

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

Game Branch / HPC Project Number:	13-511
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**PROJECT INFORMATION**

<b>Project Title:</b> Abner Water Well Re-development	
<b>Region and Game Management Unit:</b> Region 5 / GMU 35A	
<b>Local Habitat Partnership Committee (LHPC):</b> • SEAZHPC	<b>Was the project presented to the LHPC?</b> YES <input checked="" type="checkbox"/> NO <input 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> Permanent Water Re-development	
<b>Brief Project Summary:</b> Water will be pumped through the installation of a solar power booster pump from an existing storage tank via HDPE pipe for approximately .37 miles, stored in a 10,000 gallon heavy duty poly tank and gravity fed to a metal, wildlife accessible water trough. This development is needed due to Abner well going dry due to drop in water table, along with nearby dirt tanks and dams drying up during the critical spring/summer timeframe. Currently, there is no perennial water within this pasture, which encompasses 1,446 acres of prime mule deer, pronghorn, whitetail, and javelina habitat.	
<b>Big Game Wildlife Species to Benefit:</b> Pronghorn, Mule Deer, Whitetail Deer, Javelina, Quail	

<b>Implementation Schedule</b> (Month/Day/Year):  <u>Project Start Date:</u> February 1, 2014  <u>Project End Date:</u> February 1, 2015	<b>Environmental Compliance:</b> NEPA Completed: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Projected Completion Date: Conversation with BLM biologist requires only Catex under NEPA and no public comment period, due to primary water use by wildlife, no major ground disturbance, and a re-development of an existing range improvement. Will be complete by early 2014, upon project approval.  State Historic Preservation Office - Archaeological Clearance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Projected Completion Date: BLM has been notified and Arch. Clearance will be completed upon project approval.  Arizona Game and Fish Department EA Checklist: N/A <input checked="" type="checkbox"/> To be Completed by: _____ Projected Completion Date: _____
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**PROJECT FUNDING**

<b>Special Big Game License Tag Funds Requested:</b>	<b>\$ 4,846.60</b>
<b>Cost Share or Matching Funds:</b>	<b>\$ 11,931.00</b>
<b>Total Project Costs:</b>	<b>\$ 16,777.60</b>

**PARTICIPANT INFORMATION**

<b>Applicant</b> (please print): Huachuca Gould's Chapter –	<b>Address:</b> PO Box 1257 Hereford, AZ 85615	<b>E-mail:</b> j2dbmill@msn.com
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John Millican, President		
<b>Telephone:</b> 520-508-4272		<b>Date:</b> August 27, 2013
<b>AGFD Contact and Phone No.</b> (If applicant is not AGFD personnel): Matt Braun (Unit 35AB Wildlife Manager): 623-237-1821 Brad Fulk (Sector 8 Field Supervisor): 520-400-4575		
<b>Project has been coordinated with:</b> Bill Brake and Al Wilcox: Owners of Rose Tree Cattle Co., LLLP Matt Braun, WM, GMU35,AZGFD Brad Fulk, Sector 8 Field Supervisor, AZGFD Marcia Radke: BLM Biologist, Sierra Vista Glen Dickens: Arizona Antelope Foundation Terry Herndon: Regional Director, Mule Deer Foundation SEAZHPC		

**NEED STATEMENT – PROBLEM ANALYSIS:** Due to long-term moisture regimes being below average, increase in housing development and agriculture throughout the Elgin/Sonoita area, many local wells have dried up. The Abner Well, which is located in Santa Cruz County, on BLM lands leased by the Rose Tree Ranch, LLC is one such well that recently has gone dry. This well, used as a livestock and wildlife water only, provided yearlong water availability to a 1,280 acre pasture. The Rose Tree Ranch practices a rest/rotation grazing program where livestock utilize a specific pasture approximately 30 days per year. Water is available to wildlife the remaining 11 months. The closest perennial water to this proposed water development is approximately 1 ½ miles to the north and 1 mile to the south, along the base of the Mustang Mountains. Both of the above mentioned waters were funded through HPC funds, with labor to install the water developments completed by the Rose Tree Ranch and various statewide conservation organizations.

Along with water developments, the Rose Tree Ranch has been an exceptional partner in allowing range fence modifications to be completed on interior and perimeter fencelines. Additionally, the Rose Tree received NRCS and HPC funds to complete aerial herbicide treatments, and extensive water distribution projects. To date, an estimated 12-15 miles of fence has been modified, either by AAF or the Rose Tree Ranch, resulting in the bottom strand of ranch fence raised to a height of 18” above ground level. Additionally, habitat projects in the form of water developments, sacaton burns, aerial herbicide treatments and additional fence modifications have been completed on 2 ranches that border the Rose Tree Ranch to the south, along with grassland restoration projects occurring on the BLM, Empire Cienega, properties to the west. These past and ongoing habitat projects are providing ecological improvements for Pronghorn, Mule Deer, Coues Whitetail Deer, Javelina and Scaled Quail. As important, these projects have developed a travel corridor on open spaces held by neighboring ranches around the private lands that are being developed throughout the Elgin/Sonoita landscape.

Additional to the many landscape projects that have been instituted throughout the area, more recently a predator control effort has been practiced over the past 2 years, with emphasis on trapping and calling coyotes during winter/spring months (December – May). The intent of this ongoing practice is to reduce coyote population numbers within known fawning areas just prior to the Pronghorn fawning period. Since the inception of this management activity, pronghorn fawning success has

averaged 53 fawns:100 does over the past 2 years. Looking back during the 2009-2011 period, fawn survival (pre-coyote control) resulted in zero (0) fawn survival. Additionally, mule deer surveys during the winter of 2013 indicated that mule deer recruitment throughout the predator control area resulted in 75 fawns:100 does, while in areas where no predator control was performed resulted in only 26 fawns:100 does, which is within the long-term average ranging from 17-26 fawns:100 does (Matt Braun, AZGFD Wildlife Manager, GMU 35. 2013). The re-establishment of this perennial water source will also aid the existing Coues whitetail population, which has declined over the past 20 years, but has stabilized recently due to ongoing habitat improvements.

The development of the Abner Well Water development will greatly aid in the completion of past and ongoing wildlife management activities throughout the Elgin/Sonoita grasslands area by re-establishing a permanent water source in prime wildlife habitat, thus providing habitat connectivity and increasing the amount of available, yearlong, habitat available to wildlife.

**PROJECT OBJECTIVES:** The Abner Well Water Development will provide permanent water to a 1,280 acre pasture (Lake Pasture) and an adjoining Horse Pasture of 166 acres, along with establishing a water source every mile to 1 ½ miles along the western face of the Mustang Mountains and across the grassland savannah the extends west onto the Las Cienegas National Conservation Area.

Not only will this water allow the Rose Tree Ranch to improve their rest/rotation grazing management, it will provide additional habitat for a variety of listed big game and game bird species, and will greatly enhance habitat availability by completing the necessary ecological components for unobstructed wildlife movement.

**PROJECT DESCRIPTION AND STRATEGIES:** Currently, the Rose Tree Ranch pumps water from a very reliable well located east of the Upper Elgin/Canelo Road to a covered, metal rimmed storage tank located on private property north of the Ranch Headquarters. The Abner Well re-development will utilize a solar powered booster pump to push water from this existing storage tank some .37 miles easterly to a 10,000 gallon heavy duty poly storage tank. Water from this tank will be gravity fed to a metal, wildlife accessible water trough. Escape ramps will be installed and the trough will be bat friendly. **(see attached pictures of proposed storage, trough location and habitat)**

The water line will originate at an existing metal-rimmed storage tank, run across private property, onto BLM lands for approximately 600' where the storage tank and trough will be installed. The water line will be laid above ground utilizing HDPE pipe, with minimal ground disturbance at the storage tank and trough sites.

Water will be available yearlong and routine checks and maintenance will be performed by the Rose Tree Ranch.

**PROJECT LOCATION:** Rose Tree Ranch, located in Santa Cruz County, Arizona **(see attached map).**

The development of this water will provide yearlong water to 1,280 acre pasture on BLM land, along with an additional 166 acres that currently does not have a wildlife water.

R18E, T20S, SE ¼ of Sec. 22

Storage Tank Coordinates : UTM: 0547957/3504705 Datum NAD83

Trough Coordinates: UTM:0547962/3504653 Datum NAD83

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

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

- The location of the storage tank and water trough will be on BLM lands, with leased grazing rights by the Rose Tree Ranch.

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

YES[] NO[] N/A[]

**HABITAT DESCRIPTION:** The project will encompass an elevation ranging from 4,983 feet at the existing storage tank and rise to an elevation of 5,024 feet at the storage tank.

The project area can be described as semi-desert grassland. The project area is predominately made up of a variety of native grass species, perennial and annual shrubs, various browse species, scattered mesquite sp., cactus sp., along with invasive species including lovegrass exists throughout this habitat regime.

**ITEMIZED USE OF FUNDS:**

Special Big Game License Tag Funds:

Solar Booster Pump and fittings (Sun Pumps):

Solar Plunger Pump:	\$1,305.00
Controller:	\$350.00
Modules X 2 (\$200.00 each)	\$400.00
Rack:	\$300.00
Pulsation Dampener:	\$325.00
Suction and Discharge Hose Assembly:	\$125.00
Oil Pressure Gauge:	\$35.00
¾" Check Valve:	\$18.00
Controller Connections:	\$118.00
Appropriate Taxes:	\$74.00
<b>TOTAL:</b>	<b>\$3050.00</b>

Water line, Storage Tank, Trough Connections:

2,100 feet HDPE, 1 ¼" Ranch Pipe/ 300' roll @ \$227.17/roll:	\$1590.19
4- Brass Ball Valves @ \$30.00 each:	\$120.00
4- Metal 1 ¼" Pipe Connectors @ \$4.30 each:	\$17.20
8- Metal 1 ¼" Transition Fittings @ \$4.30 each:	\$34.40
1-Trough Float & Reducer:	\$35.00
<b>TOTAL:</b>	<b>\$1,796.60</b>

**GRAND TOTAL SBG FUNDS REQUESTED: \$4,846.60**

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

Poly 10,000 gallon Storage Tank (Provided by Rose Tree Ranch):	\$5,000.00
Storage Tank Delivery:	\$500.00
250 Gallon Metal Trough:	\$230.00
2-Metal escape Ramps:	\$75.00
20Volunteers/Ranch Personnel (16 Hours labor) @ \$14.14/hour	\$4,524.80
Travel costs X 20 X 180 miles roundtrip @ \$0.445	\$1602.00
<b>TOTAL COST SHARE:</b>	<b>\$11,931.00</b>

**LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:**

Rose Tree Ranch: Labor, provide storage tank and trough, yearlong check and maintenance (as required).

Arizona Antelope Foundation/ Mule Deer Foundation/Huachuca Gould's Chapter: Provide labor during installation of water line, storage tank, and trough.

BLM: Complete Arch. Clearance, Catex paperwork/review (per telephone conversation on 08/26/13 with Marcia Radke- BLM Biologist, Sierra Vista)

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

YES NO N/A

Continuing a partnership with the ranch not only will result in maintaining public access, but will enhance wildlife habitat, thus aiding in the restoration of various game species populations throughout the area.

NOTE: The location of the proposed development is on BLM lands and accessible by the general public.

**PROJECT MONITORING PLAN:** Rose Tree Ranch will provide annual checks and maintenance (as required) on all aspects of water development.

Local AZGFD Wildlife Manager will perform yearly checks in association with field activities.

**PROJECT MAINTENANCE:** All maintenance will be performed by Rose Tree Ranch. Additional labor, if needed, will be offered by local and statewide volunteers.

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

John Millican, Field/Project Manager – Arizona Antelope Foundation



Existing storage tank on Private Property



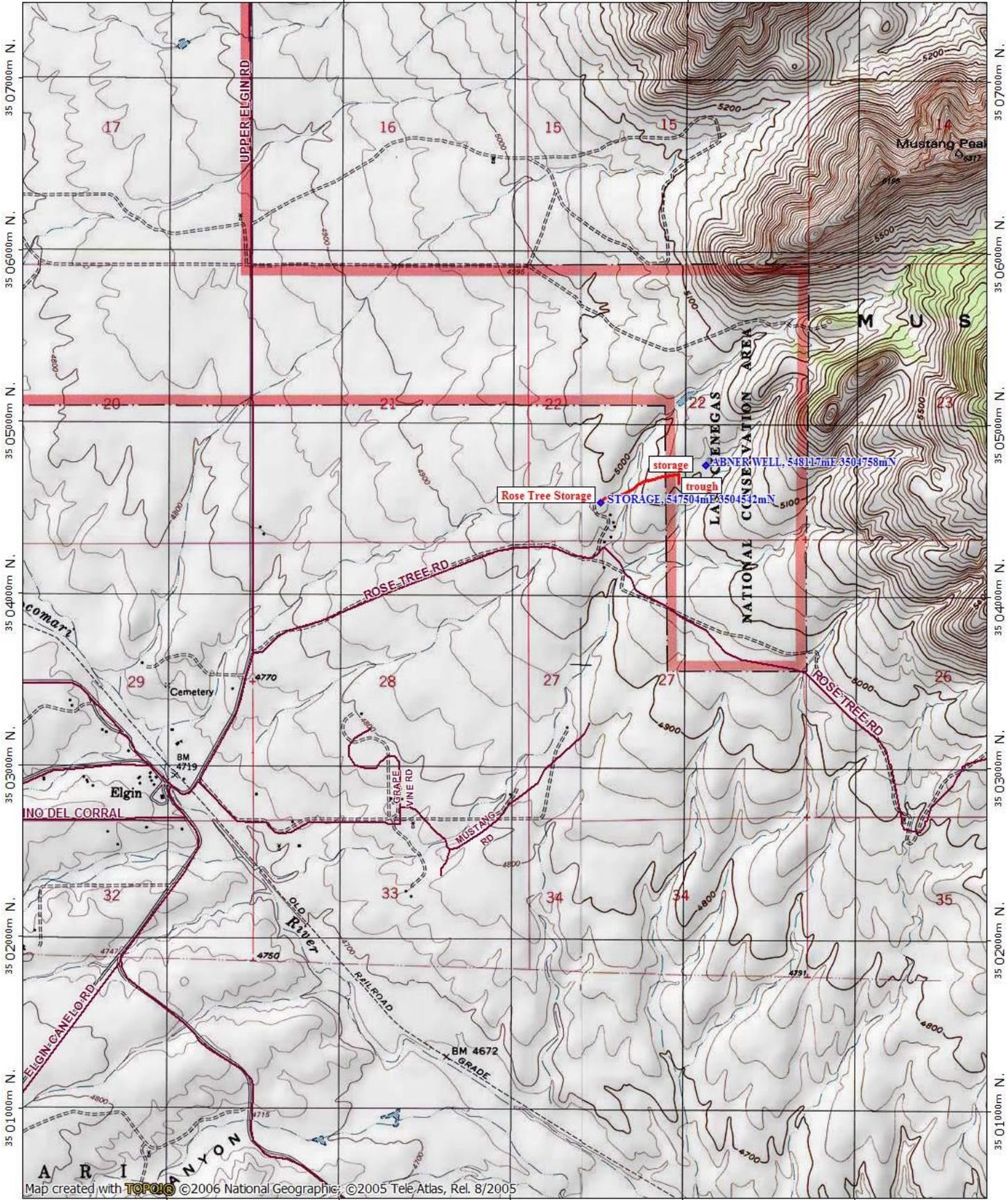
Proposed storage tank and trough site



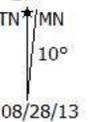
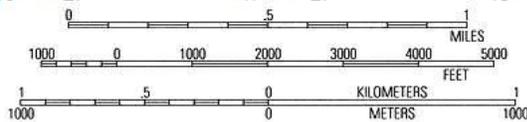
Proposed Storage Tank site, habitat



Habitat- Existing storage tank to proposed s



Map created with TOPO! © 2006 National Geographic; © 2005 Tele Atlas, Rel. 8/2005



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

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