

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

PROJECT INFORMATION	
Project Title: Bennett Ranch Solar Project	Project No. 10-513
Region/GMU: 30B	HPC:
Project Type: Well Improvement	
Project Description: The Bennett Ranch Solar Project would seek to replace windmills with solar pumps throughout the ranch.	
Wildlife Species to Benefit: Mule Deer, Whitetail Deer, also Small game and Nongame species	
Possible Funding Partners:	
Implementation Schedule: Beginning: 03/2011 Completed: 08/2011	NEPA Compliance: (if applicable) Completed: Yes ___ No <u>x</u> ___ Projected Completion Date:
PROJECT FUNDING	
SBG Funds Requested: \$15,000	
Cost Share Funds: \$30,000	
Total Project Costs: \$45,000	
PARTICIPANT INFORMATION	
Applicant: Slash TL LLC James Howard Telephone: 520-508-9767	Address: PO Box 1572 Tombstone, AZ 85638
AGFD Contact and Phone No. (If applicant is not AGFD personnel)	
Coordinated with:	Date:
Applicant's signature: James Howard	Date: 8/31/2010

SEND COMPLETED APPLICATIONS TO:
AZ Game and Fish Department
Attn: Game Branch
5000 W. Carefree Highway
Phoenix, AZ 85086
rgregory@azgfd.gov

WAS PROJECT PRESENTED TO THE LOCAL HPC? YES x NO

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

No.

NEED STATEMENT/PROBLEM ANALYSIS:

The Bennett Ranch in GMU 30B provides an excellent habitat for whitetail deer, and mule deer, but lacks dependable water year-round. Many of the water troughs on the ranch are only kept full by the owners when cattle are present. The old windmills are starting to fail and are being run by gasoline generators to maintain an adequate water supply. For approximately six months of the year, the water supply for wildlife is inadequate or non-existent.

PROJECT OBJECTIVES:

Provide year round water for Mule Deer, Whitetail Deer, and other wildlife on Bennett Ranch in GMU 30B.

PROJECT STRATEGIES:

Funding will be distributed to the landowner to contract installation of a solar pumping system to replace the current gas operated pumping system. Funding will also be used by the landowner to purchase solar pumps, solar panels, PVC or steel pipe, and additional materials and hardware necessary for the completion of the solar water system.

PROJECT LOCATION:

There are seven windmills throughout the Bennett Ranch. Two windmills located near the mountain, which incorporates private land and is situated near Forest Service Land, and five windmills located on the lower portion of the ranch.

LAND OWNERSHIP AT PROJECT SITE:

State Land, and Private Property Slash TL LLC

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

HABITAT DESCRIPTION:

The Bennett Ranch is located in the middle of GMU 30B near Tombstone. The habitat type is predominantly Semi-desert Grassland and is excellent habitat for whitetail deer, along with mule deer. The elevations in the project area range from 4500' to 5500' above sea level.

ITEMIZED USE OF FUNDS:

<i>Anticipated Costs:</i> <i>Project Component and Cooperator</i>	<i>Cost-Share Dollars</i>	<i>Grant Dollars Requested</i>
Arizona Game and Fish Department / HPC Funding / NRCS -Provide funding for the purchase/installation of 7 solar pumping systems at the existing well sites on the Bennett Ranch.		\$40,000
Bennett ranch -Provide labor and support to coordinate installation of solar pumping system by contractor.	\$5,000	
APS -Possibly provide used solar panels or other solar equipment to reduce the overall cost.		
Totals:	\$5,000	\$40,000
5 wells at 4,000 each = 20,000 5 solar pumps 10 solar panels 850 feet of PVC piping		
2 wells at 10,000 each = 20,000 2 solar pumps 12 solar panels 1200 feet of steel piping		

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

Arizona Game and Fish Department:

- Provide funding for miscellaneous parts for the water system.

NRCS

-25% Grant

Bennett Ranch

-Provide planning support.

-Provide labor and support to the solar pump contractor during construction.

-Provide labor to plumb the system to ensure all troughs are operational before completion of the project.

APS

-Possibly provide used solar panels or other equipment.

PROJECT MONITORING PLAN:

Use of the troughs by wildlife will be monitored by the Wildlife Manager in GMU 30B and the ranch owners during site visits, and hunter feedback. Species using the troughs for water will be recorded, and an estimate of the use will be made by the Wildlife Manager.

PROJECT MAINTENANCE:

Water system, including the solar pumping system, and solar panels, will be maintained by the landowner for a minimum of five years.

PROJECT COMPLETION REPORT TO BE FILED BY:

Karen Klima, WM, GMU 30B

James Howard, Bennett Ranch

WATER DEVELOPMENT PROJECTS (see attached worksheet):

Not Applicable

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

Not Applicable