

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

Game Branch / HPC Project Number:	13-218
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PROJECT INFORMATION

Project Title: Raymond Wildlife Area Fence Maintenance II and New Corrals

Region and Game Management Unit: Region II; GMU 5B

Local Habitat Partnership Committee (LHPC): • Forage Resource Study Group	Was the project presented to the LHPC? YES[] NO[X]
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Has this project been submitted in previous years? YES[] NO[X]
If Yes, was it funded? YES[] NO[] → **Funded HPC Project #(s):**

Project Type: Fence Maintenance and Arch Survey

Brief Project Summary:
 Add a top ¼” cable and maintain an additional 3 miles of existing Raymond Wildlife Area perimeter fence in addition to the 7 ¾ miles already completed, replace/add new fence stays for stability. Improve and modify another approximate 1.61 miles of the old horse pasture fence to the same standard. Conduct an archeological survey and report from internal Game and Fish archeologist for new fence and corrals.

Big Game Wildlife Species to Benefit: Buffalo

Implementation Schedule (Month/Day/Year): <u>Project Start Date:</u> November 2013 <u>Project End Date:</u> April 2014	Environmental Compliance: NEPA Completed: Yes[] No[] N/A[X] Projected Completion Date: _____ State Historic Preservation Office - Archaeological Clearance: Yes[] No[X] N/A[] Projected Completion Date: _____ Arizona Game and Fish Department EA Checklist: N/A[] Completed under Programmatic EA titled “AGFD Bison Management Activities; Habitat Branch Log #: M10-10062330
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PROJECT FUNDING

Special Big Game License Tag Funds Requested:	\$ 63,253
Cost Share or Matching Funds:	\$ 0
Total Project Costs:	\$ 63,253

PARTICIPANT INFORMATION

Applicant (please print): Carl Lutch	Address: 3500 S. Lake Mary Rd Flagstaff, AZ 86001	E-mail: clutch@azgfd.gov
Telephone: 928-214-1242		Date: October 8, 2013

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

Project has been coordinated with:

Flying M Ranch- Kit Metzger

Arizona State Land Department-Stephen Williams

NEED STATEMENT – PROBLEM ANALYSIS:

Raymond Wildlife Area (RWA) is home to one of two state buffalo herds. Confining buffalo to solely RWA is difficult at best. Buffalo cause problems on surrounding cattle ranches and their private property including fence and gate damage, disruption of cattle operations and consumption of forage by buffalo while on private property and cattle leases. Additionally, the Arizona Game and Fish Department has received a letter of concern from the Arizona State Land Department over trespass buffalo outside of RWA. Approximately, half of the received complaints are of roaming groups of bachelor bulls and the rest concern the main herd.

The Department updated approximately 7 ¾ miles of perimeter fence during the summer of 2013 that the buffalo travel through the majority of time when leaving RWA. These 7 ¾ miles is also where most wintering elk enter and exit RWA. Over the years, elk have deteriorated those sections of fence by breaking the first and sometimes second strands of wire and breaking many fence stays. These sections of fence are “looser” and easier for buffalo to cross and where they were leaving RWA. We need to complete the south boundary fence from where the current work ended in August 2013 and continue to the SE Raymond boundary corner. The same work would continue north for a ¼ mile up the east fence line.

A second part of this proposal is to update the old horse pasture at Raymond to the same buffalo fence standard as the perimeter. This pasture fence line encloses approximately 115 acres and is 1 ¾ miles in length. This project is just to maintain the old fence, approximately one mile in length. Approximately, 600 yards of new pasture fence and a new corral system would be erected as soon as archeological surveys and an EAC are complete. The new pasture fence and corral system are needed to further manage and confine the Raymond buffalo herd to RWA. The third part of this proposal is to conduct this needed archeological survey.

PROJECT OBJECTIVES:

Improve the 4.61 miles of old fence to reduce significantly (or ideally altogether) the number of times the Raymond buffalo herd leaves RWA.

PROJECT DESCRIPTION AND STRATEGIES:

Two sections of fence need maintenance totaling 4.61 miles. We are proposing to add a new ¼” top cable and new fence stays to the existing fence between our south gate and basically to our SE property corner. This section totals 3 miles. Another 1.61 miles of the old horse pasture will be maintained to the same standard.

Some 7ft t-posts and new wood posts need to be added in portions to support the added weight of the cable, but not all sections of these fences need new posts. The top cable will be 4.5 ft to 5 ft in height on the perimeter (depends on the current height) and 5 ft on the pasture. Much of the current fence is already 5 ft or higher. This is higher than “standard” fence specifications for wildlife, but a standard fence is not tall enough to deter buffalo. We believe it is still low enough to allow elk to jump over and the bottom strand is already at 18-20” to allow antelope and young elk/deer passage.

To date the Raymond buffalo herd has not challenged the new fence design.

Other techniques are being employed to calm the Raymond buffalo herd and reduce escapes from RWA. A

maintained fence that will not break during elk crossings is needed to go hand and hand with attempts to keep Raymond buffalo on RWA to the fullest extent possible.

PROJECT LOCATION:

Raymond Wildlife Area, east of Flagstaff

LAND OWNERSHIP AT THE PROJECT SITE(S):

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

- 2 miles of the south boundary fence are owned by the Arizona Game and Fish Commission
- 1 mile (SE corner) owned by Arizona State Land Department Land
- Old horse pasture fence owned again by the Arizona Game and Fish Commission

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:

Mostly pinyon-juniper, but some open grassland habitat is also within the 7 miles of fence that need maintenance.

ITEMIZED USE OF FUNDS:

Special Big Game License Tag Funds

1) **SE Boundary Fence (3 miles)**

TYPE 1 – This 2.25 mile stretch is a 5-wire barbed wire fence with a barbless bottom wire and a loose barbless (6th) top wire. There are numerous old wooden line posts and wooden stays. There are no H-braces and the 7 foot T-posts vary in spacing from 20 to 40 feet or more. The existing barbed wires and barbless wire are in need of repair in several locations.

Proposed Action For Area 1 –

- Roll up the top barbless wire and replace with ¼ inch cable
- Repair all loose and/or broken wires
- Install 10 H-braces (H-braces will be replacing existing wooden posts)
- Replace approximately six wooden line posts
- Replace old wooden posts with 7 ft T-posts to achieve 20 ft spacing between T-posts
- Attach three (3) 5 foot wooden stays between T-posts
- Attach ¼ inch cable to all T-posts with doubled 16 gauge wire

TYPE 2 – This .75 mile stretch consists of five (5) high tensile wires on 10 foot spaced T-posts. There are no wooden stays between posts and no wooden line posts. The existing angle iron H-braces are adequate. A gate is needed, which will require two (2) additional H-braces. The high tensile wire is in need of repair in several places, and will require heavy maintenance in a few locations.

Proposed Action For Area 2 –

- Replace existing T-posts with 8 foot wooden posts every 250-300 feet where soils allow
- Repair all broken and/or loose wires
- Attach two (2) 5 foot wooden stays between each T-post
- Install ¼ inch cable as a top (6th) wire
- Attach cable to all T-posts with doubled 16 gauge wire
- Install one (1) 12 foot gate and two (2) supporting H-braces

- <u>Materials</u>		
- ¼ inch cable	16,000 feet @ \$0.24/ft.	\$ 3,840
- Freight on cable		\$ 400
- Wooden stays (5'x2"x2")	2,700@ \$0.72 ea	\$ 1,900
- 8 foot wooden posts	44 @ \$25 ea	\$ 1,100
- Heavy walled pipe (7' x 2 7/8")	4 @ \$25 ea	\$ 100
- Brace pipe (5' x 2 3/8")	12 @ \$10 ea	\$ 120
- Barbless wire	1 roll @ \$60 ea	\$ 60
- Stay (tie) wire	300 lbs @ \$140/100 lbs	\$ 420
- 7 foot T-posts	200 @ \$6.75 ea	\$ 1,350
- 12 foot gate	1 @ \$180 ea	\$ 180
- Misc. supplies		<u>\$ 800</u>
	Total Materials costs	\$10,270
	Total Labor costs	<u>\$17,800</u>
	Sub-total	\$28,070
	Tax (TPT)	1,140
	TOTAL	\$29,210

2) **Horse Pasture Maintenance (1.61 mile)**

Type 1 (.90 Miles) – 4-wire barbed wire, with bottom wire barbed. The majority of line posts are wooden posts on 20 foot centers. Little line clearing is needed. One existing 12 foot gate is located in this section.

Proposed Action - Type 1 section.

- Replace existing wooden line posts with 7 foot T-posts
- Surface rock permitting, install new wooden line posts every 250 feet
- Replace four (4) existing H-braces and construct four (4) additional H-braces
- Re-stretch four (4) existing barbed wires and add a fifth (5th) wire
- Install a ¼ inch cable as the sixth (6th) (top) wire
- Tie 5' x 2" x 2" wooden stays to all six (6) wires on 42" spacing
- Tie cable to T-posts with a double strand of 16 gauge wire
- Construct one (1) 2 7/8" x 7' pipe in rock ledge
- Rehang existing 12 foot gate

Type 2 (.53 Miles) – 5-wire high tensile, with T-posts 4.5 to 5 feet above ground on 10 foot centers. There are four (4) angle iron H-braces, and all are only 4 ½ feet above ground. There are no wooden line posts or stays in this section of the fence

Proposed Action - Type 2 section.

- Weld an additional 1 foot section to each of the four (4) existing angle iron H-braces
- Install one (1) new angle iron H-brace
- Install one (1) new wooden H-brace
- Replace 2/3rds of existing 6 foot T-posts with 7 foot T-posts
- Clear the fence line of occasional brush and trees (minimal clearing required)
- Install a ¼ inch cable as the sixth (6th) (top) wire
- Tie cable to T-posts with a double strand of 16 gauge wire
- Surface rock permitting, install new wooden line posts every 250 feet

- Tie 5' x 2" x 2" wooden stays to all six (6) wires on 42" spacing

Type 3 (.18 Miles) – 4-wire high tensile, with T-posts on 10 foot centers. The T-posts are only a little more than 4 feet above ground; wooden H-braces are also only 4 feet above ground. There are no wooden line posts or wooden stays in this section of the fence.

Proposed Action - Type 3 section.

- Install two (2) triple H-braces
- Install one (1) single H-brace
- Replace all existing T-posts with 7 foot T-posts
- Install new wooden line posts every 250 feet
- Re-adjust spacing of existing 4th wire
- And a fifth (5th) high tensile wire (furnished by AGFD)
- Install a ¼ inch cable as the sixth (6th) (top) wire
- Tie cable to T-posts with a double strand of 16 gauge wire
- Tie 5' x 2" x 2" wooden stays to all six (6) wires on 42" spacing

Work requires no new ground disturbance as all new post material will be replacing existing posts and using the same post holes.

QUOTE: Heavy Maintenance of existing Horse Pasture fence (Type 1, 2 and 3)

Materials

Barbed wire	4 rolls@ \$64/roll	\$ 256
Barbless wire	2 rolls@ \$60/roll	\$ 120
7' T-posts	355 @ \$6.75 ea	\$ 2,397
Wooden posts	57@\$25 ea	\$ 1,425
5' wooden stays	2420@ \$0.72 ea	\$ 1,743
Stay wire	400 lbs@\$140/100lbs	\$ 560
¼" cable	8610 ft@ \$0.24/ft	\$ 2,067
5' x 2 3/8" pipe	12 @ \$10 ea	\$ 120
7' x 2 7/8" pipe	1 @ \$21 ea	\$ 21
Angle iron H-brace	Furnished	
Gates	Furnished	
Freight on cable		\$ 400
Misc.		<u>\$ 1,000</u>
	Total Materials	\$10,109.00
	LABOR	\$17,800.00
	Sub-total	\$27,909.00
	Tax (TPT)	<u>\$ 1,134.00</u>
	TOTAL	\$29,043.00

- 3) Archeological Survey and Report- New AGFD archeologist \$5,000

The Grand Total for 4.61 miles = \$63,253

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

Kit Metzger of the Flying M Ranch is supportive and shares the southern boundary of RWA.

Stephen Williams of the Arizona State Land Department is supportive. ASLD owns Section 34 along at the SE RWA boundary.

Neither will contribute funding to this project. Retaining buffalo to RWA is the responsibility of the Arizona Game and Fish Department. Current fencing is adequate to contain cattle, but not buffalo.

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

YES NO N/A

Maintaining good relations with surrounding private land ranches is important to retain current public access to these ranches. Also, improving the buffalo management on RWA will allow us to reopen RWA to antelope and elk hunters in 2014.

PROJECT MONITORING PLAN:

No specific monitoring plan, but RWA perimeter fence is monitored weekly for damage. When damage is detected, repairs are made at that time.

PROJECT MAINTENANCE:

RWA Manager- currently Steve Iker

PROJECT COMPLETION REPORT TO BE FILED BY:

Carl Lutch

