

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

<b>PROJECT INFORMATION</b>	
<b>Project Title:</b> Hi Pt Water System Maintenance	<b>Project No.</b> 09-111
<b>Region/GMU:</b> Region I Unit 4A	<b>HPC:</b> Winslow
<b>Project Type:</b> Maintenance on Pipeline an Water Troughs	
<p><b>Project Description:</b> This project is to assist with the cost for the upkeep of the High Point Well water system. This water system has been in operation for over 10 years. Some of the troughs are starting to rust out. There are also areas along the pipeline that have been washout exposing the pipeline. This maintenance is needed to ensure year-round water to all the drinker sites on this system.</p> <p><b>Wildlife Species to Benefit:</b> Elk 65%, Deer 15%, Antelope 20% (estimates base on current biomass of the species, not numbers)</p>	
<b>Possible Funding Partners:</b>	
<p><b>Implementation Schedule:</b>  <b>Beginning:</b> Spring 2010  <b>Completed:</b> Spring 2011</p>	
<b>PROJECT FUNDING</b>	
<b>SBG Funds Requested:</b> \$ 10,250.00	
<b>Cost Share Funds:</b> \$ 10,250.00	
<b>Total Project Costs:</b> \$ 20,500.00	
<b>PARTICIPANT INFORMATION</b>	
<b>Applicants:</b> Ken Clay	<b>Address:</b>
<b>Telephone:</b> 928 367-4281	AZGFD 2878 E. White Mtn. Blvd Pinetop, AZ 85935
<b>AGFD Contact and Phone No.</b> (If applicant is not AGFD personnel)	
<b>Coordinated with:</b> Ohaco Ranches	
<b>Applicant's signature:</b>	<b>Date:</b> August 28, 2009

**SEND COMPLETED APPLICATIONS TO:**

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

**NEED STATEMENT/PROBLEM ANALYSIS:**

Water availability and distribution concerns in Northern Unit 4A were largely address with the Hi Pt Well water system. This system came online in 1998 and since there have been many miles of pipe and drinker sites added to this system. Currently, almost the entire 40,000 plus acres on the Ohaco Ranch has water available to wildlife and livestock. With this system in place comes necessary maintenance. Some of today's maintenance needs include covering up portion of the pipeline. Many of the older water troughs are starting to rust. Fixing these troughs today will prevent the need from turning them off due to an emergency in the near future.

**PROJECT OBJECTIVES:**

The project objective is to keep the Hi Pt Well water system in good working order. Maintenance on the pipeline is needed so portions of the pipeline don't have to be shut down and drained during the winter. Maintenance on the trough will ensure these trough stay in service for many years to come. As for maintaining the troughs, there are three options. The first option is to replace them with another Power River Trough. These troughs cost around \$1000.00 plus the cost of a new float assembly is about \$150.00. The second option is to coat the existing trough with a sealant. The cost for the sealant is roughly \$90.00 a gallon and each trough will need about 3 gallon of sealant to cover the entire trough. The total cost for this option with a new float assembly is about \$420.00. The third option is to replace the existing trough with a large rubber tire (use on the large truck in the cooper mine). These tires cost around \$500. This option will also require the need to plumb a new float assemble and some pre-mix cement. This cost is roughly about \$250.00. The total material cost to use this option is about \$750.00 per drinker.

**PROJECT STRATEGIES:**

When comparing the three options stated above the cheapest short term would be the second option; seal the existing troughs. However, in about 10 years trough maintenance will need to be addressed once again. This is also true for option one. Option three will be the best long-term option when addressing both cost and future maintenance. The old mine tires will not rust, holes cannot be shot in them, and freezing in the winter is not an issue.

***PREFERRED OPTION***

Once this project is funded, the Ohaco Ranch will do all the in kind labor to complete the project. The Ranch will use a Dozer to address the pipeline maintenance. The Ranch will purchase the tire and the other materials (pre-mix, float assemblies) required to replace these troughs. Currently there are over 40 water troughs connected to the High Point Water System. The Ranch would like some of the troughs been in service for 12 years while other for only 2 years. Over the next couple of years the Ranch would like to address the water troughs that been in service the longest. In 2010 the Ranch would like to replace at least 10 troughs and 10 in 2011.

**PROJECT LOCATION:**

The Hi Pt Pipeline water system locate in Unit 4A on the Ohaco Ranch. See map below

**LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name):**

Ohaco Ranches

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

There are stewardship agreements with the owners.

**HABITAT DESCRIPTION:**

Great plains grassland and Pinyon/Juniper woodland.

**ITEMIZED USE OF FUNDS:**

<b>Activity/product</b>	<b>Quantity</b>	<b>Cost</b>	<b>Total</b>
<b>Pipeline Maintenance</b>	<b>8 days - 8 hr days</b>	<b>\$150.00/ hr</b>	<b>\$9600.00</b>
<b>Backhoe for trough</b>	<b>2 hrs/ water trough x 10 troughs</b>	<b>\$100.00/ hr</b>	<b>\$2000.00</b>
<b>Labor to install new trough</b>	<b>16 hrs /trough X 10 troughs</b>	<b>\$15.00/hr</b>	<b>\$2400.00</b>
<b>New Trough (old Mine Tire)</b>	<b>10 tires</b>	<b>\$500.00/tire</b>	<b>\$5000.00</b>
<b>1 ¼ Float Assembly</b>	<b>10 assemblies</b>	<b>\$150.00/assembly</b>	<b>\$1500.00</b>
<b>80lbs Pre-mix</b>	<b>15 bags/ trough x 10 troughs</b>	<b>\$4.00/bag</b>	<b>\$600.00</b>
<b>TOTAL COST</b>			<b>\$20500.00</b>

	<b>Total Cost</b>	<b>\$20,500.00</b>
<b>SBG</b>	<b>Funds Requested</b>	<b>\$10250.00</b>
<b>Ohaco Ranches</b>	<b>Cost Share</b>	<b>\$10250.00</b>

**LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:**

- Arizona Game and Fish will provide the coordination for project.
- Jim Ohaco

**PROJECT MONITORING PLAN:**

Water system maintains year-round water.

**PROJECT MAINTENANCE:**

No future maintenance needed.

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

Ken Clay  
 AZGFD Region I

Figure 1. Map of the two Water Systems on the Ohaco Ranch

