Management Plans”, pages 26 through 31, February 2005. A copy of the narrative portion of the prescriptions is attached to this application (pages 27 and 28 are maps and are not included).

Individual polygon treatment prescriptions are as follows:

- Polygons 1 through 5 will be treated as stated in the prescriptions for “Grassland maintenance of PJ” and “PJ restoration to grassland”
- In polygons 6 through 9 trees of a height of 8 feet and less will be cut and, where practical, placed in a manner that flames from the burning of the carcasses will scorch/burn nearby uncut trees to increase the number of trees killed and further return the area to a savannah like aspect.

The coordination team has conservatively estimated approximately 700 acres can be treated with the requested funds, but anticipates additional acreage can be treated as well. If any acreage identified needing treatment in this application is not completed the coordination team will promptly seek funding either through another HPC funds application or through another source of funding.

The treatment will be conducted in two phases. The Good Neighbor Agreement between the State of Arizona, Arizona Department of Forestry and Fire Management and the US Forest Service, Southwestern Region (a copy of the agreement is attached to this application) provides the authority for the Arizona State Forestry to perform activities on US Forest Service administered lands within the Southwest Region of the US Forest Service. Therefore phase 1 of the treatment will be conducted by Arizona Department of Forestry and Fire Management (ADFFM) forestry crews. ADFFM will also provide coordination of the implementation crews with habitat enhancement priorities of the USFS and AGFD. Trees will be cut and left to lie by the prison crew(s).

Phase 2 of the project will be conducted when USFS Fire Management Crews monitoring the carcasses feel the maximum consumption of tree carcasses will occur, described as when the trees have dried to the point that needles have turned orange to brown, but not yet fallen off (this is anticipated to be 6 months to 1 year after cutting). At this time USFS fire crews will burn the tree carcasses. It is anticipated most of the carcass debris will be removed. Before initiating any of the prescribed burning activities that are part of this project, the Flagstaff Ranger District Archaeologist will be notified to ensure the proposed activities have cultural resource clearance. Note: All

prescribed burning activities must receive archaeological clearance prior to implementation.

PROJECT LOCATION:

The project is located on Anderson Mesa within the Coconino National Forest within Sections 24 and 25 in Township 18N Range 10E; Section 19, 20, 29, 30, 31 and 32 in Township 18N Range 11E; and Section 5 in Township 17N Range 11E.

LAND OWNERSHIP AT THE PROJECT SITE(S):

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

- USFS – Coconino National Forest, Flagstaff Ranger District, Grazing Permittee is the Flying M Ranch

IF PRIVATE PROPERTY, IS THERE A COOPERATIVE BIG GAME STEWARDSHIP or LANDOWNER AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?
YES[] NO[] N/A[]

HABITAT DESCRIPTION:

Colorado Plateau Woodland Grassland. Vegetation includes one-seed juniper, Colorado pinyon, blue grama, western wheatgrass, bottlebrush squirreltail, mutongrass and a variety of perennial and annual forbs.

ITEMIZED USE OF FUNDS:

Special Big Game License Tag Funds

- The Special Big Game License Tag Funds will be used to fund the cost of obtaining Arizona Department of Corrections prison crew(s).

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

- The Arizona Department of Corrections/Arizona State Forestry Division match funds will be used to supervise the prison crews(s) and the Crew Boss and Crew Coordinator during implementation of the treatment.
- The USFS match funds will cover the cost of implementing the burn to remove tree carcasses, including the Fuels Specialist, Silviculture Specialist, and burn crew.

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

Flying M Ranch – management of livestock to enhance treatment objectives

USFS – Coconino NF – NEPA, coordination of habitat priorities, prescribed burn to remove tree carcasses

Arizona Department of Forestry and Fire Management – Contracting, supervision and oversight of the Forestry crews

Arizona Game and Fish Department – coordination of habitat priorities, funding

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

YES[] NO[x] N/A[]

PROJECT MONITORING PLAN:

Monitoring of the implementation phase of the treatment will be conducted by representatives of the Arizona Department of Forestry and Fire Management and personnel from the USFS – Coconino NF to

ensure the treatment prescription(s) is/are followed. Post treatment monitoring will be performed according to protocol established within the Final Environmental Impact Statement for the Bar T Bar and Anderson Springs Allotments Management Plans.

PROJECT MAINTENANCE:

Long term maintenance need will be determined and conducted by personnel from the USFS – Coconino NF.

PROJECT COMPLETION REPORT TO BE FILED BY:

██████████, District Manager/Fire Management Officer Arizona Department of Forestry and Fire Management Northern District Office

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

N/A

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

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

PROJECT TITLE: Anderson Mesa – Antelope Tank Area Habitat Restoration

- 1) What is the estimated acreage of the project?**
Minimum - 700 acres and up to 1011 acres
- 2) How are the trees going to be cleared? (agra axe, chain saw, grubbing, push, chaining):**
The trees will be cut by hand using chain saws. Carcasses will then be burned by Forest Service fire crew staff to remove/reduce carcasses.
- 3) What is the estimated number of trees per acre?**
PJ restoration to grassland component: 50 – 150 trees per acre
Grassland maintenance of PJ component: 300 – 500 trees per acre
- 4) Describe trees to be cleared (species, estimated diameter, single stem, multi-stem):**
In the PJ restoration to grassland component of the treatment, trees to be cleared are dominantly one seed juniper (multi-stemmed trees) with just a few small pinyon pine trees removed. In the Grassland maintenance of PJ component approximately 55 percent of the trees to be removed are junipers and 45 percent are pinyon pine.
- 5) Describe terrain (slope, soil type, rocks)**
The majority of the treatment area is gently sloping. Most of the Grassland maintenance of PJ component has a few stones and occasional with a cobbly soil surface. The PJ restoration to grassland component is generally cobbly and rocky. Priority area 5 is steep and rocky.
- 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

- 7) Please provide the following information about access to the proposed site:**

Type of access (mark one): ☒2x4 vehicles ☐4x4 only ☐Foot only**

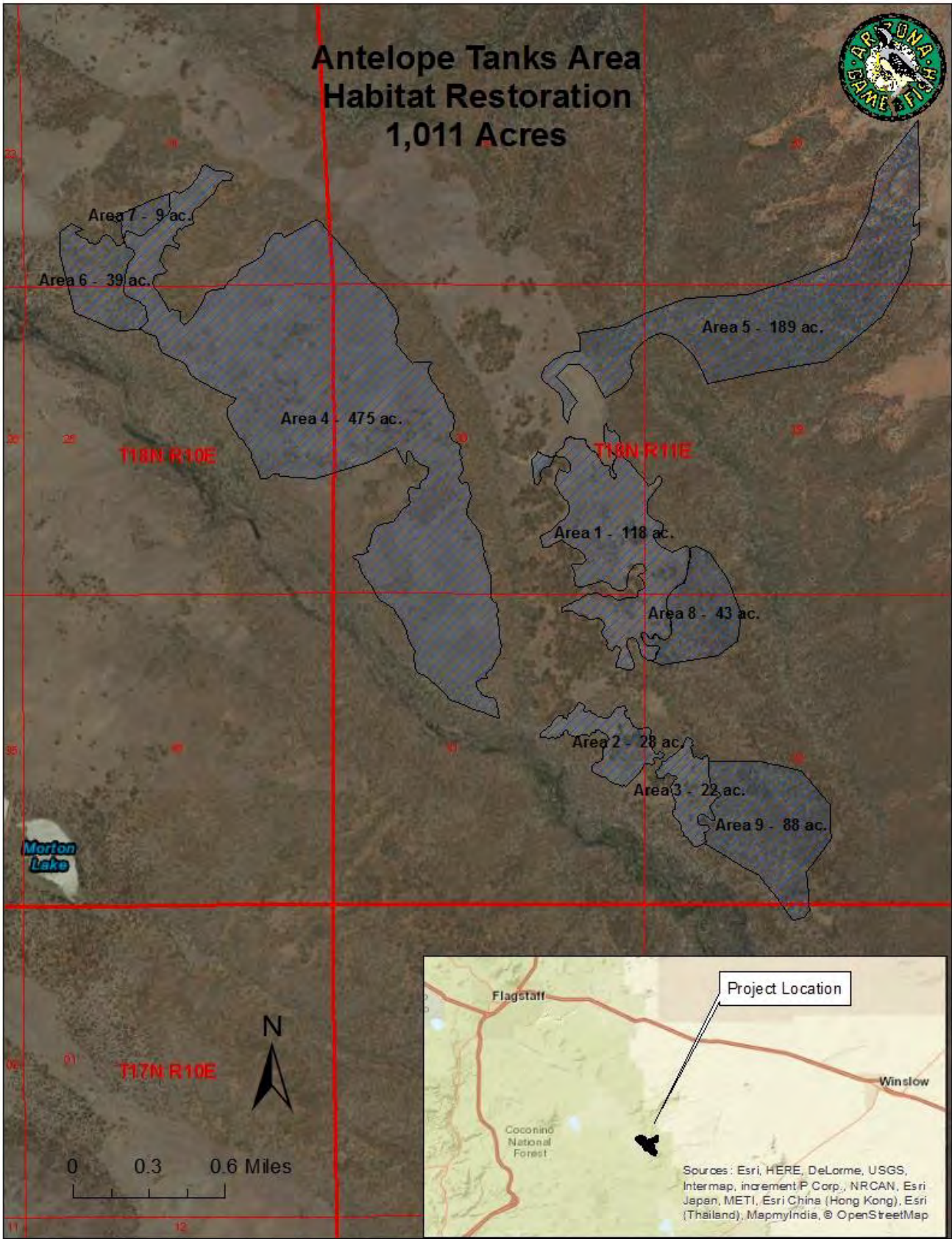
**If foot access only: Distance in miles: Approx. hiking time:

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:

Attachment A
Map



Attachment B



Treatment Area 3
110 trees per acre



Treatment Area 4
150 trees per acre



Treatment Area 5



Treatment Area 7