

## ARIZONA GAME AND FISH DEPARTMENT

## HABITAT PARTNERSHIP COMMITTEE

## HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL

HPC Project Number:	20-101
---------------------	--------

PROJECT INFORMATION			
<b>Project Title:</b>	East Eagle/Mud Springs Phase 1 Block D		
<b>Game Management Unit:</b>	27	<b>Region:</b>	1
<b>Local Habitat Partnership Committee (LHPC):</b>		<b>Was the project presented to the LHPC?</b>	
Safford		No	
<p><b>Project Location:</b> (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).</p>			
<p><b>LATITUDE/NORTHING:</b> 33 31' 18"</p> <p><b>LONGITUDE/EASTING:</b> 109 19' 40"</p> <p><b>MULTIPLE LOCATION COORDINATES:</b></p> <p>Please separate coordinate pairs with names &amp; commas. (ex. Bob's Tank 34.365, -110.663. Clear Spring 34.55, -110.107, etc.):</p> <p>The project area is located in Greenlee County on the Clifton Ranger District, Apache-Sitgreaves National Forests (Figure 1). The total acreage of the project is 91,029 acres of which 89,010 acres are federal land and 2,019 are private acres. The project area is found in Greenlee County, Arizona and is bounded to the north by the Clifton and Alpine Ranger District boundary, to the east by U.S. Highway 191, to the south by FR 515 (Pine Flat Road), and to the west by the Clifton Ranger District border with the San Carlos Apache Indian Reservation (Figure 2).</p> <p>Phase 1 Block D boundaries are bounded to the north by the Clifton and Alpine Ranger District boundary, to the east by U.S. Highway 191, to the south by Trail 33, and to the west by Trail 18</p>			

<b>Project Type:</b> Prescribed Burn	
<b>Water Project Action (if applicable):</b>	
<b>Habitat Restoration Action (if applicable):</b>	Prescribed Burn
<b>Other Project Type and Action (if applicable):</b>	
<b>Has this project been submitted in previous years?</b>	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:**

The purpose of this project is to use prescribed fire, pretreatments and/or hand thinning in order to maintain and restore fire-adapted ecosystems to their natural fire regimes by reducing hazardous fuel accumulations and maintaining vegetation communities similar to their historic ecological conditions. Enhancement of wildlife habitat through most of the project area will occur through changes to early seral stages in the brush/browse component and increased forb production. Increases in the grass component will also occur throughout the project area, as well as better overall condition of soils and hydrologic function.

The ASNF proposes to use prescribed fire and hand/mechanical pretreatments within the 91,029-acre project area. Approximately 2,900 acres of the project area are WUI locations and will be treated mechanically or with hand thinning. Mechanical treatments will consist of using a rubber-tired skid-steer/bobcat with a tree shear. Hand thinning will consist of using a chainsaw. Vegetative material from these activities will be spread using a cut and scatter method or removed from the site. No brush piles will be created within the project area.

The primary method of achieving the proposed action will be to initiate fuel maintenance projects in low and moderate

departure areas by using planned ignitions, and scheduling of planned ignitions in areas of high departure areas that are at risk from future high intensity wildfire. Site preparation and pretreatments will be utilized ahead of any prescribed fires. Treatments will be implemented across the project area for 10–25 years with approximately 5,000 to 20,000 acres treated per year.

The 91,029 acre East Eagle/Mud Springs project area was broken into 3 Phases. These Phases were then broken down again into individual blocks. This habitat enhancement and wildlife management proposal is to treat 4,500 of the 9,872 acres in Phase 1 Block D of the 91,029 acre East Eagle/Mud Springs project area.

<b>Primary Big Game Wildlife Species to Benefit:</b>		Elk, Mule Deer, Coues Deer, Turkey, and Bear
<b>Implementation Schedule</b> (Month/Day/Year)	<b>START DATE:</b> 10/01/2021	<b>COMPLETION DATE:</b> 02/28/2022

## 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>Please email separate quotes if HPC funds are to be used to purchase materials or contracted labor: HPC@azgfd.gov.</p>
<p><u>HPC Funds Requested</u></p> <p><b>Amount:</b> \$45,000 for 4,500 acres in Phase 1 Block D</p>	<p>HPC Funds</p> <p style="padding-left: 20px;">\$5,000.00 Supplies (burn fuel, drip torches, PPE, tools, maintenance, etc.)</p> <p>+ \$5,000.00 Travel and Per diem</p> <p>+ \$15,000.00 Crew Salaries</p>
<p><u>Cost Share or Matching Funds</u></p> <p><b>Amount:</b> \$165,000 for 9,872 acres in Phase 1 Block D</p>	<p>+ \$10,000.00 Crew Overtime</p> <p>+ \$10,000.00 Helicopter Contract for ignition</p> <p>= \$45,000 Total Funding for 4,500 acres of the 4,500 acres in Phase 1 Block D</p>
<p><u>Percent Match</u></p> <p>Approx. 22% HPC and 78% USFS</p>	<p><b>Cost Share or Matching Funds</b> (for volunteer labor rates please refer to the worksheet below)</p>
<p><u>Total Project Cost</u></p> <p><b>Amount:</b> \$210,000 for 9,872 total acres</p>	<p style="padding-left: 20px;">\$7,000.00 Supplies (burn fuel, drip torches, PPE, tools, maintenance, per diem, etc.)</p> <p>+ \$5,000.00 Travel and Per diem</p> <p>+ \$10,000.00 Overtime</p> <p>+ \$15,000.00 Helicopter Contract for ignition</p> <p>+ \$128,000.00 Crew Salaries and Overtime</p> <p>= \$165,000.00 Total USFS funding towards 9,872 acres in Phase 1 Block D</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](mailto:HPC@azgfd.gov) \*\*\*

<b>AGFD EA Checklist Completed:</b>	pending	<b>Completion Date:</b>	Fall 2020
<b>NEPA Completed:</b>	Yes	<b>Completion Date:</b>	2020
<b>State Historic Preservation Office/ Archaeological Clearance:</b>	Yes	<b>Completion Date:</b>	2020

<b>CONTACT INFORMATION</b>	
Applicant	
The project applicant is the responsible party for seeing the work through to completion.	
<b>APPLICANT NAME:</b> Justin J. Thompson	<b>PHONE:</b> 928-687-8613
<b>ORGANIZATION:</b> USDA Forest Service, Clifton RD	<b>EMAIL:</b> justin.j.thompson@usda.gov
<b>ADDRESS:</b> 397240 AZ 75, Duncan, AZ 85534	
<b>AGFD Project Proponent</b>	
The Project Proponent is responsible for compliance, implementation, and annual/final reporting requirements.	
<b>AGFD CONTACT NAME:</b> Steve Najjar	<b>PHONE:</b> [REDACTED]
<b>Cooperators</b>	
<b>COOPERATOR NAME(S), ORGANIZATION, ROLE IN PROJECT:</b>	
Current cooperators are the Clifton Ranger District, HPC, the Arizona Game and Fish Department, with funding. Livestock permittees provide grazing allotment rest and assist in monitoring.	
Potential partners include Arizona Deer Association, Mule Deer Foundation, NWTF, Rocky Mountain Elk Foundation, Arizona Department of Agriculture (ADA), and NRCS.	

## PROJECT NEED AND DESCRIPTION

Please use direct language: why is this project important? What problem will be solved? How will you implement it, and how will the habitat be enhanced? Please include # of acres, methods, roles, and any phases. Please be specific and thorough.

### NEED STATEMENT – PROBLEM ANALYSIS:

The purpose of this project is to use prescribed fire, pretreatments and/or hand thinning in order to maintain and restore fire-adapted ecosystems to their natural fire regimes by reducing hazardous fuel accumulations

and maintaining vegetation communities similar to their historic ecological conditions.

The following specific needs exist:

- Address how ecological conditions have diverged from what has historically existed throughout the project area within represented vegetation communities and restore the natural role of wildfire in order to reduce the risk that large and severe wildfires will have adverse impacts to the ecosystem and its resources. The current conditions across much of the project area do not meet the desired fire regime condition class as depicted in the Apache-Sitgreaves National Forests (ASNFs) Land Management Plan (LMP), with 51% of the project area is either highly or moderately departed (USDA 2015).
- Prevent the Forest from further shifting away from desired conditions. Failure to implement the proposed action will result in increased fuel loading and fire hazard, decreased forage and browse vigor and availability, departure from natural fire return intervals, and will cause a general long-term decline in forest health.
- Protect natural resources from the effects of future high-intensity wildfire risk, and promote habitat protection and long-term forest and grassland health. Because unplanned fires during extreme fire conditions can put resources at an unacceptable level of risk, there is also a need to use prescribed fire and allow wildfire under desirable burn conditions as a way to gradually reintroduce fires without compromising the ecological integrity of the vegetation, soils, wildlife, hydrology and other forest resources.
- Protect public life and properties by focusing fuel treatments in areas that pose a threat to communities at risk and other areas, which include developed recreational sites and/or other unique features that reside within and adjacent to the project area.
- Hazardous fuels have accumulated across a wide range of vegetation types in the project area and it is necessary to reduce these fuels within the WUI, near U.S. Forest Service (USFS) developments and improvements, and where the accumulation of fuel places Threatened and Endangered Species and their habitats, and other ecological and heritage values at risk. Within WUI areas, and some other accessible areas, there is a need for tree thinning prior to the reintroduction of fire to the system.

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

Eight different vegetation types identified in the ASNF Forest Plan (USDA 2015) occur across the project area. The project action calls for different activities within each of the PNVTs (Potential Natural Vegetation Types) to address the project purpose and need. Timing of the implementation of prescribed fire will be based on environmental conditions, but will typically be applied seasonally as indicated in Table 1.

**Table 1. PNVTs in the Proposed Action Area**

PNVT	Acres	Type of Treatment <sup>1</sup>			
		Prescribed Fire Season <sup>2</sup>		Thinning	Mechanical and Hand Pre-treatment
		Fall/Winter	Spring		
Mixed Broadleaf Deciduous Riparian Forest	2,552			hand thin only	
Cottonwood-willow Riparian Forest	76			hand thin only	
Ponderosa Pine Forest	5,505	<b>X</b>	x	x	x
Dry Mixed Conifer Forest	3,004	<b>X</b>	x	x	x
Wet Mixed Conifer Forest	1,240	<b>X</b>	x		
Madrean Pine-oak Woodland	46,170	x	<b>X</b>	x	x
Semi-desert Grassland	13,983	x	<b>X</b>		x
Interior Chaparral	18,499	Year round		x	x
Total	91,029				

<sup>1</sup>Bold capital "X" indicates preferred season or likely season of treatment. Small "x" indicates the possibility of a different seasonal treatment if environmental conditions are appropriate. Small "x" also indicates where thinning or pre-treatments may occur to redistribute fuels prior to burning.

<sup>2</sup>Seasons are: fall (September 1–November 30), winter (December 1–February 28), and spring (March 1–May 31).

Treatment in the Ponderosa Pine and the Dry Mixed Conifer PNVTs will primarily be prescribed fire though thinning and pre-treatment may be used to better reach desired conditions. No thinning or pretreatments are anticipated for the Wet Mixed Conifer PNVT.

Treatment in Madrean Pine-Oak PNVT will be prescribed fire and thinning around the WUI areas (Figure 2). Timing of thinning implementation will be year-round but typically in the fall and winter months and will be subject to timing restrictions of special status wildlife species (see Wildlife mitigations in Appendix B). In both Madrean Pine-Oak and Semi-desert Grassland PNVTs mechanical and hand pre-treatment of areas will be used prior to burning to manipulate fuels to help reduce juniper and encroachment.

The Interior Chaparral PNVT will be treated in conjunction with surrounding PNVTs and may occur year-round, as environmental conditions allow.



### **Prescribed Fire Treatment**

Prescribed fires may be ignited by hand, mechanical, or aerial-firing methods and are intended to burn at low to moderate intensities. Planned ignitions are designed to meet objectives specified in a written, approved burn plan and all regulatory requirements prior to implementation. The prescribed intensities will be based upon vegetative components and management objectives.

Lighting techniques will vary based upon PNVT, timing restrictions, weather, and fire behavior parameters set in the burn plan. Treatment with prescribed fire will generally consist of black-lining by hand (drip torch), but could be a combination of hand and aerial ignition by plastic sphere dispenser to create a containment line (black line). After black-lining is completed interior ignitions will follow.

Broadcast burning will be utilized where necessary to reduce fuel loading, promote understory plant vigor, and bring the PNVT back or closer to the natural fire regime and desired condition.

Prescribed burning will be implemented in phases and blocks as shown in

Figure 3. The phases and burn blocks represent the ASNF's best approximation for project implementation.

Phases may be combined or treatments applied in a different order if monitoring or experience indicates that such a change will be beneficial to meeting project objectives. Burn block size will be variable (typically between 1,000 to 20,000 acres) and will be based on holding features, environmental conditions, time of year, available funding, and grazing permittee coordination. Most burn blocks may have multiple treatment criteria tailored to the prescription needs of different types of vegetation types contained therein. Burn blocks may be redesignated over the life of the project, with ignitions dependent upon appropriate burning conditions at the time in order to minimize impacts to resource areas and maximize safety considerations. Multiple entries and maintenance burns will be scheduled to best attain each PNVT's desired condition.

Before implementing prescribed fires, the ASNF will strategically create or breakup fuel continuity by using various pretreatments (e.g., grazing rest, etc.) to promote desirable burn characteristics, which will

protect improvements and infrastructure and reduce fire hazard. Certain grazing pastures will be rested before prescribed fire to allow for fine fuel accumulation to ensure that fire can burn through the area. Any infrastructure (e.g., fences, buildings, corrals, etc.) will be prepared and protected before the application of as prescribed fire.

### **WUI Treatment Areas**

Figure 3 shows two specific areas proposed for mechanical and/or hand thinning:

- Pine Flat (approximately 1,400 acres) with an emphasis of reducing fuel loading within WUI in the southeast portion of the project area, and
- Honeymoon (approximately 1,500 acres) with emphasis of removing high density juniper by treatment methods such as: thinning (contractor or USFS labor), or other methods such as creating green fuelwood or commercial fuelwood areas.

### **Prescribed Mechanical Thinning Treatment and Pre-Treatment**

Mechanical thinning will be used to reduce fuel loading and continuity in PNVTs that have been determined to be departed from their natural fire regime. It will also be used to reduce accumulated fuel loadings in the WUI. Mechanical thinning areas will be subsequently treated with fire to reduce fuels buildups and stimulate herbaceous growth. In selected PNVTs mechanical treatments will be used to increase the fuel continuity that will help carry fire across the landscape.

Mechanical and hand pre-treatments will be used to manipulate fuel loadings and continuity to better achieve prescribed fire objectives. These pre-treatments will generally consist of chainsaw operations to re-arrange and create ladder fuels (fuels which provide vertical continuity between strata) to manipulate prescribed fire to better reach overall project objectives. Only trees less than nine inches would be thinned as necessary to reduce fire hazard and damage to older, larger trees during burning activities. No burn piles will be established.

**Project objectives include:**

- Advance forest stands and wildlife habitats toward desired conditions
- Restore the natural role of fire into the project area to restore/maintain functionality of fire adapted ecosystems.
  - Maintain a mosaic of forest structure and conditions
  - Reduce the risk that large and severe wildfires will have adverse impacts to the ecosystem and its resources
- Implement standard Forest Service fuels treatment strategies that allow for successful management of both planned and unplanned ignitions o Maintain fuel loading in low and moderate burn severity areas
  - Reduce high fuel loading in unburned areas or areas that burned with a low intensity
  - Allow fire to play its natural role in the environment by managing natural ignitions
- Protect natural and cultural values at risk of destruction from wildfire
- Focus fuel treatments within the project area in order to reduce the threat of wildfire to Treat areas within the project boundary that will enhance the wildfire protection of communities at risk/wildland and urban interfaces (WUIs)
  - Identify and protect other areas within the project boundary such as developed recreational sites and unique features
  - Implement treatment measures in sections of the project area with consideration of reducing wildfire threats to key areas adjacent to the project boundary

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

Land ownership is USDA Forest Service managed lands.

**PROJECT MONITORING PLAN:**

The proposed monitoring plan consists of several fire/range monitoring related plots within the project area.

The plots have been read to complete the NEPA for the project and will need to be re visited due to post burn re-stocking guidelines outlined in the NEPA documents. In addition, photo points have been established which will illustrate the effectiveness of treatments. Similar data and photo points were used with prior restoration projects on the Clifton Ranger District and have proved effective at monitoring project effectiveness.

**PROJECT MAINTENANCE:**

The project area will be available for re-entry if monitoring shows lack of effectiveness. ***However, once objectives are achieved for each project, Wild land fire use and additional Prescribed Fire entries plan on being employed as a maintenance tool to enhance and maintain the initial project investment.***

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

The Project Completion Report will be filed by the USFS Clifton Ranger District East Eagle/  
Mud Springs Project lead. Currently Justin Thompson and or Joe Names

**SUPPORTING DOCUMENTS LIST:**

Figures/Maps, Photos, AZGF Letter of Support, AZSFWC Letter of Support, and Arch Clearance

**Figure 1. Project location and vicinity**



**Figure 2. Project area and WUI Thinning**



**Figure 3. Phases and Burn Blocks**



