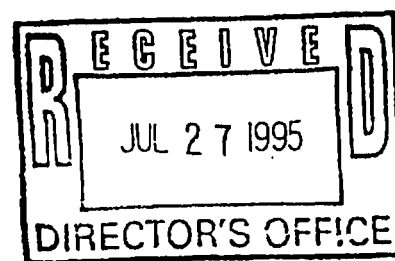


A. Application Cover Page

Application Information

1. Title of project: <u>Sycamore Creek Riparian Management Area</u>		
2. Type of project:	3. Stream type	4. Date submitted <u>July 28, 1995</u>
<u>XX</u> Water Acquisition	<u>XX</u> Perennial	5. Date received by ADWR _____
<u>XX</u> Capital Project or other	<u> </u> Intermittent	6. Applicant name <u>Mesa Ranger District</u>
<u> </u> Water Conservation	<u> </u> Ephemeral	
<u> </u> Research		
7. Address (city, county, zip code)	8. In an AMA	Outside AMA <u>XX</u>
<u>26 N. MacDonald</u>	<u>XX</u> Phoenix	Approximately 40% of the project is within the Phoenix AMA.
<u>P.O. Box 5800</u>	<u> </u> Tucson	
<u>Mesa, Arizona 85211</u>	<u> </u> Prescott	
	<u> </u> Pinal	
	<u> </u> Santa Cruz	
9. Contact person/title and phone number: <u>Russell Orr, Range & Wildlife Staff Officer, 602-379-6446</u>		
10. Type of application:	11. Project start date: <u>Ongoing</u>	
<u>New (X) Continuation ()</u>	End date: <u>March 31, 1998</u>	
12. Other grants obtained or will be applied to for funding:	13. Estimated funding:	
Augmentation: ()	a. AWP <u>\$115,522</u>	
Partners for Wildlife ()	b. Applicant <u>\$115,522</u>	
Heritage ()	c. Other _____	
Others <u>None</u>	d. Total <u>\$231,044</u>	
	14. Tax ID number: <u>N/A</u>	
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. The Arizona Water Protection Fund Commission may approve grant award agreements with modifications to scope items, methodology, schedule, final products, and/or budget.		
<u>Paul W. Libby, Jr.</u>	<u>Acting District Ranger 602-379-6446</u>	
Typed Name of Authorized Representative	Title and Telephone No.	
<u>[Signature]</u>	<u>July 27, 1995</u>	
Signature	Date Signed	

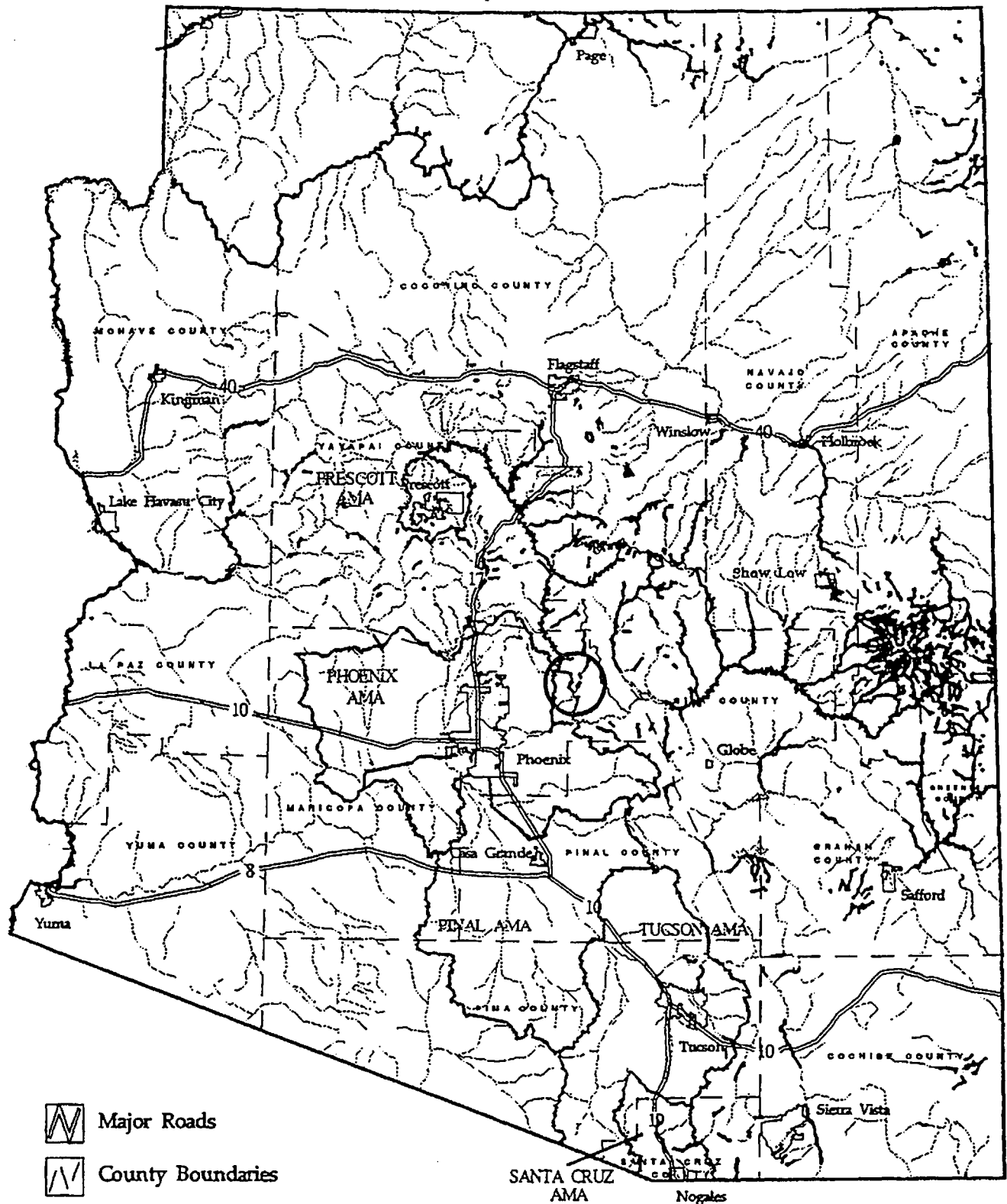


STATE OF ARIZONA

Arizona Water Protection Fund

January 1, 1995

006



Major Roads



County Boundaries



Perennial Streams



Intermittent or Ephemeral Streams



Active Management Areas



0 10 20 30 40 50 100 150
MILES



ARIZONA
DEPARTMENT
OF WATER
RESOURCES

APPLICANT NAME: Mesa Ranger District

Circle the general location of proposed project

H. Minimum Statutory Criteria

The Arizona Water Protection Fund Commission (AWPFC) realizes that completing an application for our program will be a time consuming process. In trying to help you make sure that all statutory requirements and minimum application information requirements are met, we have devised the following two forms:

- 1) Minimum Statutory Criteria that must be satisfied; and
- 2) Application Completeness Checklist

These forms will be part of your completed application. Read through them (but don't try and complete them) before you begin any work on your application. **If your project or program does not meet all the Minimum Statutory Criteria, then it cannot be funded and will not be evaluated.** If you answer NO to any of its questions, you will have to change that portion of your project or program before it is submitted. The Application Completeness Checklist will give you a general idea of the format and types of information that the application requires. **If a form or piece of information is listed as MANDATORY, and it is applicable, it must be included or your application will not be evaluated.**

After completing your narrative proposal, revisit these two forms. Complete the forms and make sure that the minimum requirements are met and your application package is complete. This should save both you and the Commission a great deal of time and effort. If you have any questions regarding these forms, write to Arizona Water Protection Fund Commission, Arizona Department of Water Resources, 500 N. 3rd St., Phoenix, AZ 85004 (Attn: Tricia McCraw), or call (602)-417-2460.

Minimum Statutory Criteria

1. Your application does not require the acquisition of property?
YES xx NO
2. Your application does not require the use of the State's right of eminent domain to acquire water or water rights?
YES xx NO
3. Your application includes a description of the relationship between the project and existing plans, reports and information that are relevant to the project?
YES xx NO
4. When applicable, your application includes provisions for inspection and evaluation of the project?
YES xx NO
5. Your application proposes methods for the expenditure of and accounting for any monies granted by the Commission?
YES xx NO

I. Application Completeness Checklist

APPLICATION COMPLETENESS CHECKLIST

The purpose of this checklist is to ensure that all mandatory application requirements are fulfilled. **If specific forms or information are found to be lacking when the initial completeness review of your application is performed, the application will not be evaluated.** It is extremely important that you complete this checklist when you have finished all other portions of the application and that it is included with your submitted application package.

Form Number	Description	Mandatory (if applicable) Y/N	Completed Y/N/NA
A1	Cover page	Y	Y
A2	State map	Y	Y
	Project area outlined	Y	Y
A3	Location Information Sheet/Land ownership	Y	Y
	7.5 minute USGS map	Y	Y
	Land use/agreement documents	Y	Y
A4	Task-Timetable	Y	Y
A5	Legal/Regulatory checklist	Y	Y
A6	SHPO information sheet	Y	Y
A7	Budget forms	Y	Y
A8	Minimum statutory requirements	Y	Y
A9	Application completeness checklist (this form)	Y	Y
	Narrative section	Y	Y
	Project experience references	Y	Y
	Letters of support	N	N

SYCAMORE CREEK RIPARIAN MANAGEMENT AREA

SUMMARY - The Sycamore Creek Riparian Management Area is being established to restore and protect the unique riparian resources associated with 19 miles of Sycamore Creek, a major tributary to the Verde River.

Uncontrolled livestock grazing and Off-Highway Vehicle use has severely degraded the riparian ecosystem associated with the lower 19 miles of Sycamore Creek. Planning to correct this uncontrolled use includes the recently approved Dos S Unit Livestock Grazing Strategy. The Sycamore Creek Riparian Management Area is a component of this grazing strategy. The objective for managing this area is to separate the riparian from the rest of the unit so that livestock access to the area can be controlled. Because of the degraded condition of this riparian area, livestock grazing will be totally excluded from the area for the first ten years of management. Livestock grazing will, however, continue on the adjacent uplands utilizing a three-pasture rotation system.

The boundary of the management area will be defined by a standard four-strand barbwire fence used in conjunction with natural barriers. Approximately seven miles of this boundary has already been completed with an additional 22 miles planned. Of this 22 miles, approximately 15 miles will be fenced. The funding required to complete this fence has been significantly reduced because of competing uses and an additional source of funds will be necessary to complete the project within the time-frame specified in the Environmental Analysis for the Dos S Unit Livestock Grazing Strategy.

The Sycamore Creek Riparian Management Area provides an excellent opportunity to restore a Hot Desert Riparian Ecosystem while at the same time maintaining multiple-use on National Forest with the Dos S Unit grazing strategy.

INTRODUCTION - In 1989, an allotment management plan was approved for the Sunflower Grazing Allotment on the Mesa Ranger District, Tonto National Forest. This allotment included 188,000 acres which was determined to be too large for any improved livestock grazing strategies. The approved management plan split the allotment into five units, each of which would have its own grazing strategy determined. The Dos S Unit was the third unit to have a grazing strategy approved. The Sycamore Creek Riparian Management Area is a component of the Dos S Unit grazing strategy.

OBJECTIVES - Objectives listed in the approved environmental assessment for the Dos S Unit Grazing Strategy included one specific objective for the Sycamore Creek Riparian Management Area. This objective includes four specific components:

1. Increase the canopy cover of Fremont Cottonwood. This component is measured as the percent of canopy. Increased Cottonwood canopy will shade the riparian area and moderate temperature fluctuations. This increased canopy will also be important to wildlife species (primarily birds) that are dependent on this habitat component.
2. Increase the density of Fremont Cottonwood. This component is measured in the number per acre. The presence of Cottonwood in the area is considerably less than in comparison areas where the riparian resources are considered to be in good condition. Increasing density will provide the trees necessary to meet

the canopy requirements. The trees will also provide the root systems necessary to stabilize the stream banks.

3. Increase the canopy cover of Gooding Willow. This component is measured as the percent of the canopy. Increasing the Willow canopy will have the same beneficial affects as noted for Cottonwoods.

4. Increase the density of Gooding Willow. This component is measured in the number of trees per acre. Increasing the Willow density will have the same beneficial affects as noted for Cottonwoods.

METHODS AND MONITORING - The Sycamore Creek Riparian Management Area will be established by fencing the perimeter to exclude livestock. The area boundary will be located to take advantage of existing Highway 87 right-of-way fence and natural barriers. Roads entering the area will be crossed with cattleguards to eliminate the problem of open gates. The management area boundary will include some upland areas with the riparian. This will provide livestock management options following the initial 10 year recovery period.

Fence construction will follow Tonto National Forest guidelines for wildlife fencing. The bottom wire will be smooth and located 16 inches from the ground surface. This will allow most wildlife to pass under the fence without injury. The next three wires will be barbed to discourage pressure from livestock. These wires will be spaced at 22 inches, 30 inches and 42 inches. The low top wire will allow animals to jump the fence and the gap between the third and fourth wires will prevent entanglement when animals do jump. Standard steel T-type posts will be spaced 15 feet apart with three wire fence stays between posts. Corner and line braces will be constructed utilizing 2 1/2 inch steel angle corner braces with 2 inch steel angle support braces. The corner and support braces will be set in concrete. Cattleguards will be installed at all road locations. These cattleguards will be 14 feet long and 7 1/2 feet wide on railroad tie bases. A 12 - 14 foot gate will be constructed immediately adjacent to each cattleguard to allow horse passage and tracked vehicle passage.

Monitoring within the management area is included in the environmental assessment for the Dos S Unit Grazing Strategy. The response of the riparian community to livestock exclusion will be determined by monitoring the response of Cottonwood and Willow at key sites on Sycamore Creek. Monitoring the response of Cottonwood and Willow is the most practical means of evaluating the exclosure over the short-term. The expected response of Cottonwood and Willow on two established transects is listed below. These transects were established for a baseline and they will be reread at 5 year intervals to determine riparian response.

<u>Sugaloaf Transect</u>	<u>Current</u>	<u>Expected (10 years)</u>
Cottonwood canopy %	1	35
Cottonwood density #/acre	.4	51
Salix canopy %	4	24
Salix density #/acre	3	89
<u>Red Mtn. Transect</u>		
Cottonwood canopy %	19	48
Cottonwood density #/acre	187	247

Salix canopy %	30	35
Salix density #/acre	6	292

Additional monitoring will include rephotographing 31 established photo points along this part of Sycamore Creek. These photo points will be redone annually by Mothers for Clean Water under a volunteer agreement with the Tonto National Forest.

PROJECT LOCATION - The project location is identified on the 7.5 minute, USGS topographic map attached to this application and on Form A3.

PROJECT TIMETABLE - This project was initiated in 1994 following approval of the environmental assessment for the Dos S Unit Grazing Strategy. With current funding completion of the project as planned will not be possible. With additional funding, three years would be required to complete the project.

FINAL PRODUCT AND SIGNIFICANCE OF PROJECT - The end product of the project will be a riparian management area along 19 miles of Sycamore Creek. It will be possible to control livestock access to the area, including the 10 year recovery period specified in the environmental analysis.

Historical land and water use practices along the hot desert rivers and streams have significantly reduced the riparian communities. In many areas this reduction of riparian cannot reasonably be reversed. Sycamore Creek, however, offers an opportunity to restore many miles of hot desert riparian. Land uses that are currently affecting the riparian can be controlled.

PERSONNEL - The project manager will be Russell Orr. Russell is the Mesa Ranger District Range, Wildlife and Watershed Staff Officer. He developed the grazing strategy for the Dos S Unit and was responsible for negotiating with the livestock grazing permittee to establish the riparian management area. Russell has 16 years of experience with Sonoran Desert Ecosystems including riparian and has established special riparian strategies on several grazing allotments.

The actual fence construction will be completed by a Mesa Ranger District multi-functional crew. This crew completes project work during the winter and fights fire during the summer months. Several members of this crew have nearly ten years of fence building experience. They will be working on the project between October 1st and March 31st during each of the three years. The crew will consist of six members working for a total of 240 days. The project work will be completed during fall, winter and spring when conditions are more favorable for this type of work. Crew cost was determined using an average daily cost of \$110 per crew member and a monthly cost of \$625 per vehicle. The actual amount of fence constructed during a given period of time will vary considerably based on access and conditions at the project site.

LEGAL OR REGULATORY COMPLIANCE - On August 5, 1994 a Record of Decision and Finding of No Significant Impact was signed for the Dos S Unit Grazing Strategy. A component of this grazing strategy is the Sycamore Creek Riparian Management Area. Planning for this unit and the riparian management area in particular is in full compliance with the National Environmental Policy Act. This planning process also included formal consultation with the U.S. Fish and Wildlife Service to meet requirements of the Endangered Species Act. A biological opinion was received from the U.S. Fish and Wildlife Service

confirming the planned actions for the unit including the riparian management area. The environmental assessment for the Dos S Unit stated that all ground disturbing activities would be surveyed for cultural resources and a clearance would be obtained from the Tonto National Forest Supervisor prior to implementation of the activity. The survey and clearance process is in accordance with the current agreement between the Tonto National Forest and the Arizona SHPO. This procedure will be followed during completion of the Sycamore Creek Riparian Management Area boundary fence.

COMMUNITY SUPPORT - The Public participation process during the development of the Environmental Assessment for the Dos S Unit included a wide array of individuals, organizations and agencies. Opinions on how livestock grazing should be managed on the unit were highly variable. The final decision was a compromise that provided for recovery of important riparian and upland ecosystems and at the same time provided for continued livestock grazing on the unit. Although not every concern was fully satisfied, the final grazing strategy was accepted by all involved. The cornerstone of the grazing strategy and the reason for its acceptance is the Sycamore Creek Riparian Management Area. Without special management objectives for this area, public support for the grazing strategy would not have existed.

Organizations and agencies that were involved in the planning process included; Arizona Game and Fish Department, Arizona Department of Environmental Quality, Sierra Club, Audubon Society, Arizona Riparian Council, Arizona Grazing Clearinghouse and Arizona State University Department of Zoology.

EXISTING PLANS - Approved grazing strategies are currently being utilized on two grazing allotments upstream of the Sycamore Creek Riparian Management Area. Both of these strategies have special provisions for riparian resources in addition to the upland provisions. Significant improvement in vegetative ground cover is being documented on these allotments. Improved ground cover should result in less sediment moving into the lower reaches of Sycamore Creek and it should also result in a moderation in peak flows, reducing the scouring impact.

C. Location Information Sheet/Land Ownership

LOCATION INFORMATION SHEET/LAND OWNERSHIP FORM

This sheet is to be completed for capital, water acquisition, or research projects, which involve a specific stream reach or watershed area. If the exact extent of the project area is not completely defined at the time this sheet is completed, please make note of this in the appropriate space provided, and complete the form with location information which is as accurate as possible.

1. County: Maricopa 2. Section: Multiple 3. Township: 4,5,6 N

4. Range: 7,8,9 E 5. Stream Name: Sycamore Creek

6. Landownership: National Forest

7. Current land use: Rangeland, Wildlife Habitat and Dispersed Recreation

8. Upstream extent of project area and elevation: Crabtree Butte, 3120 Ft.

9. Downstream extent of project area and elevation: Fort McDowell Reservation
1560 Ft.

10. Length of stream through project area: 19 Miles

11. Size of project area (in acres): 12,357 Acres

12. Is the project area fully defined at this time: Y/N? Yes

13. Ownership of land surrounding project area and its current use:

North: National Forest - Rangeland, Wildlife Habitat, Dispersed Recreation	South: National Forest - Rangeland, Wildlife Habitat, Dispersed Recreation
East: National Forest - Rangeland, Wildlife Habitat, Dispersed Recreation	West: National Forest - Rangeland, Wildlife Habitat, Dispersed Recreation. Fort McDowell Reservation - Indian Reservation

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

The project can be accessed at four locations along State Route 87. Beginning at the intersection of State Route 87 and McDowell Road, drive north on SR87 for 23 miles. Exit left on Forest Road 403 and drive 2½ miles to Sycamore Creek. The second access is 26 miles north on SR87. Exit left on Forest Road 402 and continue 3 miles to Sycamore Creek. The third access is 30 miles north on SR 87. Exit left and drive ¼ mile to Sycamore Creek. The fourth access is 35 miles north on SR 87 where the highway crosses Sycamore Creek.

D. Task - Timetable

[illegible]

[illegible]

[illegible]

E. Legal and Regulatory Compliance Checklist and Permit Descriptions

Applicants\Grantees are responsible for determining that all necessary permits that apply to their project are identified and obtained. For convenience, we have provided the following checklist consisting of some of the local, state and/or federal ordinances and laws that may be applicable to some projects. In addition, the following 3 pages provide a short narrative on the applicability of the permits. While the checklist is not all inclusive, it does provide a basic list of some permits which may potentially be required.

Applies to project:		REGULATIONS/PERMITS	Regulatory Authority
Yes	No		
LOCAL			
	XX	Floodplain Ordinances	County
	XX	Planning and Zoning Ordinances	City and County
	XX	Other	
STATE			
	XX	Floodplain Use Permits	ADWR
	XX	Water Quality Certification (Section 401)	ADEQ
	XX	Aquifer Protection Permits	ADEQ
	XX	Wastewater Reuse Permits	ADEQ
	XX	Groundwater and Surface Water Laws	ADWR
XX		State Historic Preservation Act	SHPO
	XX	Special Use Permits	ASLD
	XX	Arizona Native Plant Laws	ADA
	XX	Other	
FEDERAL			
	XX	CWA (Section 402): Point Source/Stormwater Discharges	EPA/ADEQ
	XX	CWA (Section 404): Section 10 Rivers and Harbors Act	COE
	XX	Wilderness or Wild and Scenic River Acts	BLM/USFS
XX		Endangered Species Act	USFWS
XX		National Environmental Policy Act	BLM/USFS
	XX	Special Use Permits	BLM/USFS
	XX	Other	
INDIAN RESERVATIONS			
	XX	Tribal Permits	
	XX	Other	

State Historic Preservation Office Information

SHPO Certification

This certification is required by regulations implementing the State Preservation Act (A.R.S. 41-861 through 41-864), 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.

PROJECT TITLE: Sycamore Creek Riparian Management Area

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

Does the project have the potential to disturb the surface and/or subsurface of the ground?

YES: XX **NO:**

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:** XX

Are there any known prehistoric and/or historic archaeological sites within the project area?

YES: **NO:** XX

Are you aware of any archeological investigations that have been performed within one (1) mile of the project area?

YES: XX **NO:**

If you have answered "NO" to all of the above questions, please sign on the line below certifying that the activity or project is in compliance (and will remain in compliance throughout the project period) with the State Historic Preservation Act.

Authorized Signature

Date

If you have answered "YES" to any of the questions above, please answer all applicable questions on the other side of this form.

G. Project Budget Sheets

PROJECT BUDGET Cost Estimates: Capital/Water Acquisition (CAP or Effluent)

	FUNDING SOURCES			
	AWPF	Other	Donated Materials/Services	TOTAL
ADMINISTRATION (management and overhead) (1)				
PROJECT LABOR				
Personnel (2)	79,200	79,200		158,400
Travel/Per diem				
Vehicle mileage and monthly rate charges	7,500	7,500		15,000
CONTRACT SERVICES				
PROJECT MATERIALS/SUPPLIES				
Fence posts, t-type	7,084	7,084		14,168
Barbed wire	3,420	3,420		6,840
Smooth wire	1,140	1,140		2,280
Fence stays	2,420	2,420		4,840
Fence clips	278	278		556
Railroad ties	450	450		900
Braces	2,280	2,280		4,560
Cattleguards	10,000	10,000		20,000
Backhoe rental	1,750	1,750		3,500
CAPITAL OUTLAY				
Tech/Industrial Equip. (3)				
Water (CAP/Effluent)				
Other (Describe)				
TOTALS	115,522	115,522		231,044

- (1) Administration is limited to 5% of the total dollars requested for a project.
 (2) Include wages, salaries, and fringe benefits.
 (3) Attach list of capital equipment expenditures over \$1,000.00.