

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

**PROJECT INFORMATION**

<b>Project Title:</b> Brooklyn Well Solar Pump	
<b>Region and Game Management Unit:</b> Region VI, GMU 21	
<b>Local Habitat Partnership Committee (LHPC):</b> •	<b>Was the project presented to the LHPC?</b> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
<b>Has this project been submitted in previous years?</b> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> <b>If Yes, was it funded?</b> YES <input type="checkbox"/> NO <input type="checkbox"/> → <b>Funded HPC Project #(s):</b>	
<b>Project Type:</b> Water Development - Water Well Development/Infrastructure	
<p><b>Brief Project Summary:</b> This project will restore a permanent water source that has not been available to wildlife for many years. Brooklyn Well is a small, hand-dug well, with an existing storage tank and trough. The tower and head for the windmill are missing. This project involves installing a solar powered submersible pump into the well cistern along with a solar pump controller and utilizing existing solar panels currently stored at Horseshoe Ranch to power the system. The solar panels will be installed on top of the water storage tank where they are out of sight and out of reach from the ground. Additional pipes, hoses, fittings, and valves will also be needed to complete the project.</p> <p>The livestock operator [REDACTED] will provide the labor for the installation of the system.</p>	
<b>Big Game Wildlife Species to Benefit:</b> Mule Deer, Whitetail Deer, Pronghorn, Javelina	

<p><b>Implementation Schedule (Month/Day/Year):</b></p> <p><u>Project Start Date:</u> Spring 2014</p> <p><u>Project End Date:</u> Fall 2014</p>	<p><b>Environmental Compliance:</b></p> <p>NEPA Completed: Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Projected Completion Date: _____</p> <p>State Historic Preservation Office - Archaeological Clearance: Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Projected Completion Date: _____</p> <p>Arizona Game and Fish Department EA Checklist: N/A <input type="checkbox"/> To be Completed by: <u>M White</u> Projected Completion Date: <u>August 2013</u></p>
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**PROJECT FUNDING**

<b>Special Big Game License Tag Funds Requested:</b>	\$1,058
<b>Cost Share or Matching Funds:</b>	\$1,600
<b>Total Project Costs:</b>	<b>\$ 2,658</b>

**PARTICIPANT INFORMATION**

<b>Applicant</b> (please print): [REDACTED]	<b>Address:</b> [REDACTED]	<b>E-mail:</b> [REDACTED]
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<b>Telephone:</b> [REDACTED]		<b>Date:</b> 8/29/13
<b>AGFD Contact and Phone No.</b> (If applicant is not AGFD personnel): Micah White, 928-606-3093		
<b>Project has been coordinated with:</b> Mule Deer Foundation and AZ Deer Association		

**NEED STATEMENT – PROBLEM ANALYSIS:**

Brooklyn Well is located near the southeast corner of Perry Mesa and is part of the Horseshoe Ranch Copper Creek allotment. The previous owners of the Horseshoe Ranch did not maintain the ranch water sources and over the course of many years, the waters have gone into a state of disrepair. After the Cave Creek Complex fire in 2005, most of the surrounding water sources, in the form of dirt stock tanks, were blown out by subsequent flooding leaving most of the western edge of the New River Mountains without permanent water.

Restoring this water source would provide permanent water to an area that currently does not have any permanent water sources. Renovating this water would also allow the livestock operator to spread his cattle out into the rest of the allotment, which would reduce use on S. Cambell tank, benefiting deer and pronghorn alike.

**PROJECT OBJECTIVES:**

- 1) Restore a permanent water source to the eastern edge of Perry Mesa and the western edge of the New River Mountains.
- 2) Provide water for mule deer, whitetail deer and javelina
- 3) Mount the solar system in a manner that reduces the likelihood of theft and vandalism.
- 4) Reduce water use by cattle on nearby stock tanks and spread cattle out over a larger portion of the allotment.

**PROJECT DESCRIPTION AND STRATEGIES:**

The livestock operator will install the submersible pump as well as the control box and the solar panels onto the existing infrastructure at the site. The water will be left available to wildlife year-round, regardless of livestock rotations.

**PROJECT LOCATION:**

Brooklyn Well is located in the northwest part of the Cave Creek Ranger District on the Tonto National Forest.

Township 91/2 N. Range 4 E. Section 31

See attached map.

**LAND OWNERSHIP AT THE PROJECT SITE(S):**

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

- Tonto National Forest-Cave Creek Ranger District

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

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

**HABITAT DESCRIPTION:**

Mosaic of chaparral and juniper woodlands.

**ITEMIZED USE OF FUNDS:**

Special Big Game License Tag Funds

SDS-T-128 Solar Submersible Pump (w/tax)	\$587
PCA-30-M1D Solar Pump Controller 6 Amps, 15-30 Volts DC (w/tax)	\$271
Miscellaneous pipes, hoses, fittings, mounting brackets, valves etc.	\$200
	<b>\$1,058</b>

Cost Share or Matching Funds (for volunteer labor rates please refer to the worksheet below)

The livestock operator [REDACTED] will provide the labor and expertise on the installation of the pump, control box and solar panels. The estimated value of the labor for this project is:

**\$1,000.** Two existing solar panels will be used that are valued at \$300 each, for a total of **\$600.**

**LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:**

[REDACTED] Holbrook Cattle Company, Horseshoe Ranch CRMP group,

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

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

**PROJECT MONITORING PLAN:**

AZGFD will monitor for project completion.

**PROJECT MAINTENANCE:**

Any maintenance will be completed by the livestock operator. If necessary, additional details can be outlined in a big game cooperative stewardship agreement.

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

AZGFD Wildlife Manager Micah White

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

**TREE CLEARING/REMOVAL PROJECTS (please use the worksheet below):**

N/A

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

**PROJECT TITLE:** Brooklyn Well Solar Pump

- 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.**  
N/A
- 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):  
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). If private land, list landowner.**  
Tonto National Forest, Cave Creek Ranger District
- 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:
- 9) **Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.**
- 10) **Was a site visit completed?** Yes  No   
If Yes, please list personnel that attended and date.  
Micah White, August 17, 2013

## **ARIZONA GAME AND FISH DEPARTMENT** **TREE CLEARING/REMOVAL WORKSHEET**

**PROJECT TITLE:** \_\_\_\_\_

- 1) **What is the estimated acreage of the project?**
  
- 2) **How are the trees going to be cleared? (agra axe, chain saw, grubbing, push, chaining):**
  
- 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)**
  
- 6) **Please list any special land management status for the project site (e.g. Wilderness, National Park, National Monument). 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 removal equipment? YES[] NO[]

Please describe any restrictions to public access:

## ARIZONA GAME AND FISH DEPARTMENT VOLUNTEER HOURLY RATES AND CLASSIFICATIONS WORKSHEET

**PROJECT TITLE:** \_\_\_\_\_

The value of volunteer labor should be calculated at the hourly rate of an employee doing similar work, or using hourly rates from the Arizona Department of Administration's Human Resource web site, plus a standard ERE rate of 35%. [http://www.hr.az.gov/HR\\_Professional/Class\\_Comp/PDF/alphacovered.pdf](http://www.hr.az.gov/HR_Professional/Class_Comp/PDF/alphacovered.pdf)

\$0.445/mile should be the calculation used for mileage.

<b>Water Development</b>	<b>Volunteer Hours</b>	<b>Volunteer Miles</b>	<b>Hourly Rate</b>	<b>Estimated Value</b>
			\$14.14	
<b>Habitat Restoration and Clean Up</b>	<b>Volunteer Hours</b>	<b>Volunteer Miles</b>	<b>Hourly Rate</b>	<b>Estimated Value</b>
			\$14.14	
<b>Fisheries</b>	<b>Volunteer Hours</b>	<b>Volunteer Miles</b>	<b>Hourly Rate</b>	<b>Estimated Value</b>
			\$14.14	
<b>Nongame Branch Project</b>	<b>Volunteer Hours</b>	<b>Volunteer Miles</b>	<b>Hourly Rate</b>	<b>Estimated Value</b>
			\$14.14	
<b>Misc/office work</b>	<b>Volunteer Hours</b>	<b>Volunteer Miles</b>	<b>Hourly Rate</b>	<b>Estimated Value</b>
			varies	
<b>Community Services</b>	<b>Volunteer Hours</b>	<b>Volunteer Miles</b>	<b>Hourly Rate</b>	<b>Estimated Value</b>
			\$7.44	
<b>Events and Other</b>	<b>Volunteer Hours</b>	<b>Volunteer Miles</b>	<b>Hourly Rate</b>	<b>Estimated Value</b>
			\$14.14	
<b>Research Branch</b>	<b>Volunteer Hours</b>	<b>Volunteer Miles</b>	<b>Hourly Rate</b>	<b>Estimated Value</b>
			\$14.14	
<b>Wildlife Area Hosts</b>	<b>Volunteer Hours</b>	<b>Volunteer Miles</b>	<b>Hourly Rate</b>	<b>Estimated Value</b>
			\$17.44	
<b>Education Programs</b>	<b>Volunteer Hours</b>	<b>Volunteer Miles</b>	<b>Hourly Rate</b>	<b>Estimated Value</b>
			\$16.07	
<b>Totals</b>				



