

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

<b>PROJECT INFORMATION</b>	
<b>Project Title:</b> Jhus Spring Redevelopment	<b>Project No. 10-509</b>
<b>Region/GMU:</b> Region 5/ Unit 29	<b>HPC:</b> Douglas/Sierra Vista
<b>Project Type:</b> Water Development: New concrete spring box, pipeline, storage and drinker system	
<b>Project Description:</b> This project is designed to re-develop Jhus Spring to supply water to a more wildlife and livestock accessible area. The spring is located in a steep, rough drainage that is difficult for wildlife to access. At one time, this improvement existed and worked well, supplying enough water to irrigate a small fruit and nut orchard near the location of the proposed storage and trough. By reconstructing the small concrete dam and installing a sandpoint upstream, as well as installing new Polyethylene pipe to a flat ridge approximately ¾ of a mile down the canyon to a storage system (10,000 gallon) and trough, approximately 3000 acres of currently unwatered wildlife habitat will benefit. Also, by transporting some of the water out of the spring site and reconstructing the fence around the spring, the riparian nature of the area will be excluded from livestock grazing and trampling.	
<b>Wildlife Species to Benefit:</b> Coues' whitetail deer, bear, Gould's turkey	
<b>Possible Funding Partners:</b>	
<b>Implementation Schedule:</b> Feb. 2010 to Nov. 2012	<b>NEPA Compliance: (if applicable)</b>
<b>Beginning:</b>	<b>Completed: Yes <u>X</u> No ____</b>
<b>Completed:</b>	<b>Projected Completion Date:</b>
<b>PROJECT FUNDING</b>	
<b>SBG Funds Requested: \$5,320</b>	
<b>Cost Share Funds: \$8,180</b>	
<b>Total Project Costs: \$13,500</b>	
<b>PARTICIPANT INFORMATION</b>	
<b>Applicant:</b> U.S. Forest Service, Coronado NF, Douglas RD Attn: Joseph Harris <b>Telephone:</b> (520) 364-3468	<b>Address:</b> 1192 W. Saddleview Rd. Douglas, AZ 85607
<b>AGFD Contact and Phone No.</b> Gilbert Gonzalez (520) 384-1830 <b>(If applicant is not AGFD personnel)</b>	
<b>Coordinated with:</b> Permittee (Darrow Richins, Split Rock Ranch LLC)	<b>Date:</b> August 19, 2010
<b>Applicant's signature:</b>	<b>Date:</b>

**SEND COMPLETED APPLICATIONS TO:  
AZ Game and Fish Department  
Attn: Game Branch**

**5000 W. Carefree Highway**  
**Phoenix, AZ 85086**  
[rgregory@azgfd.gov](mailto: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:**

In Jhus Canyon, as well as the rest of the northeast portion of the Chiricahua Mountains, there are very few areas where permanent water is available. Jhus Spring is one of the most reliable, but is very inaccessible to wildlife. There is a great need for a reliable water source in this area of the allotment, as well as the surrounding areas of adjacent allotments.

**PROJECT OBJECTIVES:**

Redevelop Jhus Spring to make permanent water available and accessible to both wildlife and livestock, and to keep livestock out of the sensitive riparian area.

**PROJECT STRATEGIES:**

Using Forest Service funding, AZG&F cooperation, and HPC funding, permanent water will be made available by reconstructing the small concrete dam and installing a sand point (perforated pipe) upstream to collect water from the spring. A new 1 1/4" polyethylene pipe, thermally fused at the joints, will be installed for approximately 3/4 of a mile down the canyon to a polyethylene storage system (10,000 gallons total, two 5,000 gallon tanks plumbed together) and a heavy equipment tire trough located on a flat ridge near the original point of use (old orchard). This will effectively service approximately 2,000 acres of currently un-watered wildlife habitat. Also, by transporting some of the water out of the spring site and reconstructing the fence around the spring, the riparian nature of the area will be excluded from livestock grazing and trampling. Since this is a reconstruction of an existing range improvement, NEPA analysis is not necessary for this proposed project.

**PROJECT LOCATION:**

The project is located in the N 1/2 of section 11, T17S, R30E. The project is in Jhus Canyon and lies on part of the Manhattan Claim owned by the AZGFD and lies within the East Whitetail allotment, Douglas Ranger District, Coronado N.F. Map attached.

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

Although the boundaries are unclear on the AZGFD owned Manhattan Claim, the project is either located entirely on Forest Service administered land, or the spring is located on the AZGFD owned Manhattan Claim. The point of use is on Forest land, and the area is accessible to sportsmen.

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

Not applicable

**HABITAT DESCRIPTION:**

The area surrounding the project ranges in elevation from around 5,200 feet to 6,572 feet at a high point within a mile of the project. A significant portion of the affected acreage falls within pinon/juniper and pine oak vegetation types, mostly on steep mountain faces and rocky, rugged terrain. The north facing slopes are mostly pine/oak woodland vegetation type.

**ITEMIZED USE OF FUNDS:**

**Jhus Spring Redevelopment Project Proposal – Itemized Use of Funds**

<b><u>Total Project Cost:</u></b>	<b>13,500.00</b>
<b>Cost Share Funds</b>	<b>8,180.00</b>
<b>SBG Funds</b>	<b>5,320.00</b>

**Arizona Game and Fish**

**Department:**

Labor for two people for 5 days	2,060.00
<b>Total:</b>	<b>2,060.00</b>

**NGO Volunteer Contribution:**

Miscellaneous Labor for 5 days	400.00
<b>Total:</b>	<b>400.00</b>

**Forest Service Contribution**

Approximately 0.5 miles 1 1/4 PE pipe	1,300.00
Labor for three people for 5 days	3,500.00
Cement mixer	200.00
Generator	100.00
Wildlife ramp	50.00
20 – T Posts	90.00
2 – Rolls of wire-1Barbed & 1 Barbless	125.00
1- Bundles Stays	80.00
4– Corner Braces-Uprights/Braces/Bolts/Nuts	275.00
<b>Total:</b>	<b>5,720.00</b>

**HPC Contribution:**

2 – 5,000 gallon PE storage tanks	4,000.00
1 – 11’ tire trough	650.00
1 – Galvanized culvert float box	150.00
1 - Pallet Redi-Mix concrete	180.00
5 – 20’ 3/8” Rebar	20.00

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1 – 21’ 1 ¼” Galvanized Steel Pipe	40.00
1 – Stainless steel 1 ¼” Sand point	60.00
2 – 1 ¼” Float valves w/ PE Balls	180.00
1 ¼” Steel Elbows, Street Ells, Unions, Misc. Fittings	40.00
<b>Total:</b>	<b>5,320.00</b>

**LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:**

- USFS: Planning, implementation and supplying materials; NEPA compliance, labor
- AZGFD: Support for project and funding through their habitat improvement funds and special tag funds through various programs, Labor and planning
- Various Non-Government Organizations

**PROJECT MONITORING PLAN:**

For monitoring specific to this project, photographs will be taken before and after installation. Ecological condition data will also be gathered by the Forest Service through an Allotment Management Plan (AMP) and Annual Operating Instructions (AOI). The Forest Service monitors both effectiveness and implementation monitoring. Yearly, implementation monitoring is conducted to evaluate the amount of utilization and distribution the livestock permitted on the allotment achieved, as well as the maintenance/construction of improvements outlined in the AOI. Approximately every 5 years, effectiveness monitoring is conducted to evaluate the vegetation and soil condition trends, and make management decisions accordingly.

**PROJECT MAINTENANCE:**

The maintenance of the project will be the responsibility of the Split Rock Ranch, LLC, the permittee of the East Whitetail allotment. It will be ensured that water will be made available year-round to wildlife.

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

U.S. Forest Service – Joseph Harris, Range and Watershed Staff

**WATER DEVELOPMENT PROJECTS (see attached worksheet):**

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

N/A

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

**PROJECT NAME: Jhus Spring Redevelopment**

- 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.**  
Gilbert Gonzales, August 17, 2010
- 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: Stockade Corral Trough  
Type of water source (catchment, spring, dirt tank, etc.): concrete drinker in a corral  
Ownership of water source: Private land  
Distance in miles from project: approximately 3, directly over an extremely rugged mountain
- 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, etc). If private land, list landowner.**  
Forest Service administered land
- 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:  
  
-- 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.**

1 Pallet Ready Mix concrete 3000 PSI to build small dam for catchment (approx 10' wide, 2' high average, and 1' thick

5 – 20' sticks of 3/8" Rebar

2 - 5000 gal. HDPE storage tanks, 8' wide x 12' high

.5 mile 1 1/4" 200 psi PE pipeline, thermally fused joints

1 – 11' heavy equipment tire trough drinker with concrete bottom

1 – 24" galvanized culvert float box with lockable lid

1 – 20' 1 1/4" Galvanized steel pipe

1- 1 1/4 Galvanized Sandpoint

Galvanized fittings and brass float valves for trough and tank plumbing

Float guards over float mechanisms and anywhere else that there might be a threat

Freeze guard insulation on all exposed fittings and connections

Wildlife access and escape ramps in each open water source

**10) Was a site visit completed?** \_\_\_ Yes X No

If Yes, please list personnel that attended and date.

Forest Service personnel and AZGFD manager Gilbert Gonzales have both been to the site often.