

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

Game Branch / HPC Project Number:	13-220
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**PROJECT INFORMATION**

**Project Title:** Stock tank restoration on the Williams Ranger District, Kaibab National Forest within the Ida and White Hill Grassland Conservation Project areas (HPC # 09-203 and 13-205) and Sitgreaves and Hat Grazing Allotments, Williams Ranger District, Kaibab National Forest, Game Unit 7W and 8.

**Region and Game Management Unit:** Region 2, Unit 7W

<b>Local Habitat Partnership Committee (LHPC):</b> <ul style="list-style-type: none"> <li>• Williams - Flagstaff HPC</li> </ul>	<b>Was the project presented to the LHPC?</b> <b>YES</b> <input type="checkbox"/> <b>NO</b> <input type="checkbox"/>
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**Has this project been submitted in previous years?** YES  NO   
**If Yes, was it funded?** YES  NO  → **Funded HPC Project #(s):**

**Project Type:** Maintenance of existing earthen water tanks

**Brief Project Summary:** Many of the water sources in Game Management Units 7 and 8 include dirt tanks. On Forest Service land, many of these tanks have become silted in over the years and only provide water for a short duration. This project would increase water storage in 16 dirt tanks within the Smoot Lake, Moritz Lake, Sitgreaves, and Hat Allotments (see attached maps and pictures). Smoot Lake and Moritz Lake Allotments include the Ida and White Hill grassland restoration projects (HPC # 09-203 (funded) and 13-205). The availability of dependable water will greatly enhance these grassland restoration wildlife projects previously funded or being considered for funding. The proposed tanks in the Sitgreaves Allotment are all within grasslands in the Pitman Valley area. Proposed tanks within the Hat Allotments are within meadows, one within ponderosa pine and one within juniper/ponderosa pine. These are areas of high big game populations. Dependable waters will help evenly distribute the elk and mule deer populations helping ensure adequate distribution of forage use by wildlife.

**Big Game Wildlife Species to Benefit:** Elk, mule deer, antelope, and turkey

<b>Implementation Schedule</b> (Month/Day/Year):  <u>Project Start Date:</u> April 2014   <u>Project End Date:</u> September 2016	<b>Environmental Compliance:</b> NEPA Completed: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Projected Completion Date: _____  State Historic Preservation Office - Archaeological Clearance: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Projected Completion Date: _____  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>	\$ 40,000
<b>Cost Share or Matching Funds:</b>	\$
<b>Total Project Costs:</b>	<b>\$ 40,000</b>

## PARTICIPANT INFORMATION

<b>Applicant</b> (please print): Steve Clark, AES	<b>Address:</b> <b>Arizona Elk Society</b> <b>7558 W. Thunderbird Rd. Ste. 1-465,</b> <b>Peoria AZ. 85381</b>	<b>E-mail:</b> [REDACTED]
<b>Telephone:</b> [REDACTED]		<b>Date:</b> February 16, 2014
<b>AGFD Contact and Phone No.</b> (If applicant is not AGFD personnel): Matt Padilla (623) 252-8602		
<b>Project has been coordinated with:</b> This project has been coordinated with Roger Joos, Williams Ranger District, Kaibab NF; AZ Game and Fish Department and the grazing permittees, Earle and John Nagiller, Frank McNelly, and Joseph Auza.		

### NEED STATEMENT – PROBLEM ANALYSIS:

Most of the available water on the Smoot Lake, Mortiz Lake, Sitgreaves, and Hat Allotments are found in dirt tanks scattered throughout the allotments. Dirt tanks are an inexpensive way to distribute water throughout an area; however, the tanks require periodic maintenance. Reliable surface water is an issue for Unit 7W and 8 due to silt loads in earthen tanks. All tanks proposed for renovation are recognized as needed waters within the allotments by the Williams Ranger District, Kaibab National Forest and the Arizona Game and Fish Department.

### PROJECT OBJECTIVES:

The objective of the project is to improve the distribution and duration of water availability for wildlife in portions of unit 7W and 8 by removing sediment and sealing 16 tanks with bentonite (if needed). Improved water availability will have the result of enhancing habitat conditions by better distributing wildlife and livestock across the range and further enhance work being completed or have previously been completed through previous Habitat Partnership grassland restoration projects (HPC # 09-203 and 13-205).

### PROJECT DESCRIPTION AND STRATEGIES:

Sixteen dirt tanks located on the Smoot Lake, Mortiz Lake, Sitgreaves, and Hat Allotments that have reduced water capacity will be renovated when tanks are dry. Heavy equipment will be used to remove the silt load within the bowl of the tank with the dirt being applied to the dam. All work will be performed when the tanks are dry. Tanks will be sealed with bentonite to improve water retention if indicated by a soil analysis. Project is for a two year period to be able to catch tanks as they become dry.

### PROJECT LOCATION:

Fourteen tanks are located north of Interstate 40 and two are located south of Williams on the Williams Ranger District, Kaibab National Forest (See attached maps and pictures).

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

All tanks are on public land administered by the Forest Service.

### HABITAT DESCRIPTION:

The Smoot Lake, Mortiz Lake, Sitgreaves, and Hat Allotments contain areas of ponderosa pine

forests, pinyon/juniper forests, and grasslands. Fourteen tanks are associated with large grasslands, one tank near McCracken Knolls is located within a ponderosa pine meadow, and one tank is within a pinjon/juniper/ponderosa pine meadow in the southern part of Unit 8. Ten proposed waters on the Smoot Lake and Mortiz Lake Allotments are within grassland restoration projects that have been previously funded or is currently being funded through the Habitat Partnership Committee (see attached pictures).

**ITEMIZED USE OF FUNDS:**

Special Big Game License Tag Funds:

The funds for this project are to cover the cost for the operator (\$50/hour for operator and machine) plus diesel which is 50 gallons per 8 hour day at \$4 per gallon, and the cost to purchase Bentonite (aprox. \$2000)

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

NEPA was completed by the Forest Service. An additional archeological clearance was completed by the Forest Service in 2013. Costs for NEPA and archeological clearance is estimated at \$25,000 which will be considered as contributions in lieu of matching funds.

**LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:**

The Arizona Elk Society will obtain the services of a heavy equipment operator who has experience cleaning out earthen tanks and spreading bentonite to seal the tanks once cleaned. This will include the purchase of bentonite. The Forest Service completed the environmental analysis when grazing was authorized and has completed a recent archeological survey for all tanks.

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

YES[] NO[X] N/A[]

**PROJECT MONITORING PLAN:**

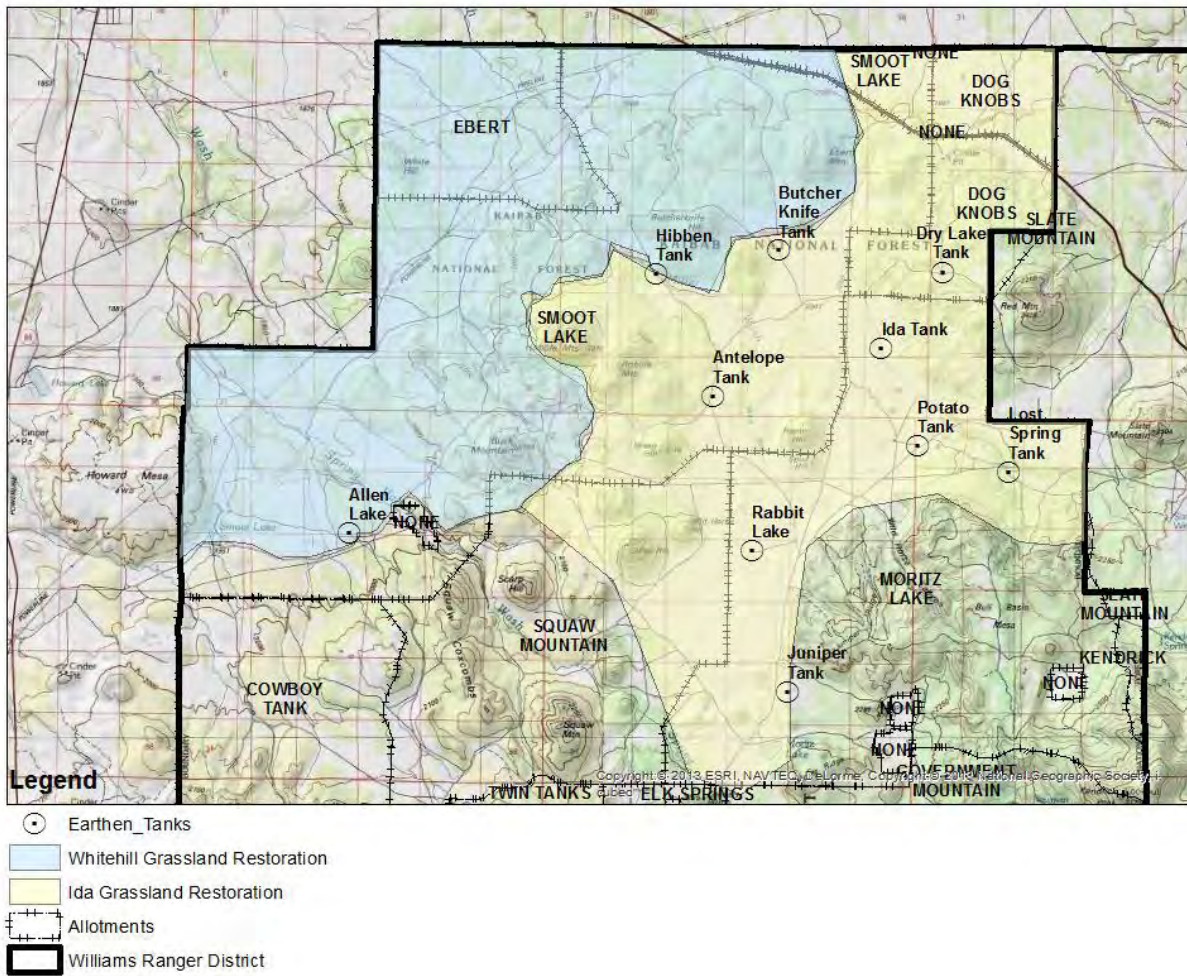
Work will be monitored by The Arizona Elk Society and pictures of the completed project will be provided to the Arizona Game and Fish Department and the Kaibab National Forest.

**PROJECT MAINTENANCE:**

No maintenance will be required until the time the tank needs to be cleaned out again. The life of the project is estimated to be 10 years.

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

The Arizona Elk Society



Map 1: Ten earthen tanks proposed for clean-out within the White Hill and Ida Grassland Restoration Project Areas, Smoot Lake and Moritz Lake Allotments, Williams Ranger District, Kaibab National Forest.



Allen Lake consists of three tanks with interconnecting culverts that act as spillways. The first tank is dry and silted in. The second is nearly dry and silted in. The third is still holding quite a bit of water (Pictures taken by Copper State Earth Works, 2014).



Hibbon Tank which is completely dry (Pictures taken by Copper State Earth Works, 2014).



Butcher Knife Tank with approximately 4' of water (Pictures taken by Copper State Earth Works, 2014).



Antelope Tank that is dry (Pictures taken by Copper State Earth Works, 2014).



Ida Tank still holding water (Pictures taken by Copper State Earth Works, 2014).



Dry Lake with quite a bit of water (Pictures taken by Copper State Earth Works, 2014).



Potato Tank is actually two tanks one holding water and the other one which has failed (Pictures taken by Copper State Earth Works, 2014).





Lost Spring Tank holding water (Pictures taken by Copper State Earth Works, 2014).



Potato Lake that is dry (Pictures taken by Copper State Earth Works, 2014).



Juniper tank which is dry (Pictures taken by Copper State Earth Works, 2014).



Four proposed tanks north of Interstate 40 within the Sitgreaves Allotment, Williams Ranger District, Kaibab National Forest.



East Pipeline Tank is small and almost dry (Pictures taken by Copper State Earth Works, 2014).



Moss Tank with quite a bit of water (Pictures taken by Copper State Earth Works, 2014).





Pouquette Tank which is dry (Pictures taken by Copper State Earth Works, 2014).



Crowe Tank with quite a bit of water (Pictures taken by Copper State Earth Works, 2014).



**Legend**

-  Earthen\_Tanks
-  Allotments

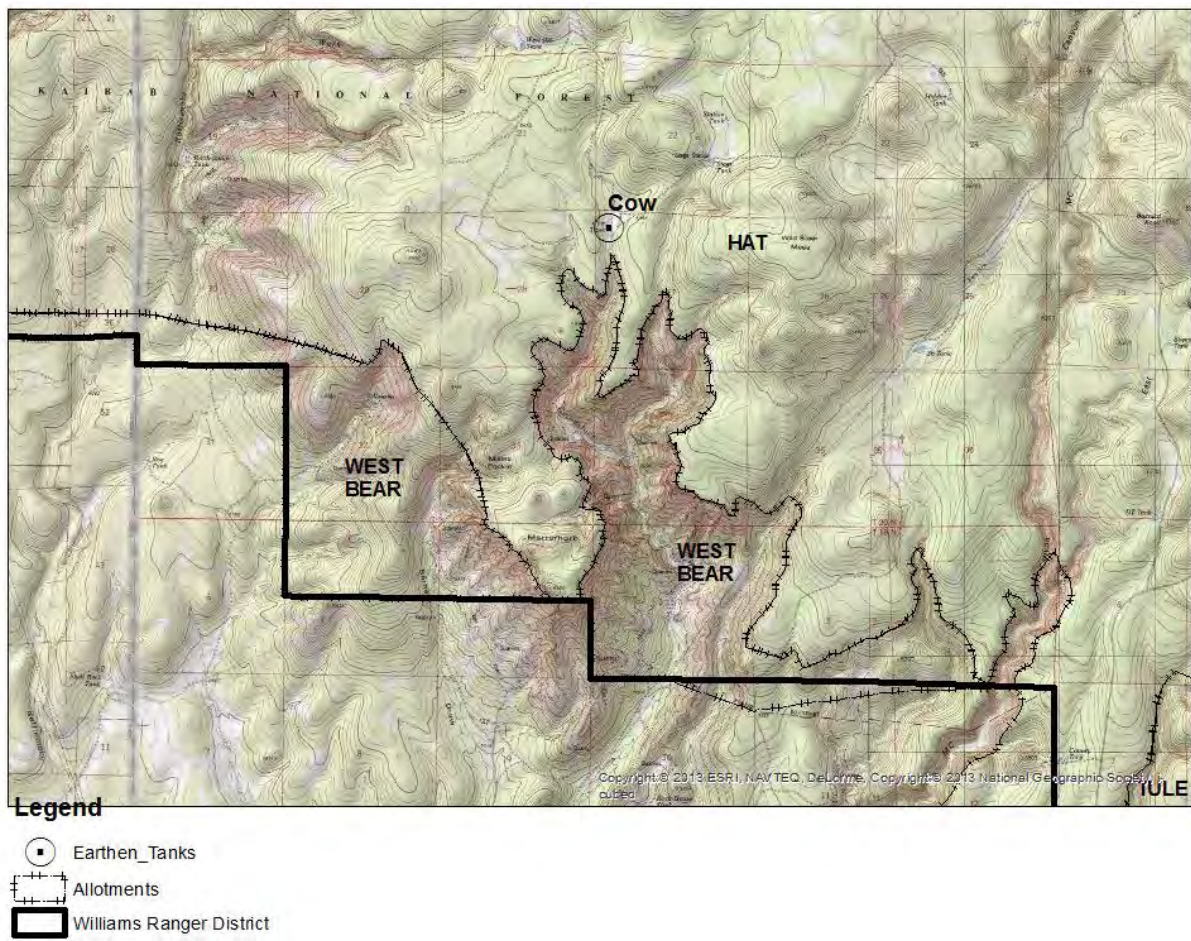
Location of McCracken Tank, Hat Allotment, Williams Ranger District, Kaibab National Forest.



**Legend**

- ◉ Earthen\_Tanks

McCracken Tank August 2010.



Cow Tank located within the Hat Allotment along the southern border of the Williams Ranger District, Kaibab National Forest.



**Legend**

- ◻ Earthen\_Tanks

Cow tank, aerial photo, August 2010.