

HPC
#2

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

Game Branch / HPC Project Number: _____

PROJECT INFORMATION

Project Title: Anderson Mesa Grassland Restoration Project; Yeager Canyon Unit; Treatment Area #1

Region and Game Management Unit: Region II, GMU 5BN

Local Habitat Partnership Committee (LHPC):

- Flagstaff/Williams
- FRSG

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: Grassland Restoration/Grassland Maintenance

Brief Project Summary: Within Treatment Area #1 of the Yeager Canyon Unit (approx. 419 acres), we propose to maintain and improve the herbaceous community by removing encroaching trees species from grassland sites and to reduce the trees per acre in areas that have not been treated in the past. Implementation will be accomplished through the use of Agra axes, hand thinning and pile burning to restore/maintain the grasslands to provide a healthy ecosystem and improve wildlife habitat for movement, foraging, and cover.

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

Implementation Schedule (Month/Day/Year):

Project Start Date: 2/1/2016

Project End Date: 10/1/2018

Environmental Compliance:

NEPA Completed: Yes No N/A

Projected Completion Date: February 3, 2005

State Historic Preservation Office - Archaeological Clearance:

Yes No N/A

Projected Completion Date: Expected by December 31, 2015

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: \$ 28,800

Cost Share or Matching Funds: \$ 28,840

Total Project Costs: \$ 57,640

PARTICIPANT INFORMATION

Applicant (please print):

██████████

Address:

██████████
██████████
██████████

E-mail:

██████████

Telephone:

██████████

Date: 8/26/15

AGFD Contact and Phone No. (If applicant is not AGFD personnel):

Steve Cassady, LRPS (928) 214-1270

Project has been coordinated with:
Flying M Ranch [REDACTED]

NEED STATEMENT – PROBLEM ANALYSIS:

Reduce encroachment and canopy cover of juniper and pinyon pine to maintain and restore grasslands. There is also a need to remove dead pinyon pine and reduce the high fuel loading in the area to protect habitat from uncharacteristic fires.

PROJECT OBJECTIVES:

- Improve forage quality and quantity on elk, mule deer and antelope winter and transition range.
- Improve antelope fawn survival.
- Reduce juniper and pinyon encroachment and canopy cover.
- Reduce future bark beetle infestation.
- Reduce/remove dead pinon.
- Increase water yield.

PROJECT DESCRIPTION AND STRATEGIES:

This project is part of a larger landscape level approach to improve and restore grassland habitat on and adjacent to Anderson Mesa, Coconino National Forest- Flagstaff Ranger District. The goal of the project is to remove encroaching Juniper and Pinyon Pine from areas that were previously meadows and open grasslands/savannahs. Beginning in the late 1950's, and continuing to date, thousands of acres on Anderson Mesa were cleared of encroaching juniper, pinyon pine and ponderosa pine through various means such as mechanical chaining, mechanical pushing, prescribed fire and grinding. We propose to maintain and improve the herbaceous community by removing encroaching trees species from grassland sites through the use of Agra axes, hand thinning and pile burning to restore and maintain the grasslands. Additionally we propose to treat areas that have not been treated previously and are currently not meeting desired conditions by having a higher canopy cover of juniper and pinyon pine than natural conditions. Some of these areas were also severely impacted by pine bark beetles between 2008-2010 which resulted in heavy mortality of pinyon pine and a significant increase in fuel loading. By removing the heavy fuel loading and reducing the tree canopy cover, habitat conditions for pronghorn, elk and mule deer will improve and the area will be less susceptible to uncharacteristic fires. Non-game species such as golden eagles, song birds and small mammals would also benefit. Removing and reducing the canopy cover of juniper and pinyon pine will also benefit important browse species such as cliff rose which is important winter forage for elk, mule deer, and pronghorn antelope.

PROJECT LOCATION: Treatment Area #1 of the Yeager Canyon Unit is located in portions of sections 7, 8, and 17 of T18N, R11E (see attached map). The entire Yeager Canyon unit consists of 905 acres which has been divided into three treatment units. If funding is received, the Forest Service will implement project activities in Treatment Area #1 (approximately 419 acres). This unit is adjacent to the Flying M Ranch headquarters and borders State land to the east which has had significant vegetation treatments similar to those outlined in this proposal. Future proposals will include Treatment Area #2 (approximately 207 acres), and Treatment Area #3 (approximately 278 acres).

LAND OWNERSHIP AT THE PROJECT SITE(S):

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

- Forest Service (administered by Coconino NF)

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: Pinyon Juniper Grassland, Great Basin Grassland and Pinyon Juniper Woodland.

ITEMIZED USE OF FUNDS:

HPC Funds				
Personnel	Daily Rate	Days	Total	
Operator1	\$385.00	30	\$11,550.00	
Operator2	\$300.00	30	\$9,000.00	
Operator 3	\$275.00	30	\$8,250.00	
Total			\$28,800.00	
Cost Per Acre				\$68.74
USFS Funds				
		Daily Rate	Days	Total
	Fuel	\$95.00	30	\$2,850.00
	Equipment Maintenance	\$36.00	30	\$1,080.00
	2-Vehicles	\$160.00	30	\$4,800.00
	Hand Crew	\$1,500.00	5	\$7,500.00
	Daily Rate Specialist (Fuels)	\$350.00	5	\$1,750.00
	Daily Rate Specialist (Range)	\$350.00	3	\$1,050.00
	Daily Rate Specialist (Heritage)	\$385.00	3	\$1,155.00
	Daily Rate Specialist (Wildlife)	\$385.00	3	\$1,155.00
	RX Burning Cost/Day	\$2,500.00	3	\$7,500.00
Total				\$28,840.00
Combined Total				\$57,640.00
Combined cost Per acre				\$137.57

RX Burning Costs include: Personnel, Supplies and Equipment. (1 Fire Engine, 1 Water Tender and 10 personnel)

Special Big Game License Tag Funds

Approximately 50% of total project cost to treat 419 acres = \$28,000

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

From USDA Forest Service approximately 50% of total project cost to treat 419 acres = \$28,840

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

USDA – Forest Service, Coconino National Forest – funding, equipment, labor, NEPA and Heritage Clearance

Region II Arizona Game and Fish Department – project design assistance

Flying M Ranch – project design assistance

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

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

PROJECT MONITORING PLAN:

The project will be monitored by all three cooperators; USFS, AGFD, Flying M Ranch

PROJECT MAINTENANCE:

The project will be maintained by USFS

PROJECT COMPLETION REPORT TO BE FILED BY:

USFS and/or AGFD Region II LRPS

WATER DEVELOPMENT PROJECTS (please use the worksheet below):

N/A

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

ARIZONA GAME AND FISH DEPARTMENT WATER DEVELOPMENT WORKSHEET

PROJECT TITLE: Yeager Canyon Treatment area 1

- 1) **Is the water development listed as a priority in the most recent "Wildlife Water Development Annual Implementation Schedule?"**
- 2) **Please list the Development Branch personnel and date coordinated with for this project.**
- 3) **What is the estimated annual inches of precipitation for the area? (mark one)**
2-4 4-6 6-8 8-10 10-12 12-14 14-16 >16
- 4) **Is there a perennial water source available to big game within four miles of this project?**

YES (please complete #5 below) NO (skip #5 below)
- 5) **For the accessible, perennial water source nearest this project:**
Name of water source:
Type of water source (catchment, spring, dirt tank):
Ownership of water source:
Distance in miles from project:
- 6) **Is the target wildlife species a result of transplant efforts? YES NO**
- 7) **Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument). If private land, list landowner.**
- 8) **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: _____ Approximate hiking time: _____

-- Does access to this site require crossing private or tribal lands? YES NO

-- Please describe any restrictions to public access:
- 9) **Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.**
- 10) **Was a site visit completed? Yes No**
If Yes, please list personnel that attended and date.

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

PROJECT TITLE: Yeager Canyon Treatment area 1

- 1) **What is the estimated acreage of the project?**
419 acres

- 2) **How are the trees going to be cleared? (agra axe, chain saw, grubbing, push, chaining):**
Agra axe, hand thinning and pile burning

- 3) **What is the estimated number of trees per acre?**
Approximately 10-100 trees per acre. About 246 acres have previously been mechanically treated and the proposed treatment will be maintaining the open grassland characteristics. This area contains mainly shrub form juniper trees at a density of less than 25 trees per acre. The remaining 173 acres have not been previously treated and have approximately 50-100 trees per acre. Pinyon pine within this area suffered heavy mortality due to the pine bark beetle infestation from 2008 to 2010.

- 4) **Describe trees to be cleared (species, estimated diameter, single stem, multi-stem):**
Juniper and Pinyon Pine. Stem sizes range from 1"-5" diameter in previously treated areas to 10"-20" diameter in the previously untreated areas. Pinyon pine with a DBH of 6" or greater would not be cleared.

- 5) **Describe terrain (slope, soil type, rocks)**
Yeager Canyon Treatment Area #1 is mainly located on elevated plains with slopes ranging from 0 to 15%. Soils are predominately a fine sandy loam derived from a limestone/sandstone parent material with rock fragments covering 20 – 40% of the soil surface.

- 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

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

Please describe any restrictions to public access: None

ARIZONA GAME AND FISH DEPARTMENT VOLUNTEER HOURLY RATES AND CLASSIFICATIONS WORKSHEET

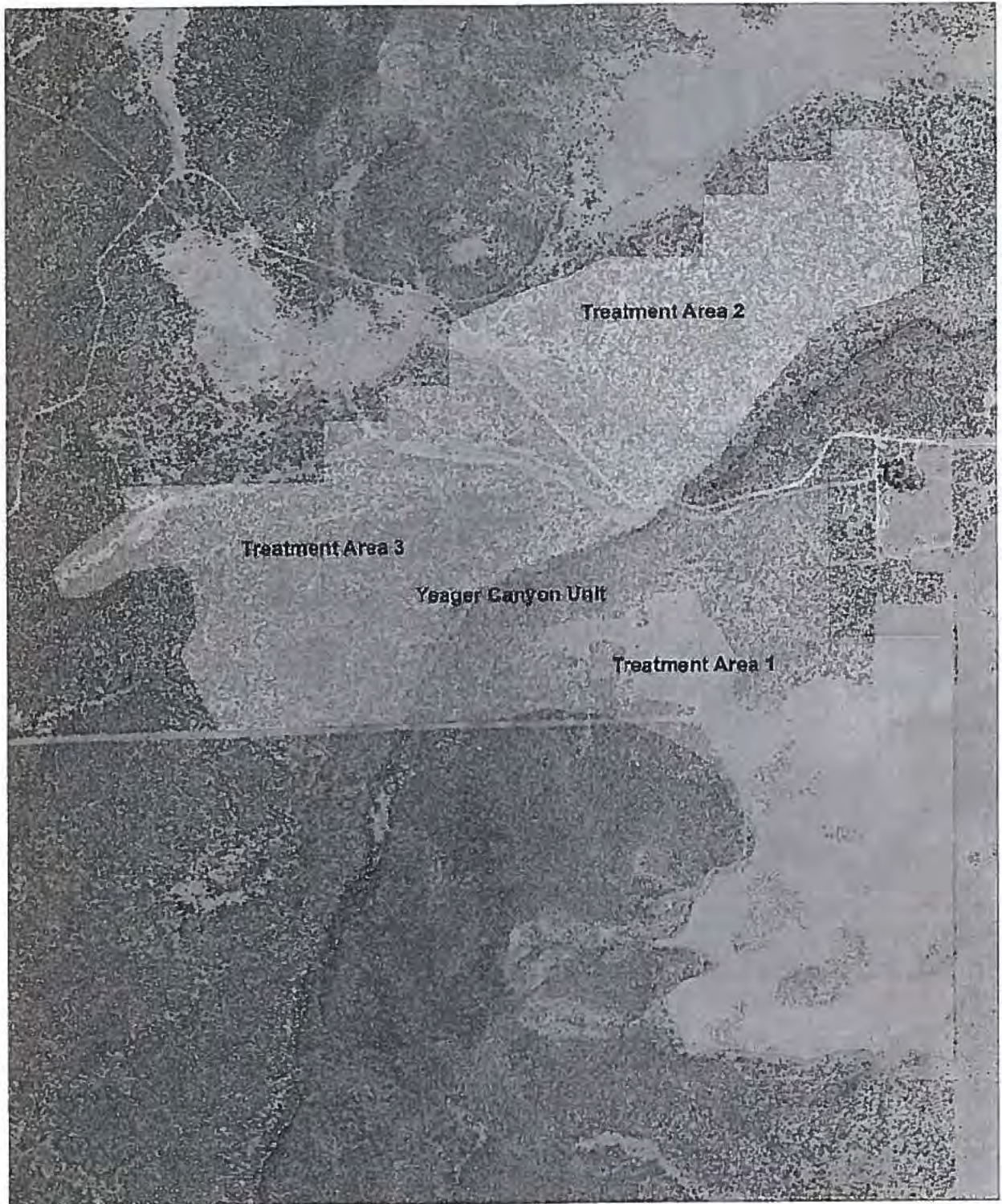
PROJECT TITLE: _____

The value of volunteer labor should be calculated at the hourly rate of an employee doing similar work, or using hourly rates from the Arizona Department of Administration's Human Resource web site, plus a standard ERE rate of 35%. http://www.hr.az.gov/HR_Professional/Class_Comp/PDF/alphacovered.pdf

\$0.445/mile should be the calculation used for mileage.

Water Development	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$14.14	
Habitat Restoration and Clean Up	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$14.14	
Fisheries	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$14.14	
Nongame Branch Project	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$14.14	
Misc/office work	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			varies	
Community Services	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$7.44	
Events and Other	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$14.14	
Research Branch	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$14.14	
Wildlife Area Hosts	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$17.44	
Education Programs	Volunteer Hours	Volunteer Miles	Hourly Rate	Estimated Value
			\$16.07	
Totals				

Yeager Canyon Unit



0 0.5 1 1.5 Miles

Map created by: Mandy Prewer
5-3-09 2:13



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

5000 W. CAREFREE HIGHWAY
PHOENIX, AZ 85086-5000
(602) 942-3000 • WWW.AZGFD.GOV

GOVERNOR
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DIRECTOR
LARRY D. VOYLES

DEPUTY DIRECTOR
TY E. GRAY



January 28, 2016

[REDACTED]
Coconino National Forest
5075 N. HWY 89
Flagstaff, AZ 86001

Dear [REDACTED]

Congratulations. This letter is to inform you that your project proposal for Habitat Partnership Committee (HPC) project number **15-211: Anderson Mesa Grassland Restoration Project : Yeager Canyon Unit; Treatment Area #1** has been reviewed by all the appropriate committees and has been funded by Special Big Game License Tag (SBGLT) funds. The project was approved for the amount of **\$28,800**.

As the project proponent, it is your responsibility to initiate project implementation, and to ensure all necessary coordination, agreements, and applicable environmental compliance documentation has been obtained. Enclosed please find the document titled "HPC Next Steps to Project Implementation". This document will help guide you to project implementation. Also, the form titled "Special Tag Fund Match Information" (Page 4), needs to be filled out and sent back to me. If you have any questions about how to proceed, please use the attached contact list or contact the HPC Coordinator. Please refer to the HPC project number when making any inquiries or when coordinating with the HPC Coordinator.

To assist with project tracking, please provide the HPC Coordinator with a project status update each year by March 1st, and a project completion report within 30 days of project completion. Project completion report forms are located on the HPC website at http://www.azgfd.gov/w_c/hpc.shtml.

Thank you for your participation in the Special Big Game License Tag and Habitat Partnership Committee Programs, and for your dedication to the management of Arizona's big game species.

Sincerely,

[REDACTED]

Habitat Partnership Committee Program Coordinator