

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

Game Branch / HPC Project Number:	11-203
Possible Funding Partners:	

PROJECT INFORMATION

Project Title: Jacks Canyon Catchment, AZGFD #1014

Region and Game Management Unit: Region 2, GMU 5BS

Local Habitat Partnership Committee (LHPC):

- Forage Resource Study 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 → **HPC Project #:**

Project Type: Water Development

Brief Project Summary: This project looks to replace a US Forest Service wildlife catchment in eastern GMU 5BS. The current catchment is inadequate in the amount of water available (storage capacity), reliability, and apron size. The current catchment is over 30 years old and is failing significantly due to a wind-damaged sheet metal apron. With funding from the HPC process, AZGFD will replace the inadequate FS drinker with a maintenance free catchment system capable of supporting the year round demands of big game such as elk and deer.

Big Game Wildlife Species to Benefit: Elk, Mule Deer, Whitetail Deer, Black Bear, Turkey, small game, and various non-game including bats and reptiles.

Implementation Schedule (Month/Day/Year):

Project Start Date: 9/1/2012

Project End Date: 3/1/2014

Environmental Compliance:

NEPA Completed: YES No N/A

Projected Completion Date: 2010

State Historic Preservation Office - Archaeological Clearance:

YES No N/A

Projected Completion Date: 2010

Arizona Game and Fish Department EA Checklist: N/A

To be Completed by: J. CURRIE

Projected Completion Date: 9/2012

PROJECT FUNDING

Special Big Game License Tag Funds Requested: \$ 53,919.00

Cost Share or Matching Funds: \$ 26, 288.00

Total Project Costs: \$ 80,207.00

PARTICIPANT INFORMATION

Applicant (please print):

Garrett Fabian

Address:

3500 S. Lake Mary Rd, Flagstaff, AZ

E-mail:

gfabian@azgfd.gov

Telephone: (928) 606-3557

Date: 8/15/11

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

Project has been coordinated with:

USFS (Mogollon Ranger District), FRSG HPC, and AZ Elk Society

NEED STATEMENT – PROBLEM ANALYSIS:

Water availability on the northern portion of the Mogollon Ranger District within the central portions of Game Management Unit (GMU) 5A, 5BS, and 5BN are fairly limited. Most water availability comes from dirt tanks, which have become so degraded that water availability is severely limited. There are six USFS water catchments in the area, which were constructed in the 1970's. All six are failing and in need of redevelopment. The six catchments (USFS labeled - Trick Tanks) consist of:

- Trick Tank #1- livestock/wildlife apron catchment feeding into a railroad car storage vault with a ring drinker located at (N 34° 45.070 / W 111° 03.353) near the rock climb recreation area.
- Trick Tank #2 - wildlife drinker with an apron catchment and small metal storage vault located on Jacks Canyon at (N 34 41.710, W 111 07.003).
- Trick Tank #3 - wildlife drinker with an apron catchment and small metal storage vault located at (approx. N 34° 37.984 / W 111° 02.989) on a non-numbered two-tracker off FS 319 behind Mogollon Ranch.
- Trick Tank #4 is a 10,000 gallon wildlife/fire “saucer” type trick tank with a wildlife drinker located downstream located at (N° 34 34.245 / W 111° 05.210) on FS 137B,
- Trick Tank #5 is a 10,000 gallon wildlife/fire “saucer” type trick tank with a wildlife drinker located downstream located at Trick Tank #5 (N 34° 32.577 / W 111° 07.122) on FS 137
- Trick Tank FS145 is not listed on the USFS list of catchments, but it is a wildlife/fire system consisting of a 10,000 gallon “saucer” type trick tank with a wildlife drinker located downstream located at (N 34° 24.898 / W 111° 11.609) on FS 145.

See attached Map for Trick Tank #2 site also known as Jacks Canyon, AZGFD #1014.

In 2001, these “saucer and railroad car” trick tanks began to exhibit failures in water delivery; in addition are experiencing significant rust issues that will soon lead to a complete failure. The wildlife only catchments are experiencing apron failure and in addition have too small of an apron and storage vault to support wildlife demands. In 2006, AZGFD Wildlife Manager Garrett Fabian took an AZGFD Water Development Engineer on a field trip of the trick tanks. The Engineer estimated the life of these catchments not be more than 5 more years, and suggested the most efficient solution was to completely replace the existing catchments. For these reasons, AZGFD would like to start the process to replace these catchments within the next several years one at a time. The number one priority, Leonard Points (Trick Tank #3) was funded through the HPC process in 2010 and should be implemented in 9/2011. With that implementation, Jacks Canyon, AZGFD #1014 (Trick Tank #2) will become the number one Region 2 Sector 8 priority, so we are seeking funding for this funding cycle.

PROJECT OBJECTIVES:

This project looks to replace a US Forest Service wildlife catchment in eastern GMU 5BS. The current catchment is inadequate in the amount of water available (storage capacity), reliability, and apron size (see attached photo). In addition, the current catchment is over 30 years old and is currently failing. With funding from the HPC process, AZGFD will replace the inadequate FS drinker with a maintenance free catchment system capable of supporting the year round demands of big game such as elk and deer.

PROJECT DESCRIPTION AND STRATEGIES:

The proposed plan would consist of AZGFD Development Branch building a gravity fed water catchment (10,000 to 30,000 gallon) in the identified areas (see attached schematic). These large gravity fed catchments are buried underground, require virtually no maintenance, and due to their size require little effort in maintaining water availability. Catchments would be constructed within the existing water development's footprint to minimize disturbance and administrative paperwork, and would include the removal of the degraded catchments. Only medium sized dump trucks with flatbed trailers carrying backhoe and bobcat are the needed heavy equipment necessary to construct the new catchments. The old catchment would be broken down and hauled out via dump truck for disposal.

All 6 catchments currently reside on existing roads. No new roads or trails will be necessary for the work. If an existing road does need to be improved for the machinery to head into the area, the road will be left as it was found prior to the work (i.e. boulders, trees, etc will be placed on road) to prohibit use other than what it was getting prior to the work. Finally, all work within Mexican Spotted Owl Protected Activity Areas will be done outside of the breeding season (allowable work timeframe is Sept.1-March1 yearly). This site is within a PAC location, so in addition, no trees may be removed from this site.

It is estimated that it will take about a month to complete each catchment. USFS Coconino Mogollon Rim District agrees to pre-work identification of weeds, treatment and post work monitoring and weed treatment of the footprint area should the need arise for three years following completion. Overall, these water development reconstructions would help reduce the limiting factor of water availability on the northern half of the Mogollon Ranger District and increase the carrying capacity of this area for wildlife.

PROJECT LOCATION:

Trick Tank #2, also known as Jacks Canyon AZGFD #1014, is located at approximately N 34 41.710, W 111 07.003 in T15N, R12E, Sec. 7. It is located on a non-numbered two-tracker headed east off of Highway 87 at milepost 308. Access is on a non-maintained USFS road.

LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name): US Forest Service, Mogollon Ranger District

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

HABITAT DESCRIPTION:

This project is located in transition Ponderosa Pine – Pinion/Juniper habitat. Prominent tree species include Ponderosa Pine, Juniper, Alligator Juniper, Pinion and Gambel Oak. Elevation is approximately 6600 feet, receiving significant winter moisture.

ITEMIZED USE OF FUNDS:

Cost estimate was derived in coordination with AZGFD Engineer Joe Currie. He provided the following cost estimate:

- 3' X 18' dia. Fiberglass Ring Tank – \$ 10,010.00 (per tank, need three tanks)
- 3' X 5' Fiberglass Walk-in “Elk” Trough - \$ 3,934.00
- 24' X 96' Metal frame and R-panel Apron - \$ 6,153.00
- 200' X 200' Heavy duty Pipe rail fence - \$ 3,400.00
- Elk enclosure fencing for apron - \$3,500.00
- 3” Sch 80 Plumbing and brass ball valves - \$ 1000.00
- Misc. Materials - \$ 1000.00

Total: \$49,017.00

Cost increase of 10% = \$4,902.00

Grant Request of \$53,919.00

AZGFD Development crew will complete the installation of the project. J. Currie estimated that to be \$20,000 in kind labor cost match. In addition, Wildlife Manager G. Fabian has dedicated 10 days to project development, field trips, coordination, and finalization, which is matching in kind labor of \$1820.00. The USFS has spent 14 days completing administrative paperwork for project analysis, NEPA, ARCHY, fieldtrips, and weed monitoring, which is a matching in kind labor of approximately \$4468.00.

Project material cost:	\$53,919.00
Matching in kind labor value:	\$26,288.00
Total project cost:	\$80,207.00

Special Big Game License Tag Funds

Cost Share or Matching Funds

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

The USFS Mogollon Rim RD is cooperating in this effort with AZGFD to replace these catchments. AZGFD would seek funding through the AZGFD HPC process and other grant funding opportunities. The Mogollon Rim RD would cost share these projects through NEPA and ARCH completion and weed requirements. There will be no partial direct funding on the USFS part as the catchments that were previously used for fire are no longer necessary. These catchments will be re-built without the fire hook-up capability. Ownership of these new catchments along with maintenance responsibilities will transfer to AZGFD upon completion of the rebuild per the USFS special use permit SUP RED0415.

PROJECT MONITORING PLAN:

These drinkers will be monitored for water availability and maintenance issues several times each year.

PROJECT MAINTENANCE:

Little to none.

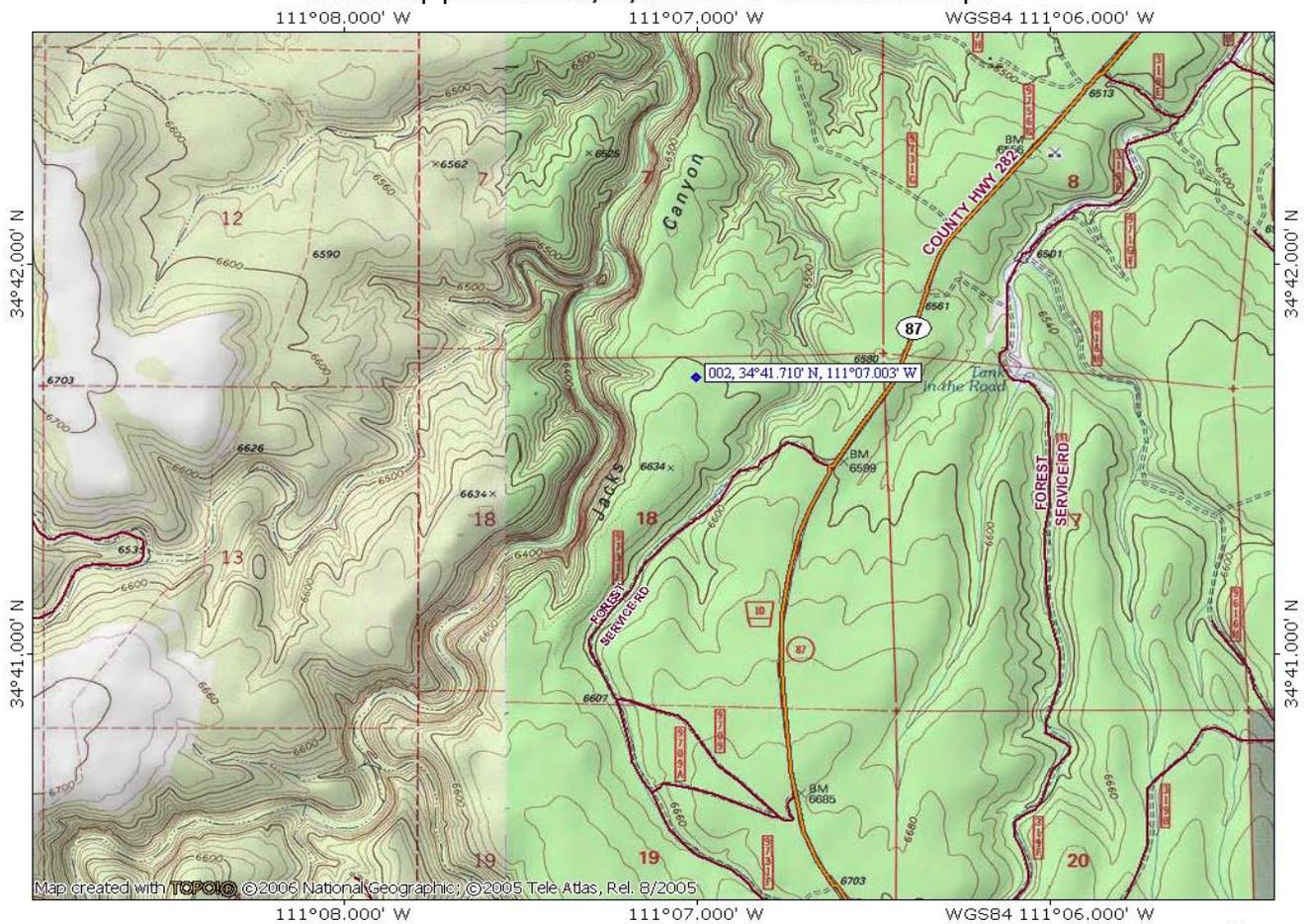
PROJECT COMPLETION REPORT TO BE FILED BY:

Wildlife Manager Garrett Fabian

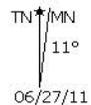
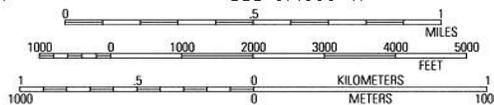
WATER DEVELOPMENT PROJECTS (see attached worksheet):

TREE SHEARING (AGRA-AXE, PUSH) PROJECTS (see attached worksheet):

TOPO! map printed on 06/27/11 from "LP current waters.tpo"



Map created with TOPO! © 2006 National Geographic, © 2005 Tele Atlas, Rel. 8/2005



ARIZONA GAME AND FISH DEPARTMENT WATER DEVELOPMENT WORKSHEET

PROJECT NAME: Jacks Canyon catchment #1014

1) **Is the water development listed as a priority in the most recent "Wildlife Water Development Annual Implementation Schedule?"** Yes. It is the Region II, sector 8 #1 priority.

2) **Please list the Development Branch personnel and date coordinated with for this project.**
Joe Currie, several dates including field trip 5/6/2010.

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: Turkey seep is 2.8 miles away. There is also a livestock well and drinker about 2 miles away, however it is across Highway 87 and only on during the fall and winter. There are several private residences in Mogollon Ranch Estates that have permanent water for livestock and wildlife, however wildlife must cross Highway 87 to access it.

Type of water source (catchment, spring, dirt tank): Spring, well and metal basin tanks

Ownership of water source: USFS, Bar T Bar ranch, and Private residences.

Distance in miles from project: 2.8, 2.0, 3+

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.**

Site is located within a Mexican Spotted Owl breeding area.

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

Type of access (mark one): 2x4 vehicles 4x4 only foot**

**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.**

See attached schematic of catchment #1014.

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

See answer #2.



JACKS CANYON, AZGFD #1014

