

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

<b>PROJECT INFORMATION</b>	
<b>Project Title: Powell's Monument Wildlife Catchment Redevelopment - 2007</b>	<b>Project No.</b>
<b>Region/GMU: Region II/ GMU 12B</b>	<b>HPC: Fredonia</b>
<b>Project Type: Wildlife Water Development</b>	
<p><b>Project Description:</b> Improve the water collection and storage capabilities of Powell's Monument Wildlife Catchment, in the Paria Canyon-Vermillion Cliffs of eastern 12B. This project will involve redeveloping the existing catchment with new materials, replacing the float valve system with a gravity fed drinker. New r-panel type roofing panels will replace the current metal sheeting at the site. These panels will be fastened to a new 24 x 96' metal frame. Two 3' x 18' fiberglass tanks will replace the existing metal tank, and a new 3' walk in style fiberglass trough will replace the existing drinker. The redevelopment of this water will greatly improve water availability for Bighorn Sheep and Mule Deer in the area.</p> <p><b>Wildlife Species to Benefit: Primarily Desert Bighorn Sheep, additional benefits to Mule Deer</b></p>	
<b>Possible Funding Partners:</b>	
<p><b>Implementation Schedule:</b>  <b>Beginning: Fall 2007</b>  <b>Completed: Fall 2008</b></p>	
<b>PROJECT FUNDING</b>	
<b>SBG Funds Requested: \$ 45279.50</b>	
<b>Cost Share Funds: \$ -----</b>	
<b>Total Project Costs: \$ 45279.50</b>	
<b>PARTICIPANT INFORMATION</b>	
<p><b>Applicant: Sophia L. Fong</b></p> <p><b>Telephone: 928-645-6920</b></p>	<p><b>Address:</b>  <b>3500 S Lake Mary Road</b>  <b>Flagstaff, AZ 86001</b></p>
<b>AGFD Contact and Phone No. (If applicant is not AGFD personnel)</b>	
<b>Coordinated with: BLM – Arizona Strip Field Office</b>	<b>Date: February 22, 2007</b>
<b>Applicant's signature:</b>	<b>Date: March 1, 2007</b>

**SEND COMPLETED APPLICATIONS TO:**

**Game Branch**  
**2221 W. Greenway Rd.**  
**Phoenix, AZ 85023**  
[mdisney@azgfd.gov](mailto:mdisney@azgfd.gov)

**NEED STATEMENT/PROBLEM ANALYSIS:** Powell's Monument wildlife catchment is an AZGFD owned catchment in the Paria Canyon-Vermillion Cliffs of eastern 12B. Powell's Monument wildlife catchment currently has a wood framed apron with metal sheets nailed to the wood. Many of these metal sheets have come loose, and are no longer attached to the catchment. The "sausage" style tank is approximately 3,000 gallons, which feeds into a small metal drinking trough. There is 4wd road access to the facility.

Because of its age, Powell's Monument wildlife catchment has begun to fail. The wood-framed apron is rotting, and the metal sheeting has come loose greatly reducing its ability to collect water during rain events and supply water throughout the summer months. While it currently can hold water near capacity, the ability of the apron to collect water limits this facilities value to the bighorn sheep in the area. The redevelopment of Powell's Monument WLC will involve replacing the old float valve system with a lower maintenance gravity fed water system. Powell's Monument is only one of two WLC located on the 31 mile long southern face of the Vermillion Cliffs. Paria Point WLC, which also needs to be redeveloped, is located approximately 11 miles west of Powell's Monument WLC above and west of the town of Cliff Dwellers. Fisher Point WLC is located approximately 4.5 miles to the northeast along Paria Canyon.

The habitat surrounding this catchment is highly beneficial to bighorn sheep. The wildlife catchment is located in a pinyon-juniper woodland (Utah juniper, manzanita, ephedra, etc.) on the edge of the Vermillion Cliffs Wilderness, which transitions to a black brush community. Black brush, buckwheat, various shrubs, many grass and forb species are present in the transition zone with the cliff benches below. Bighorn sheep have been documented using this area, and hunters have spent a significant amount of time hunting in the area. Powell's Monument WLC, as well as all of the wildlife catchments located on the Paria Canyon-Vermillion Cliffs, is listed in The Arizona Strip Desert Bighorn Sheep Management Plan as a strategy to improve bighorn sheep distribution in eastern 12B. Increasing the availability and distribution of perennial waters within the Paria Canyon-Vermillion Cliffs bighorn sheep habitat area is a high priority and is a focal point for the Arizona Strip Bighorn Sheep Core Team. With the current disease issues in Kanab Creek, the Paria Canyon-Vermillion Cliffs area is an area of focus for future bighorn sheep transplants on the Arizona Strip. Without improving the ability of this wildlife catchment to collect and hold water, it will continue to have limited value to bighorn and could limit the ability of bighorn sheep to use associated habitats. The redevelopment of Powell's Monument WLC will increase its water storage capacity from approximately 3,000 gallons to more than 12,000 gallons securing water availability during extended dry periods.

Although the desert bighorn sheep is the target species, Powell's Monument WLC has also become an important water for the small herd of mule deer located on the Paria Plateau. California Condors, peregrines, spotted bats as well as other game and non-game species are found in the surrounding area.

NEPA and the archeological clearance have been completed by the Arizona Strip BLM office. The Arizona Game and Fish Department EA Checklist was completed and signed in August 2005, current HDMS check lists no T&E species within the project vicinity.



**PROJECT OBJECTIVES:** There are several objectives of this project:

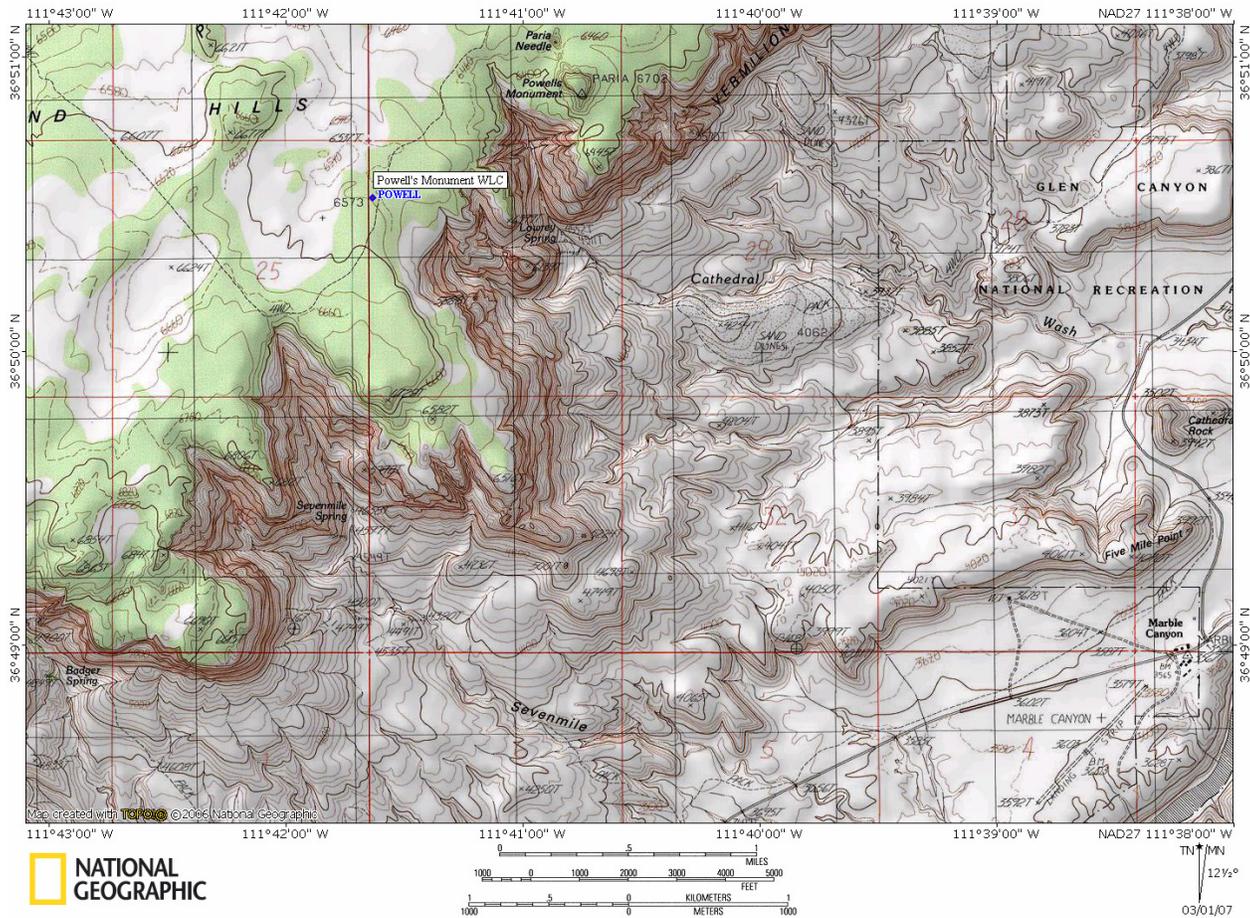
1. Improve water availability and distribution for bighorn sheep in the Paria Canyon-Vermillion Cliffs of eastern 12B.
2. Improve habitat use and distribution of bighorn sheep, by providing an additional reliable water source in the area.
3. Continue the task of redeveloping wildlife water catchments in 12B that have failed or are in disrepair because of their age.

**PROJECT STRATEGIES:** This project will involve redeveloping the existing catchment with new materials. New r-panel type roofing panels will replace the current slick rock apron at the site. These panels will be fastened to a new 24 x 96' metal frame. Two 3' x 18' fiberglass tanks will replace the existing metal tank, and a new 3' walk in style fiberglass trough will replace the existing drinker. The water storage capacity will be increased from approximately 3,000 gallons to over 12,000 gallons.

Because of the location of the project, a helicopter will be needed to sling load materials from the staging area, to the project site. The staging area is projected to be the Marble Canyon Landing Strip.

These steps will ensure that the water collection and storage capabilities of this wildlife catchment will improve greatly and ensure that objectives of this project are met.

**PROJECT LOCATION:** GPS: 36° 50' 31" N 111° 41' 38" W  
Legal: T 40N R 7E sec 30 NW NW



**LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name):** 100% federal administered by the BLM – Arizona Strip Field Office

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

**HABITAT DESCRIPTION:** The habitat surrounding this catchment can best be described as a pinyon-juniper woodland community which is located on the edge of a black brush transition. Elevation at the site is 6208 feet ASL. Associated species at the catchment site include Utah Juniper, Single Leaf Pinyon, big sagebrush, narrow leaf yucca and several grass and forb species. Additional associated species include black brush, various shrubs, many forb species, and several grass species in the transition zone with the cliff benches below.

**ITEMIZED USE OF FUNDS:**

**ESTIMATED PROJECT COST SHEET**

**Powell's Monument Wildlife Catchment Redevelopment – 2007**

<b>Costs Category-Equipment, Labor, Administrative, Material</b>	<b>Grant Dollars Requested – Special Tag</b>
24x96 elevated r-panel apron package – Includes r-panel roofing, metal studs, and associated hardware	\$8,107.50
Helicopter including ferry time and fuel truck	\$20,000.00
2- 18' x3' fiberglass tanks - Includes Tax	\$12,672.00
Associated Plumbing, Concrete and Miscellaneous Hardware Materials	\$500.00
3' Walk-in fiberglass trough	\$2000.00
Piperail fence package-Includes piperail and concrete	\$2000.00
<b>Totals</b>	<b>\$45,279.5</b>

**LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:**

**PROJECT MONITORING PLAN:** After completion of this project, this wildlife catchment will continue to be monitored as part of the Region II/GMU 12B water development protocol. This protocol outlines facility inspection schedules, as well as maintenance schedules if needed. It is anticipated that this wildlife catchment will be inspected at least twice between April and October each year.

**PROJECT MAINTENANCE:** Maintenance of this wildlife water facility will be completed cooperatively with the BLM and the Arizona Game and Fish department as partners. Any future maintenance including water hauling, etc., will be coordinated between the agencies.

**PROJECT COMPLETION REPORT TO BE FILED BY:** Sophia Fong – Wildlife Manager GMU 12B

**WATER DEVELOPMENT PROJECTS (see attached worksheet):**

**TREE SHEARING (AGRA-AXE, PUSH) PROJECTS (see attached worksheet):** N/A

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

**PROJECT NAME:** Powell's Monument Wildlife Catchment Redevelopment- 2007

- 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 (602) 789-3867      Ed Jahrke (602) 789-9482
- 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:  
Type of water source (catchment, spring, dirt tank, etc.):  
Ownership of water source:  
Distance in miles from project:
- 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.** 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    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.**
  - Elevated R-panel roofing metal apron package ~24' x 96'
  - 2- 3' x 18' fiberglass tanks
  - 3' Walk in fiberglass trough
  - 600' piperail fence
- 10) **Was a site visit completed?**    Yes    No  
If Yes, please list personnel that attended and date.  
Recent site visit has not been completed. Powell's Monument WLC was checked aerially on 02/06/07.

---

**ARIZONA GAME AND FISH DEPARTMENT**  
**TREE SHEARING WORKSHEET**

**PROJECT NAME:** \_\_\_\_\_

- 1) **What is the estimated acreage of the project?**
  
- 2) **How are the trees going to be cleared? (agra axe, chain saw, push):**
  
- 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, etc.)**
  
- 6) **Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument, etc). 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 shearing equipment? \_\_\_\_\_YES \_\_\_NO  
  
Please describe any restrictions to public access:

**PROJECT COMPLETION REPORT**

(Please complete the report and forward to Game Branch  
within 30 days of the completion of the project. THANK YOU!)

**Project Title:** Powell's Monument Wildlife Catchment Redevelopment- 2007

**Project number:** \_\_\_\_\_

**GMU:** 12BE

**Project Coordinator (IF NOT APPLICANT):** \_\_\_\_\_

**Agency:** Arizona Game and Fish Department

**Address:** 3500 S. Lake Mary Rd.

Flagstaff, AZ 86001

**Phone:** 928-645-6920

**Email:** sfong@azgfd.gov

**Project Completion Date** \_\_\_\_\_

**COOPERATING AGENCIES AND/OR CONSERVATION GROUPS, LANDOWNERS, ETC.:**

**PROJECT ACCOMPLISHMENTS:**

**PROJECT RESULT ACTIONS:**

(List practices implemented as a result of project, i.e. area rested from grazing for 2 yrs., season recommendations revised based on new distributions, data received from project, etc.)

**COMMENTS ABOUT THE PROJECT:**

(Please list updates, reports, concerns, suggestions)

**MAINTENANCE/MONITORING SCHEDULE (from this point on): WHO and WHEN?**

**PHOTO:** (Please attach)

**MAIL COMPLETED PROJECT COMPLETION FORM TO:**

**Game Branch**

**Arizona Game and Fish Department**

**2221 W. Greenway Road**

**Phoenix, AZ 85023**

**[mdisney@azgfd.gov](mailto:mdisney@azgfd.gov)**