

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

Game Branch / HPC Project Number: 13-211

**PROJECT INFORMATION**

**Project Title:** Sawmill (#4488) Water Catchment Redevelopment

**Region and Game Management Unit:** Region 2 / GMU 13A

**Local Habitat Partnership Committee (LHPC):**

- Fredonia

**Was the project presented to the LHPC?**

YES  NO

The Fredonia HPC has not met in the years past. However, this project is part of the statewide Water Implementation Schedule, as well as the local regional water prioritization, and those processes have been presented to the LHPC in the past.

**Has this project been submitted in previous years?** YES  NO

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

**Project Type:** Wildlife Water Catchment Redevelopment

**Brief Project Summary:**

This project will be a complete redevelopment of the Sawmill #4488 (BLM) Wildlife Water Catchment in southern GMU 13A. Redevelopment will include an upgraded apron material, a larger storage tank, a new walk-in wildlife drinker, and replacement of existing barbed wire fence with steel rail fences. R-panel type roofing panels are to be fastened to a new metal frame that will replace the current failing metal apron at the site. A 3' by 18' fiberglass storage tank will replace the existing small concrete vault, and a new 3' walk in style trough will replace the existing small metal drinker. Redevelopment of this catchment is necessary to meet AZGFD statewide strategic goals, Arizona Strip water development implementation plans, and BLM objectives for management of mule deer and wildlife habitat.

**Big Game Wildlife Species to Benefit:** Mule Deer, Merriam's Turkey, and any other wildlife in the area

**Implementation Schedule** (Month/Day/Year):

Project Start Date: Spring 2014

Project End Date: Summer 2015

**Environmental Compliance:**

NEPA Completed: Yes  No  N/A

Projected Completion Date: 6/20/2013

State Historic Preservation Office - Archaeological Clearance:

Yes  No  N/A

Projected Completion Date: 6/22/2011

Arizona Game and Fish Department EA Checklist: N/A

To be Completed by: Joe Currie

Projected Completion Date: Fall 2012

**PROJECT FUNDING**

**Special Big Game License Tag Funds Requested:** \$ 48,619.00

**Cost Share or Matching Funds:** \$ 0

**Total Project Costs:** \$ 48,619.00

## PARTICIPANT INFORMATION

<b>Applicant</b> (please print): Jeremy Felish Wildlife Manager II, GMU 13A	<b>Address:</b> 3500 South Lake Mary Road Flagstaff, Arizona 86001	<b>E-mail:</b> Jfelish@azgfd.gov
<b>Telephone:</b> 928-856-0726		<b>Date:</b> August 20, 2013
<b>AGFD Contact and Phone No.</b> (If applicant is not AGFD personnel):		
<b>Project has been coordinated with:</b> Bureau of Land Management, Arizona Strip District Joe Currie, Arizona Game and Fish Department		

### NEED STATEMENT – PROBLEM ANALYSIS:

Sawmill wildlife catchment (#4488) is a Bureau of Land Management owned wildlife facility, originally constructed in 1977 to meet the objectives of mule deer management on the Arizona Strip District. This wildlife catchment is located within the Grand Canyon Parashant National Monument within the vicinity of Mt. Logan.

Presently, the existing metal apron has a wooden frame that is deteriorating, which is causing the catchment to be ineffective in capturing precipitation. The collection side of the apron also has several cracks in it allowing a lot of water to escape before it makes it to the collection drain. The small concrete storage vault does not supply enough water for the amount of pressure it receives on a monthly basis, and could possibly be cracked. Cattle and horse intrusions are often due to the failing fence, and are another reason for this catchment to be dry constantly and unusable for wildlife. Each visit to this catchment requires extensive repair work to the fence, apron, and float valve, as well as water hauling. During the summer months this catchment averages over 1500 gallons hauled to it. This catchment should be redeveloped to prevent failure and to continue to provide a very valuable and dependable perennial source of water for mule deer and turkey.

This water catchment is located in a very crucial summer range for mule deer and turkey. This habitat has seen a significant increase in population of mule deer over the past several years, and is used extensively during summer months. This water serves as a dependable perennial water source for mule deer, Merriam's turkey, and other wildlife utilizing this area of southern GMU 13A.

Redevelopment will improve water collection, storage capabilities, and the lifespan of the Sawmill water catchment. Redevelopment of this catchment is necessary to meet AZGFD statewide strategic goals, Arizona Strip water development implementation plans, and BLM objectives for management of mule deer and wildlife habitat.

### PROJECT OBJECTIVES:

- Improve water availability and distribution for wildlife, in particular mule deer and wild turkey.
- Improve habitat use and distribution of wildlife species by providing additional reliable water sources within the area while increasing life expectancy and dependability of wildlife catchments.
- Decrease maintenance needs by increasing capacity, and removing mechanical components
- Continue the task through the Statewide Water Development Implementation Plan, and the regional wildlife water priority of redeveloping wildlife water catchments in GMU 13A that have failed or in disrepair due to age.
- Make progress in meeting BLM Desired Future Condition objectives for mule deer habitat as outlined by the BLM RMP.
- Increase life expectancy and dependability of this catchment
- Decrease or eliminate potential water hauling requirements to this development

### PROJECT DESCRIPTION AND STRATEGIES:

Utilize Big Game Special Tag Funds and the services of a private contractor to redevelop this catchment. Redevelopment of this facility would include the following:

1. Purchase and install new apron packages (24'X72') using metal studs and R-paneling.
2. Replace existing concrete storage tank with a 3' by 18' fiberglass storage tank.
3. Replace existing metal drinker with a 3' fiberglass walk-in drinker.
4. Replace existing barbed wire fence with new 150'X150' steel pipe fence.
5. Purchase and install miscellaneous plumbing materials to plumb storage tank and drinker.

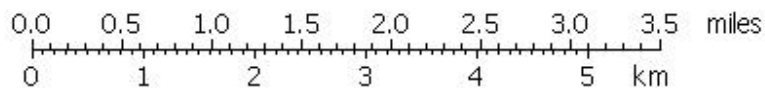
### PROJECT LOCATION:

Game Management Unit 13A  
Mohave County, AZ  
N36.22.117 W113.11.965

### 2012 HPC Grant Request- Water Redevelopment



Map created with TOPOIC © 2008 National Geographic; © 2007 Tele Atlas, Rel. 1/2007



TN ↑ MN  
11 1/2  
08/31/12



**Deteriorated frame and broken apron**



**Apron material coming apart**



**Catch no longer catching water**





**Close up of repairs that have failed**



**Storage tank is possibly cracked**

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

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

This project is located 100% on federally managed land administered by the Bureau of Land Management, AZ Strip Field Office inside the Grand Canyon Pharaohant Monument.

*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 Sawmill #4488 wildlife water catchment is located within the Mt. Logan area and is best described as a ponderosa pine forest. Vegetation at the project site consists of ponderosa pine trees. This catchment is located at approximately 7000' ASL.

There are several habitat treatments within the area including a chaining to the north of the catchment that provides cliffrose, oak, serviceberry, and other browse species beneficial to mule deer. This area also provides various grass species such as wheat grass and grama grasses. These

treatments as well as the ponderosa forest in the area not only provide habitat for mule deer but also for turkeys in the area as well as for several raptor species. The Mt. Logan Wilderness area is located directly to the south of this catchment.

**ITEMIZED USE OF FUNDS:**

Special Big Game License Tag Funds

<b>Costs Category – Equipment, Labor, Materials, etc.</b>	<b>Grant Dollars Requested – Special Tag Funds</b>
<b>24’X72’ metal Stud and R-panel apron</b>	<b>\$5,925.00</b>
<b>Fiberglass 3’X4” wildlife drinker</b>	<b>\$3,294.00</b>
<b>Fiberglass 3’X18’ diam. Storage tank</b>	<b>\$10,010.00</b>
<b>Steel Pipe fence 150’X150’</b>	<b>\$3,390.00</b>
<b>Misc. plumbing supplies</b>	<b>\$1,000.00</b>
<b>Contractor Services \$ 25000.00 ea.</b>	<b>\$25,000.00</b>
<b>EA Documentation – Use of Contactor 3723.63 ea.</b>	<b>Completed By BLM</b>
<b>Totals</b>	<b>\$48,619.00</b>

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

Bureau of Land Management may be able to provide some funding to assist, but it is unknown at this time.

**LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:**

Arizona Game and Fish Department

- Personnel with the Arizona Game and Fish Department will request funding, provide project coordination, and disperse funds to a private contractor.

Bureau of Land Management

- BLM might be able to provide funding but it will not be known until the next fiscal year. BLM has provided all the archeological clearances and NEPA work for this project.

Private Contractor

- Complete redevelopment of the Ponderosa Burn #9753 water catchment

Arizona Deer Association

- The Arizona Deer Association as well as the Arizona Mule Deer Foundation may be potential cooperators with this project. Participation from these groups is unknown at this time.

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

YES  NO  N/A

History has shown that during travel management planning of the land management agencies, roads that have historic use and provide access to wildlife waters receive priority in remaining open to the public.

**PROJECT MONITORING PLAN:**

After completion of this project, the wildlife catchment will continue to be monitored as part of the Region II Game Management Unit 13A water development protocol. This protocol outlines facility inspection schedules, as well as maintenance schedules if needed. It is anticipated that this catchment will be inspected at least twice a year between April and October each year.

**PROJECT MAINTENANCE:**

The project will be maintained by the responsible District Wildlife Manager, who may complete minor maintenance issues when possible. The Arizona Game and Fish Department Development Crew will complete routine maintenance or major repairs of each facility when necessary. As outlined in the project narrative, long term maintenance needs are expected to be minimal. All maintenance and access needs will be closely coordinated with the Arizona Strip BLM office.

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

Jeremy Felish – Wildlife Manager, GMU 13A

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

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

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

**PROJECT TITLE: Sawmill #4488 Water Catchment Redevelopment**

- 1) **Is the water development listed as a priority in the most recent “Wildlife Water Development Annual Implementation Schedule?”**  
Yes, in addition this water is also listed on the regional prioritization list for wildlife catchments.
  
- 2) **Please list the Development Branch personnel and date coordinated with for this project.**  
Joe Curry, ongoing 2010-2013
  
- 3) **What are 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: Aspen #618  
Type of water source (catchment, spring, dirt tank): Catchment  
Ownership of water source: Arizona Game and Fish Department  
Distance in miles from project: Approximately: 3.6 miles
  
- 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, and National Monument). If private land, list landowner.**  
This project is located within the Grand Canyon – Parashant National Monument.
  
- 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: N/A   Approximate hiking time: N/A  
  
-- Does access to this site require crossing private or tribal lands? YES  NO  
  
-- Please describe any restrictions to public access: None



**9) Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.**

- 24' by 72' r-panel apron package and steel frame
- 3' by 18' fiberglass storage tank
- 3' walk in style fiberglass trough
- 200' by 200' pipe rail fence

**10) Was a site visit completed? Yes[] No[]**

If Yes, please list personnel that attended and date.

- Development branch visited this site in June 2010 to haul water to the site.
- A site visit was conducted June 2010 consisting of the Arizona Strip BLM field office personnel and the 271 and 272 wildlife managers to discuss water redevelopment. Another site visit was conducted in September 2011 with the same personnel.
- Development branch visited this site again in April 2011 to haul water to this catchment.
- Archeologist visited this site in 2011 and cleared it for redevelopment
- BLM revisited this site again in 2012 and cleared it for work

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

**PROJECT TITLE:** Sawmill #4488 Water Catchment Redevelopment

- 1) **What is the estimated acreage of the project?**
- 2) **How are the trees going to be cleared? (agra axe, chain saw, grubbing, push, chaining):**
- 3) **What is the estimated number of trees per acre?**
- 4) **Describe trees to be cleared (species, estimated diameter, single stem, multi-stem):**
- 5) **Describe terrain (slope, soil type, rocks)**
- 6) **Please list any special land management status for the project site (e.g. Wilderness, National Park, and National Monument). If private land, list landowner.**
- 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:

## **ARIZONA GAME AND FISH DEPARTMENT**

# **VOLUNTEER HOURLY RATES AND CLASSIFICATIONS WORKSHEET**

**PROJECT TITLE:** Sawmill #4488 Water Catchment Redevelopment

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](http://www.hr.az.gov/HR_Professional/Class_Comp/PDF/alphacovered.pdf)

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

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