

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

Game Branch / HPC Project Number:	13-607
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PROJECT INFORMATION

Project Title: Capture of Bighorn Sheep in Unit 22 and 23 for DNA and Movement Corridor Research	
Region and Game Management Unit: Region 6 / GMUs 22 and 23	
Local Habitat Partnership Committee (LHPC): <ul style="list-style-type: none"> • Payson Natural Resources Committee 	Was the project presented to the LHPC? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
Has this project been submitted in previous years? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> If Yes, was it funded? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> → Funded HPC Project #(s):	
Project Type: Capture and Collaring of Rocky Mountain Bighorn Sheep	
Brief Project Summary: In November of 2012 funding was received locally to capture and collar 3 Rocky Mountain Bighorn Sheep in Units 22 and 23 northeast of Gisela, AZ. Two ewes and one ram were successfully captured, collared and released on site of the capture area. This project will expand the area of research by capturing and collaring up to 8 additional Rocky Mountain Bighorns in Units 22 and 23 and attaching GPS satellite collars in order to gather additional movement information.	
Big Game Wildlife Species to Benefit:	

Implementation Schedule (Month/Day/Year): <u>Project Start Date:</u> 11/01/2014 <u>Project End Date:</u> 05/01/2017	Environmental Compliance: NEPA Completed: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Projected Completion Date: <u>August 2014</u> State Historic Preservation Office - Archaeological Clearance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Projected Completion Date: _____ Arizona Game and Fish Department EA Checklist: N/A <input type="checkbox"/> To be Completed by: <u>Dustin Darveau, AZGFD</u> Projected Completion Date: <u>August 2014</u>
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PROJECT FUNDING

Special Big Game License Tag Funds Requested:	\$ 53,700.00
Cost Share or Matching Funds:	\$ (MSA has already obligated >\$15,000)
Total Project Costs:	\$ 53,700.00

PARTICIPANT INFORMATION

Applicant (please print): Jarrod McFarlin	Address: 7200 E University Mesa, AZ 85207	E-mail: jmcfarlin@azgfd.gov
Telephone: 480-528-8531		Date: 08/15/13

AGFD Contact and Phone No. (If applicant is not AGFD personnel):
Jarrod McFarlin 4805288531, Dustin Darveau 4803243555

Project has been coordinated with:
Tonto National Forest, Mogollon Sporting Association, ADBSS

NEED STATEMENT – PROBLEM ANALYSIS:

The purpose of this project is to capture and collar up to 8 additional bighorn sheep for the continued research on sheep movements within Region VI. Once movement patterns and locations are established within Units 22 and 23, these areas could be utilized for bighorn sheep management &/or releases in the future. DNA analysis will also be used to determine species and genetic history.

The Rocky Mountain Bighorn Sheep is widely recognized as an important resource on the public lands of the southwestern U.S. The Department’s Comprehensive Wildlife Conservation Strategy lists the bighorn sheep as a Species of Greatest Conservation Need.

PROJECT OBJECTIVES:

The objective of this project is to determine bighorn sheep movements in the area in order to possibly establish new translocation areas as well as additional hunting opportunity for the public on national forest land.

PROJECT DESCRIPTION AND STRATEGIES:

The Tonto Creek drainage North of Gisela has long been an area with increased observations of bighorn sheep. Multiple sightings occur each year from South and East of the gun range road East to the Houston Pocket area. It is currently unknown if these are resident sheep in the area or if these sheep are moving from one range to another using Tonto Creek as a corridor. Some photos have documented existing ear tags in some of the sheep in this area as likely being from the West Clear Creek herd in Unit 6A East of Camp Verde. Three of these sheep were captured in November of 2012 and collar data are showing interesting trends already.

The Black Mesa and Parker Creek area in Unit 23 have existing populations of bighorn sheep. These sheep are well documented and in 2004 the AZGFD determined these sheep were likely to be Rocky Mountain species through capture and DNA analysis. In 2006 The AZGFD offered the area’s first bighorn sheep hunt and the hunter harvested a nice ram. Hunts were also conducted in 2007 and 2008. In 2009, The AZGFD removed the hunt in these areas due to low numbers of rams observed on the ground and during surveys. It is currently unknown if these sheep migrate to different areas or if they are resident sheep. These locations have recently been discussed for potential supplemental releases of Rocky Mountain Sheep.

And most recently in September of 2012 a band of nine rams were observed during elk surveys in the area of the Mazatzal Wilderness in Unit 22. The rams were seen on the south edge of Hardscrabble Mesa. Regular sightings of sheep occur in the area just west of this location along the Verde River drainage as well. These sheep are also believed to be from the West Clear Creek herd in Unit 6A. This sighting encouraged the AZGFD to combine 22 North to the already existing unit 6A Rocky Mountain Sheep hunt in 2013.

The proposed action is to capture and collar up to 8 additional bighorn sheep in these areas. Their locations and movement patterns, along with previous GPS movement data, will help determine management objectives and direction, possibly considering if these areas are candidates for future sheep releases for long

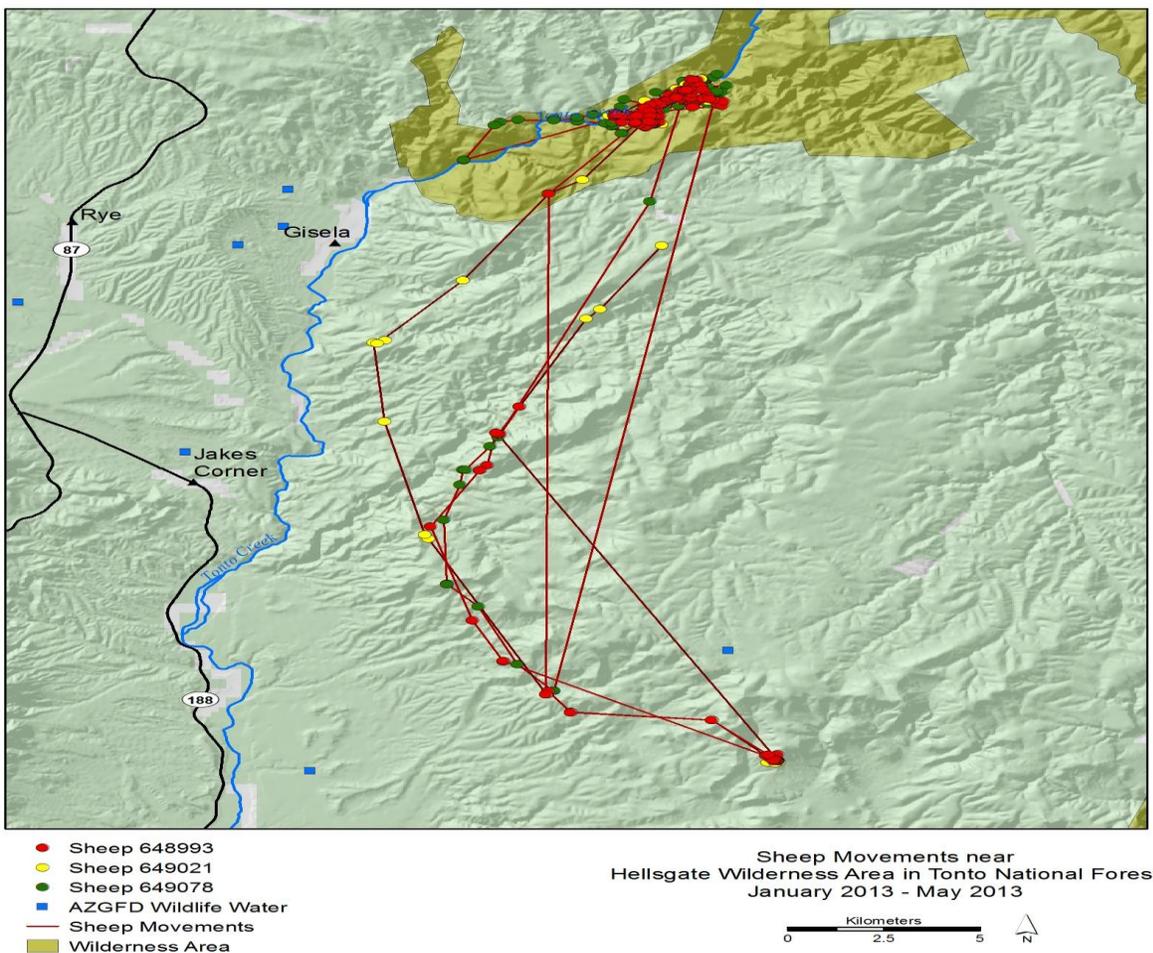
sustainability. This information will also help determine travel corridors used by these sheep and where they might be coming from. DNA will also be collected for genetic analysis. Nasal swabs will also be collected for disease testing.

A Letter of support should be obtained from the Southwestern Regional Office of the United States Forest Service for the duration of this project including this proposed capture. A current Minimum Requirements Decision Guide (MRDG) will be submitted to Forest Service for final approval and signatures. The capture area overlays public lands managed by the U.S. Forest Service and will involve the Hells Gate Wilderness and Mazatzal Wilderness.

The capture operation is planned for the winter of 2014. The sheep will be captured using net guns operated from a helicopter and the sheep will be released at their capture site.

RECENT CAPTURE DATA:

Bighorn sheep captured during the 2012 capture are showing interesting trends and movement patterns. Additional captures would allow for a broader and better understanding of the Units 22 and 23 sheep movements within the region.



PROJECT LOCATION:

PROJECT LOCATION	LANDOWNER AND/OR SITE NAME	TOWNSHIP	RANGE	SEC.	UTM (meters) / GPS COORDINATES (Easting / Long.)	
					(Northing / Lat.)	(Easting / Long.)
	Capture	T4N	R14-15E			
	Capture	T3N	R14E			
	Capture	T6N	R13-14E			
	Capture	T5N	R13-14E			
	Capture	T10N	R10-12E			
	Capture	T9N	R10-12E			
	Capture	T11N	R7-10E			
	Capture	T10N	R7-10E			
	Capture	T9N	R7-10E			

Figure 1. Southern portion of project area



Figure 2. Northern portion of project area

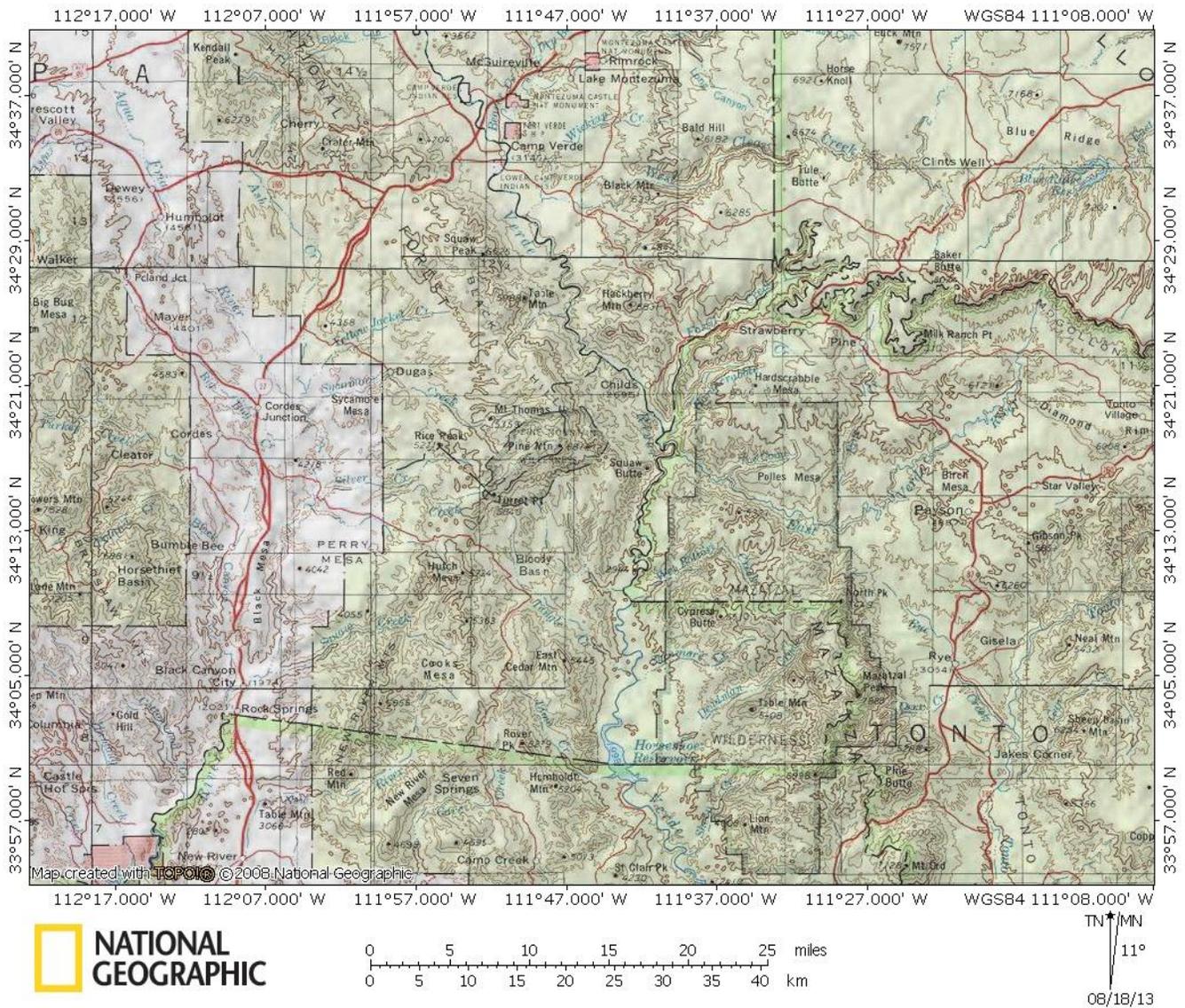


Figure 3. Southern capture areas outlined

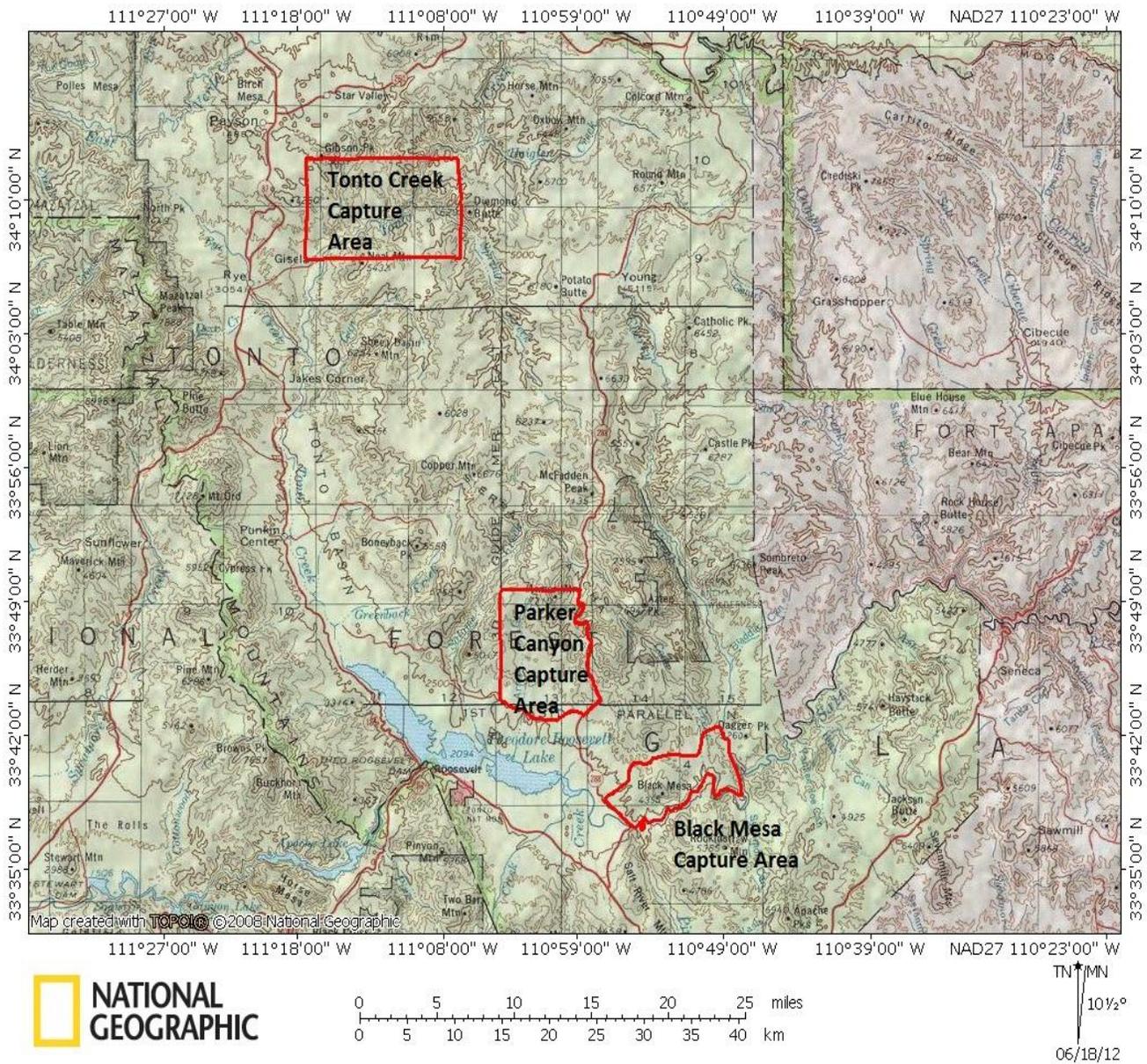
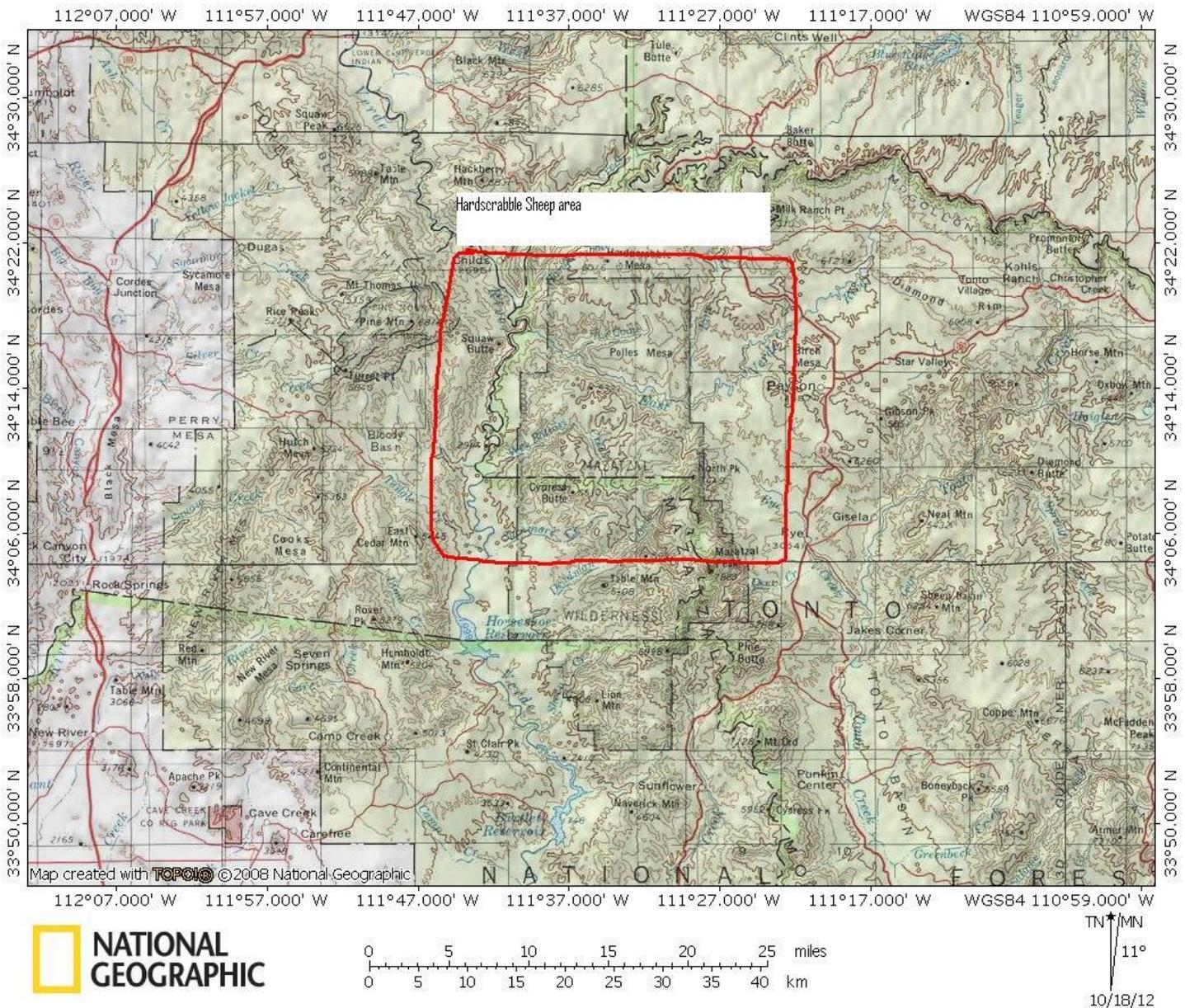


Figure 4. Northern Capture area outlined



LAND OWNERSHIP AT THE PROJECT SITE(S):

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

- United States Forest Service, Tonto Forest

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

YES[] NO[] N/A[x]

HABITAT DESCRIPTION:

Capture areas include Interior Chaparral, Semidesert Grassland and Great Basin Conifer Woodland

ITEMIZED USE OF FUNDS:

A minimum of one helicopter will be needed for a predicted two day capture effort. Ferry time should be minimal due to the approved funding for the capture near Canyon Lake in Unit 22 for sheep being translocated to the Santa Catalina's in November 2014. Estimated ferry time of 4 hours at approximately \$700 per hour, totaling \$2,800. Cost for one helicopter performing the capture work should be approximately \$9,200 each day (8 hours/day at approximately \$1150/hr) for a total of \$18,400. Additionally, up to 8 Lotek Iridium GPS satellite collars will be placed on the released bighorn sheep, costing approximately \$4000 each for a total of \$32,000. Miscellaneous supplies for ear tags, medical supplies, laboratory testing for disease, etc should be approximately \$500.

Total project cost would be approximately \$53,700.

Special Big Game License Tag Funds

This proposal pending approval - \$53,700.

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

To be determined upon approval.

Mogollon Sporting Association has previously obligated up to \$15,000 for the aerial capture time, refurbishment of GPS collars, and monthly satellite airtime for the 2012 project.

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

USFS – land management agency coordination with AGFD to meet project objectives.

ADBSS - assist with funding and implementation.

Mogollon Sporting Association – assist with funding and implementation.

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

YES[] NO[x] N/A[]

PROJECT MONITORING PLAN:

Project monitoring will consist of GPS data upload and monthly mapping evaluation to determine sheep movement trends and locations.

PROJECT MAINTENANCE:

N/A

PROJECT COMPLETION REPORT TO BE FILED BY:

Jarrold McFarlin, AZGFD

WATER DEVELOPMENT PROJECTS (please use the worksheet below):

N/A

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

N/A