

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

Game Branch / HPC Project Number: 12-310

PROJECT INFORMATION

Project Title: L O Ranch Earthen Stock Tank Maintenance

Region and Game Management Unit: Region III/Unit 17A

Local Habitat Partnership Committee (LHPC):
• Prescott

Was the project presented to the LHPC?
YES NO

Has this project been submitted in previous years? YES NO

If Yes, was it funded? YES NO → **HPC Project #:**

Project Type: Dirt Stock Tank Cleanout (Maintenance)

Brief Project Summary: Many areas within Game Management Unit 17A lack perennial water sources, which can result in a significant amount of habitat being largely unusable by numerous wildlife species. Maintenance of dirt stock tanks in some of these areas will provide the much needed water on a more permanent basis. This will allow for better distribution of wildlife and livestock. A contracted operator, with substantial experience in this type of work, using either a front-end loader or bulldozer will clean the selected tanks. Most tanks simply require removal of accumulated silt, while some may require repairing the dam.

Big Game Wildlife Species to Benefit: Mule deer, elk, turkey and javelina

Implementation Schedule (Month/Day/Year):

Project Start Date: Summer 2012 (weather dependant)

Project End Date: Summer 2013 (weather dependant)

Environmental Compliance:

NEPA Completed: YES No N/A

Projected Completion Date: _____

State Historic Preservation Office - Archaeological Clearance:

YES No N/A

Projected Completion Date: Cleared on 8/21/12 by PNF (attached)

Arizona Game and Fish Department EA Checklist: N/A

To be Completed by: _____

Projected Completion Date: _____

PROJECT FUNDING

Special Big Game License Tag Funds Requested:

\$ 8,000

Cost Share or Matching Funds:

\$ 16,750

Total Project Costs:

\$ 24,750

PARTICIPANT INFORMATION

Applicant (please print):
Darren G. Tucker

Address: : Arizona Game and Fish
Dept., Region III
5325 N. Stockton Hill Rd.
Kingman, AZ 86401

E-mail:
DTucker@azgfd.gov

Telephone: 928-856-0665

Date: August 31, 2012

AGFD Contact and Phone No. (If applicant is not AGFD personnel):

Project has been coordinated with:

John Hunt, L O Ranch owner; Jake Russell, Prescott National Forest; Andy Clark and Wade Albrecht, AGFD

NEED STATEMENT – PROBLEM ANALYSIS:

In Arizona hot and dry conditions often pose a significant bottleneck for mule deer and other wildlife species. For nearly two decades Arizona has experienced a period of drought conditions with several consecutive years that were the driest on record. Compounding the problems from lack of adequate permanent water is the stress put on habitat surrounding the remaining water sources. These areas can receive heavy use from wildlife and livestock that are tied to the waters. If repeated over a broad area, these circumstances may contribute to low survival of juveniles and to adult animals being in poor condition entering the breeding season, ultimately resulting in low recruitment rates for wildlife populations. Mule deer appear to be especially susceptible to these conditions.

Stock tanks are selected for maintenance based on their distance from other water sources, the amount of country they could potentially service, clearance from the land management agency and historical use by mule deer of the surrounding area. The Livestock Operators, for this area, provided valuable input during this process. Although water catchments specifically designed for wildlife would be the best choice to provide permanent water, at roughly \$50,000 per development they are cost prohibitive on a large scale. Cleaning existing dirt stock tanks is the most cost-effective method.

For the purposes of saving money in equipment transportation, it is advantageous to cluster several tanks in one locale. Often a geographical boundary, such as a canyon, can make it necessary to clean several tanks within close proximity of each other. Additionally, lack of uniform summer rainfall often results in a specific drainage running water while adjacent drainages remain dry. By having several functional tanks in one region, at least one should fill with water. Tank groupings will occur in large areas with no existing permanent waters, where deer numbers were historically high.

A similar project was completed during the summer of 2007 on the nearby Spider Ranch. A total of eight tanks were cleaned and have since caught significant amounts of water. These tanks now have the capacity to hold enough water to provide a reliable drinking source throughout most dry periods. The project was a complete success.



Photograph of Pothole Tank in April of 2012 – it is nearly dry with little chance of catching water until the monsoon season.

PROJECT OBJECTIVES:

- Provide reliable permanent water sources for wildlife and livestock
- Reduce concentrations of these animals around currently existing permanent waters, which can lead to habitat degradation.

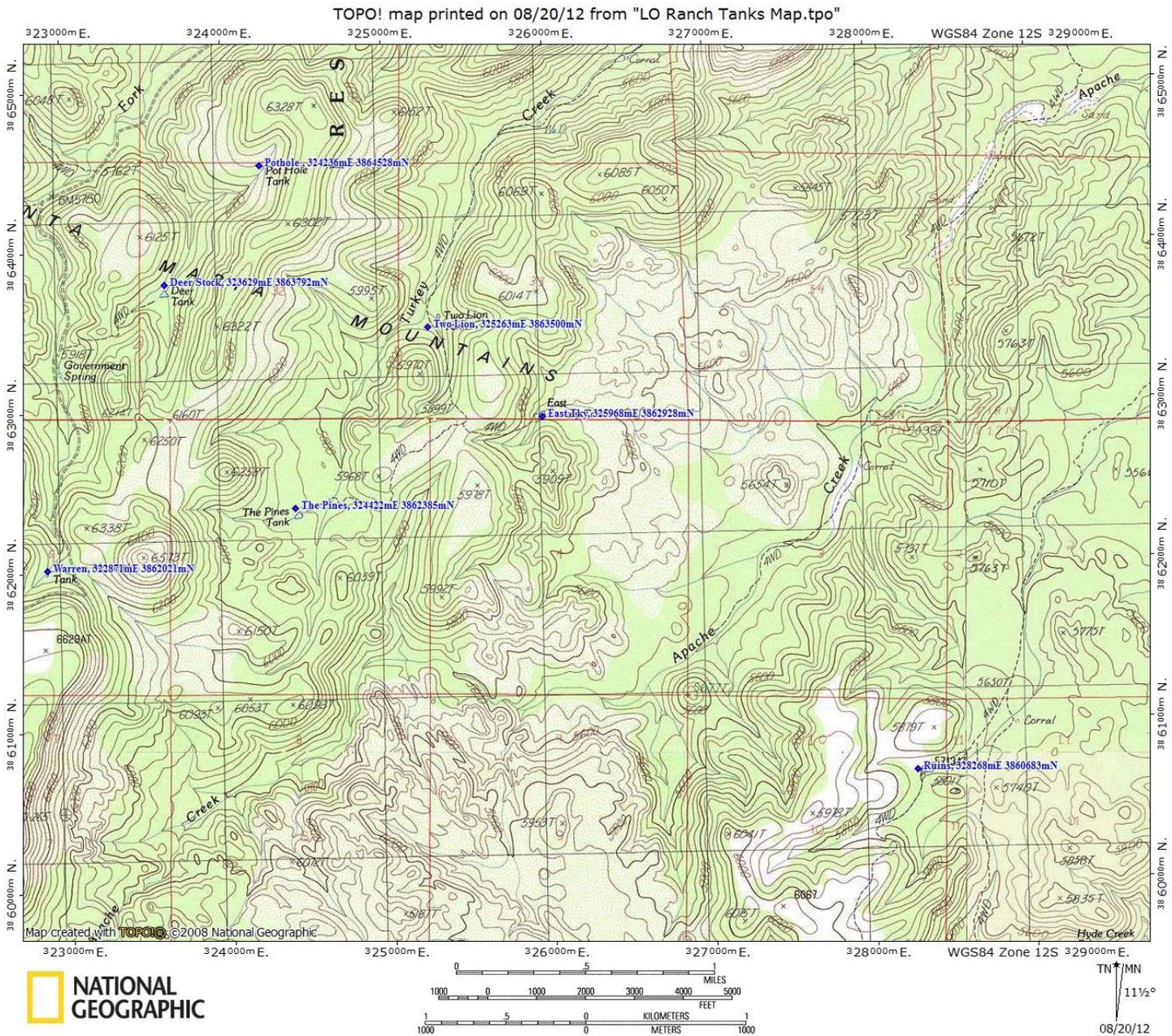
PROJECT DESCRIPTION AND STRATEGIES:

- Coordinate with livestock permittee, contractor and Prescott National Forest personnel.
- Develop construction plan.
- Remove sediment from existing dirt tanks to improve water-holding capability.
- The tanks will not be enlarged and all work will occur within the existing footprint of the tank.

PROJECT LOCATION:

The following tanks are listed in order of priority.

Tank Name	GMU	Land Status	Ranch	Location (NAD 83) With Elevation	UTM
POTHOLE	17A	USFS	L O RANCH	34,54.479, 112,55.432 6051	324236mE 3864528mN
RUINS	17A	USFS	L O RANCH	34,52.441, 112,52.738 5716	328268mE 3860683mN
THE PINES	17A	USFS	L O RANCH	34,53.322, 112,55.283 5874	324422mE 3862385mN
TWO LIONS	17A	USFS	L O RANCH	34,53.934, 112,54.745 5755	325263mE 3863500mN
DEER STOCK	17A	USFS	L O RANCH	34,54.075, 112,55.821 5934	323629mE 3863792mN
WARREN	17A	USFS	L O RANCH	34,53.109, 112,56.296 6278	322866mE 3862000mN
EAST TURKEY	17A	USFS	L O RANCH	34,53.632, 112,54.275 5723	325968mE 3862928mN



LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name): United States Forest Service, Prescott National Forest
IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP or LANDOWNER AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?
 YES[] NO[]

HABITAT DESCRIPTION:

The project area is located in central Unit 17A, south of Walnut Creek on the western portion of the L O Ranch. Elevations range from approximately 5,700 to 6,300 feet above sea level. The area is composed primarily of great basin conifer woodland dominated by pinyon-juniper interspersed with cliffrose, mountain mahogany and other browse species. The surrounding terrain consists of rolling hills, steep bluffs, small canyons and granite boulder outcrops.

ITEMIZED USE OF FUNDS:

BUDGET ANALYSIS
LO Ranch Earthen Stock Tank Maintenance

ANTICIPATED COSTS:

PROJECT COMPONENT and COOPERATOR	COST-SHARE DOLLARS	GRANT DOLLARS REQUESTED
ARIZONA GAME AND FISH DEPARTMENT/HPC FUNDING <ul style="list-style-type: none"> • Construction costs for contracted operator time, equipment and equipment hauling (\$21,000 total, figured at \$3,000 per tank): <ul style="list-style-type: none"> ➤ <i>Heritage Habitat Improvement Fund</i> ➤ <i>HPC funds</i> 	\$ 12,000	\$ 8,000
ARIZONA GAME AND FISH DEPARTMENT REGION III and DEVELOPMENT BRANCH <ul style="list-style-type: none"> • Personnel Services (Wildlife Manager III Salary) • Vehicle Expenses 500 miles @ \$0.50/mile 	\$ 1,100 \$ 250	
L O RANCH <ul style="list-style-type: none"> • <i>Provide funding: Construction costs for contracted operator time, equipment and equipment hauling (\$21,000 total, figured at \$3,000 per tank).</i> • Provide assistance with project planning and oversight. If needed will obtain equipment to pump residual water from tanks prior to cleaning. 	\$ 1,000 \$ 1,000	
USDA- PRESCOTT NATIONAL FOREST <ul style="list-style-type: none"> • Provide assistance in project planning and implementation. 5 days @ \$200/day. • Conduct research and provide proper clearances 2 days @ \$200/day. 	\$ 1,000 \$ 400	
TOTALS:	\$ 16,750	\$ 8,000

PROJECT TOTAL: \$24,750

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

Arizona Game & Fish Department:

- Provide project planning, coordination, implementation, construction oversight and project completion report.
- Provide project funding through Heritage Habitat Improvement Fund

Prescott Habitat Partnership Committee:

- Publicly support project.

Prescott National Forest:

- Complete archeological and biological evaluations, research status of tanks and add to allotment plans.
- Assist with project implementation and field support

L O Ranch:

- Provide funding for project work
- Assist with field coordination and access.

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

YES[] NOX N/A[]

This project is located on National Forest land where recreational access is already permitted. However, even though it will not result in a direct increase in access it is important that other adjacent ranches that control large amounts of private property see the Department engaging in a proactive manner with livestock operators. Building this credibility within the livestock community is imperative.

PROJECT MONITORING PLAN:

District Wildlife Manager and/or livestock operator will periodically visit the individual tanks after the work has been completed and evaluate how well they are holding water through dry periods.

PROJECT MAINTENANCE:

None

PROJECT COMPLETION REPORT TO BE FILED BY:

District Wildlife Manager, Darren Tucker

WATER DEVELOPMENT PROJECTS (*see attached worksheet*):

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

PROJECT NAME: L O Ranch Earthen Stock Tank Maintenance

- 1) **Is the water development listed as a priority in the most recent “Wildlife Water Development Annual Implementation Schedule?”** N/A
- 2) **Please list the Development Branch personnel and date coordinated with for this project.**
Andy Clark
- 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) NOX (skip #5 below)

Other water sources are present within four miles of the seven tanks within the project area, but none can be counted on as perennial.

- 5) **For the accessible, perennial water source nearest this project:**
Name of water source:
Type of water source (catchment, spring, dirt tank):
Ownership of water source:
Distance in miles from project:
- 6) **Is the target wildlife species a result of transplant efforts?** YES NOX
- 7) **Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument). If private land, list landowner.**
Prescott National Forest land with no special status.

- 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: _____ Approximate hiking time: _____
The roads to several of these tanks are rough and rocky. An ATV is a much better option.

-- Does access to this site require crossing private or tribal lands? YES NOX

-- 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.**
N/A

- 10) **Was a site visit completed?** Yes No

If Yes, please list personnel that attended and date: Darren Tucker and John Hunt, LO Ranch owner, visited the seven tanks by horseback on April 17, 2012.

Russell, William J -FS

From: Darren Tucker <DTucker@azgfd.gov>
Sent: Monday, August 20, 2012 5:52 PM
To: Russell, William J -FS
Subject: LO Tanks

Jake,
If you could send me a brief message indicating that we can proceed with our tank clean out project I would appreciate it. You can include that you will need to be present for at least the first two tanks that are renovated. Below is an example of an email that Elaine sent me for a previous project.

"Hi Darrin, The Heritage Report will be titled The Pinetop Mtn. Water Catchment Maintenance - Report No. 2010-22 for the Prescott NF. No sites were located in the project area so the Forest can sign the report and it does not need to be sent it to the SHPO. I included the maintenance activities (repair or replace) plus the fence enclosure that you listed in your email. The report will be submitted to Jim Mckie today. Have a good weekend. Elaine"

Thanks a bunch,

DARREN TUCKER
WILDLIFE MANAGER III
ARIZONA GAME AND FISH DEPARTMENT
(928) 856-0665

Forest: Prescott

District: Chino Valley

State Project Number:

INVENTORY STANDARDS AND ACCOUNTING

(Reference FSM 2361)

1. Report Number:				2. Report Date:		
Year	Forest	Number	Series	Month	Day	Year
2012	09	26		08	14	2012

3. Routing: Copies to

<input type="checkbox"/> District	<input type="checkbox"/> RO	<input type="checkbox"/> SHPO	<input type="checkbox"/> 2360	<input type="checkbox"/> SO:	<input type="checkbox"/> Other:
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4. Author:

A. <input type="checkbox"/> Zamora	<input type="checkbox"/> E	<input type="checkbox"/> B.
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5. Project Name/Report Title (Abbreviate if Necessary):

Tank Maintenance: Walnut Creek Allot.

6. Abstract/Summary of Report and Findings:

It is proposed to conduct maintenance on 7 earthen stock tanks within the Walnut Creek Allotment. These tanks include Deer, East Turkey, Pines, Pot Hole, Two Lion, Ruins, and Warren Mountain (Map 1). Project activities will consist of cleaning out sediments and vegetation within the tanks and placing the sediments on or along the sides of the tanks. The overflow areas and the dams may need to be maintained or reconstructed. Fences that surround the tanks may need to be maintained. Mechanized equipment such as a backhoe will be used to conduct tank maintenance and fence maintenance will be conducted by hand with the use of power tools and/or hand tools. Access will be along existing system and non-system dirt roads. A file search of the heritage resource atlas did not identify or documented sites at these locations.

Continued Page 2

7. Consultation/Clearance

A. Conditions of Clearance:

<input type="checkbox"/> None (No potentially eligible sites in project area)	<input type="checkbox"/> Avoid sites specified below
<input type="checkbox"/> Monitor sites specified below	<input checked="" type="checkbox"/> Report new sites to Forest Archeologist
<input checked="" type="checkbox"/> Other/additional comments	

Project activities are limited to the existing tank areas where previous ground disturbances have occurred. No new ground disturbances beyond the tank areas. Access for all vehicles and mechanized equipment will be along existing system and non-system roads. No road maintenance will occur.

Continued Page 2

B. Additional Fieldwork Required:

<input type="checkbox"/> Evaluate sites specified below	<input type="checkbox"/> Other, see below
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Continued Page 2

C. Report Accepted: Yes No

D. Clearance Recommended: Yes No N/A

Forest Archeologist: *Acting Elaine Zamora* **Date:** 8/14/12

E. Effect: No Effect No Adverse Adverse N/A Beneficial

F. Consult SHPO on: Effect Eligibility Info Only Other

Forest Supervisor: *[Signature]* **Date:** 8/15/12

G. SHPO Concurrence: Yes Yes, per comment below No, per comment below

Case-by-case concurrence not required per R-3 Programmatic Agreement

SHPO: **Date:**

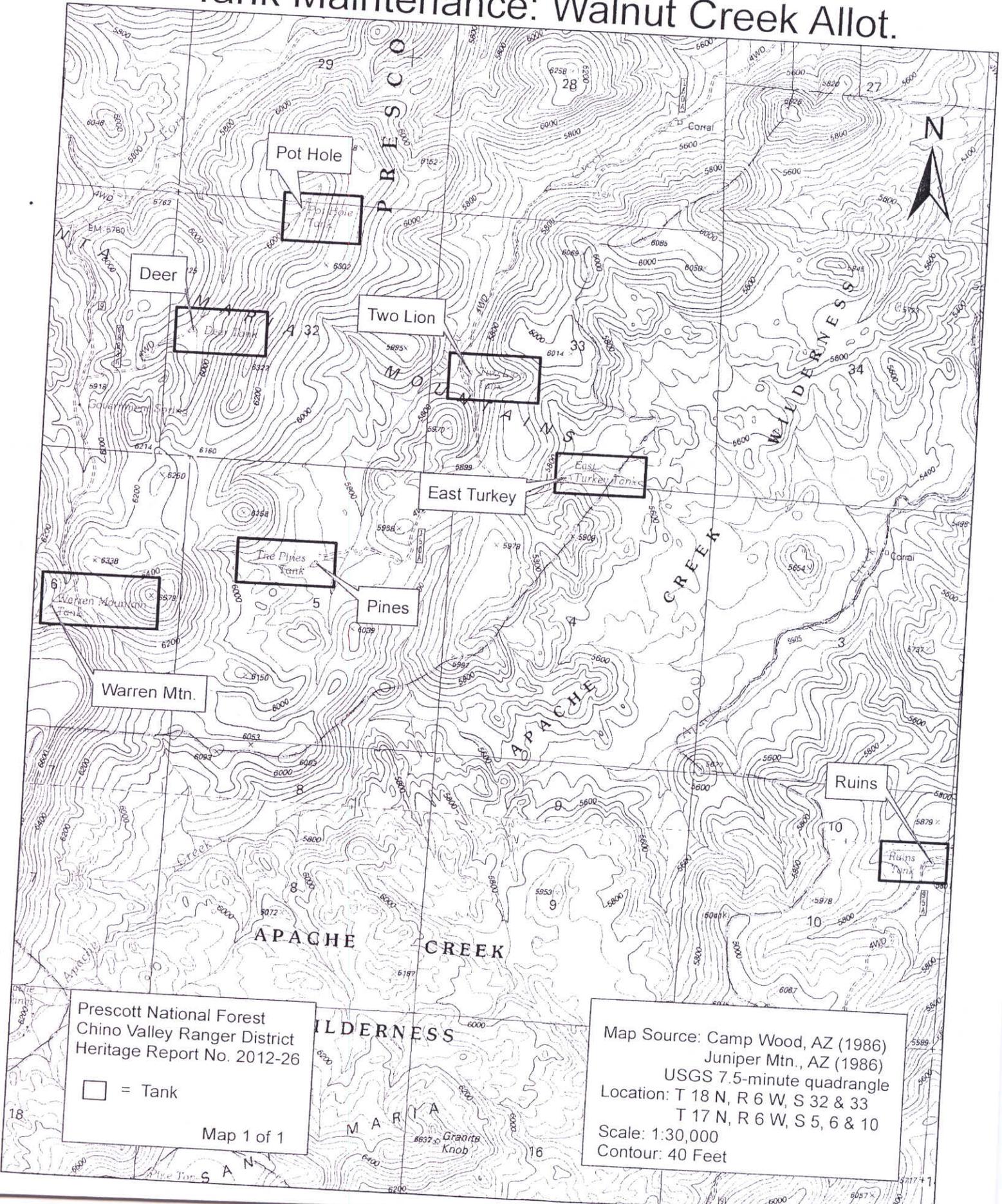
H. Clearance Approved: Yes No

Forest Supervisor: *[Signature]* **Date:** 8/15/12

8. Ranger District:		01	9. Project Function:		22	10. Primary Activity Type:		I
11. Secondary Activity Type:								
13. Total Project Acres:		14	14. Acres Completely Surveyed:		0	15. Sample %:		
16. Acres Resurveyed:			17. Total Sites in Project Area:		0	18. New Sites:		0
19. Sites Evaluated Eligible:		0	20. Sites Evaluated Not Eligible:		0			
(By Professional CRM Specialist, Request SHPO Concurrence)								
21. Sites Inspected, Monitored, Enhanced, Etc.:		0	(Projects other than survey, evaluation)					
22. Recommended Determination:		6	(initial:)			(By FS Professional CRM Specialist)		
(1. No Effect 2. No Adverse Effect 3. Adverse Effect 4. N/A - Not An Undertaking 5. Beneficial 6. N/A - No Properties)								
23. Project Location (Surveys only):								
Township	18 N	Range	6 W	Section	33 & 33			
Township	17 N	Range	6 W	Section	5, 6 & 10			
Township		Range		Section				
Township		Range		Section				
24. Institution Conducting Project / Survey:								
Name of Institution:				USFS Heritage Resource Specialist	FA			
25. Average Number of Individuals Used:			26. Average Individual Transect Spacing (ft.):					
27. Field Hours:		0	28. Lab/Lib Hours:					
30. Admin. Hrs:			RD: 4	SO:	29. Travel Hours:		0	
33. Days of Per Diem:		0	31. Mileage:		0	32. PD Rate:		N
34. Cost Weight Factor:		9	35. Cost (Code):		A	36. or Actual Cost:		

37. Remarks / Continuation from page 1:
Cont. 6: Heritage resource clearance can be recommended as stated in the "Conditions of Clearance".

Tank Maintenance: Walnut Creek Allot.



Prescott National Forest
 Chino Valley Ranger District
 Heritage Report No. 2012-26

□ = Tank

Map 1 of 1

Map Source: Camp Wood, AZ (1986)
 Juniper Mtn., AZ (1986)
 USGS 7.5-minute quadrangle
 Location: T 18 N, R 6 W, S 32 & 33
 T 17 N, R 6 W, S 5, 6 & 10
 Scale: 1:30,000
 Contour: 40 Feet