

UPPER EAGLE CREEK RESTORATION

on

EAST EAGLE ALLOTMENT

of

FOUR DRAG RANCH

Submitted to

ARIZONA WATER PROTECTION FUND COMMISSION
500 North Third Street
Phoenix, AZ 85004

Submitted by

Mr. Kevin McCormack
Four Drag Ranch



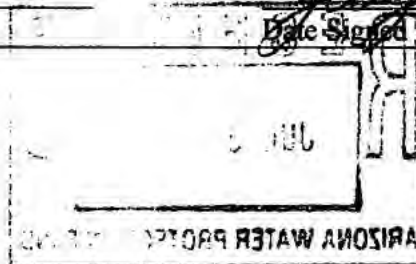
July 31, 2000

Cover Page: Application Information

- 1. Title of Project:** Upper Eagle Creek Restoration on East Eagle Allotment of Four Drag Ranch
-
- 2. Type of Project:**
____ Water Acquisition
☒ Capital Project or Other
____ Water Conservation
____ Research
- 3. Stream Type**
☒ Perennial
____ Intermittent
____ Ephemeral
- 4. Date Submitted** 31 July 2000
- 5. a. Date Attended an AWPf Workshop** 5/25/00
- 5. b. Date Attended an AWPf Consultation** _____
- 6. Applicant Name** Kevin McCormack
-
- 7. Applicant Address (city, county, zip code)**
- Kevin McCormack
Four Drag Ranch
[Redacted]
[Redacted]
- [Redacted] Phoenix
[Redacted] Tucson
[Redacted] Prescott
[Redacted] Pinal
[Redacted] Santa Cruz
-
- 9. Contact Person, Title:** Kevin McCormack, Owner of Four Drag Ranch
Phone Number: [Redacted]
Fax Number: 623-516-9839
- 10. Type of Application:**
(X) New () Continuation
- 11. Project Start date:** 1 April 2001
Project End date: 31 March 2003
- 12. Funding Obtained and Secured:**
- | Agency / Organization: | Amount: |
|------------------------|----------|
| Forest Service | \$29,220 |
| _____ | _____ |
| _____ | _____ |
| Total (copy to 13 (b)) | \$29,220 |
- 13. Estimated Funding:**
- | | |
|----------------------|-----------|
| (a) AWPf Request: | \$66,330 |
| (b) Monies Secured: | \$29,220 |
| (c) Applicant Match: | \$36,150 |
| (d) Total: | \$131,700 |
- 14. Tax ID Number:** [Redacted] Personal Identifying Information
- 15. The undersigned hereby offers and agrees to perform in compliance with all terms, conditions, specifications and scope in the application. Signature certifies understanding and compliance with the attached application. Signature certifies that all information provided by the applicant is true and accurate. The Arizona Water Protection Fund Commission may approve grant award agreements with modifications to scope items, methodology, schedule, final products, and/or budget.**

Kevin McCormack
Typed Name of Authorized Representative
Kevin McCormack
Signature

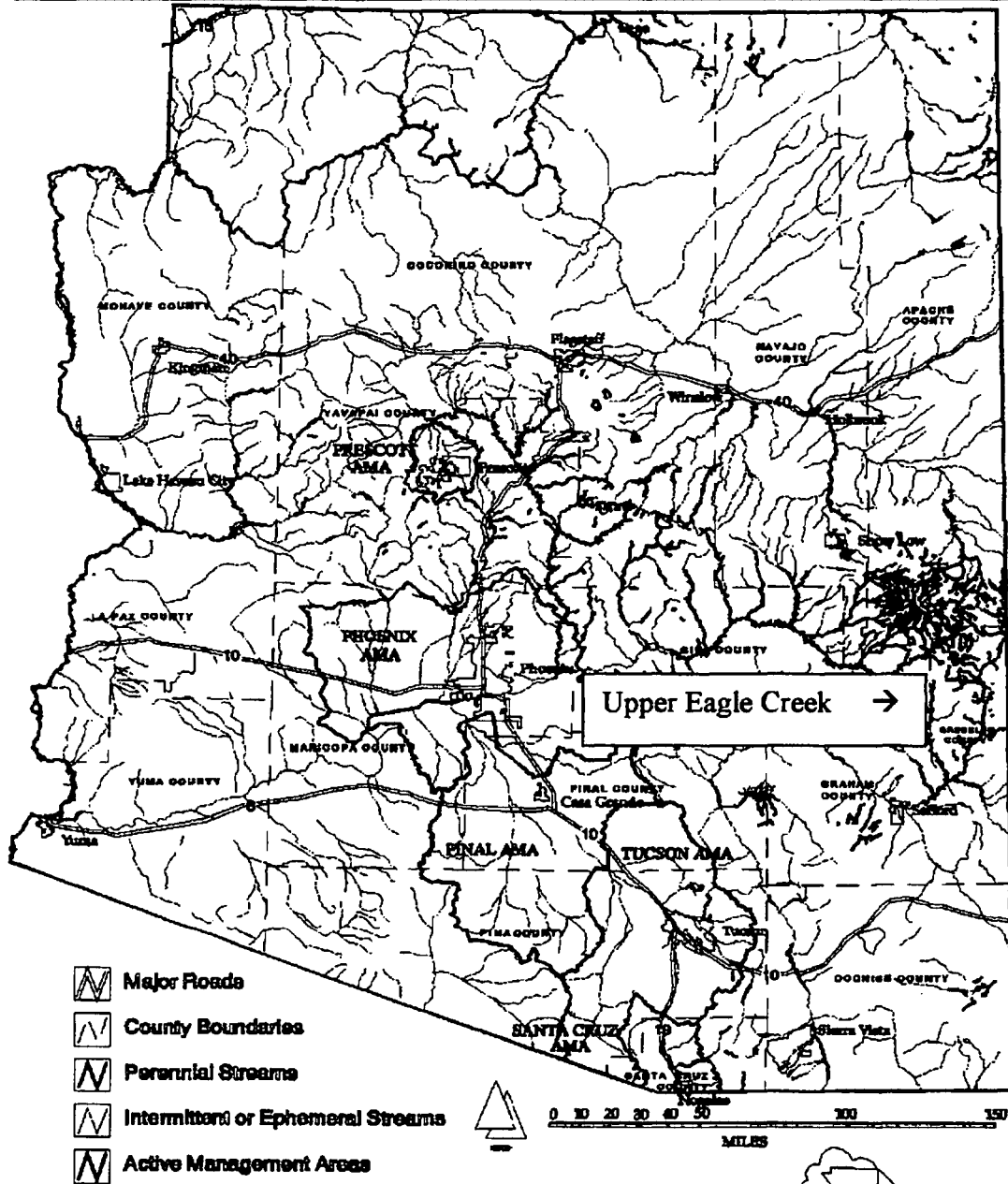
Permittee/owner Personal Identifying Information
Title and Telephone Number
July 31st 2000
Date Signed



Arizona Map

Arizona Map Instructions

Indicate on the map the approximate location of your project. Ensure that your markings are clearly visible on all five copies submitted.



PROJECT NAME: Upper Eagle Creek Restoration



Summary Page

Summary: The goal of the Upper Eagle Creek Restoration Project is to construct range improvements that will protect and improve watershed and riparian conditions, and result in the restoration of about 475 acres of riparian corridor, and 10.5 miles of perennial aquatic habitat critical to the survival of the threatened spikedace and loach minnow.

Only about 60% of the upper watershed of Eagle Creek presently is in satisfactory condition, and range condition presently is rated "fair." This upland habitat condition, and the presence of livestock freely utilizing portions of the riparian corridors, have reduced the aquatic habitat of Eagle Creek and its upper tributaries, and impacted the local survival of the spikedace and loach minnow.

Historic livestock use of the upper Eagle Creek watershed has degraded the watershed and stream channel condition. Current livestock use is more managed, and cooperation between the permittee and the Forest Service has improved the condition in recent years. However, several factors still pose significant problems: (1) the absence of permanent upland waters in Steer Pasture limits use of this upland area as an alternative to grazing in the riparian, and hinders effective pasture rotation; (2) the lack of an adequate San Carlos Reservation boundary fence allows stray cattle to occur throughout the upper watershed, especially along the riparian corridors; and (3) the incomplete fencing of East Eagle and Robinson creeks allows stray and permittee cattle access to these riparian corridors.

The proposed project will significantly assist efforts to improve about 475 acres of riparian corridor, including about 10.5 miles of aquatic habitat in the upper Eagle Creek Watershed. The permittee and Forest Service have been working to improve both watershed and riparian conditions of East Eagle Allotment. Three main elements of their range and livestock management are addressed in this grant application: Steer Pasture Water Development, East Eagle-Robinson Creeks Riparian Fencing, and San Carlos-East Eagle Boundary Fence Re-construction.

Steer Pasture Water Development will provide a permanent water source centrally located within the pasture. It will aid in livestock distribution, ensuring that this unit can be more effectively used in pasture rotations, and also provide more accessible water for wild ungulates year round. It involves construction of about 2 miles of pipeline, and installation of a solar pump and panels, storage tank and trough.

East Eagle-Robinson Creeks Riparian Fencing has been a joint project since 1995 between the permittee and the Forest Service. They have shared the cost and completed about 8 miles of new or re-constructed fence that has aided in isolating the west side of this stream segment to achieve riparian recovery objectives. The proposed east side fencing will complete the corridor and compliment improvement work accomplished to date, isolating about 75 acres of riparian habitat, including 4 miles of aquatic habitat that has been recently designated as critical habitat for both loach minnow and spikedace. This project involves construction of about 5.7 miles of fence.

San Carlos-East Eagle Boundary Fence Re-construction has been facilitated by a draft Memorandum of Understanding (Appendix B) between the Forest Service and the San Carlos Apache Tribe for future fence maintenance and re-construction of critical segments of the mutual boundary fence. Dialog with tribal stockmen and Grazing Board members, as well as the San Carlos BIA Agency, has been very productive. About 90% of the fencing along this 33-mile surveyed boundary is over 50 years old, and in need of complete re-construction. Several miles of this fenceline is essential to directly preventing stray cattle from entering about 400 acres of riparian corridor, including about 6.5 miles of aquatic habitat critical to the survival of the spikedace and loach minnow. This problem is especially severe during very dry years, when stray cattle use-levels are in excess of 70% on both woody obligates and herbaceous plants in three wetland/riparian corridors of Eagle Creek, and Wet and Middle Prong Creeks. This project involves re-construction of about 7.5 miles of boundary fence.

The proposed project improvements will be maintained for at least 20 years, and monitoring watershed and riparian conditions will be an ongoing component of the allotment management planning process of the U.S. Forest Service.

This project will compliment an AWP grant received by the Holders, just downstream from the project proposed herein.

Project Schematic Drawing

**Figure 1. Steer Pasture Water Development, and East Eagle-Robinson Exclosure Fence
Figures 2a-2d. San Carlos Apache Tribe Boundary Fence Re-construction**

East Eagle Watershed Enhancement Projects

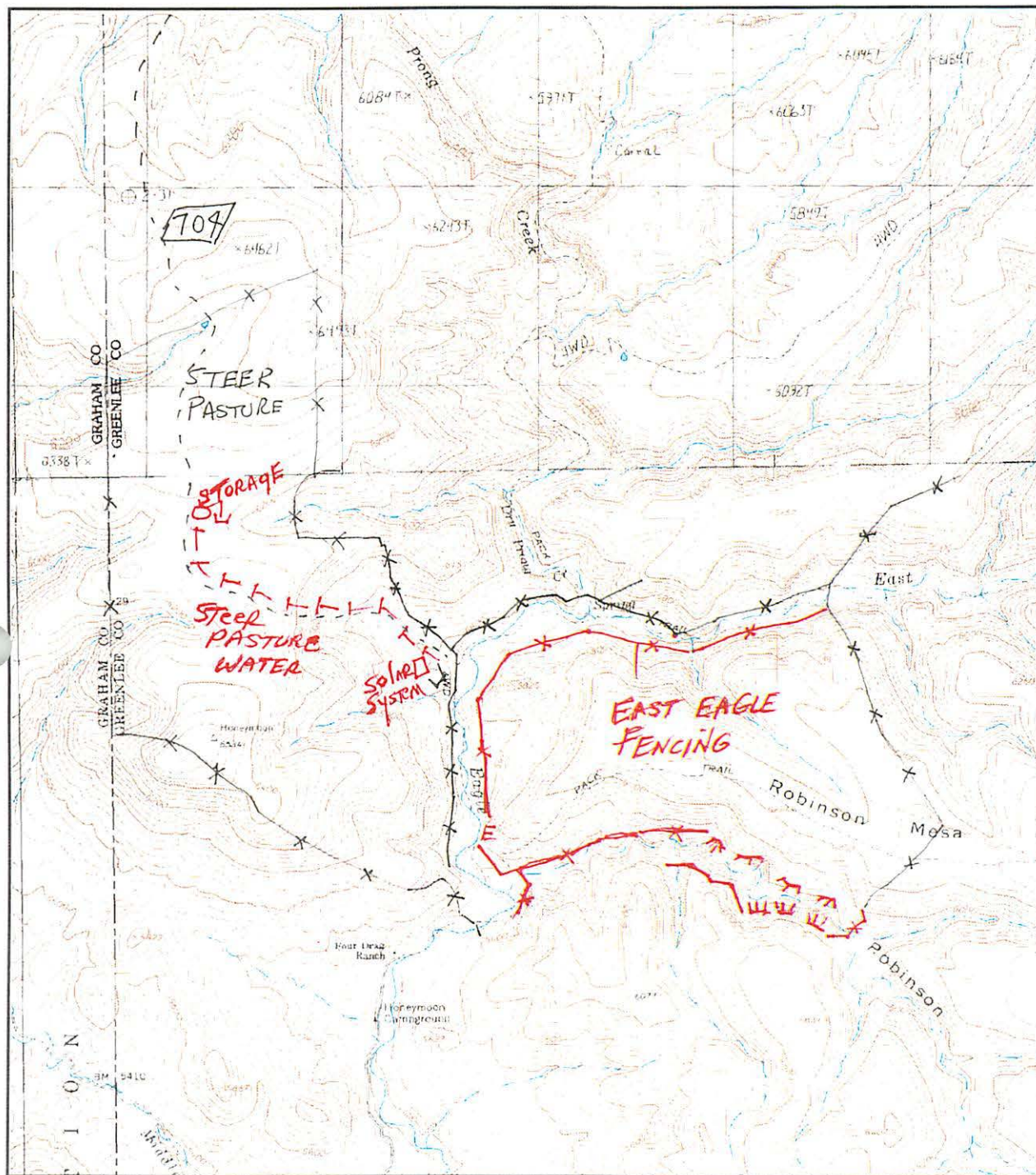


Figure 1.

East Eagle-Robinson Exclosure

APACHE-SITGREAVES N.F.

CLIFTON R.D.

7/2000

1:31845



0.5 0 0.5 Miles





6/2000



Forest Service/San Carlos Boundary

2

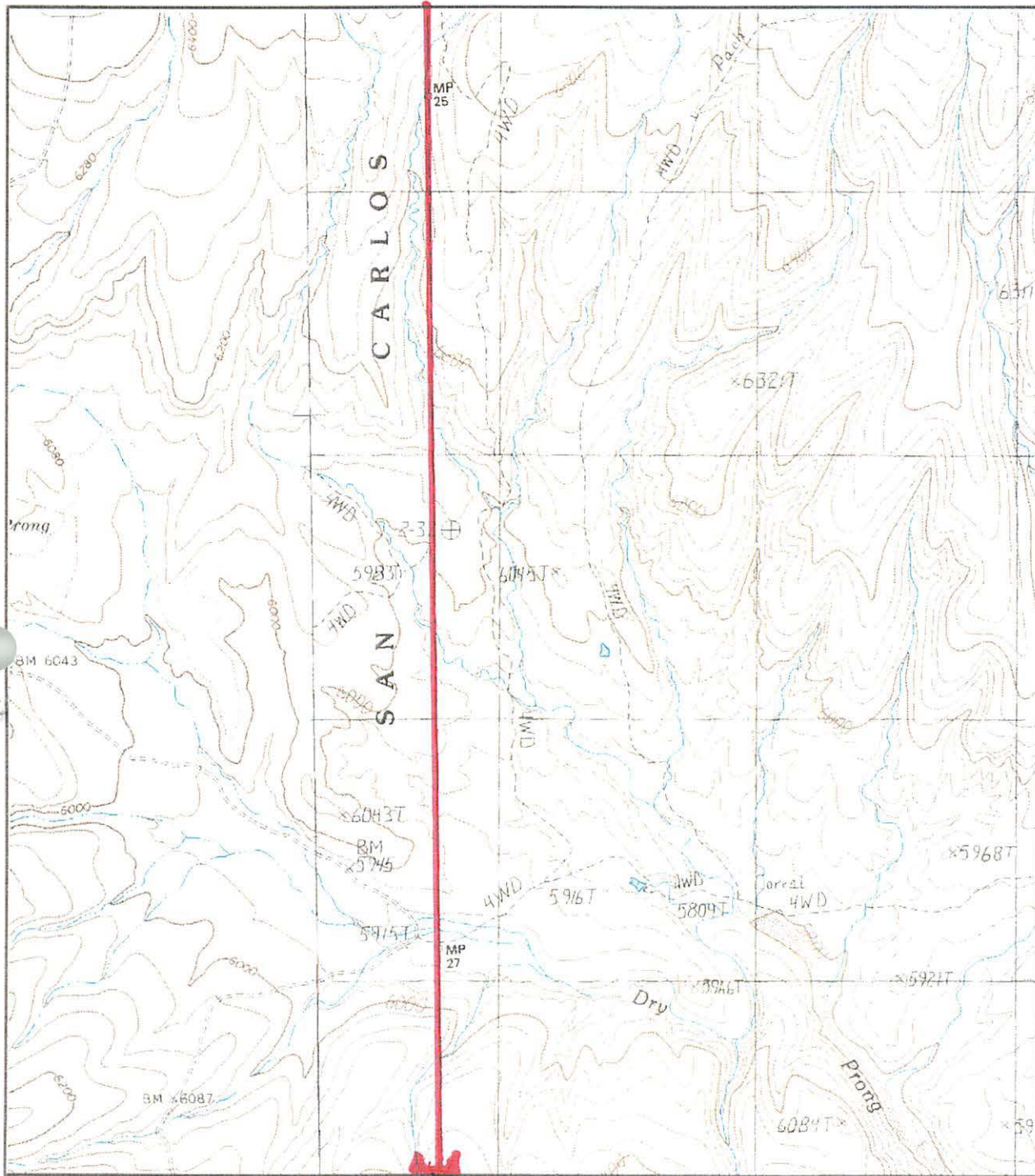


Figure 2b. (3.8 mi.) APACHE-SITGREAVES N.F.

Boundary Re-construction

CLIFTON R.D.

6/2000

1:24000



0.5 0 0.5 Miles



Forest Service/San Carlos Boundary

3

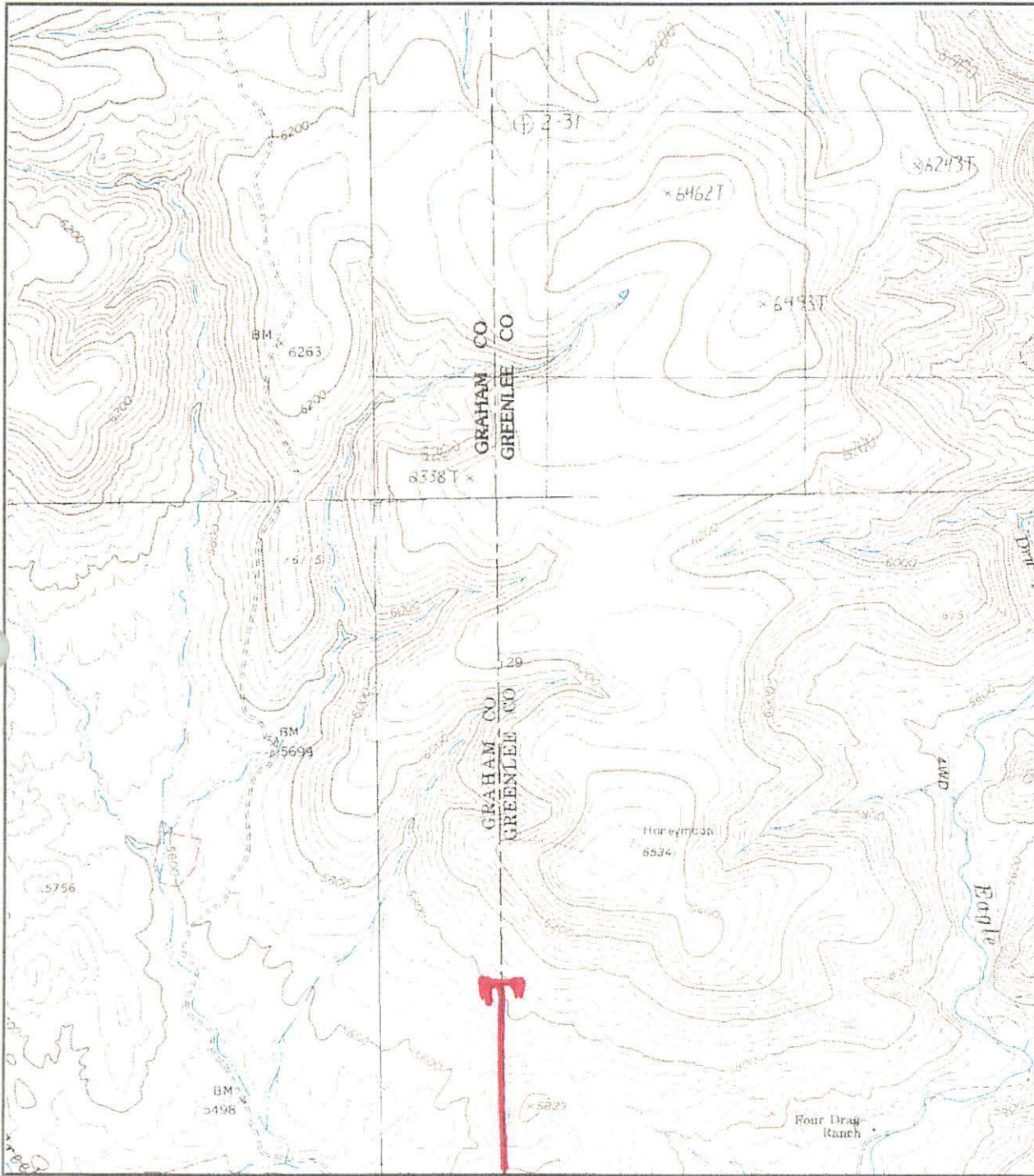


Figure 2c. (0.6 mi.)

APACHE-SITGREAVES N.F.
CLIFTON R.D.

Boundary Re-construction

6/2000

1:24000



Forest Service/San Carlos Boundary

4

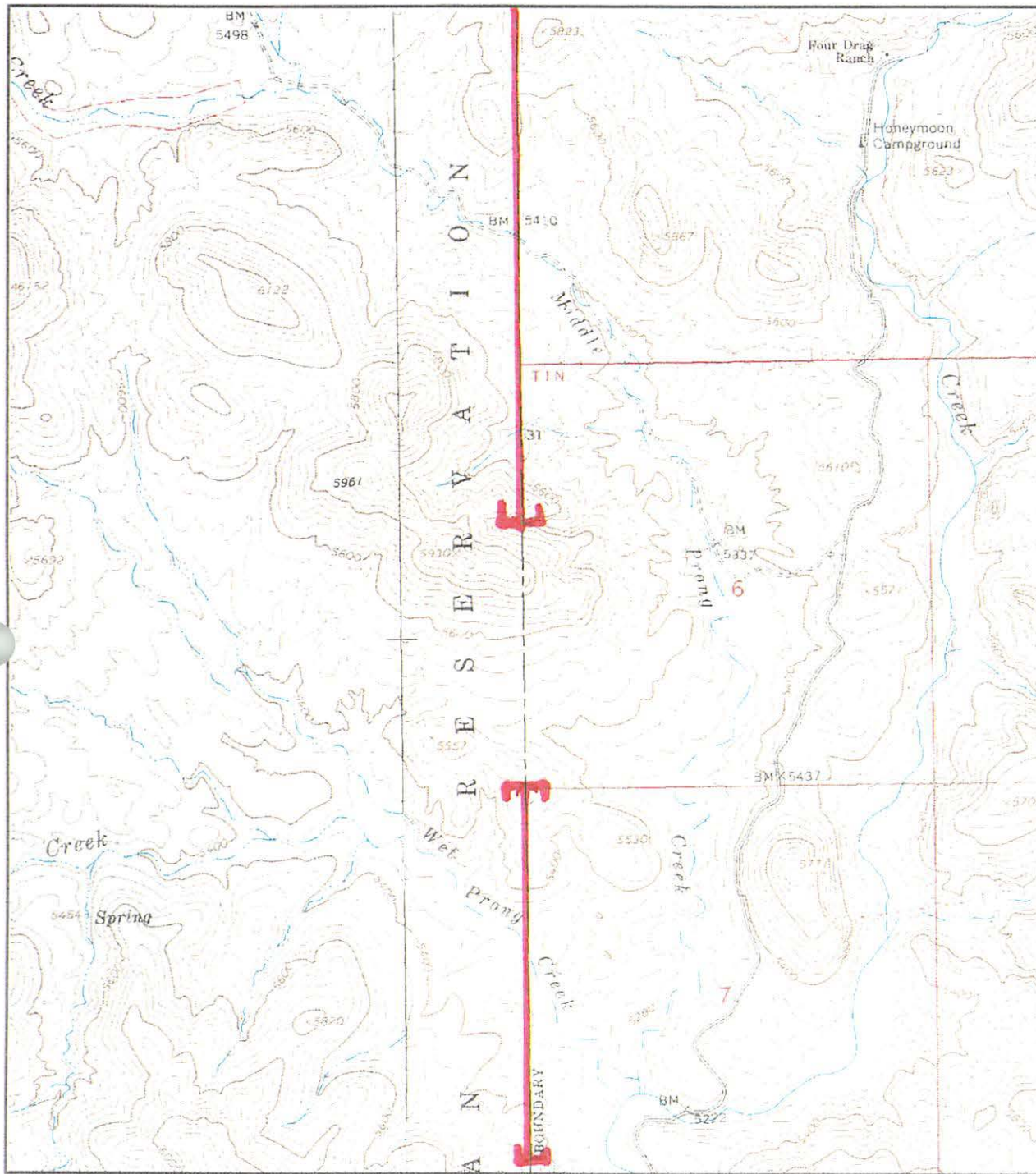


Figure 2d. (2.8 mi.) APACHE-SITGREAVES N.F.
CLIFTON R.D.

Boundary Re-construction

6/2000

1:24000



0.5 0 0.5 Miles



Project Site Photographs

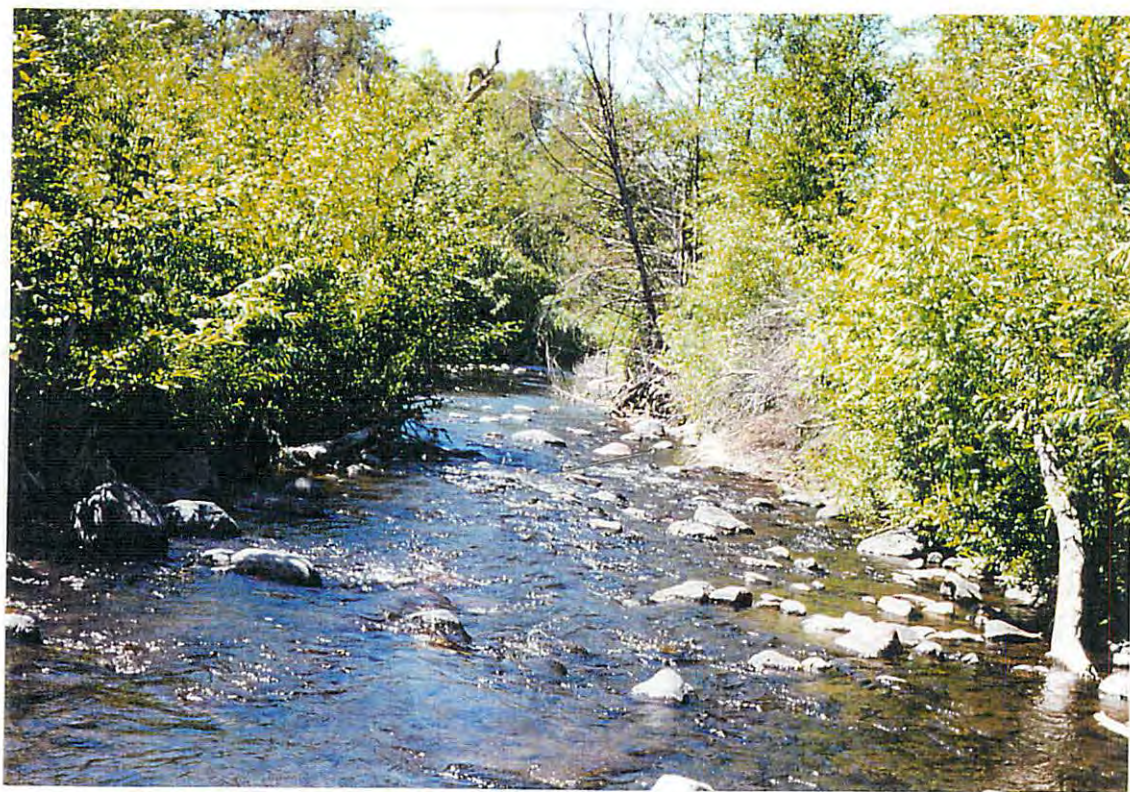
Photos 1.a. and 1.b. – Target of watershed and riparian management activities on project: Eagle Creek on the East Eagle Allotment. Note young willows that have resulted from restoration work to date.

Photos 2.a. and 2.b. – Site of present water trough in Steer Pasture about 100 yards from Eagle Creek.

Photos 3.a. and 3.b. – Steer Pasture uplands. Note heavy livestock use of pasture due to lack of water distribution.



l. a.



l. b.



2. a.



2. b.



3.a.



3b.

Project Location & Environmental Contaminant Information

LOCATION INFORMATION

1. County: Greenlee 2. Section: multiple 3. Township: 2N 4. Range: 28E
5. Legislative District: 6th
6. Stream Name: Eagle Creek & tributaries of East Eagle Creek, Robinson Creek, & Mid Prong & Wet Prong Creeks.
7. Land ownership of project area: U.S. Forest Service
8. Current land use of project area: Livestock Grazing
9. Length of stream through project area: About 15 miles including tributaries
10. Size of project area (in acres): Area of Steer Pasture, boundary fence, and affected riparian area is about 8,000 acres.
11. Area Benefited by Project Implementation: Aquatic and upland habitats of the upper Eagle Creek watershed

Miles of Stream Benefited 10.5 miles

Acres of Riparian Habitat (circle one) Enhanced, Maintained, Restored, Created: 475 acres

12. Provide directions to the project site from the nearest town. List any special access requirements.

From Clifton go north on Highway 180 about 20 miles to Honeymoon turnoff; go on Honeymoon Road about 20 miles to end of road.

ENVIRONMENTAL CONTAMINANT LOCATION INFORMATION

For purposes of this manual, environmental contaminants are substances which pose risk of harm to human health or the environment and include hazardous substances, hazardous wastes, petroleum products or Environmental Protection Agency priority toxic pollutants (defined by CERCLA 42 USC §9601, RCRA 42 USC §6903 and the Environmental Protection Agency). Environmental contaminants do not include wastewater from a wastewater facility permitted by a local, state, or federal authority having jurisdiction over wastewater.

1. Does your project site contain known environmental contaminants? Yes No X If yes, please identify the contaminant(s) and enclose data about the location and levels of contaminants.
2. Are there known environmental contaminants in the project vicinity? Yes No X If yes, please identify the contaminant(s) and enclose data about the location and levels of contaminants.
3. Are you asking for Arizona Water Protection Fund monies to identify whether or not environmental contaminants are present? Yes No X

Evidence of Control and Tenure

East Eagle Allotment permit on following page

TERM GRAZING PERMIT — PARTS 1 AND 2 (Reference FSM 2230)

PERMITTEE NUMBER 03-020PERMIT NUMBER 03-020

PART I

Kevin R. McCormack

(Name of Permittee)

(Post Office address including Zip Code)

hereinafter called the permittee, is hereby authorized to graze livestock owned by the permittee upon designated lands administered by the Forest Service

within the Apache-Sitgreaves

(X appropriate box)

☒ National Forest☐ National Grassland

under the following terms and conditions:

1. Description of range. The livestock shall be grazed only upon the area described as follows: described on attached page and/or delineated on the attached map dated 1/1996, which is part of this permit (strike out item or items not applicable).

This area includes the East Eagle Allotment on the Clifton Ranger District.

I have reviewed the provisions of this permit including the Allotment Management Plan with the Permittee.

James L. Subles
Signature of Forest Officer

1/19/96
Date

2. The number, kind, and class of livestock, period of use, and grazing allotment on which the livestock are permitted to graze are as follows, unless modified by the Forest Service in the Bill for Collection:

LIVESTOCK			PERIOD OF USE		GRAZING ALLOTMENT
NUMBER	KIND	CLASS	FROM	TO	
410	Cattle	C/C	3/1	2/28	East Eagle
10	Horses	Mature	3/1	2/28	East Eagle

3. It is fully understood and agreed that this permit may be suspended or cancelled, in whole or in part, after written notice, for failure to comply with any of the terms and conditions specified in Parts 1, 2, and 3 hereof, or any of the regulations of the Secretary of Agriculture on which this permit is based, or the instructions of Forest officers issued thereunder, or for knowingly and willfully making a false statement or representation in the permittee's grazing application, and amendments thereto; or for conviction for failure to comply with Federal laws or regulations or State and local laws relating to livestock control and to protection of air, water, soil and vegetation, fish and wildlife, and other environmental values when exercising the grazing use authorized by the permit. This permit can also be cancelled, in whole or in part, or otherwise modified, at any time during the term to conform with needed changes brought about by law, regulation, Executive order, allotment management plans, land management planning, numbers permitted or seasons of use necessary because of resource conditions, or the lands described otherwise being unavailable for grazing. Any suspension or cancellation action may be appealed pursuant to 36 CFR 211.18.

4. This permit supersedes permit issued 6/3/92 to Pete L. Gill and Carolyn Roscoe-Gill

I HAVE REVIEWED AND ACCEPT THE TERMS OF THIS PERMIT

SIGNATURE OF PERMITTEE OR HIS AUTHORIZED AGENT

Kevin R. McCormack

DATE

1-17-96

SIGNATURE OF FOREST OFFICER

NAME (Print)

Frank A. Hayes

TITLE

District Ranger

DATE

1/17/96

Introduction

Background: Upper Eagle Creek Watershed entails the East Eagle Allotment of the U.S. Forest Service, which currently is leased to the Four Drag Ranch. This allotment is 37,259 acres in size, and includes 21% of the entire watershed of Eagle Creek. At an elevation of between about 5,000-8,500 feet, it sustains mainly the vegetative communities of Great Basin conifer woodland, and montane conifer forest. Eagle Creek, with its major headwater tributaries including Dry Prong, Middle Prong, and East Eagle Creek, is an 83-mile tributary of the Gila River. Livestock grazing has been the primary use of the Eagle Creek watershed for the past 150 years. Substantial alteration of watershed soil, vegetation and hydrologic characteristics has occurred. Changes of stream flow and hydrologic cycles have caused reduction in the presence of large riparian trees and loss of recruitment along Eagle Creek overall. However, on the East Eagle Allotment, cooperation with the permittee in the area of livestock management has increased the presence of several age classes of cottonwoods and willows, and the riparian habitat is generally considered to be in good condition. The absence of aquatic habitat diversity still is problematic, however, especially for native fish.

As a result of the April 1997 suit by Forest Guardians of the U.S. Forest Service for lack of compliance with the Endangered Species Act in conducting livestock grazing on National Forest Lands, East Eagle Allotment was reviewed for presence of and impacts to endangered species. Both Forest Service and U.S. Fish & Wildlife Service biologists concluded that livestock grazing on East Eagle Allotment is "likely to adversely affect" the continued existence of the spinedace and loach minnow, both listed as threatened. The resultant Biological Opinion that the U.S. Fish & Wildlife Service issued to the Forest Service examined ongoing grazing activities on East Eagle Allotment. This opinion determined that "incidental take" of these fish would occur if livestock grazing continued on the allotment, but offered three "reasonable and prudent measures" that would minimize take (Appendix A). These actions involved improving the watershed condition with range improvement construction and maintenance, reducing livestock presence in stream courses by fencing stream corridors and trailing cattle through riparian areas, and monitoring grazing activities and impacts.

The permittee and Forest Service have been working to improve both watershed and riparian condition of East Eagle Allotment. Three main elements of their range and livestock management are addressed in this grant application: Steer Pasture Water Development, East Eagle-Robinson Creeks Riparian Fencing, and San Carlos-East Eagle Boundary Fence Re-construction.

Steer Pasture Water Development (Fig. 1): Currently, permanent water exists only within this important holding and gathering trap where water can be pumped out of Eagle creek to a small trough located at a set of corrals, directly adjacent to Eagle Creek. Other seasonal waters are available within the pasture from earthen reservoirs, but they do not always provide permanent water sources when there is critical need for pasture use, and concentrations of livestock may occur at the corral facility near Eagle Creek. Providing a permanent water source centrally located within the pasture will aid in livestock distribution, ensure that this unit can be more effectively used in pasture rotations, and also provide more accessible water for wild ungulates year round.

Eagle-Robinson Creeks Riparian Fencing (Fig. 1) is one of the last construction phases to be implemented to effectively isolate that portion of Eagle creek from the confluence of the Dry Prong where the live riparian/stream system flows to the confluence with Robinson Canyon. Since 1995 the Forest Service and the permittee have shared the cost and completed about 8 miles of new or re-constructed fence that has aided in isolating the west side of this stream segment to achieve riparian recovery objectives following the 1995 flooding, as well as to meet terms and conditions later specified in the Biological Opinion issued by the U.S. Fish and Wildlife Service for continuing ongoing grazing on the East Eagle allotment. The proposed east side fencing will complete the corridor and compliment improvement work accomplished to date, protecting about 75 acres of riparian corridor, including 4 miles of aquatic habitat that has been recently designated as critical habitat for both loach minnow and spinedace. This corridor also offers important habitat for a variety of amphibians and reptiles, including two species of leopard frogs, and likely the narrow-headed garter snake. Black-Hawks have been observed nesting within this corridor. The corridor will encompass about 60 acres within the Eagle Creek system, and about 15 acres of live riparian within the Robinson Creek drainage. Creation of the corridor will not eliminate existing uses which include travel way access to both the Sawmill and Saunders cabins, and the recently reopened ATV access to the Malay Tank area, as well as livestock gathering to and from the allotment to the headquarters. The corridor currently has stringent guidelines on periods of time when livestock may be moved through it to and from the ranch, as well as a seasonal road closure to enhance spring and early summer riparian recovery and growth.

San Carlos-East Eagle Boundary Fence Re-construction (Figs. 2a-2d): Presently, the U.S. Forest Service has facilitated meetings between Tribal Grazing associations and the Tribal Council to develop a Memorandum of Understanding (Appendix B) for future fence maintenance and re-construction of critical segments of the mutual boundary fence. Dialog with tribal stockmen and Grazing Board members, as well as the San Carlos BIA Agency, has been very productive. About 90% of the fencing along this 33-mile surveyed boundary is over 50 years old, and in need of complete re-construction. Several miles of this fenceline is essential to directly preventing stray cattle from entering about 400 acres of riparian habitat, including about 6.5 miles of aquatic habitat critical to the survival of the spinedace and loach minnow. This problem is especially severe during very dry years, when stray cattle use-levels are in excess of 70% on both woody obligates and herbaceous plants in three wetland/riparian corridors of Eagle Creek, and Wet and Middle Prong Creeks. Initial plans with the San Carlos Apache Tribe are to develop a mutual MOU, and re-construct critical segments of the boundary fence to prevent damage to critical riparian and stream resources, and loss of Tribal livestock property. This component of the proposal captures those critical segments associated with management of the East Eagle Allotment.

This project will compliment Holder's Arizona Water Protection Fund project downstream from the Four Drag Ranch

Statement of problem: Only about 60% of the upper watershed of Eagle Creek presently is in satisfactory condition, and range condition presently is rated "fair." This upland habitat condition, and the presence of livestock freely utilizing portions of the riparian corridors, have reduced the aquatic habitat of Eagle Creek and its upper tributaries, and impacted the local survival of the spikedace and loach minnow.

Statement of causes of the problem: Historic livestock use of the upper Eagle Creek watershed has degraded the watershed and stream channel condition. Current livestock use is more managed, and cooperation between the permittee and the Forest Service has improved the condition in recent years. However, several factors still pose significant problems: (1) the absence of permanent upland waters in Steer Pasture limits use of this upland area as an alternative to grazing in the riparian, and hinders effective pasture rotation; (2) the lack of an adequate San Carlos Reservation boundary fence allows stray cattle to occur throughout the upper watershed, especially along the riparian corridors; and (3) the incomplete fencing of East Eagle and Robinson creeks allows stray and permittee cattle access to these riparian corridors.

Statement of project-related remedies or solutions: The proposed project will significantly assist efforts to improve about 475 acres of riparian corridor, including about 10.5 miles of aquatic habitat in the upper Eagle Creek Watershed. Construction of the pipeline and tank in Steer Pasture will aid in livestock distribution and ensure that this pasture can be more effectively used in pasture rotations. The proposed fencing of East Eagle and Robinson creeks will complete the corridor fencing project initiated by the permittee and the Forest Service, protecting about 75 acres of riparian corridor, including about 4 miles of aquatic habitat that is critical to survival of the spikedace and loach minnow. The proposed re-construction of the boundary fence between San Carlos Apache Tribe lands and National Forest lands entailing the East Eagle Allotment will prevent stray Tribal cattle from entering about 400 acres of riparian corridor, including about 6.5 miles of aquatic habitat. All the actions related to the proposed project will improve the aquatic habitat of upper Eagle Creek and its tributaries, which will aid in the recovery of the spikedace and loach minnow.

Statement of project years of benefit: The improvements will be maintained for at least 20 years, and monitoring watershed and riparian condition will be an ongoing component of the allotment management planning process of the U.S. Forest Service.

Scope of Work: Goals & Objectives

Goal: The goal of the Upper Eagle Creek Restoration Project is to construct range improvements that will protect and improve watershed and riparian conditions, and result in the restoration of about 475 acres of riparian corridor, and 10.5 miles of perennial aquatic habitat critical to the survival of the threatened spikedace and loach minnow.

Objective #1: To implement all the range improvements on the East Eagle Allotment as delineated by the U.S. Fish & Wildlife Service's Biological Opinion on Ongoing Grazing Activities on Allotments, which was issued to the U.S. Forest Service in response to impacts on threatened spikedace and loach minnow from livestock grazing on the East Eagle Allotment.

Objective #2: To develop and implement a monitoring strategy through on-site data collection that documents the current condition and project related improvements of upland and riparian habitat on the East Eagle Allotment, using guidelines delineated by the U.S. Fish & Wildlife Service's "Reasonable and Prudent Measures," which are presented in the Biological Opinion on Ongoing Grazing Activities on Allotments (Appendix A).

Objective #3: To prepare a public presentation that provides for information transfer of project need, goals and objectives.

Objective #4: To maintain the project improvements for 20 years.

Scope of Work: Task Descriptions

Task #1: Permits, Clearances, and Authorizations: Obtain all permits, authorizations and clearances necessary to conduct the work described in this scope of work, including but not limited to cultural resource clearance (SHPO), etc.

Deliverable Description: Copy of SHPO clearance, completed MOU with San Carlos Apache Tribe, etc.

Deliverable Due Date: 31 May 2001

AWPF Reimbursable Cost: \$500

Task #2: Monitoring: Prepare and submit monitoring plans consistent with appropriate ADWR outlines in Appendix B of Grant Application Manual, and Appendix A of this proposal; and perform monitoring

Deliverable Description: Monitoring plan, and annual monitoring reports

Deliverable Due Date: July 31, 2001 (plan); March 31 2002 (annual report), 31 March 2003 (final report)

AWPF Reimbursable Cost: \$600

Task #3: Materials and services procurement: Order materials and procure contracts for labor and equipment services

Deliverable Description: Material and services bills

Deliverable Due Date: 30 June 2001

AWPF Reimbursable Cost: \$300

Task #4: Construct Steer Pasture Water Development: Install pipelines (about 1,000 feet of 1.25-inch steel pipe, 4,000 feet of 1.25-inch DR7 PE 267 DPSI pipe, 5,500 feet of 1.25-inch Dr9 PE 200), storage tank (5,000-gal. Fiberglass), trough (fiberglass), and solar pump and panels

Deliverable Description: Photos of completed improvement, invoices for materials and services

Deliverable Due Date: 30 June 2002

AWPF Reimbursable Cost: \$13,310

Task #5: East Eagle-Robinson Creeks riparian fencing: Construct about 5.7 miles of enclosure fence along East Eagle-Robinson Creeks.

Deliverable Description: Photos of completed improvements, invoices for materials and services

Deliverable Due Date: 30 September 2002

AWPF Reimbursable Cost: \$24,220

Task #6: San Carlos-East Eagle Boundary Fence Reconstruction: Reconstruct about 7.5 miles of boundary fence

Deliverable Description: Photos of completed improvements, invoices for materials and services

Deliverable Due Date: 31 December 2002

AWPF Reimbursable Cost: \$24,000

Task #7: Attend AWPf Information Transfer Meeting: Attend an AWPf Information Transfer Meeting and participate in either an oral presentation or a poster presentation about this project.

Deliverable description: Photograph of poster to be used at the AWPf Information Transfer Meeting with an abstract, or a copy of paper to be presented.

Deliverable due date: To be determined

AWPF Fixed Cost: \$500

Task #8: Final Report: Prepare and submit a comprehensive final report that includes a summary of all methodologies used, outcome of all tasks, analysis of all project and monitoring data, suggestions for any further changes needed in the project, and an evaluation of the projects success measured against the objectives.

Deliverable description: Final project report will summarize all methodologies used, outcome of all tasks, summarize and analyze project data & monitoring data, suggest any further changes needed in the project and evaluate project success measured against the objective.

Deliverable due date: 31 March 2002

AWPF Reimbursable Cost: \$2,900

Scope of Work: Sampling, Revegetation and Monitoring Plans

Goal of Monitoring:

To attain substantial pre-treatment data for monitoring, and to ensure that monitoring will continue in a consistent manner after the project is completed so the impacts of livestock grazing on the aquatic habitat of the spokedace and loach minnow can be detected and remedied. **Objectives of Monitoring:**

- 1) To determine baseline condition of upland and aquatic habitats prior to project implementation.
- 2) To determine the changes in upland vegetation characteristics (species composition, density and litter) and aquatic habitat of upper Eagle Creek.
- 3) To develop a long-term monitoring protocol that assesses the impacts of livestock grazing on the aquatic habitat of the spokedace and loach minnow in the upper watershed of Eagle Creek

Methodology:

The U.S. Forest Service, in conjunction with the U.S. Fish & Wildlife Service, and in response to the law suit by Forest Guardians on impacts of livestock grazing on spokedace and loach minnow, is developing baseline data and a monitoring strategy to document condition of aquatic habitat for the threatened spokedace and loach minnow. The elements of this monitoring plan are delineated in the "Reasonable and Prudent Measures" of the Forest Service Ongoing Grazing Biological Opinion (Appendix A).

Implementation monitoring will consist of simple photo documentary before and after project construction. Effects monitoring in the riparian habitat will incorporate compliance with the Forest Service Ongoing Grazing Biological Opinion, which include photo points, Thalweg-watershed link cross sectional transects, and forage use within associated pastures. The uplands of Steer Pasture will be monitored with photo points and transect data..

Task-Timetable

Start Date: 1 April 2001 Yrs of Benefit: 20+ End Date: 31 March 2003 Duration: 24 months			Project Name: Upper Eagle Creek Restoration: East Eagle Allotment											
Project Categories and Tasks			Months Since Project Initiated (Year 1) 2001-02											
Task No.	Task Cost to AWPf	Task Description	1 April	2 May	3 June	4 July	5 Aug	6 Sept	7 Oct	8 Nov	9 Dec	10 Jan	11 Feb	12 Mar
1	\$500	Permits	X	doc										
2	\$600	Monitoring				Plan	X	X	X					Report
3	\$300	Procurement	X	X	Bills									
4	\$13,310	Steer Pasture Water Development		X	X	X	X	X	X	X	X	X	X	Report
5	\$24,220	Riparian Fencing		X	X	X	X	X	X	X	X	X	X	Report
6	\$24,000	Boundary Fencing		X	X	X	X	X	X	X	X	X	X	Report
7	\$500	Information Transfer												
8	\$2,900	Final Report												

Task Timetable continued

Project Categories and Tasks			Project Name: : Upper Eagle Creek Restoration: East Eagle Allotment											
			Months Since Project Initiated (Year 2) 2002-03											
Task No.	Task Cost to AWP	Task Description	13 April	14 May	15 June	16 July	17 Aug	18 Sept	19 Oct	20 Nov	21 Dec	22 Jan	23 Feb	24 March
1	\$500	Permits												
2	\$600	Monitoring	X	X	X	X	X	X	X					Report
3	\$300	Procurement												
4	\$13,310	Steer Pasture Water Development	X	X	Photo									Report
5	\$24,220	Riparian Fencing	X	X	X	X	X	Photo						Report
6	\$24,000	Boundary Fencing	X	X	X	X	X	X	X	X	Photo			Report
7	\$500	Information Transfer												X
8	\$2,900	Final Report										X	X	Final Report

Project Budget Forms

TASK # and short description	AWPF FUNDS REQUESTED						
	A	B	C	D	E	F	G
Do not write in shaded areas.	DIRECT LABOR COSTS (1)	OTHER DIRECT COSTS	OUTSIDE SERVICES	CAPITAL OUTLAY	TOTAL PROJECT COSTS	ADMIN COSTS	TOTAL AMOUNT REQUESTED
					A+B+C+D=E	E * .05=F	E+F=G
Task #1: Permits	\$400	\$100			\$500		\$500
Task #2: Monitoring	\$500	\$100			\$600		\$600
Task #3: Procurement	\$250	\$50			\$300		\$300
Task #4: Steer Pasture				\$13,310 (1)	\$13,310		\$13,310
Task #5: Riparian Fence	\$12,000			\$12,220 (2)	\$24,220		\$24,220
Task #6: Boundary Fence				\$24,000 (3)	\$24,000		\$24,000
Task #7: Info Transfer	\$500				\$500		\$500
Task #8: Final Report	\$2,800	\$100			\$2,900		\$2,900
AWPF TOTALS	\$16,450	\$350		\$49,530	\$66,330		\$66,330

Descriptions of Capital Outlay—AWPF Funds Requested

(1) \$13,310: 4,000 feet of 1.25-inch DR7 PE 267 DPSI pipe @ \$.66/foot = \$2,640; 5,500 feet of 1.25-inch DR9 PE 200 @ \$.50 = \$2,750; solar pump @ \$2,420; and solar panels @ \$5,500.

(2) \$12,220: 5.7 miles of fence @ \$3,200 / mile, AWPf share is 67%

(3) \$24,000: 7.5 miles of fence @ 3,200 / mile, AWPf share is 100%

BUDGET FORMS CONTINUED

TASK # and short description	MATCHING FUNDS						
	A	B	C	D	E	F	G
Do not write in shaded areas.	DIRECT LABOR COSTS	OTHER DIRECT COSTS	OUTSIDE SERVICES	CAPITAL OUTLAY	TOTAL PROJECT COSTS	ADMIN COSTS	TOTAL AMOUNT MATCHED
					A+B+C+D=E		E+F=G
Task 1: Permits	\$400				\$400		400
Task 2: Monitoring	\$1,000				\$1,000		\$1,000
Task 3: Procurement	\$400				\$400		\$400
Task 4: Steer Pasture	\$11,000			\$5,750 (1)	\$16,750	\$3,000	\$19,750
Task 5: Riparian Fence	\$12,000			\$6,020 (2)	\$18,020	\$2,400	\$20,420
Task 6: Boundary Fence	\$14,000 (3)				\$14,000 (3)	\$6,000	\$20,000 (3)
Task 7: Info Transfer	\$600				\$600		\$600
Task 8: Final Report	\$2,000	\$200			\$2,200	\$600	\$2,800
MATCHING TOTALS	\$41,400	\$200		\$11,770	\$53,370	\$12,000	\$65,370 (3)

Descriptions of Capital Outlay—Matching Funds

(1) \$5,750: Forest Service: 1,000 feet 1.25-inch steel pipe @ \$1.65 / foot = \$1,650; fiberglass trough @ \$400; one 5,000-gal storage tank @ \$3,000; tank fittings \$350. Permittee: pipe fittings \$350.

(2) \$6,020: 5.7 miles of fence @ \$3,200 / mile; Forest Service share is 33%

Other Notes

(3) An additional \$12,000 may be available from the San Carlos Apache Tribe for labor costs in Task 6. As yet these funds are not secured, thus not formally reported herein. Addition of this match would bring the total match to \$77,370)

Budget Information – AWPf Request

Task 1

Direct Labor Costs:	
Project Manager @\$200/day, days	\$ 400
Other Direct Costs:	
Misc. Expenses (phone, per diem/travel, office supplies)	\$ 100

Task 2

Direct Labor Costs:	
Project Manager @ \$200/day, 2 days	\$ 400
Labor @ \$100/day, 1 day	\$ 100
Other Direct Costs:	
Misc. Expenses (phone, per diem/travel, office supplies)	\$ 100

Task 3

Direct Labor Costs:	
Project Manager @ \$200/day, 1 days	\$ 200
Labor @ \$100/day, 0.5 day	\$ 50
Other Direct Costs:	
Misc. Expenses (phone, travel)	\$ 50

Task 4

Capital Costs:	
4,000 feet of 1.25-inch DR7 PE 267 DPSI pipe @\$.66/foot = \$2,640;	
5,500 feet of 1.25-inch DR9 PE 200 @\$.50 = \$2,750;	
solar pump @ \$2,420; and solar panels @ \$5,500	\$13,310

Task 5

Direct Labor Costs:	
Project Manager @ \$200/day, 5 days	\$ 1,000
Labor @ \$100/day, 110 days	\$11,000
Capital Costs:	
5.7 miles of fence @ \$3,200 / mile, AWPf share is 67%	\$12,220

Task 6

Capital Costs:	
7.5 miles of fence @ 3,200 / mile, AWPf share is 100%	\$24,000

Task 7

Direct Labor Costs:	
Project Manager @ \$200/day, 2.5 days	\$ 500

Task 8

Direct Labor Costs:	
Project Manager @ \$200/day, 14 days	\$ 2,800
Other Direct Costs	
Misc. Expenses (phone, office supplies, copy costs)	\$ 100
	\$66,330

Budget Information - Matching

	<u>Permittee</u>	<u>Forest</u>
<u>Task 1</u>		
Direct Labor Costs:		
Project Manager @\$200/day, 2 days	\$ 400	
<u>Task 2</u>		
Direct Labor Costs:		
Project Manager @ \$200/day, 5 days	\$ 1,000	
<u>Task 3</u>		
Direct Labor Costs:		
Project Manager @ \$200/day, 2 days	\$ 400	
<u>Task 4</u>		
Direct Labor Costs:		
Project Manager @\$200/day, 10 days	\$ 2,000	
Labor @ \$100/day, 72 days	\$ 7,200	
Forest Service Labor @ \$200/day, 9 days		\$ 1,800
Forest Service Admin @ \$300/day, 10 days		\$ 3,000
Capital Costs:		
Forest Service: 1,000 feet 1.25-inch steel pipe		
@ \$1.65 / foot = \$1,650; fiberglass trough		
@ \$400; one 5,000-gal storage tank @ \$3,000;		
tank fittings \$350.		
Permittee: pipe fittings \$350	\$ 350	\$ 5,400
<u>Task 5</u>		
Direct Labor Costs:		
Project Manager @ \$200/day, 10 days	\$ 2,000	
Labor @ \$100/day, 80 day	\$ 8,000	
Forest Service Labor @ \$200/day, 10 days		\$ 2,000
Forest Service Admin @ \$300/day, 8 days		\$ 2,400
Capital Costs:		
5.7 miles of fence @ \$3,200 / mile;		
Forest Service share is 33%		\$ 6,020
<u>Task 6</u>		
Direct Labor Costs:		
Project Manager @ \$200/day, 10 days	\$ 2,000	
Labor @ \$100/day, 100 days	\$10,000	
Forest Service Labor @ \$200/day, 10 days		\$ 2,000
Forest Service Admin @ \$300/day, 20 days		\$ 6,000
<u>Task 7</u>		
Direct Labor Costs:		
Project Manager @\$200/day, 3 days	\$ 600	
<u>Task 8</u>		
Direct Labor Costs:		
Project Manager @ \$200/day, 10 days	\$ 2,000	
Forest Service Admin @ \$300/day, 2 days		\$ 600
Other Direct Costs:		
Misc. Expenses (phone, per diem/travel, office supplies)	\$ 200	
	<u>\$36,150</u>	<u>\$29,220</u> = \$65,370
(The following is additional POTENTIAL FUNDING for the project:		
San Carlos Tribe/BIA Labor @\$150/day, 80 days		\$12,000)

Existing Plans

Existing Plans:

Presently there are two existing plans that directly impact this project, and to a large extent support the activities proposed herein:

The San Carlos Apache Tribe and the San Carlos Cattle Association, Inc. support the Forest Service efforts to reconstruct the boundary fence between the San Carlos Apache Tribe and National Forests lands (see Appendix B). The draft Memorandum of Understanding constitutes a plan between these cooperating parties to accomplish this important task.

A plan of sorts exists in the U.S. Fish & Wildlife Service Biological Opinion On Ongoing Grazing on National Forest Allotments (Appendix A contains language of this opinion relative to "Reasonable and Prudent Measures). In this opinion the Fish & Wildlife Service is delineating the conditions by which the Forest Service can issue grazing permits without having negative impacts on endangered species, in this case the spikedace and loach minnow.

Community Support:

The following letters are in support of this project, and are attached herein:

1. Letter from the U.S. Forest Service, Clifton Ranger District, documenting Forest Service funding support sent to R. Glinski on behalf of project applicant
2. Letter of general project support from the U.S. Forest Service, Clifton Ranger District
3. Letter of support from San Carlos Cattle Association, Inc.
4. Letter of support from Dr. W. L. Minckley, Professor Emeritus, Arizona State University
5. Letter of support from U.S. Fish & Wildlife Service



United States
Department of
Agriculture

Forest
Service

Apache-Sitgreaves
National Forests
Clifton Ranger District

HC1 Box 733
Duncan, AZ 85534
(520) 687-1301
FAX: (520) 687-1614

File Code: 2560/2230

Date: July 18, 2000

Rich Glinski
Land Options, Inc.
PO Box 2575
Wickenburg, AZ 85358

Dear Mr. Glinski:

In response to a recent request by Kevin McCormack, the Term Grazing permittee on the East Eagle allotment on the Clifton Ranger District, included is a list of information concerning several projects that I feel will greatly, both directly and indirectly, improve the effectiveness of both the Forest Service and the livestock permittee to achieve objectives for watershed improvement and riparian recovery within the upper Eagle Creek stream system.

Eagle Creek Riparian Corridor Fencing: This project is one of the last phases to be implemented to effectively isolate that portion of Eagle creek from the confluence of the Dry Prong where the live riparian/stream system flows to the confluence with Robinson Canyon, immediately above the 4-drag ranch headquarters. Since 1995, the Forest Service and the permittee have shared the cost and completed about 8 miles of new or reconstructed fence that has aided in isolating the west side of this stream segment to achieve riparian recovery objectives following the 1995 flooding, as well as to meet terms and conditions later specified in the Biological Opinion issued by the U.S. Fish and Wildlife Service for continuing ongoing grazing on the East Eagle allotment. The proposed east side fencing will complete the corridor and compliment improvement work accomplished to date, isolating about 75 acres of live stream that has been recently designated as critical habitat for both Loach minnow and Spikedace, two federally listed native fish species. This corridor also offers important habitat for a variety of amphibians and reptiles, including two species of leopard frogs and likely the narrow-headed garter snake. Black hawks have been observed nesting within this corridor, even as recently as this summer.

The corridor will encompass about 60 acres within the Eagle creek system, and about 15 acres of live riparian within the Robinson canyon side drainage. Creation of the corridor will not eliminate existing uses which include travel way access to both the Sawmill and Saunders cabins and the recently reopened ATV access to the Malay Tank area, as well as livestock gathering to and from the allotment to the headquarters. The corridor currently has stringent guidelines on periods of time when livestock may be moved through it to and from the ranch, as well as a seasonal road closure to enhance spring and early summer riparian recovery and growth.

PROJECT	MILES	EST. LABOR	EST. MATERIALS	TOTAL COST
Eagle Creek	3.5 miles	\$14,000	\$10,500	\$24,500
Robinson	2.2 miles	\$8,800	\$6,600	\$15,400



Total	5.7 miles	\$22,800	\$17,100	\$39,900
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Expected and estimated contributed partnering will involve services in kind by the Forest Service, direct labor and services from the permittee, and some purchase of materials, as summarized below:

PARTNER	LABOR	MATERIALS	TOTAL	PERCENT
ADWR	\$10,800	\$11,100	\$21,900	55%
FS	\$2,000	\$6,000	\$8,000	20%
PERMITTEE	\$10,000	0	\$10,000	25%

Steer Pasture Water Development: Currently, permanent water exists only within this important holding and gathering trap where water can be pumped out of Eagle creek to a small trough located at a set of corrals directly adjacent to Eagle creek, as noted on the enclosed map. Other seasonal waters are available within the pasture from earthen reservoirs, but do not always provide permanent water sources when in critical need for pasture use, and concentrations of livestock may occur at the corral facility near Eagle Creek. Providing a permanent water source centrally located within the pasture will aid in livestock distribution, ensure that this unit can be more effectively used in pasture rotations, and also provide more accessible water for wild ungulates year round.

Expected and estimated contributed partnering will involve materials and services by the Forest Service, materials by the ADWR Water Protection fund program, and labor from the permittee for construction, calculated at similar rates for contract construction. These estimates are summarized in the tables below. Abbreviations are: fs- Forest Service; wp- Water Protection Fund; p- Permittee.

PROJECT	Materials	Materials Cost	EST. LABOR	TOTAL COST
Steer Pasture Water Development	1. 1,000 ft 1.25" steel pipe.	\$1.65/ft = \$1,650 -fs	\$.60/ft = \$1,000 - p	\$2,650
	2. 4,000 ft. 1.25" DR7 PE 267 DPSI pipe.	\$.60/ft= \$2,400-wp	\$.60/ft=\$2,400 - p	\$4,800
	3. 5,500 ft. 1.25" DR9 PE 200	\$.45/ft= \$2,475-wp	\$.60/ft=\$3,300 - p	\$5,575
	4. 1 - 5,000 gal. fiberglass storage.	\$3,000-fs	\$900-p	\$3,900
	5. Trough - fiberglass	\$400-fs	\$400 - p	\$800
	6. Misc. fittings	\$700-fs/p		\$700
	7. Solar system: Pump	\$2,200 - wp	\$1,200 - p	\$3,400
	Solar Panels	\$5,000 - wp		\$5,000

	8. Support salary		\$1,800 -fs	\$1,800
Total	Storage, pipeline, solar pump system,	\$17,825	\$11,000	\$28,825

PARTNER	LABOR	MATERIALS	TOTAL	PERCENT
ADWR	\$0	\$12,075	\$12,075	42%
FS	\$1,800	\$5,400	\$7,200	25%
PERMITTEE	\$9,200	\$350	\$9,550	33%

East Eagle, San Carlos Indian Reservation Boundary Fence Reconstruction: Presently, I have been facilitating meetings between Tribal Grazing associations, the Tribal Council, and the Forest Service in the development of an Memorandum of Understanding for future fence maintenance and reconstruction of critical segments of the mutual boundary fence. Dialog with tribal stockment and Grazing Board members, as well as the San Carlos BIA Agency, and our Forest permittees has been very productive. About 90% of the fencing along this 33 mile surveyed boundary is over 50 years old, and in need of complete reconstruction. Several miles of this fenceline prevents estray cattle from entering the Eagle Creek riparian corridor, which essentially stretches the entire distance of the boundary. There are several more critical segments of the fence which have more livestock pressure from the reservation side, and generally correspond to major tributaries that flow into Eagle creek on Forest lands.

There are several examples of problems the Forest Service and our livestock permittees have faced in recent years. One very noted example involved the continued increase of estray reservation cattle noted in or near the confluence of the Wet, Middle, and Main drainages of Eagle Creek, on and directly adjacent to the East Eagle allotment. Although we had observed some incidental grazing use within these riparian corridors by estray cattle, this very dry year apparently resulted in more drift than normal. I personally observed use levels in excess of 70% on both woody obligates and herbaceous plants in three wetland/riparian corridors, and beginning concentrations in the main Eagle creek drainage. After fully disclosing to the Tribe our intention to gather and impound these cattle, I contracted (at a very expensive rate) for the service, removing over the period of 3 weeks, 21 head of both branded and unbranded reservation livestock from the Eagle creek corridor and associated drainages, most of which came from this critical area mentioned above. District personnel and permittees spent substantial time patching or repairing areas where the boundary fence had been broken down.

Initial plans with the San Carlos Apache Tribe are to develop a mutual MOU, and reconstruct critical segments of the boundary fence to prevent damage to critical riparian and stream resources, and loss of Tribal livestock property. This proposal captures those critical segments associated with management of the East Eagle allotment, and are summarized in the tables below.

Project Name	Materials	Labor	Total
East Eagle Boundary Fence – 7.5 miles	\$22,500	\$25,875	\$48,375

PARTNER	LABOR	MATERIALS	TOTAL	PERCENT
<i>ADWR</i>		\$22,500	\$22,500	46%
<i>FS</i>	\$2,500	0	\$2,500	5%
<i>PERMITTEE</i>	\$11,500	0	\$11,500	24%
<i>BIA</i>	\$875	0	\$500	1%
<i>S.C. TRIBE</i>	\$11,500	0	\$11,500	24%

Should you need additional information, please do not hesitate to contact me directly.

Sincerely,



for FRANK A. HAYES
District Ranger

cc: Kevin McCormack

Enclosures



United States
Department of
Agriculture

Forest
Service

Apache-Sitgreaves
National Forests
Clifton Ranger District

HC1 Box 733
Duncan, AZ 85534
(520) 687-1301
FAX: (520) 687-1614

File Code: 2240/2550

Date: July 26, 2000

Arizona Water Protection Fund Commission
300 N. 3rd Street
Phoenix, AZ 85004

Dear Commissioners:

I have recently been contacted by Kevin McCormack, (livestock permittee on East Eagle allotment on the Clifton Ranger District) requesting information concerning potential projects that the Forest Service could support, which will benefit watershed uplands as well as Upper Eagle Creek and adjacent tributaries. By letter dated July 18, 2000, I provided some site-specific information to Rich Glinski, a private contractor working for Mr. McCormack to develop a proposal for funding.

Within that letter, I outlined three projects that will enhance watershed and live riparian conditions adjacent to or directly associated with upper Eagle Creek. These include, in order of our priority for funding and resource benefits, Eagle Creek Riparian Corridor Fencing, East Eagle, Allotment-San Carlos Reservation Boundary fencing, and Steer Pasture water development. The Eagle Creek riparian corridor replaces and adds new fencing that provides direct management flexibility for the livestock permittee and the Forest Service, consistent with current Terms and Conditions related to Reasonable and Prudent Measures, as applied through the Biological Opinion for Ongoing Grazing on the Apache-Sitgreaves National Forests. The reservation boundary reconstruction is identified in the Draft Memorandum of Understanding with the San Carlos Tribe, and supported as stated in the July 21, 2000 letter from the Steve Titla, Tribal Attorney. This 7.5 miles of fencing is proposed in critical areas that have had recent problems associated with trespass tribal cattle that have resulted in significant impacts on associated wetland/riparian drainages to Eagle Creek. The Steer Pasture water development project will assist in continuing progressive livestock management and improve flexibility within this area to help keep livestock away from the fenced riparian corridor.

Proposed monitoring to gauge the success of these projects will involve both project implementation and project effects monitoring efforts. Implementation monitoring will consist of simple photo documentary of before and after project construction work, as well as fiscal accounting to document contributions in person time and actual expenditures for each project. Effects monitoring will be similar to current efforts in the documentation of compliance with the Ongoing Grazing Biological Opinion (photo points of riparian recovery, Thalweg-watershed link cross sectional transects above Honeymoon Campground, forage use within the associated pastures, exclusion of riparian corridor of Eagle, East Eagle, and Robinson Canyons, controlled livestock trailing in Eagle Creek). Additional photo points and transect data will be established within the Steer Pasture. This level of monitoring will continue for about 3 years, or until a more site-specific decision will establish new or varying monitoring requirements.



Caring for the Land and Serving People

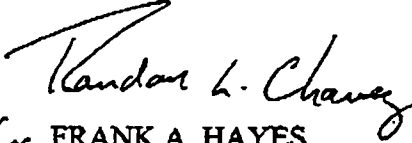
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001-25-00 03 54 FROM: DISTRICT RANGER DISTRICT ID 520687-1301 PAGE 1 1 1

Should you have additional questions regarding any one of these proposals, please feel free to contact me directly at 520-687-1301.

Sincerely,


for FRANK A. HAYES
District Ranger

ANCHOR SEVEN

A4
ASH CREEK

POINT OF PINES

IV
SLAUGHTER

HT
TONTA

SAN CARLOS CATTLE ASSOCIATIONS, INC.

P.O. BOX 159
SAN CARLOS, ARIZONA 85550
Phones:
(520) 475 - 2241 / (520) 475 - 2541

HARRISON TALGO, SR.
PRESIDENT

STEVE TITLA
VICE-PRESIDENT

DAVID THOMPSON
SECRETARY/TREASURER

TESSIE J. DILLON
OFFICE MANAGER

July 21, 2000

Frank A. Hayes
District Ranger
HCI Box 733
Duncan, Arizona 85534

Re: Point of Pines Boundary Fence Reconstruction

Dear Mr. Hayes:

Thank you for your visit of July 21, 2000 to the Point of Pines Cattle Associations monthly meeting. As you know we discussed the poor quality of the fences along the Eastern boundary of the Point of Pines Cattle Association. This boundary is also the Eastern boundary of the San Carlos Apache Reservation. The poor quality of the fences causes livestock to cross over in both directions of the boundary which causes havoc with cattle owners, tribal, federal and state management plans.

The Point of Pines Cattle Association Board of Directors voted to support your proposal to get funding to reconstruct the Eastern boundary of the San Carlos Apache Reservation/Point of Pines Boundary. I hope that you obtain this funding soon so that we can complete this project in the very near future.

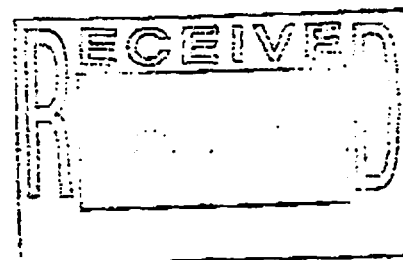
Feel free to contact me if you have any questions concerning this matter.

Sincerely,



Steve M. Titla
Attorney at Law

cc: Point of Pines Board of Directors
Raymond Stanley, Chairman, San Carlos Apache Tribe



Department of Biology
Arizona State
University_____

LSC 285, Main Campus
Tempe, Arizona 85287-1501
965-2519

(480) 965-6518, fax (480)

25 July 2000

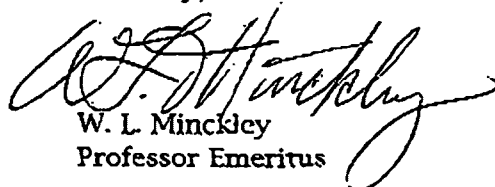
Arizona Water Protection Fund
Commission
300 North Third
Phoenix, AZ 85004

Dear Commission:

I have been asked to write in support of an "Upper Eagle Creek Restoration Project" proposal for the East Eagle Creek Allotment (4-Drag Ranch), Greenlee Co., Arizona.

The methods of restoration proposed, providing off-stream water supplies, fencing riparian zones, and fencing to prevent access by trespass cattle, all are highly applicable and appropriate in this situation. These methods will allow stream-side habitats and thus the stream itself to stabilize. In turn, this will enhance the habitat and thus populations of threatened loach minnow (*Tiaroga cobitis*) and "candidate" Gila chub (*Gila intermedia*), both of which occur in the immediate vicinity of the 4-Drag Ranch, and spikedace (*Meda fulgida*), that occurs downstream in mainstream Eagle Creek. I also strongly support monitoring of riparian vegetation, aquatic habitats, and fishes, as a means for documentation of results of the project, and urge that those results be published in the open literature for public benefit. As the project develops, I further hope that other watershed enhancements, e.g., reduced grazing, erosion control, re-seeding (if necessary), etc., can be applied in this important drainage. This is the kind of project that should be supported for additional drainages as well, and I urge the Commission to encourage and fund more projects of this kind.

Sincerely,



W. L. Minckley
Professor Emeritus

Personnel

Key Personnel:

Dean Warren, Project Manager, has been in this area for over 20 years. He currently is the ranch foreman for the Four Drag Ranch, and is familiar with the projects, landscape, and logistics of conducting this project to completion.

Frank Hayes, District Ranger on the Clifton District, will administer Forest Service involvement with the project. He has coordinated with the San Carlos Apache Tribe, and will continue to do so throughout the life of this project.

Apache-Sitgreaves National Forest archaeologist staff will perform cultural clearances.

San Carlos Reservation / Forest Service Boundary
Fence Contract

11/6/03

This contract is between Gary Ely, 4 Drag Ranch and Fredrick Boni to take down and replace the existing fence. All fence material is supplied by AWP Grant. The fence has 4 strands of barbwire and the 5th strand is smooth on the bottom. Fence post every 15 feet, wood post every 8th post, H brace every quarter or as needed (top hill - edges of washes) 5 wood cedar stays between metal post - wood stays can be cut on either side - wood slats put around trees that wire crosses. All labor payroll and taxes are covered in the cost of \$3700⁰⁰ per mile, paid completion of each mile, Payment will be made to Fredrick Boni.

Gary Ely

Fredrick Boni
P.O. Box 383

San Carlos AZ 85550

Personal Identifying Information

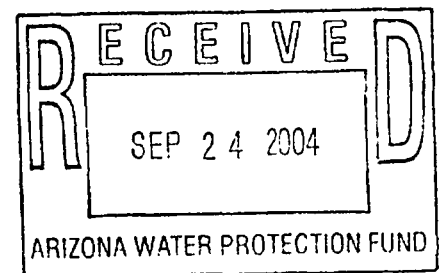
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East Eagle-Robinson Canyon Riparian Fencing
Task 5
Grant 00-102WPF

Upper Eagle Creek Restoration on East Eagle Allotment

This task consisting of 3.5 miles of Eagle Creek fence and 2.2 miles of Robinson fence was the last capital improvement project of this grant. All work was done in 2004, before and after the fire closure 01-447. This project is one of the last phases implemented to effectively isolate the portion of Eagle Creek from the confluence of the Dry Prong where the live riparian/stream system flows to the confluence with Robinson Canyon, immediately above the Four Drag Ranch Headquarters. Since 1995 the Permittee and Forest Service isolated 8 miles of the west side of the stream to achieve riparian recovery. The aid of this grant has now completed the east side of the stream nine years later. The corridor is currently habitat to beavers, an occasional elk, variety of amphibians and reptiles, along with native fish species.

Permit was issued in 2002 but the USFS prescribed burn was scheduled in the area. The burn was unsuccessfully completed in the area in 2002 and 2003. With no reschedule for a burn planned in 2004, the fence material was packed in and the old fence was packed out on mules. All equipment including chainsaws, gas, oil, fence post, wire and men had to go by mule. A stop order was issued when a fire closure for Apache- Sitgreaves Forest was issued, delaying the building of fence for 6 weeks. The final installing was completed in August 2004.



The San Carlos Reservation Boundary – East Eagle Fence

This project consisted of 7.5 miles of fence line reconstructed and replacing a 50 year old fence that is a shared boundary between the San Carlos Apache Reservation Point of Pines Cattle Association and the USDA Forest Service Clifton Ranger District. The fence was built south of the Mogollon Rim and west of Eagle Creek starting at mp24 for 6.5 miles on the East Eagle Allotment. One mile of fence was installed south of East Eagle Allotment across Wet Prong Creek. This area was known for trespassing livestock into a pasture that is rested every other year by the permittee. As a result of the new fence, winter and spring of 2004 has been the first year no trespassing cattle have been seen in Maylay Pasture. Only elk and deer have grazed the area in 2004. Before the fence was completed, many cattle were being returned in the spring of 2003 to Point of Pines Association.

This project has a late start because of the MOU between the Forest Service and the San Carlos Apache Tribe. It also had four different fence crews. Isolation and rough terrain made it difficult to find fencing crews. Once a signature was finalized, the Point of Pines supplied employee's to build the first mile. The entire 6.5 miles was cleared by the Four Drag Crew with chainsaws and bobcat loader. Much of the work used mules to pack into the higher country. The fence line has an 8 ft clearing from oak and juniper and can be well maintained easily. A rock drill was used in certain areas, and other areas, the post hole digger was used.

Fredrick Boni, a fence contractor from San Carlos Apache Reservation was hired to complete four miles of fence line. They camped for two miles of fence line and during the cold weather; they drove each day from San Carlos. The crew ranged from 5 men to 10 men depending on weather. The other one and half miles were completed by Four Drag Crew. The final mile of fence was completed by the IDT Association from the San Carlos Apache Reservation. They supplied all the labor and the fence material was supplied by AWPf. Clearing was not necessary on the last mile of fence.

This area had three fire closures from 2002 through 2003 making it difficult to build fence during the longest daylight hours and good weather. The road closure from February 1 to July 1st each year also made it difficult.

By the end of May, San Carlos Reservation cattle could be seen grazing on the reservation side and no cattle were observed on the forest.

The fence material was bought in 2003 before steel prices raised, saving the project dollars. Purchasing all the fence material for task 5 and task 6 at the same time also saved dollars.

Photos were taken at different points along the fence line. You can see the fence line going for miles up toward the Mogollon Rim.