

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

<b>PROJECT INFORMATION</b>	
<b>Project Title: Redevelopment of Catchment 749</b>	<b>Project No. 09-522</b>
<b>Region/GMU: 5/37B</b>	<b>HPC: Tucson</b>
<b>Project Type: Redevelopment of existing catchment</b>	
<b>Project Description:</b> This project will be a complete redevelopment of wildlife water catchment 749 (Tortilla Mountains #2). The existing system was installed in 1970 and has reached the end of its lifespan. The wood apron has rotted out and its ability to collect water is extremely limited. It should be redeveloped with a higher capacity 11,400 gallon fiberglass ring tank system utilizing a 24'x96' R panel collection apron to provide a perennial water source for deer, javelina and other wildlife in the area.	
<b>Wildlife Species to Benefit:</b> mule deer, Coues' deer, javelina, small game and nongame species	
<b>Possible Funding Partners:</b>	
<b>Implementation Schedule:</b> <b>Beginning: September 1, 2008</b> <b>Completed: June 30, 2011</b>	<b>NEPA Compliance: (if applicable) see attached</b> <b>Completed: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></b> <b>Projected Completion Date:</b>
<b>PROJECT FUNDING</b>	
<b>SBG Funds Requested: \$39,037</b>	
<b>Cost Share Funds: \$20,000</b>	
<b>Total Project Costs: \$59,037</b>	
<b>PARTICIPANT INFORMATION</b>	
<b>Applicant: Ben Brochu</b>  <b>Telephone: (520) 229-3222</b>	<b>Address:</b> Arizona Game and Fish Department 555 N. Greasewood Road Tucson, AZ 85745
<b>AGFD Contact and Phone No.</b> <b>(If applicant is not AGFD personnel)</b>	
<b>Coordinated with: Joe Currie (AGFD), Darrell Tersey (BLM) and Rick Bader (livestock operator)</b>	<b>Date: 8-6-07, 2-26-07</b>
<b>Applicant's signature:</b>	<b>Date: September 1, 2009</b>

**SEND COMPLETED APPLICATIONS TO:**

**Game Branch  
2221 W. Greenway Rd.  
Phoenix, AZ 85023  
rothompson@azgfd.gov**

**WAS PROJECT PRESENTED TO THE LOCAL HPC?      YES       NO**

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

Yes, this proposal was submitted last year for the redevelopment of catchments 748 and 749. It was partially funded and the redevelopment of catchment 748 has been scheduled for December of 2009.

### **NEED STATEMENT/PROBLEM ANALYSIS:**

Catchment 749 (Tortilla Mountains #2) was constructed in 1970. It has reached the end of its lifespan and is in need of a complete redevelopment. The wood/corrugated metal collection apron has rotted away and its ability to collect water is limited. This catchment was identified as a priority catchment in the 2002 Wildlife Water Development Team Report. The closest perennial water source from catchment 749 are catchments 752 and 764, which were recently redeveloped, at respective distances of 2.5 and 2.3 miles over the crest of the Tortilla Mountains. The system currently has a 5000-gallon capacity.

This catchment should be redeveloped with higher capacity system to ensure water is available during critical dry months of the year especially during prolonged periods of drought. Also, redevelopment is necessary to provide a valuable and dependable perennial source of water for mule deer, Coues' deer and javelina. In providing a permanent water source for wildlife, local populations of deer and javelina may increase thereby potentially increasing hunter opportunity. The **NEPA** and **Arch clearances** have been completed (see the attached email form Darrell Tersey (BLM)).

### **PROJECT OBJECTIVES:**

- To increase deer and javelina populations by providing dependable, long term, self-sustaining, quality water sources and by increasing the use of otherwise unavailable forage resources
- To increase hunter opportunity
- To install systems that have a long lifespan (40-50 years for storage and collection systems, 25 years for drinking troughs)
- To install systems that do not require supplemental hauling except in rare or exceptional circumstances
- To install systems that have minimal visual impacts and blend in with surrounding landscape
- To install systems that are accessible and that requires minimal routine maintenance
- To monitor the use of these waters using remote digital game cameras

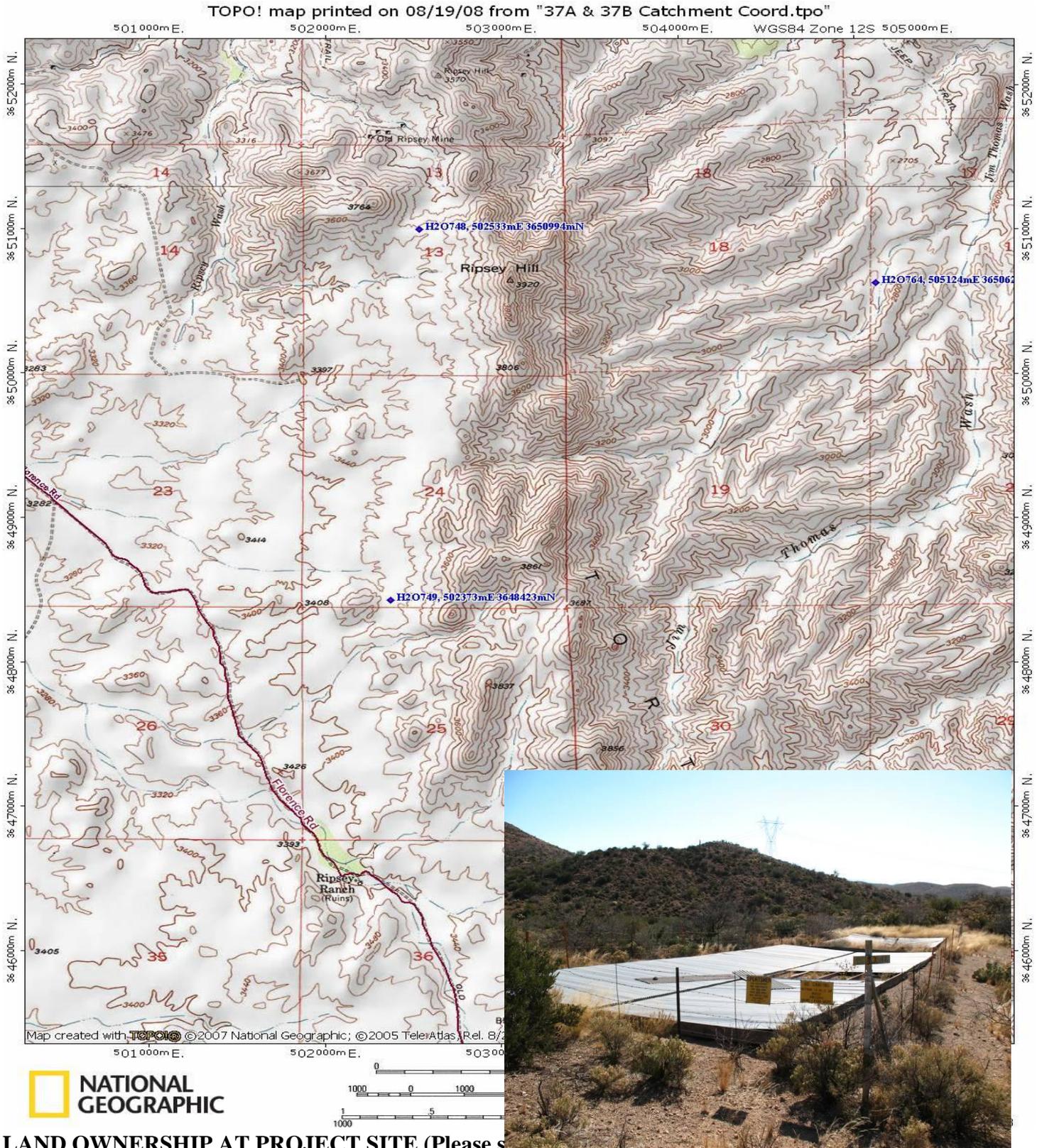
### **PROJECT STRATEGIES:**

Each project will be completed in one of three ways:

1. Utilize big game special tag funds, personnel from the Arizona Game and Fish Department Development Branch and approximately 15 volunteers to install both of the new systems.
2. Pending available big game special tag funds, projects could be contracted out at an increased cost. The total project would be completed in a fraction of the time.
3. Utilize big game special tag funds for the purchase of the system components. Pending availability and willingness, use donated volunteer heavy equipment (backhoe) and labor to build the systems. If donated backhoe is not available, one will be rented from Tucson and transported to and from the project site. Development Branch would only be responsible for supplying 1-2 people for project supervision and for transporting the required supplies and specialized equipment to the site. Nearly the entire project would be completed with volunteers.

### **PROJECT LOCATION:**

Catchment 749 – UTM 502373mE, 3648423mN



**LAND OWNERSHIP AT PROJECT SITE (Please provide landowner's name):**  
The project site is on land administered by the Bureau of Land Management, Tucson Field Office, 12661 E. Broadway, Tucson, AZ 85748, (520) 258-6300.

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

**HABITAT DESCRIPTION:**

Game management unit 37B is located in Pinal County, Arizona, southeast of Phoenix. Two main biotic community types, Sonoran Desertscrub and Semidesert Grassland, comprise the bulk of the habitat in 37B. Catchments 748 and 749 are located within the Jojoba-Mixed Scrub Series of the Arizona Upland Subdivision of the Sonoran Desertscrub community. Common vegetation includes jojoba (*Simmondsia chinensis*), foothill palo verde (*Cercidium microphyllum*), mesquite (*Prosopis spp.*), and desert hackberry (*Celtis pallida*). Average rainfall is approximately 13” and elevation is approximately 3480’.

**ITEMIZED USE OF FUNDS:**

<u>Item</u>	<u>Dimintions</u>	<u>Cost</u>	<u>Cost Share</u>	<u>Funds Needed</u>
2-3'x18' fiberglass ring tank (5700g each)	3'x18' each	\$15,418		\$15,418
24'x96' R panel apron	24'x96'	\$10,779		\$10,779
3'x4' walk-in standard trough	3'x4'	\$2,640		\$2,640
Wildlife "friendly" livestock exclosure fence	150'x150'	\$2,500		\$2,500
Plumbing		\$2,000		\$2,000
Tax @ 8.1%		\$2,700		\$2,700
Backhoe Rental for 1 week		\$1,500		\$1,500
Extra fuel for road work		\$1,000		\$1,000
Labor		\$20,000	AGFD, Volunteers	\$0
<b>Total</b>		<b>\$58,537</b>	<b>\$20,000</b>	<b>\$38,537</b>

- Digital game camera with lockable bear box - \$500ea

**LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:**

- AGFD Development Branch: acquire the materials and provide equipment and minimal labor for construction, also contracted out Arch clearances.
- Bureau of Land Management: NEPA requirements
- Rick Bader (livestock operator): supports the project
- Tucson Habitat Partnership Committee: coordinate project funding opportunities
- Public volunteers: to provide volunteer labor for the project

**PROJECT MONITORING PLAN:**

Remote digital cameras will be used to monitor density and frequency of wildlife water use during the months of May-July if cameras are available. This will enable the Wildlife Manager to make better informed decisions for the management of wildlife within GMU 37B.

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. Minor maintenance will also be conducted as needed by the Wildlife Manager. The AGFD Development Branch will be responsible for major maintenance issues.

**PROJECT MAINTENANCE:**

The maintenance of each catchment will continue to be the responsibility of the AGFD. The Wildlife Manager will be responsible for coordinating this.

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

Ed Jahrke, Joe Currie or Ben Brochu

**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: Catchment 749 Redevelopment**

- 1) **Is the water development listed as a priority in the most recent “Wildlife Water Development Annual Implementation Schedule?”**  
Yes
- 2) **Please list the Development Branch personnel and date coordinated with for this project.**  
Joe Currie – 8-6-07
- 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: Catchment 752 and 764  
Type of water source (catchment, spring, dirt tank, etc.): Catchment  
Ownership of water source: AGFD  
Distance in miles from project: 2.5 and 2.3 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, etc). 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:   Approx. hiking time:  
  
-- Does access to this site require crossing private or tribal lands?  YES    NO  
  
-- Please describe any restrictions to public access: There are currently no restrictions to public access.

**\*\*\*NOTE\*\*\* - The road into the site is very rough and will require some maintenance with heavy equipment for 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.**

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

Joe Currie on 8-6-07 and Darrell Tersey (BLM) on 2-26-07.

From: Darrell\_Tersey@blm.gov [[mailto:Darrell\\_Tersey@blm.gov](mailto:Darrell_Tersey@blm.gov)]  
 Sent: Tuesday, February 12, 2008 11:44 AM  
 To: Ben Brochu  
 Cc: John Windes  
 Subject: Re: Tortilla Mountains Water Catchments - #748, 749, and 764

Hi Ben,  
 Sorry to take so long to reply to you. I did check on the NEPA documentation for the projects. All of the projects were covered by the Middle Gila HMP, which is a cooperative plan between the BLM and the AG&F Dept. Part of the plan was an EA covering all of the projects which at the time were either new proposals or redevelopments. The development up hackberry wash is actually a horizontal well development and I have all of the project files, including as-built drawings. I would think that either the Tucson office or the Phoenix office would have a copy of the HMP as it was signed by Bud Bristow when he was director of the department. If you can't find one, I could probably copy the EA out of this one for your records.

Darrell Tersey  
 Natural Resource Specialist  
 Ironwood Forest National Monument  
 (520) 258-7218  
 Darrell\_Tersey@blm.gov