Application Cover Page

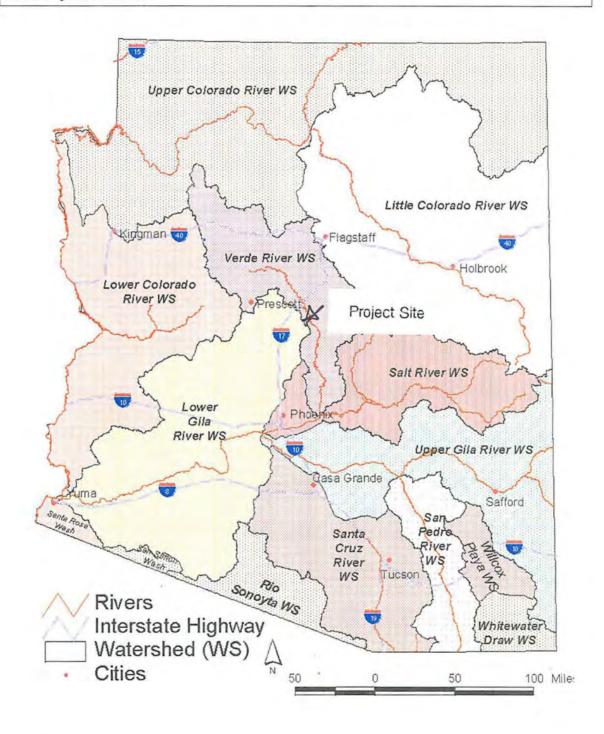
WPF0315

Fill in all information on the cover page. The project title should be short, yet descriptive of the proposal.

	Applicat	ion Information		
Title of Project: Verde Wi.ld and Scenic R	liver Fence	Exclosure		
Type of Project: Stream Type		Date Submitted: 6/	Date Submitted: 6/16/04	
		Date Attended an A	AWPF	Workshop:
		Date Attended an AWPF Consultation:		
Research Ephemeral				
Applicant Information:			Insid	e an AMA: Yes No N
Name/Organization: Prescott National Fo	rest		Insite	c an AMA. Tes No
Address 1: P.O. Box 670 (Maili			Tf woo	which AMA:
Address 2: 300 E. Highway 260 (Physical)			II yes	, which AMA:
City: Camp Verde				Phoenix
State: AZ				Tucson
ZIP Code: 86322				Prescott
County: Yavapai				Pinal
Watershed: Verde River				Santa Cruz
Tax ID No.:				
Contact Person:		Type of Applica	ation:	Project Start Date: 1/31/05
Name: Douglas MacPhee		New New		
Title: Range, Soils, Ecology and V	Vatershed	Continuation	on	Project End Date: 1/31/08
Team Leader		Continuation		Troject End Date. 1751700
Phone: 928-567-1120				
Fax: 928-5671179			_	
Arizona Water Protection Fund				
Grant Amount Requested:		Matching Fund	s Obta	ined and Secured:
•	Apr	olicant/Agency/Orga		
\$63,888.50		pplicant		214,095.00
,	2.	T L		4-1
If the application is funded, will the	3.			
Grantee intend to request an advance:	-			
Yes No				Total: 214,095.00
Signature of the undersigned certifies und	oveton dine	and sampliance with	. all tow	me conditions and
specifications in the attached application.				
applicant is true and accurate. The under				
fraudulent information, or knowingly con-				
penalties as provided in A.R.S. Title 13. T				
Awards with modifications to scope items,				
(9
Mike King (Acting Cynthia Moody)		Forest Supervisor 928-443-8210		
Typed Name of Applicant or Applicant's		Title and Telephone Number		
Authorized Representative				
0 10 mal.		(-111)	21	
Got the Mosdy		6/16/0	JT	
Signature		Date Signed		
				MECELVEIN

Arizona Watershed Map

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



Title of Project: Verde Wild and Scenic River Fence Exclosure

Executive Summary Page

Limit this section to one page only! Begin this summary with a single sentence clearly stating the purpose of the project. List objectives, describe methods to be used, and describe all major project features for which funding is being requested. Be sure to illustrate how the proposed work will directly benefit rivers, streams and riparian habitats, including fish and wildlife resources that are dependent on the habitat.

Executive Summary:

This project begins implementation of the Verde Wild and Scenic River Comprehensive River Management Plan by installing fences and an access trail to exclude livestock from grazing the river riparian areas on the Brown Springs allotment, Prescott National Forest.

Inventories and monitoring conducted to support the environmental analysis of the Verde Wild and Scenic River (VWSR) management plan found grazed areas had less riparian species diversity, cover, and biomass than ungrazed areas of the same riparian community. There was less ground cover by native grasses and forbs in the floodplain of the grazed areas, banks were often damaged by livestock, and a number of trails crossed the river. Wildlife and fish habitat value for the eight Threatened, Endangered, or Candidate species, 33 Sensitive species, 20 Management Indicator species and numerous other species in the VWSR is diminished by the effects of grazing on vegetation and banks, and by cattle walking in the river.

On June 14, 2004 the Prescott, Tonto, and Coconino Forest Supervisors signed the Decision Notice and Finding of No Significant Impact for the Verde Wild and Scenic River Comprehensive River Management Plan. The Decision Notice selected alternative 3a which recommends exclusion of grazing from the riparian areas of the VWSR.

On Brown Springs the river runs mostly through steep walled canyons with a floodplain confined by the canyon walls. Exclusion of livestock grazing of the riparian and most of the floodplain would be accomplished by constructing fences between topographic features such as cliffs, rock outcrops, and existing fences. Cattle would still be allowed access to the river for drinking water in three narrow waterlanes in the Rodeo pasture. A trail would be constructed upslope from the exclusion fence to allow for the movement of cattle out of the floodplain in Coldwater pasture. The fence and trail locations attached were determined by the permittee, Bill Fix, and Prescott NF Range Technician Tim Mabery.

Benefits of this project include allowing riparian vegetation to establish and develop to its potential on the entire 9.6 miles of river in Brown Springs. Banks would stabilize reducing soil movement into the river and cattle would no longer walk across the river and stir sediment. Water quality would improve with the elimination of grazing impacts and livestock waste. Herbaceous ground cover by native species would increase in the floodplain and banks would have more vegetation with the net result of less soil movement and filtering of overland flows before they enter the river.

National Environmental Policy Act (NEPA), the Biological Assessment and Evaluation (BA&E) and consultation with U.S. Fish and Wildlife Service have been completed. Archeological clearances are needed. Final designs are needed for the fences and the trail. Implementation and effectiveness monitoring must be documented and a file established. Upon completion of plans and the archeological survey the fencing would be contracted and the access trail constructed. Monitoring would begin before the fences are built and continue to document change and compliance.

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Project Location & Environmental Contaminant Information

All applicants must provide project location and environmental contaminant location information. If the exact extent of the project area is not completely defined at the time this form is completed, please make note of this on line #'s 8 & 10 below, and complete the form with location information as accurately as possible. Outline the study area on a 7.5 minute (15 minute if the project area is too large), U.S.G.S. topographic map and include a copy with each copy of the application. The Arizona Watershed Map is for general public use when reviewing your application summary, while the U.S.G.S. map is for staff use. All applicants also must provide a project schematic drawing as described on page 16 of this application package.

Project Location Information			
1. County: Yavapai	2. Section: <u>1, 2, 11,</u> <u>12, 13, 24, 6, 7, 14,</u> <u>30, 35, 36, 35, & 36</u>	3. Township: <u>12.0N</u> , <u>12.5N</u> , <u>& 13.0N</u>	4. Range: <u>5.0E & 6.0E</u>
5. State Legislative District:			
6. Land ownership of project area: 1	USDA Forest Service, Pr	escott National Forest	
7. Current land use of project area:	Wild and Scenic River D	esignation	
8. Size of project area (in acres): 11	<u>40</u>		
9. Stream Name: Verde			
10. Length of stream through project area: 9.6			
11. Miles of stream benefited: 9.6 miles			
12. Acres of riparian habitat: 287 acres will be: Enhanced Maintained Restored Created			
12. Provide directions to the project	site from the nearest city	or town. List any special acc	ess requirements:
		***************************************	#-#
		t Location Information	
For purposes of this manual, environ the environment and include hazardo Protection Agency priority toxic poll Environmental Protection Agency). facility permitted by a local, state, or	ous substances, hazardous utants (defined by CERC Environmental contamin federal authority having	wastes, petroleum products (LA 42 USC §9601, RCRA 4 ants do not include wastewater) jurisdiction over wastewater.	or Environmental 2 USC §6903 and the er from a wastewater
1. Does your project site contain known environmental contaminants? YES NO 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 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			

Introduction

Give the background of the project, providing any necessary introductory information and the project area's relevant history. Identify the <u>overall</u> goal(s) of your project (what you want to achieve), followed by the objectives of your project. Objectives are specific, measurable outcomes of the project. List these objectives in numerical order, with the first objective having the most important outcome. List the problem(s) that you address in your proposal, the cause(s) of these problems, and the remedies or solutions to them. State the anticipated number of years of project-related benefit from the project, along with a justification for that estimate. Also, provide a statement regarding your level of commitment to maintenance of project benefits and capital improvements. The history and background of the project also must be provided for on-going projects. Describe the site prior to project initiation, tasks that have been completed and any site changes that have occurred as a result of these activities.

Background:

The Brown Springs allotment, Prescott National Forest, has about 9.6 miles of the VWSR within the allotment boundaries. Brown Springs has three primary pastures between which 170 cattle graze on a rest-rotation grazing system. Two pastures, Coldwater and Rodeo include portions of the VWSR as does Home, a smaller pasture used for gathering cattle and grazing horses. An Environmental Assessment prepared in 1995 noted river riparian conditions as having an upward trend moving toward a moderate to high similarity to potential. This same analysis affirmed the Forest's 20% utilization level for grazing on riparian vegetation and noted that the riparian areas were the barometer for allotment health.

Various monitoring of grazing in the VWSR riparian zone has been conducted focusing on utilization levels and effects on woody vegetation such as cottonwood, ash, and willows. Green (2003) found that winter grazing on the Verde allowed riparian trees to establish, grow, and survive. Agency monitoring found utilization to be within the 20% allowed except in dry years when that standard was exceeded. Inventories conducted in support of the environmental analysis for the CRMP identified 14 unique riparian vegetation communities in the VWSR and evaluated vegetative composition, cover, and in some areas, biomass within these communities for the length of the VWSR.

The inventories conducted in 2002 and early 2003 found notable differences in riparian species composition, cover, and biomass grazed and ungrazed reaches of the river. The variances were greatest on Brown Springs because the river is livestock accessible in warm weather. This data was supported by inspections conducted by the Forest that found utilization to be exceeded on woody plants and herbaceous species to be grazed to near ground level. Evaluations of wildlife habitat found conditions to be poor on grazed sections of the river. Banks were trampled and numerous trails crossed the river indicating that localized sediment production and turbidity were probably occuring. Impacts were less on the two allotments that had grazed during the winter but were still damaging. These situations had not been documented in years when precipitation greened up vegetation out of the river floodplain although reviewing those inspections they appear deficient in not comparing conditions between grazed and ungrazed areas.

The Prescott NF discussed findings with the Brown Springs permittees, Bill and Marilyn Fix, and options for management that would mitigate future unacceptable impacts. With only three pastures it was agreed that management options were inadequate to provide growing season rest, remove cattle when utilization was reached, or not graze the riparian until the vegetation had fully recovered from the effects of scouring floods. Not only were options limited but the permittees stated that the river was "a pain in the butt" and required excessive amounts of time to manage

and they would rather not graze the riparian. They feel strongly enough about the need for better river/grazing management that they wrote a letter supporting alternative 3 and removal of livestock from the riparian areas.

Goal(s):

The project goal is to remove livestock grazing impacts from the river's riparian vegetation and streambanks and by doing so allow vegetation to grow to its potential and banks to stabilize.

Objective(s):

- 1. Construct approximately 2.5 miles of fence exclosure gaps to exclude livestock grazing from the Verde Wild and Scenic River riparian areas.
- 2. Construct approximately 1.36 miles of access trail to move livestock that currently are moved in the river's floodplain.
- 3. Implement compliance and effectiveness monitoring.

Statement of problem(s):

Riparian vegetation has less species and structural diversity and less shoreline biomass, including litter, in sections of the Verde River floodplain that are grazed by livestock. Wildlife habitat is below ecological potential and the scenic integrity of the corridor is impacted by damage to vegetation and stream banks in the grazed reaches. Arizona Department of Environmental Quality2004 water quality assessment found this reach (West Clear Creek - Fossil Creek, AZ15060203-025) not attaining because of turbidity for A&Ww (warmwater fishery) and attaining for other catagories. The Verde River TMDL for Turbidity (2002) is expected to address this deficiency and among the Best Management Practicies is improved livestock management including exclusion of grazing from the river.

Statement of cause(s) of the problem(s):

Areas of the river that are grazed have less representation by native vegetation such as sedges, rushes and riparian woody plants and higher representation by bermuda grass, rabbitfoot grass, and cockleburs. Grazing within the recovery period from scouring floods reduces plant species diversity through selective grazing of the more palatable regeneration. Grazing also suppresses plant growth and reduces cover by plants. Livestock also contribute to turbidity by trampling banks and displacing soil into the river and by walking in the river and stirring up sediment.

Statement of project-related remedies or solutions:

The desired conditions for the Brown Springs allotment livestock grazing NEPA, 1995, and the Verde Wild and Scenic River EA and Decision Notice can be achieved by fencing the riparian corridor using topographical barriers to reduce fencing and including waterlanes for livestock water access. One trail is needed to move livestock outside of the floodplain.

Statement of project years of benefit:

For the duration of grazing on the Brown Springs allotment

You	ir level of commitment to maintenance of project benefits and capital improvements
	< 5 years
	3-10 years
	11-15 years
\geq	16-20 years

Commitment to Long-Term Operation and Maintenance Responsibilities (Capital Projects Only)

Long-term operation and maintenance of capital grant-assisted structures, human access or educational facilities, revegetation sites, and other grant-assisted improvements are a condition of AWPF grants. Information described on this page will assist in drafting an Operation and Maintenance Contract to be signed concurrently with the Grant Award Contract, if the project is selected for funding by the AWPF Commission.

- List the operation and maintenance activities to be performed.
- In limited circumstances, the Commission may agree to hold another entity besides the grantee responsible for performing some or all of the operation and maintenance responsibilities. Notify the Commission on this form if you want the Commission to consider contracting separately with another entity for operation and maintenance. The Commission will vote on such a request at the Grant Award Meeting.
- The operation and maintenance period shall last for 20 years following completion of grant-assisted structures, human access or educational facilities, revegetation sites, and any other grant-assisted improvements, or for another, shorter period as agreed upon by the applicant/landowner and Commission. Any shorter operation and maintenance period shall be based upon either 1) the most current Fiscal Year Cost Share / Incentive Payment Schedule of the Farm Bill Program which is utilized by the Natural Resource Conservation Service or 2) another reasonable period agreed upon by the parties.

Applicant(s): Prescott National Forest	Landowner(s) (if	Landowner(s) (if different from applicant):	
Operation & Maintenance (O&M) Activities	Responsible Party: (Applicant or Landowner)	O&M Period (if other than 20 years - see terms above)	
Maintain fencing Compliance and effectiveness monitoring.	Applicant	20 years	
each specified period. The landown	ees to perform operation and mainten er's signature acknowledges that if the the project site to perform tooks iden	he project is funded, the landowner	
each specified period. The landown will provide the applicant access to and to operate and maintain grant-above as the responsible entity for a that, should the project be funded a maintenance of the project, the land		ne project is funded, the landowner tified in the Grant Award Contract e. If the landowner is identified andowner's signature acknowledges ontract separately for operation and	
each specified period. The landown will provide the applicant access to and to operate and maintain grant-above as the responsible entity for a that, should the project be funded a	ter's signature acknowledges that if the project site to perform tasks iden assisted structures as identified above any operation and maintenance, the land should the Commission agree to c	he project is funded, the landowner tified in the Grant Award Contract e. If the landowner is identified andowner's signature acknowledges ontract separately for operation and aintenance Contract with the	
each specified period. The landown will provide the applicant access to and to operate and maintain grant-above as the responsible entity for a that, should the project be funded a maintenance of the project, the land Commission.	the project site to perform tasks ident assisted structures as identified above any operation and maintenance, the land should the Commission agree to colowner will sign an Operation and M Landowner(s) Sig (if different from	he project is funded, the landowner tified in the Grant Award Contract e. If the landowner is identified andowner's signature acknowledges ontract separately for operation and aintenance Contract with the	

State Historic Preservation Office (SHPO) Certification

This certification is required by regulations implementing the State Historic Preservation Act (A.R.S. 41-861et seq.), effective July 24, 1982. It is understood that recipients of state funds are required to comply with this law throughout the project period. The State Historic Preservation Act mandates that all State agencies consider the potential of activities or projects to impact significant cultural resources. Each State agency is required to consult with the State Historic Preservation Officer with regard to those activities or projects that may impact cultural resources. All projects that affect the ground-surface that are funded by AWPF require SHPO clearance, including those on private and federal lands.

Project Title: Verde Wild and Scenic River Fence Exclosure

Please answer the following questions, which provide information about the potential of the project to impact cultural resources:

1.	Does the project have the potential to disturb the surface and/or subsurface of the ground? VES NO
2.	Are there any buildings or structures (including mines, bridges, dams, canals, etc.) which are 50 years or older within the project area that have the potential to be disturbed by the proposed activity? YES NO
3.	Are there any known prehistoric and/or historic archaeological sites within the project area?
4.	Are you aware of any archaeological investigations that have been performed within one (1) mile of the project area? YESNO
the ac	answered "NO" to all of the above questions, please sign on the line below certifying that tivity or project is in compliance (and will remain in compliance throughout the project i) with the State Historic Preservation Act. YOU MUST SUBMIT THIS FORM WITH R COMPLETED APPLICATION.
	Authorized Applicant Signature

If you answered "YES" to any of the above questions, please answer the questions on the following page.

SHPO Certification

If you answered yes to question #1, specifically identify any surface or subsurface impacts that are expected.

If you answered yes to question #1, describe the current ground surface condition within the entire project area boundary (i.e. is the ground in natural undisturbed condition, or has it been bladed, payed, graded, used for agriculture, etc.).

If you answered yes to question #2, list the sites, their names, and provide a brief description of the sites.

Has the project area	been previously surveyed for cultural resources by a qualified Archaeologist
□YES ⊠NO	
DON'T KNOW	

If yes, submit a copy of the Archaeologist's report with your application.

If you answered any questions on this page, please sign on the line below certifying that you will take all of the necessary steps to comply with the State Historic Preservation Act for all project activities and will remain in compliance throughout the project period. YOU MUST SUBMIT THIS FORM WITH YOUR COMPLETED APPLICATION.

1) 1 1 a /

Date

Scope of Work: Task Descriptions

Describe in detail the tasks you will perform to accomplish your objectives and achieve your desired results. These tasks must be exactly the same as the tasks listed in your task-timetable. Please use the same task numbering on each form.

- A deliverable is a product submitted to the Arizona Water Protection Fund demonstrating that work has been completed. Deliverables are often reports, photographs, data, etc. that are submitted along with receipts and invoices for materials and labor.
- Dobtaining permits and conducting monitoring are potential tasks for all applications.

 Obtaining access agreements is another potential task, especially for research projects.
- ➤ If applicable, development of revegetation and monitoring plans must be tasks with appropriate costs assigned. Go to Appendix B for appropriate plan content outlines.
- > The last task must be a final report with an appropriate cost assigned.
- Although some tasks continue throughout the contract duration, attempt to make each task discrete and payable upon completion.

Task #1: Permits, Authorizations, Clearances and Agreements

The Grantee shall obtain all permits, authorizations, clearances and agreements necessary to conduct the work described in this Scope of Work. A Forest Service Archaeologist will complete a cultural resource survey and clearance for any area that will receive ground disturbance outside of the active stream channel. A Forest Service Wildlife Biologist has completed a Biological Assessment and Evaluation, and the Forest Service has completed an Environmental Assessment and Analysis. SHPO clearance will be completed.

Deliverable Description: Copy of SHPO clearance, NEPA compliance, Biological Assessment and Evaluation.

Deliverable Due Date: Prior to any ground disturbing activities

AWPF Reimbursable Cost: \$4,050.00 (\$202.50 Admin.) Total Cost: \$4252.50

Task #2: Prepare and Submit Fencing and Access Trail Plans

The Grantee shall prepare and submit appropriate fencing and trail plan, including maps showing proposed fencing and trails, schematic of fencing and gate construction consistent with wildlife standards, materials and equipment lists, and construction sequence and procedures.

Deliverable Description: Fencing plan. Access Trail Plan.

Deliverable Due Date: 3/1/05

AWPF Reimbursable Cost: \$4,300.00 (\$215.00 Admin.) Total Cost: \$4515

Task #3: Prepare and Submit Monitoring Plan

The Grantee shall prepare and submit appropriate plans for photo and Allotment Permitee compliance monitoring. The monitoring plan shall include provisions for baseline monitoring and annual monitoring throughout the contract period. The Allotment Permitee Monitoring will entail documentation of the structural integrity of the fence improvements and their effectiveness in livestock exclusion. The Monitoring Plan shall describe the specific monitoring schedule and timing for all aspects of the program. See the *Monitoring Plans* for more specifics.

Deliverable Description: Monitoring Plan

Deliverable Due Date: 3/1/05

AWPF Reimbursable Cost: \$2,090.00 (\$104.50 Admin.) Total Cost: \$2194.50

Task #4: Implementation of Fencing and Access Trail Plan

The Grantee shall implement the approved Access Trail and Fence Plan submitted as part of Task #2. Grantee shall prepare and submit to the Project Manager an Access Trail and Fencing Report which details the construction and maintenance of the trail and fence. The report shall include a brief narrative of the work completed under this task, representative photos and maps, and copies of receipts and invoices for materials, labor, and equipment.

Deliverable Description: Access Trail and Fencing Report

Deliverable Due Date: 8/1/05

AWPF Reimbursable Cost: \$36,180.00 (\$1,809.00 Admin.) Total Cost: \$37989

Task #5: Implementation of Monitoring Plan

The Grantee shall implement the approved Monitoring Plan submitted as part of Task #3 in order to evaluate the various components of this Project. Grantee shall prepare and submit to the Project Manager Annual Monitoring Reports which shall include a brief narrative of work completed under this task, a narrative description of Allotment Permitee compliance, all data collected, analysis of all data collected, a map and GPS location for all monitoring sites, photo point records and photographs, and copies of all materials, labor and equipment. Final analysis and reporting of all monitoring activities shall be included as part of the Final Report.

Deliverable Description: Annual Monitoring Reports **Deliverable Due Date:** 11/30/05, 11/30/06, 11/30/07

Final Report 1/31/08

AWPF Reimbursable Cost: \$9,120.00 (\$456.00 Admin.) Total Cost: \$9576

Task #6: Attend AWPF Information Transfer Meeting

The Grantee may attend an AWPF Information Transfer Meeting and participate in either an oral presentation or a poster presentation about this project. The value of this Task is \$500 fixed cost to compensate the Grantee for its expertise and participation in the meeting.

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 (Please note: No admin. cost)

Task #7: Final Report

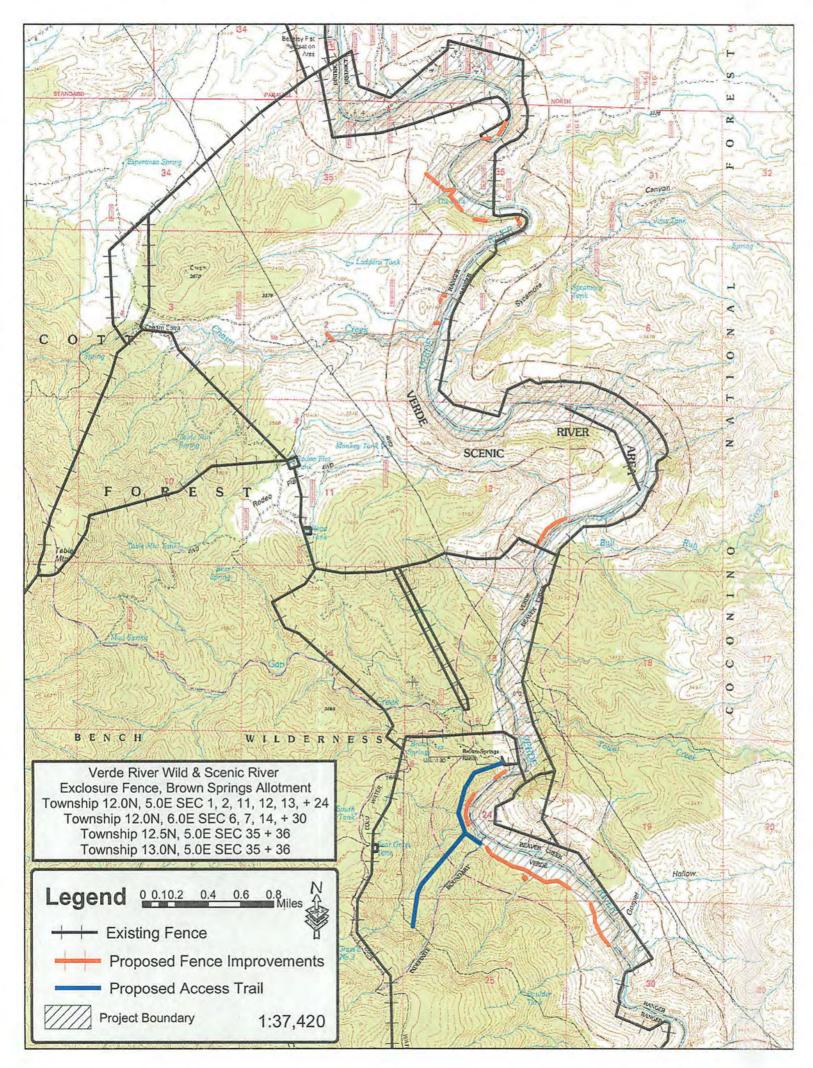
The Grantee shall prepare and submit to the Project Manager a comprehensive final report consistent with the Final Report Guidelines in Appendix A of the FY 2005 AWPF Policies and Application Guidelines Manual, including a summary of all methodologies used, outcome of all tasks, analysis of all project 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: 1/31/08

AWPF Fixed Cost: \$4,630.00 (\$231.50 Admin.) Total Cost: \$4861.50

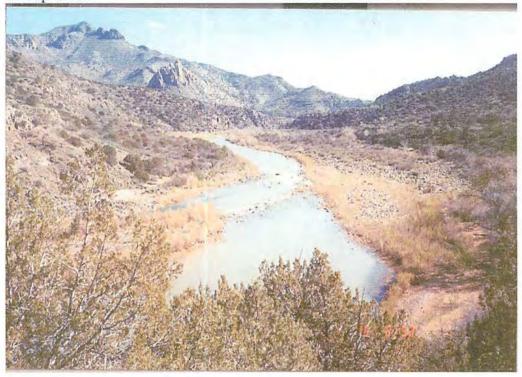
Project Schematic Drawing



Project Site Photographs

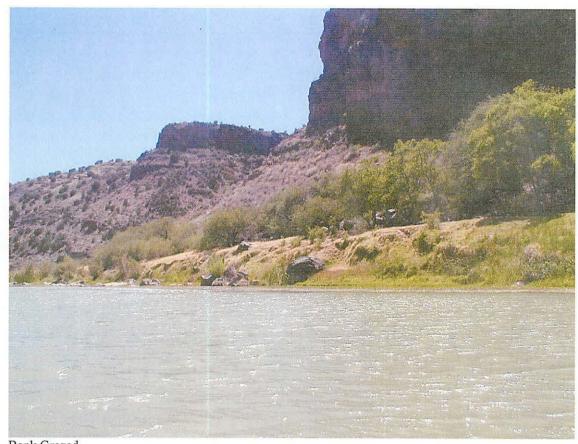
Brown Springs Allotment. Overview of riparian area taken from the proposed trail south

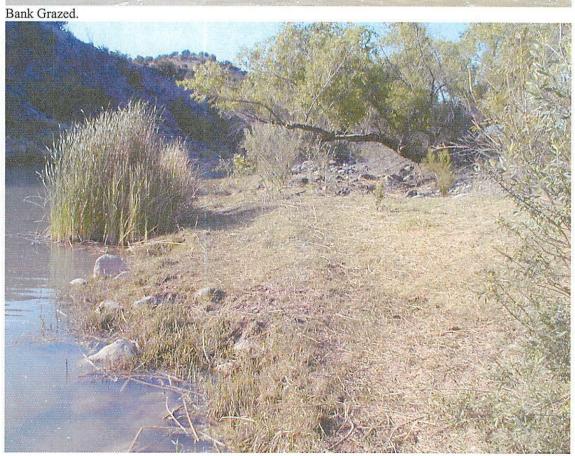
of Gap Creek.

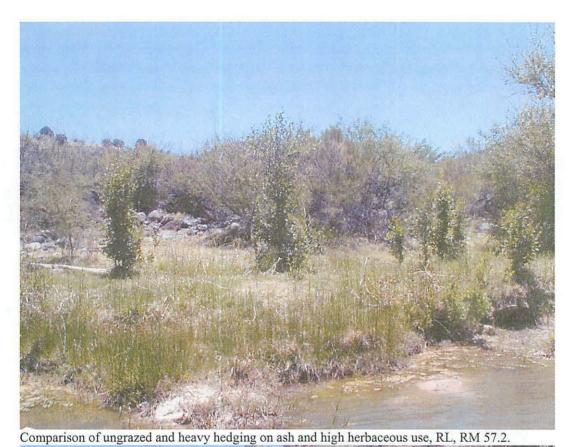


Brown Springs Allotment. Alluvial deposition with a willow community. Seep willow on the green line. Taken from the proposed trail.





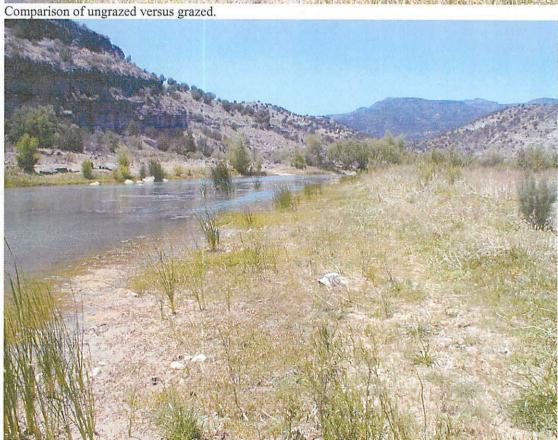




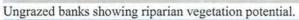


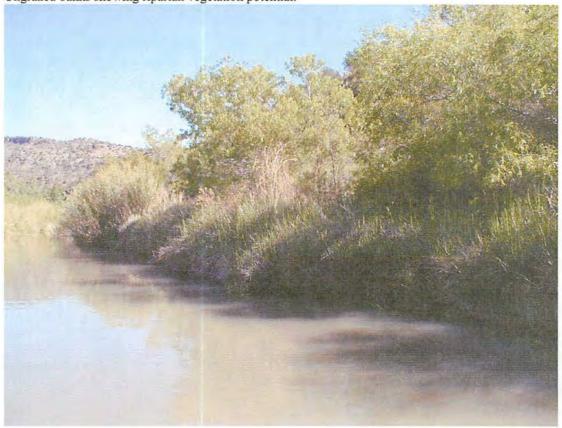












Monitoring Plans

Prior to initiating monitoring, a detailed plan will be developed and submitted for AWPF approval.

Photographic Monitoring

Photographic monitoring will qualitatively document success of the riparian vegetation response and change in channel and floodplain dynamics. The plan will follow the guidelines for photographic monitoring provided in the 2004 AWPF Policies and Procedures Application Guidelines Manual. Photographs from permanent photo points will be used for long-term monitoring of this site after the grant period.

Range Permitee Compliance Monitoring

Range Permitee Compliance Monitoring will inspect, evaluate, and document the structural integrity of the fence improvements and their effectiveness in livestock exclusion.