

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

Game Branch / HPC Project Number: 15-516

PROJECT INFORMATION

Project Title: Roskruge Mountains No6 Water Catchment Redevelopment	
Region and Game Management Unit: Region 5, GMU 37A	
Local Habitat Partnership Committee (LHPC): • Tucson	Was the project presented to the LHPC? YES[X] NO[]
Has this project been submitted in previous years? YES[X] NO[] If Yes, was it funded? YES[] NO[X] → Funded HPC Project #(s):	
Project Type: Wildlife Water Catchment Redevelopment	
Brief Project Summary: This project will be a complete redevelopment of wildlife water catchment #724. The current concrete system was installed in 1968, and it has been steadily deteriorating over that past 47 years. The concrete drinker and storage tank have cracks that cannot be repaired or sealed. This catchment goes nearly dry several times a year and requires multiple water hauling efforts every year. The entire system will be removed and replaced with an R-panel apron, a 10,000 gallon storage tank, polyethylene walk-in trough, and a piperail fence.	
Big Game Wildlife Species to Benefit (% benefit per species): mule deer (50%), javelina (30%), bighorn sheep (10%), mountain lion (10%)	

Implementation Schedule (Month/Day/Year): <u>Project Start Date:</u> January 1, 2016 <u>Project End Date:</u> June 30, 2016	Environmental Compliance: NEPA Completed: Yes[X] No[] N/A[] Projected Completion Date: <u>Completed</u> State Historic Preservation Office - Archaeological Clearance: Yes[X] No[] N/A[] Projected Completion Date: <u>Completed</u> Arizona Game and Fish Department EA Checklist: N/A[] To be Completed by: <u>Joe Currie</u> Projected Completion Date: <u>Completed</u>
--	--

PROJECT FUNDING

Special Big Game License Tag Funds Requested:	\$ 31,800.27
Cost Share or Matching Funds: PR Bubble Funds	\$ 25,000.00
Total Project Costs:	\$ 56,800.27

PARTICIPANT INFORMATION

Applicant (please print): Allison Dutt AGFD	Address: 555 N. Greasewood Rd Tucson, AZ 85745	E-mail: adutt@azgfd.gov
Telephone: 520-240-1019		Date: 7/23/2015

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

Project has been coordinated with:

John Patton, ASLD Range Con; Joe Currie, AGFD Development Branch; Alisha Phipps, NRCS; Terry Herndon and Clyde Weekly, Mule Deer Foundation; Pat Whillock, Dobbs Butte Ranch

NEED STATEMENT – PROBLEM ANALYSIS:

The current concrete water catchment system was installed in 1968, and it has been steadily deteriorating over that past 47 years. The concrete drinker and storage tank have cracks that cannot be repaired or sealed.

This catchment goes nearly dry several times a year and requires multiple water hauling efforts every year. Catchment #724 is not a dependable water source for wildlife in the southern Roskrige Mountains near Three Points, AZ and is in need of redevelopment.

The Western Association of Fish and Wildlife Agencies (WAFWA) Mule Deer Working Group found that rainfall and availability of water were the two biggest limiting factors for wildlife in the Southwest Desert Ecoregion. The number one recommendation of the Group to improve mule deer management in the Southwest Desert Ecoregion was to create sources of water in areas where water is limiting and where other potentially limiting factors are being addressed. Also, consistent with the Group's recommendation is the Department's Species Management Guidelines (SMG) which provides goals, objectives, strategies and procedures for a specific species. The SMG outlines four ways to improve and enhance deer habitat to accomplish the overall goal of increasing mule deer populations to levels that provide diverse recreational opportunities. Number one on the list is: protect and maintain current water sources.

There is not currently a resident population of bighorn sheep in the Roskrige Mountains. However, a pair of rams have been seen at Catchment #724 and a GPS collared ram was recorded traveling south from the Waterman Mountains through the Roskruges. An increase in reliable water sources in the Roskrige Mountains could possibly encourage the Waterman and Silverbell bighorn sheep populations to extend their range to the south. The area could also serve as a travel corridor to the Coyote Mountains Wilderness and Baboquivari Peaks Wilderness both in Unit 36C.

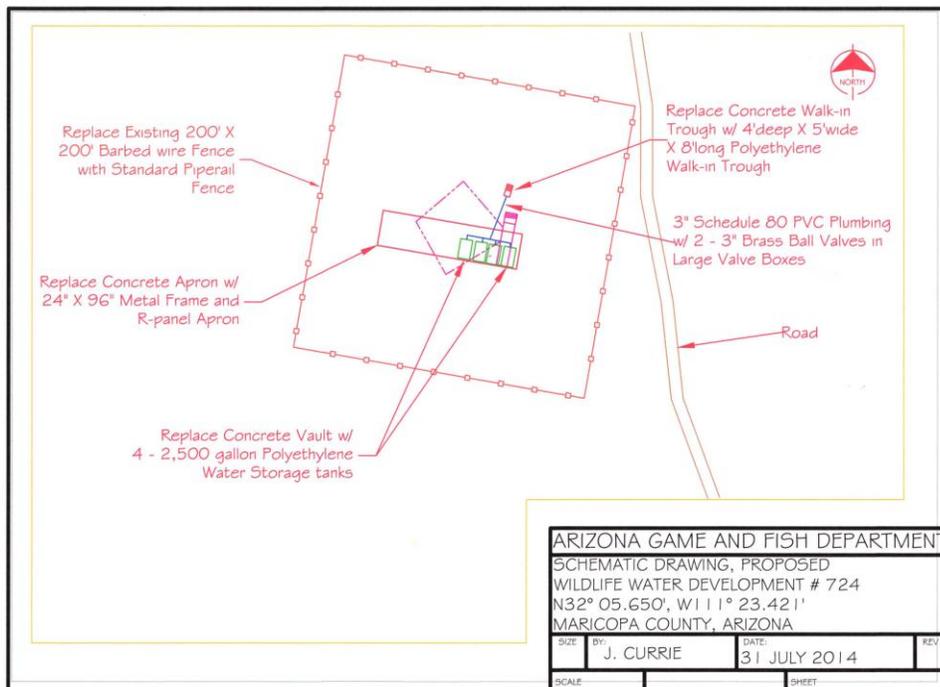
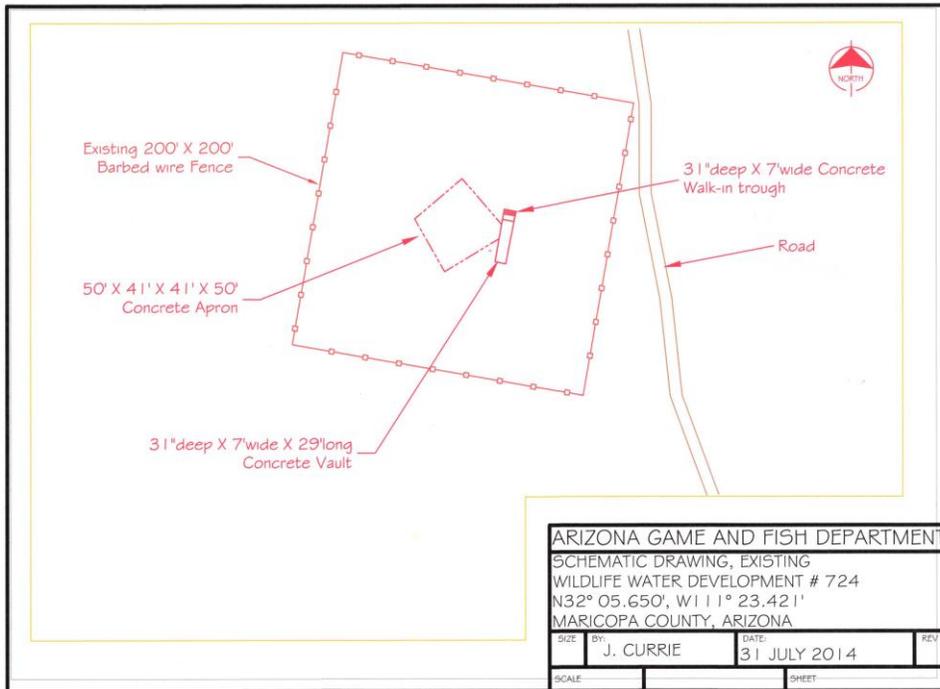
PROJECT OBJECTIVES:

This reliable water source will:

- Increase mule deer, bighorn sheep, and javelina populations by providing dependable, long term, self-sustaining, quality water sources.
- Increase hunter opportunity
- Install a system that has a long lifespan (40-50 years for storage and collection systems, 25 years for drinking troughs)
- Install a system that does not require supplemental hauling except in rare or exceptional circumstances
- Install a system that is accessible and that requires minimal routine maintenance

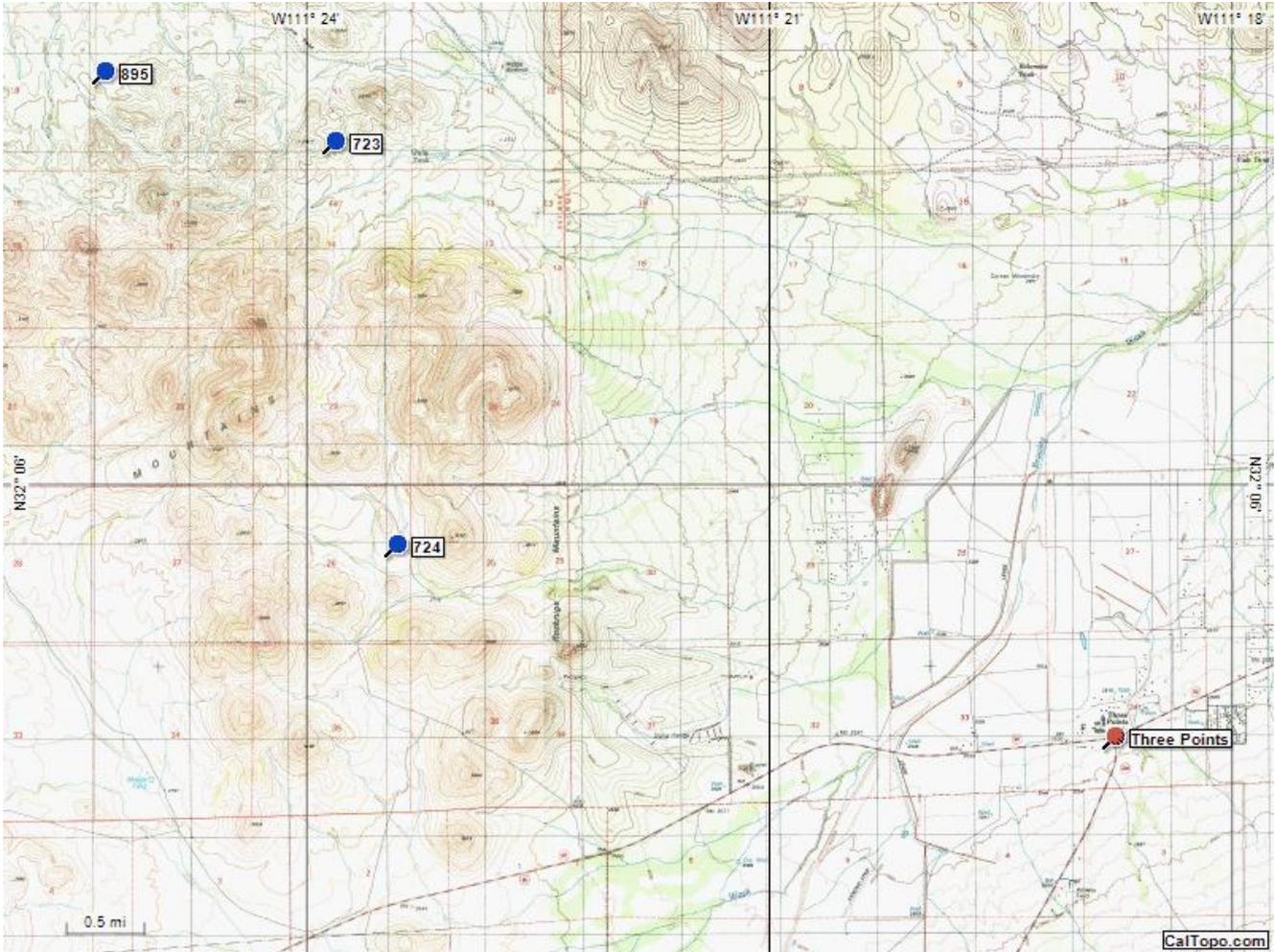
PROJECT DESCRIPTION AND STRATEGIES:

This redevelopment will require removing the old concrete system and barbed wire fence. The old non-working system will be replaced with a 24' x 96' R-panel apron, four 2,500 gallon polyethylene water storage tanks, a 4' deep x 5' wide x 8' long polyethylene walk-in trough, and a 200' x 200' standard piperail fence. A trail camera and protective case will be added to observe and document wildlife using the updated catchment.



PROJECT LOCATION:

The project is located west of Tucson, and northwest of the town of Three Points, in Game Management Unit 37A. The GPS coordinates are 32°05.650'N, 111°23.421'W.



LAND OWNERSHIP AT THE PROJECT SITE(S):

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

- The project site is on State Trust Land, administered by the Arizona State Land Department

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 primary biotic community in the Roskrige Mountains is Sonoran desert scrub. Common vegetation around the project area includes, palo verde (*Cercidium microphyllum*), saguaro (*Carnegiea gigantea*), ocotillo (*Fouquieria splendens*), and creosote (*Larrea tridentata*). Average rainfall is 10-12", and the elevation is approximately 2,700'.



ITEMIZED USE OF FUNDS:

Special Big Game License Tag Funds

4- 2,500 Gallon Polyethylene Water Storage Tanks	\$13,280.43
24' X 96' Metal Frame and R-Panel Apron	\$8,097.70
200' X 200' Standard Piperail Fence	\$3,250.00
4' deep X 5' wide X 8' long Polyethylene Walk-in Trough and Gutter	\$4,697.14
Plumbing	\$1,000.00
18 Rubber Mats (for under tanks)	\$975.00
<u>Remote Digital Monitoring Camera</u>	<u>\$500.00</u>
Total	\$31,800.27

Cost Share or Matching Funds

<u>External Contractor Labor/Equipment (Pittman-Robinson Bubble Funds)</u>	<u>\$25,000.00</u>
Total	\$25,000.00

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

AGFD SS Development Branch
AGFD Region V
Arizona State Land Department

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

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

PROJECT MONITORING PLAN:

Project would be monitored by SSDV up to and during redevelopment, to include all required federal and state compliance paperwork; all project material; all state and federal volunteer paperwork and a final construction completion report with 'as built' drawings. This information will be housed in AGFD SSDV Water Development hard files and the SSDV Water Development database located at the AGFD Headquarters, 5000 W. Carefree Highway, Phoenix, AZ 85086. Regular welfare monitoring will occur as deemed appropriate by the GMU 37A Wildlife Manager.

A remote digital camera will be used to monitor density and frequency of wildlife water use. This will enable the Wildlife Manager to make better informed decisions for the management of wildlife within GMU 37A.

Water levels will be monitored at least twice per year with emphasis during the warmer drier months by the Wildlife Manager. Additional monitoring will be conducted as needed.

PROJECT MAINTENANCE:

Any project maintenance will be assumed by the AGFD SSDV Branch and AGFD Region V. Minor maintenance will also be conducted as needed by the Wildlife Manager. The AGFD Development Branch will be responsible for major maintenance issues

PROJECT COMPLETION REPORT TO BE FILED BY:

A. Dutt, AGFD Region V GMU 38M/37A Wildlife Manager

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

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

PROJECT TITLE: Roskruge Mountains No6 Water 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 Currie, July 16, 2014; Joe Currie and Tobbie McMillan, July 22, 2015

- 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: Dobbs Butte Ranch Pipeline/Drinkers
Type of water source (catchment, spring, dirt tank): Livestock Drinkers (not wildlife accessible)
Ownership of water source: Pat Whitlock, Rancher (Dobbs Butte Ranch)
Distance in miles from project: 0.66 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, National Monument). If private land, list landowner.**
N/A

- 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: 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.**
4- 2,500 Gallon Polyethylene Water Storage Tanks
18 Rubber Mats (for under tanks)
24' X 96' Metal Frame and R-Panel Apron
200' X 200' Standard Piperail Fence
4' deep X 5' wide X 8' long Polyethylene Walk-in Trough and Gutter

3” Schedule 80 PVC Plumbing w/ 2 3” Brass Ball Valves in Large Valve Boxes

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

If Yes, please list personnel that attended and date.

July 16, 2014: Joe Currie, AGFD Development Branch and Allison Dutt, AGFD Wildlife Manager 38M/37A

June 19, 2015: Allison Dutt, AGFD Wildlife Manager 38M/37A; John Patton, ASLD Range Con; Alisha Phipps, NRCS; Darrel Tersey, BLM; Terry Herndon and Clyde Weekly, Mule Deer Foundation; Pat Whillock, Dobbs Butte Ranch

July 22, 2015: Allison Dutt, AGFD Wildlife Manager 38M/37A; Joe Currie and Tobbie McMillan, AGFD Development Branch