

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

Game Branch / HPC Project Number:	15-203
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PROJECT INFORMATION

Project Title: Uinkaret Mountains Landscape Restoration Project (UMLRP)
South Trumbull Mechanical Treatment (Phase I)

Region and Game Management Unit: Region II GMU 13A

Local Habitat Partnership Committee (LHPC): • Arizona Strip Habitat Working Group	Was the project presented to the LHPC? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
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Has this project been submitted in previous years? YES NO
If Yes, was it funded? YES NO → **Funded HPC Project #(s):**

Project Type: Mechanical Thinning and Habitat Enhancement

Brief Project Summary: 200 acre vegetation treatment would consist of the use of a Masticator to grind and chip pinyon-juniper trees where encroachment into chained areas is occurring. The objective is to maintain large openings of grasses, forbs and shrubs to support mule deer and provide foraging habitat.

Big Game Wildlife Species to Benefit: Mule deer - enhanced summer and winter range

Implementation Schedule (Month/Day/Year): <u>Project Start Date:</u> May 1, 2016 <u>Project End Date:</u> October 31, 2016	Environmental Compliance: NEPA Completed: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> <u>Projected Completion Date:</u> 05/01/2016 UMLRP EA State Historic Preservation Office - Archaeological Clearance: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> <u>Projected Completion Date:</u> _____ Arizona Game and Fish Department EA Checklist: N/A <input checked="" type="checkbox"/> <u>To be Completed by:</u> _____ <u>Projected Completion Date:</u> _____
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PROJECT FUNDING

Special Big Game License Tag Funds Requested:	\$ 15,000.00
Cost Share or Matching Funds:	\$ 32,000.00 (BLM matching funds)
Total Project Costs:	\$ 47,000.00

PARTICIPANT INFORMATION

Applicant (please print): Patrick W. Fleming	Address: 345 E. Riverside Dr. St. George, UT 84790	E-mail: pfleming@blm.gov
Telephone: 435-688-3213		Date: 08/26/2015

AGFD Contact and Phone No. (If applicant is not AGFD personnel):
Tim Shurtliff 928-358-3843 and Luke Thompson 928-856-0724

Project has been coordinated with:
Vegetation Treatments would occur only on BLM managed lands; however, Arizona Game and Fish Department has been consulted in developing this project proposal.

NEED STATEMENT – PROBLEM ANALYSIS:

Pinyon pine and Utah juniper trees are encroaching into meadow areas of old chaining units. If no action is taken in the proposed treatment units, plant succession would progress resulting in dominate woody species, heavy fuel loadings, lack of biodiversity, increased pinyon-juniper invasion, and ultimately a closed canopy pinyon-juniper monoculture with minimal species diversity.

Mechanical treatment is necessary to reduce pinyon-juniper encroachment into sagebrush and grass lands to prevent infill and expansion of woodland areas and improve vegetation diversity. By reducing and/or removing pinyon-juniper trees, the vegetative resource has greater potential to achieve desired plant communities (DPC) that support mule deer foraging and habitat. Desirable herbaceous species such as globemallow, penstemon, buckwheat, Indian ricegrass, blue bunch wheatgrass, oakbrush, cliffrose, and bitterbrush would be more competitive for space, food, light, and water improving habitat conditions for mule deer.

PROJECT OBJECTIVES:

Phase 1 Treatment objectives:

1. Enhance mule deer summer and winter range habitat by reducing pinyon-juniper canopy in the 200 acre treatment area by 60 to 75 percent.

Phase 1 Long term objectives:

2. Achieve DPC objectives in the South Trumbull Vegetation Treatment Unit as follows:

Plant Species	Present Composition %	Desired Plant Community (DPC)
Trees (Pinyon-Juniper)	32%	2-10%
Shrubs	51%	12-65%
Sagebrush	47%	2-10%
Cliffrose	3%	2-10%
Gambel Oak	1%	1-5%
Grasses	10%	20-60%
Cool Season		
Warm Season	3%	5-30%
Forbs	4%	2-10%

3. Establish desirable forage species such as globemallow, penstemon, buckwheat, Indian ricegrass, blue bunch wheatgrass, oakbrush, cliffrose, and bitterbrush to improve forage quality and quantity.
4. Improve vegetative cover to prevent accelerated soil erosion.

PROJECT DESCRIPTION AND STRATEGIES:

Pinyon Pine-Juniper Removal: The Arizona Strip District BLM is proposing mechanical vegetation treatment on 200 acres in FY2016 within the 1000+acre South Trumbull Vegetation Treatment Unit. Treatment would consist of the use of a Masticator to grind and chip pinyon-

juniper trees where encroachment into meadow areas is occurring.

200 acres are identified for this proposal to be mechanically thinned in 2016 (see attached map). The remainder of the South Trumbull Vegetation Treatment Unit would be treated in later, independent treatment phases (Phases 2-5). Mechanical treatments by mastication would continue over a several year period followed by prescribed burning.

PROJECT LOCATION:

The project is located in Mohave County, Arizona in the Grand Canyon-Parashant National Monument on BLM managed lands adjacent to Mt. Trumbull at the following legal description:
Uinkaret Mountains Landscape Restoration Project Area: T. 34 N., R. 8 W., secs. 2,3,10, 11.
See attached map.

LAND OWNERSHIP AT THE PROJECT SITE(S):

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

- Bureau of Land Management

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:

The habitat is composed of pinyon-juniper (PJ) woodlands and sagebrush flats in old chaining areas with varying densities of Pinyon pine (*pinus edulis*), Utah juniper (*Juniperus osteosperma*), big sagebrush (*Artemisia tridentate*), cliffrose (*Cowania Mexicana*), and a variety of grasses including: blue grama, galletta grass, Indian ricegrass, squirreltail grass, crested wheatgrass (*Agropyron cristatum*). Mule deer use the area as summer habitat, typically browsing within and along the edges of chaining unit.

ITEMIZED USE OF FUNDS:

Special Big Game License Tag Funds

Mastication Equipment Operation Cost	
\$30 per hour x 8 hours = \$240 Daily Cost x 60 days	\$14400
Supplies	\$ 600
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Total	\$15,000

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

Planning	\$4,500
Labor (Equipment Operator)	\$22,250
<u>Miscellaneous (logistics support, supplies, vehicles)</u>	<u>\$5,250</u>
Total	\$32,000

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

American Conservation Experience (ACE) crews
Veterans Green Corps

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

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

PROJECT MONITORING PLAN:

BLM may establish trend plots using the pace-frequency monitoring method to determine trend, Dry-Weight Rank method to determine composition, and/or Brown's transects and photo point monitoring to measure vegetation structure and composition.

PROJECT MAINTENANCE:

Project maintenance will be conducted by the BLM. Maintenance actions would be secondary treatments including seeding and prescribed burning of jackpot fuels to reduce fuel loading.

PROJECT COMPLETION REPORT TO BE FILED BY:

Patrick Fleming
Fuels Program Manager
Arizona Strip District BLM
435-688-3213
pfleming@blm.gov

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

N/A

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

See attached worksheet.

ARIZONA GAME AND FISH DEPARTMENT **WATER DEVELOPMENT WORKSHEET**

PROJECT TITLE: _____

- 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: South Trumbull Mechanical Treatment (Phase I)

1) What is the estimated acreage of the project?

200 acres

2) How are the trees going to be cleared? (agra axe, chain saw, grubbing, push, chaining):

Mastication

3) What is the estimated number of trees per acre?

The unit tree density ranges from 23 to 70 stems/acre with an average density of 14 pinyon pine/acre and 21 Utah juniper trees/acre.

4) Describe trees to be cleared (species, estimated diameter, single stem, multi-stem):

Pinyon pine (*Pinus edulis*) and Utah juniper (*Juniperus osteosperma*) make up the dominate tree species. The pinyon pine are typically single stem, although some are forked, and have a diameter of 1-8 inches. Junipers are generally single stem in the smaller diameters (1-6 inches), but older, mature trees develop multiple stems with larger diameters (6-15 inches). All trees greater than 1.6 ft in height would be cut at the base with a chainsaw and left on site.

5) Describe terrain (slope, soil type, rocks)

The vegetation treatment is located South of Mt. Trumbull at an elevation of 6000-6400 feet. Soils range from limestone slopes and hills to clay loam upland terraces with the majority being gravelly-textured. The depth the soil mantle varies from very shallow (less than 4 inches) on low ridges to deep (40 inches plus) in the clayey bottom areas.

6) Please list any special land management status for the project site (e.g. Wilderness, National Park, National Monument). If private land, list landowner.

The project site lies entirely within the Grand Canyon-Parashant National Monument.

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.state.az.us/ClassComp/CC_Job_Titles_with_Ranges.asp

\$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				

Unkaret Mountain Landscape Restoration Project
South Trumbull Mechanical Treatment Units
ARIZONA UPC Project Proposal

0 0.25 0.5 0.75 1 Kilometers
Actual map scale: 1:25,000
Aerial imagery: 2013
Document title: UNKARET MOUNTAIN LANDSCAPE RESTORATION PROJECT SOUTH TRUMBULL MECHANICAL TREATMENT UNITS AERIAL 2013

