

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

**PROJECT INFORMATION**

**Project Title:** 75 Well and North 75 Pipeline, Phase 1

**Project No. 09-506**

**Region/GMU:** V / 35A

**HPC:** Sierra Vista

**Project Type:** Water Development

**Project Description:**

The 75 Well is located in Scotia Canon on the west face of the Huachuca Mountains. The well is a current range improvement connected to 40,000 gallons of storage (two separate Storages), 2 miles of pipeline and 5 troughs. The well is equipped with a solar pump and panels capable of lifting water over 200 feet. 12,500 gallons of the total storage is located on a ridge connected to the 2 miles of pipeline. The well is unable to keep up with the demand of the water system, leaving the improvement mostly unusable.

The proposed project would be broken down into two phases. Phase one would consist of re-drilling(deepening) the well, installing and burying an additional 2.1 miles of pipeline, two troughs and 10,000 gallons of storage. The existing solar pump and panels would be re-installed to pump water to both the new and existing storages. Phase one would supply water to 1,250 acres, which are currently without permanent water. Phase two would consist of installing and burying another 3.0 miles of pipeline from the storage installed in phase 1 to three more troughs also located in mostly un-watered country. Phase two would supply water to an additional 3,894 acres, and the two phases together would water a total of 5,144 acres. The project would also enable the existing system to become fully operational, which would mean that the proposed improvements along with the existing improvements would water 7,600 acres.

The 75 Well is a critical water for both wildlife and livestock. The existing and proposed system would water country that connects high quality Gould's turkey, Coues Deer, black bear, and Mearn's quail habitat of the oak woodlands to the desert grass lands and the Coniferous transition on the Huachucas. Currently there are large gaps of available water between the face of the Huachuca Mountains and the lower reach of Scotia Canyon. These proposed improvements would connect these areas, thus creating more country with permanent water every mile for wildlife. This system would also greatly increase livestock distribution, which would contribute to overall better range and watershed conditions.

All troughs supplied by the 75 Well and North Pipeline project would be equipped with wildlife ingress and egress ramps. Floats would be covered. Pipelines would be buried wherever possible. Water would be provided to wildlife year-long whether livestock were in the pastures or not. There are no restrictions to public access in the project area.

**Wildlife Species to Benefit:** Coues deer (80%), black bear (5%), mountain lion (2.5%), javelina (2.5), quail, Gould's turkey (10%), dove, ducks and non-game species, including bats.

**Possible Funding Partners:**

**Implementation Schedule:**

**Beginning:** April, 2010

**Completed:** October, 2011

**PROJECT FUNDING**

**SBG Funds Requested:** \$19,852.50

**Cost Share Funds:** \$24,166.89 (55% Cost Share)

**Total Project Costs:** \$44,019.39

<b>PARTICIPANT INFORMATION</b>	
<b>Applicant:</b> Annette H. Chavez (please print) <b>Telephone:</b> 520-378-2805	<b>Address:</b> Sierra Vista Ranger District 5990 South Hwy 92 Hereford, AZ 85615
<b>AGFD Contact and Phone No.</b> Aaron Miller 520-455-4653, 435-830-4896 Brad Fulk 520-400-4575	
<b>Coordinated with:</b> John Millican (Sierra Vista-Douglas HPC Chairperson); Aaron Miller (AZGFD V/35A); John Millican (NWTF); Greg Locke (Lone Mountain Ranch); Dan Taylor (Bat Conservation International); Steve Lindsey (E Lazy H Ranch)	<b>Date:</b> 08/11/2009
<b>Applicant's signature:</b> /s/ Annette H, Chavez	<b>Date:</b> 8/26/2009

**NEED STATEMENT/PROBLEM ANALYSIS:**

Water is the limiting factor throughout most areas in Southeast Arizona. Where water is, it is usually a livestock watering location, and it's the only one for 1,000 to 2,000 acres. This creates livestock distribution problems and large areas without water for wildlife. The distribution problem degrades habitat and has adverse impacts on riparian areas.

**PROJECT OBJECTIVES:**

Supply dependable, year-long wildlife water to the lower reach of Scotia Canyon on the west slope of the Huachuca Mountains. While supplying water to upland area, substantial livestock use would be pulled out of critical riparian areas. Better distribution of livestock means better wildlife habitat.

**PROJECT STRATEGIES:**

NEPA was completed in 2001 for the Lone Mountain Allotment. Cultural and biological clearances will need to be completed for the pipelines, and the trough and storage locations. These will be done by the U.S. Forest Service. The well will replace an existing range improvement and will require no clearances. This HPC grant would:

1. Re-Drill 75 Well and equip the well with the existing solar pump outfit.
2. Utilize the existing Forest Roads to bury the 2.1 miles of pipeline within the road beds.
3. Clear and level the site on top of the ridge to install two 5,000 gallon HDPE storage tanks.
4. Install two troughs, one on the Lone Mountain Allotment and one on the Lyle Canyon Allotment.

**PROJECT LOCATION:**

The project is located on the eastern portion of Unit 35A, east of Parker Canyon Lake on the east side of the San Rafael Valley in Cochise County located in:

T. 23 S., R. 19 E., SEC 16, 17, 20 and 21

**LAND OWNERSHIP AT PROJECT SITE:** The entire project is located on National Forest System lands.

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

**HABITAT DESCRIPTION:**

Phase one and two of the 75 Well and North Pipeline is located within an Oak Woodland vegetation type surrounding riparian corridors. The terrain within the project consists of moderately steep hills (<45%) between 5300 and 5800 feet in elevation. Parker and Scotia Canyons are the two riparian areas within the project area,

which contain a mixture of deciduous riparian trees, oak, pines and mesquites. The project area creates a habitat bridge between the desert grasslands of the San Rafael Valley and the coniferous forest of the Huachuca Mountains.

**ITEMIZED USE OF FUNDS:**

The attached tables summarize the estimated costs for the project and the amount requested from HPC. The Forest Service, Grazing Permittee and Bat Conservation Internationals matching funds are displayed on the same table.

**LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:**

**Forest Service:** The Forest Service has completed NEPA and will complete the required biological, archaeological clearances, and will provide project oversight. The forest will also contribute one 5,000 gallon storage, miscellaneous plumbing parts and general labor throughout the project.

**Bat Conservation International:** To provide one 12' round trough for a bat friendly watering source.

**Lone Mountain Ranch:** To provide all mechanical labor to level and prep the storage and trough locations, and bury 2.1 miles of pipeline. The ranch will also provide the installation labor and provide maintenance year-round for the project.

**E Lazy H Ranch:** To provide installation of 1 trough that would be located on their permitted allotment.

**PROJECT MONITORING PLAN:**

Completion of tasks by agreed upon timelines and quality of work will be monitored by Sierra Vista Ranger District Rangeland Management Specialists and administered through Permit Modifications.

**PROJECT MAINTENANCE:**

The improvements will be added to Part 3 of the rancher's Term Grazing Permit with the rancher assuming maintenance responsibility with regulatory enforcement and oversight by the Forest Service.

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

James Heitholt, Rangeland Management Specialist, Sierra Vista Ranger District

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

**PROJECT NAME:** 75 Well and North 75 Pipeline, Phase 1

- 1) **Is the water development listed as a priority in the most recent “Wildlife Water Development Annual Implementation Schedule?”**  YES  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: Various. See project map.  
Type of water source (catchment, spring, dirt tank, etc.): Parker Canyon Lake, various springs, stock tanks, ephemeral drainages and wells.  
Ownership of water source: Forest Service and AZ Game and Fish (Parker Lake).  
Distance in miles from project: Varies
  
- 6) **Is the target wildlife species a result of transplant efforts?**  YES  NO Gould’s Turkey.
  
- 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.**
  
- 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:  
The well site, storage and the troughs are available by vehicle.  
  
-- 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.**  
See Attached Spreadsheets.
  
- 10) **Was a site visit completed?**  Yes  No A site visit is planned with AZGFD in September. Several site visits by the rancher and Forest Service personnel have been conducted.

**75 Well and North Pipeline Phase 1**

<b>HPC Contribution</b>			
<b>Item</b>	<b>Number</b>	<b>Cost per Unit</b>	<b>Cost for Project</b>
Re-Drill 75 Well and case	250	\$25.00	\$6,250.00
Move-in/Move-out of Well Drilling Equip. and re-hab of site			\$2,500.00
Taxes			\$1,000
Labor to Install Pump			\$1,000
1.25" diameter NuMex HDPE DR-9 Pipe (per foot)	11,550	\$0.55	\$6,352.50
8' x 2' Round Trough	1	\$250.00	\$250.00
5,000 Gallon Storage HDPE (8ft x 12ft)	1	\$2,500.00	\$2,500.00
		<b>Total</b>	<b>\$19,853</b>

<b>Grazing Permittee - Lone Mountain Ranch Contribution</b>			
<b>Item</b>	<b>Number</b>	<b>Cost per Unit</b>	<b>Cost for Project</b>
Dozer and Operator to Bury (per 1 mile of Pipe)	2.1	\$4,500.00	\$9,450.00
Misc. labor to Install system (hourly for 2 people)	40	\$40.00	\$1,600.00
Road Work to get Drill Rig in to Site (Equipment and operator/day)	1	\$250.00	\$250.00
Site Prep for Storages and Troughs (Equipment and operator/Day)	1	\$250.00	\$250.00
		<b>Total</b>	<b>\$11,550</b>

<b>Forest Service Match</b>			
Archaeological & biological surveys & clearances	6	\$300.00	\$1,800.00
NEPA analysis & documentation (Completed in 2002)			\$4,000.00
Project oversight (days):	5	\$265.00	\$1,325.00
Write Permit Modification, including specifications			
Inspect project during construction & at completion			
File reports with HPC			
Misc. Labor to Deliver materials and Project Work (days)	6	\$265.00	\$1,590.00
1.25" NuMex Transitions	11	\$35.00	\$385.00
1.25" Galvanized Nipple 3 inch	11	\$2.99	\$32.89
1.25" Galvanized Union	11	\$9.00	\$99.00
1.25" Ball Valve	4	\$23.00	\$92.00
1.25" Elbow	4	\$6.50	\$26.00
1.25" Nipple 6"	2	\$4.00	\$8.00
1.25" Pipe Galvanized	12	\$6.00	\$72.00
1.25" to 1" Coupler	2	\$4.00	\$8.00
1" Nipple 26"	2	\$13.00	\$26.00
1" Nipple 4"	6	\$5.00	\$30.00
1" Elbow	6	\$4.50	\$27.00
1" Float Valve, rod, ball	2	\$74.00	\$148.00
Escape Ramp - Expanded Metal	2	\$35.00	\$70.00
Valve box plastic	3	\$15.00	\$45.00
1.5" Nipple 4"	1	\$6.50	\$6.50
1.5" Elbow Reducer to 1.25"	1	\$6.50	\$6.50
5,000 Gallon Storage HDPE (8ft x 12ft)	1	\$2,500.00	\$2,500.00
		<b>Total</b>	<b>\$12,296.89</b>

<b>Other Matches</b>			
Bat Conservation International - 12' x 2' round Trough	1	320	<b>\$320.00</b>
<b>Total Estimated Project Costs for Phase 1</b>			<b>\$44,019.39</b>
<b>Cost Share</b>		<b>55%</b>	<b>\$24,166.89</b>
<b>Requested from HPC</b>		<b>45%</b>	<b>\$19,852.50</b>