

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

| PROJECT INFORMATION | |
|--|---|
| Project Title: AGFD #613-#620 Catchment Redevelopment | Project No. 07-224 |
| Region/GMU: Region II / GMU 13A | HPC: Fredonia HPC |
| Project Type: Multi-Wildlife Water Redevelopment | |
| Project Description: This project is a multi-year plan for the redevelopment of AGFD water developments #613-#620 in GMU 13A. These existing catchments, most of which constructed in the 1970's, are aging resulting in deteriorating concrete storage vaults and drinkers, aprons and dilapidated enclosure fences. Redevelopment will include upgraded apron materials and storage tanks as well as new walk-in wildlife drinkers and replacement of existing barbed wire fence with steel rail fences. These new developments will ensure perennial water sources are available for mule deer, Merriam's turkey and other wildlife utilizing these areas of GMU 13A for decades in the future. | |
| Wildlife Species to Benefit: Mule Deer, Merriam's Turkey | |
| Possible Funding Partners: Arizona Deer Association, NTWF | |
| Implementation Schedule: Beginning: ~Spring 2008 Completed: ~Fall 2012 | NEPA Compliance: (if applicable) Completed: Yes ___ No <u>X</u> Projected Completion Date: Anticipated w/6 mo - 1 yr |
| PROJECT FUNDING | |
| SBG Funds Requested: \$372,000.00 | |
| Cost Share Funds: \$33,779.00 | |
| Total Project Costs: \$405,779.00 | |
| PARTICIPANT INFORMATION | |
| Applicant: John Sims (please print) Telephone: (435) 644-3794 | Address: 3500 S. Lake Mary Road Flagstaff, AZ 86001 |
| AGFD Contact and Phone No. (If applicant is not AGFD personnel) | |
| Coordinated with: Joe Curry , AGFD | Date: August 20, 2007 |
| Applicant's signature: | Date: |

**SEND COMPLETED APPLICATIONS TO:
Game Branch
2221 W. Greenway Rd.**

Phoenix, AZ 85023
mdisney@azgfd.gov

WAS PROJECT PRESENTED TO THE LOCAL HPC? YES _____ NO X

HAS PROJECT BEEN SUBMITTED IN PREVIOUS YEARS? IF SO WAS IT FUNDED?

Project has not been submitted in previous years

NEED STATEMENT/PROBLEM ANALYSIS:

The Arizona Game and Fish Department constructed catchments #613-#620 each with a storage capacity of 2,500 gallons. Unlike many other developments constructed during this time, the 20'X'60 apron is secured to the ground at intervals using concrete anchors rather than wood studs. The storage tank is a concrete vault at the end of each apron rather than a metal storage tank and liner. Finally, the drinker is concrete made in the same form as the storage vault. As a result of age and exposure to the elements, the concrete anchors associated with the apron are deteriorating and crumbling eventually jeopardizing the integrity of the apron. In addition, the edges of the concrete drinkers have deteriorated and crumbled substantially resulting in an overall reduction in the quantity of water available in the drinker and overall storage capacity of the vault. Finally, it's suspected that the storage vault #614 has a leak slowly allowing the loss of water.

Water hauling occurred to #614, #617, #618 and #619 in 2007. Hauling effort resulted in the following amounts hauled to each water catchment:

- #614: 3,000 gallons
- #617: 1,000 gallons
- #618: 2500 gallons
- #619: 1000 gallons

All of the above mentioned waters are in the same general geographic area in the Mt. Trumbull region and provide critical water for a burgeoning mule deer population and to a lesser extent a Merriam's turkey population. It's anticipated if left in their current state and allowed to progressively get worse, in addition to the burgeoning mule deer population, water hauling demands will increase dramatically. This grant proposal is structured as a phased approach to the redevelopment of each water. Ideally, through this grant, funding would be provided to redevelop at least two waters per year until all are complete. It's anticipated it will take approximately five years utilizing the services of a private contractor to complete the project. Cultural clearances and associated NEPA documentation will be required, however, this work has been funded and is currently contracted by a private firm. It's anticipated all necessary NEPA work will be completed within six months to one year

PROJECT OBJECTIVES:

- Increase storage capacity from 2,500 gallons to 10,000 gallons

- **Increase life expectancy of all eight water catchments by a minimum of 20 years.**
- **Increase dependability of each water catchment**
- **Decrease or eliminate water hauling requirements to each development**

PROJECT STRATEGIES:

Utilize Big Game Special Tag Funds and the services of a private contractor to redevelop all eight water catchments over the span of five years. If funded, at least two water catchments would be redeveloped each year for 4-5 years until complete.

Redevelopment of each facility would include the following:

- 1. Purchase and install new apron packages (24'X72') using metal studs and R-panel on each water catchment.**
- 2 Replace existing 2,500 gallon concrete storage vaults with two 3'X16' fiberglass storage tanks.**
- 3. Replace concrete drinkers and replace with a 3' fiberglass walk-in drinker for each water catchment.**
- 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:

#613

**Game Management Unit 13A
Mohave County, AZ
N36 28.915', W113 07.258'**

#614

**Game Management Unit 13A
Mohave County, AZ
N36 27.230', W113 06.731'**

#615

**Game Management Unit 13A
Mohave County, AZ
N36 28.409', W113 11.133'**

#616

**Game Management Unit 13A
Mohave County, AZ
N36 22.381', W113 06.267**

#617

**Game Management Unit 13A
Mohave County, AZ**

N36 21.094', W113 07.285'

#618

Game Management Unit 13A

Mohave County, AZ

N36 21.405', W113 11.281'

#619

Game Management Unit 13A

Mohave County, AZ

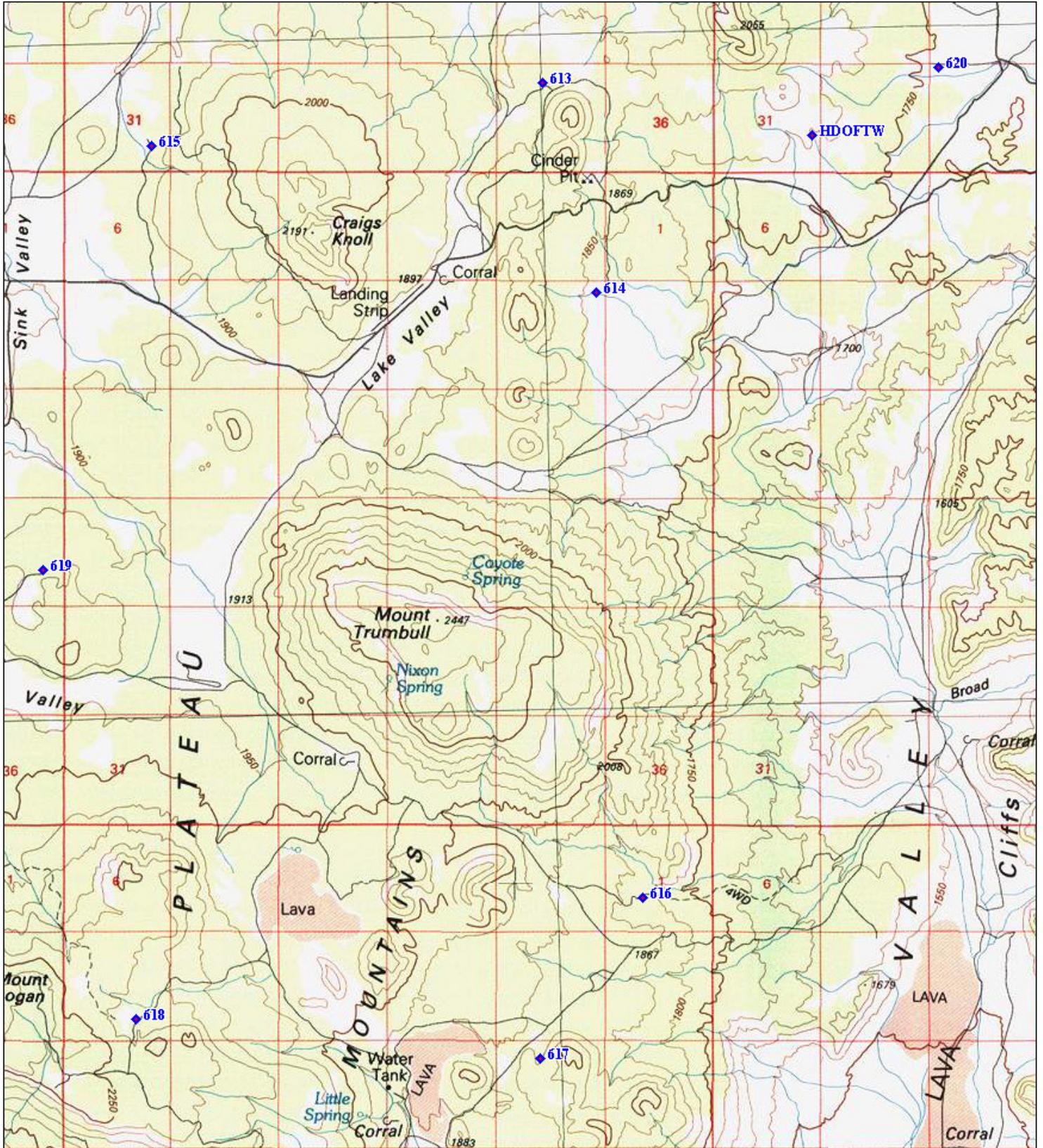
N36 25.005', W113 12.199'

#620

Game Management Unit 13A

Mohave County, AZ

N36 29.038', W113 03.341'



TN MN
12 1/2°

Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)

LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and

(revised 6-05-2007)

provide landowner's name):

All projects are located 100% on public land administered by the Bureau of Land Management, AZ Strip Field Office.

IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?

N/A

HABITAT DESCRIPTION:

Vegetation at seven of the eight project locations consists of mixed pinyon/juniper, big sagebrush, cliffrose and various forbs and grasses. Vegetation at #618 is consistent with Ponderosa Pine communities including gamble's oak, aspen, Mexican locust and various forbs and grasses.

- #613 – Approximately 6158' ASL
- #614 – Approximately 6036' ASL
- #615 – Approximately 6177' ASL
- #616 – Approximately 5956' ASL
- #617 – Approximately 6235' ASL
- #618 – Approximately 7127' ASL
- #619 – Approximately 6373' ASL
- #620 – Approximately 5715' ASL

ITEMIZED USE OF FUNDS:

ESTIMATED PROJECT COST SHEET

| Costs Category – Equipment, Labor, Materials, etc. | Grant Dollars Requested – Special Tag Funds | Wildlife Conservation Funds |
|---|--|-----------------------------|
| 24'X72' metal Stud and R-panel apron \$6100.00 ea. (X 8) | \$48800.00 | |
| Fiberglass 3'X4'' wildlife drinker \$4000.00 ea. (X 8) | \$32000.00 | |
| Fiberglass 3'X16' diam. Storage tank – 2/catchment \$4300.00 ea. (X 16) | \$68800.00 | |
| Steel Pipe fence 150'X150' 2000.00 ea. (X 8) | \$16000.00 | |
| Misc. plumbing supplies 1000.00 ea. (X 8) | \$8000.00 | |
| Contractor Services \$ 25000.00 ea. (X 8) | \$200,000.00 | |

| | | |
|---|---------------------|-------------------|
| EA Documentation – Use of Contractor 3723.63 ea. (X 8) | | \$29789.00 |
| Cultural Survey – Use of Contractor 498.75 ea. (X 8) | | \$3990.00 |
| Totals | \$372,000.00 | \$33,779 |

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 private contractor.**

Private Contractor

- **Complete redevelopment of all eight water catchments**

The Arizona Deer Association (Phoenix, Page and Littlefield Chapters) as well as the Arizona Mule Deer Foundation may be potential cooperators with this project. Chapters of The National Wild Turkey Federation may be interested partners as well. Participation from these groups is unknown at this time.

PROJECT MONITORING PLAN:

As with all water catchments in GMU 13A, each water catchment will be checked according to district protocol. Water levels will be recorded and submitted to the Region II Game Specialist.

PROJECT MAINTENANCE:

The responsible District Wildlife Manager may complete minor maintenance when possible. The AGFD Development Crew will complete routine maintenance or major repairs of each facility when necessary.

PROJECT COMPLETION REPORT TO BE FILED BY:

John Sims – Wildlife Manager, GMU 13A

WATER DEVELOPMENT PROJECTS (see attached worksheet):

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

ARIZONA GAME AND FISH DEPARTMENT
WATER DEVELOPMENT WORKSHEET

PROJECT NAME: AGFD #613-620 Catchment Redevelopment

- 1) **Is the water development listed as a priority in the most recent “Wildlife Water Development Annual Implementation Schedule?”**

No

- 2) **Please list the Development Branch personnel and date coordinated with for this project.**

Joe Curry

- 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:**

From #613

Name of water source: #614, #615, #620 and Head of Tuweep

Type of water source (catchment, spring, dirt tank, etc.): Catchments, Livestock/Wildlife Water

Ownership of water source: AGFD, BLM/Livestock Operator

Distance in miles from project: Approximately: 2 miles, 3.6 miles, 3.64 miles and 2.5 miles

From #614

Name of water source: #613, #620, Head of Tuweep

Type of water source (catchment, spring, dirt tank, etc.): Catchments, Livestock/Wildlife Water

Ownership of water source: AGFD, BLM/Livestock Operator

Distance in miles from project: Approximately: 2 miles. 3.77 miles and 2.45 miles

From #615:

Name of water source: #613, #828, Dutch Valley Coop

Type of water source (catchment, spring, dirt tank, etc.): Catchments, Livestock/Wildlife Water

Ownership of water source: AGFD, BLM/Livestock Operator

Distance in miles from project: Approximately: 3.67 miles, 3.65 miles and 1.9 miles

From #616:

Name of water source: #617, Mt. Trumbull, Ponderosa Burn, Lion

Type of water source (catchment, spring, dirt tank, etc.): Catchments

Ownership of water source: AGFD, BLM

Distance in miles from project: Approximately: 1.77 miles, 2.7 miles, 3.2 miles and 3.5 miles

From #617:

Name of water source: #616, #618, Mt. Trumbull, Turkey tracks, Lion, Ponderosa Burn, big spring
Type of water source (catchment, spring, dirt tank, etc.): catchment, spring
Ownership of water source: AGFD, BLM, private
Distance in miles from project: Approximately: 1.77 miles, 3.7 miles, 3.8 miles, 3.0 miles, 3.0 miles, 3.4 miles and 3.9 miles

From #618:

Name of water source: #617, Lion, Sawmill, Logan, Turkey Tracks, Big Spring
Type of water source (catchment, spring, dirt tank, etc.): Catchment, Spring
Ownership of water source: AGFD, BLM, Spring
Distance in miles from project: Approximately miles, 1.1 miles, 0.85 mile, 1.1 miles and 1.4 miles

From #619:

Name of water source: Ponderosa Burn, Sawmill, Logan, Lion
Type of water source (catchment, spring, dirt tank, etc.): Catchment
Ownership of water source: BLM
Distance in miles from project: Approximately miles, 4.0 miles and 3.5 miles

From #620:

Name of water source: #613, #614, #825, Head of Tuweep
Type of water source (catchment, spring, dirt tank, etc.): Catchment, Livestock/Wildlife Coop
Ownership of water source: AGFD, BLM/Livestock Operator
Distance in miles from project: Approximately 3.6 miles, 3.77 miles, 3.9 miles and 1.30 miles

- 6) **Is the target wildlife species a result of transplant efforts?** ___YES ___X_NO
- 7) **Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument, etc). If private land, list landowner.**

#614, #616, #617 and #618 are 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: Approx. hiking time:

-- Does access to this site require crossing private or tribal lands? ___YES ___X_NO

-- Please describe any restrictions to public access: N/A

- 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 itemized use of funds

- 10) **Was a site visit completed?** ___ Yes ___X_No
If Yes, please list personnel that attended and date.

