

CWPF 140

Cover Page: Application Information

1. Title of Project: San Pedro Riparian National Conservation Area Watershed Protection and Improvement Project

2. Type of Project: Boundary Fence Completion 3. Stream type 4. Date submitted 30 July 1996

Water Acquisition, Capital Project or other, Water Conservation, Research, Perennial, Intermittent, Ephemeral, Date received by ADWR, Applicant Name BLM Tucson Resource

7. Applicant address (city, county, zip code) San Pedro Office 1763 Paseo San Luis Sierra Vista, AZ 85635 8. In an AMA Phoenix Tucson Prescott Pinal Santa Cruz Outside AMA X

9. Contact person/title and phone/fax number: Jack Whetstone, Wildlife Biologist (520) 458-3559 Phone / (520) 458-3559 Fax

10. Type of application: New (X) Continuation () 11. Project start date: 1 October 1996 End date: 30 April 1998

12. Other grants obtained and secured: Grant type Amount San Pedro RNCA Watershed Rehabilitation WPSF Grant \$286,000 Total \$286,000 13. Estimated funding: a. AWPf \$89,250 b. Applicant \$28,780 c. Other d. Total \$118,030 14. Tax ID number: PII

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 within this application 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.

William Civish Typed Name of Authorized Representative

District Manager (520) 428-4040 Title and Telephone No.

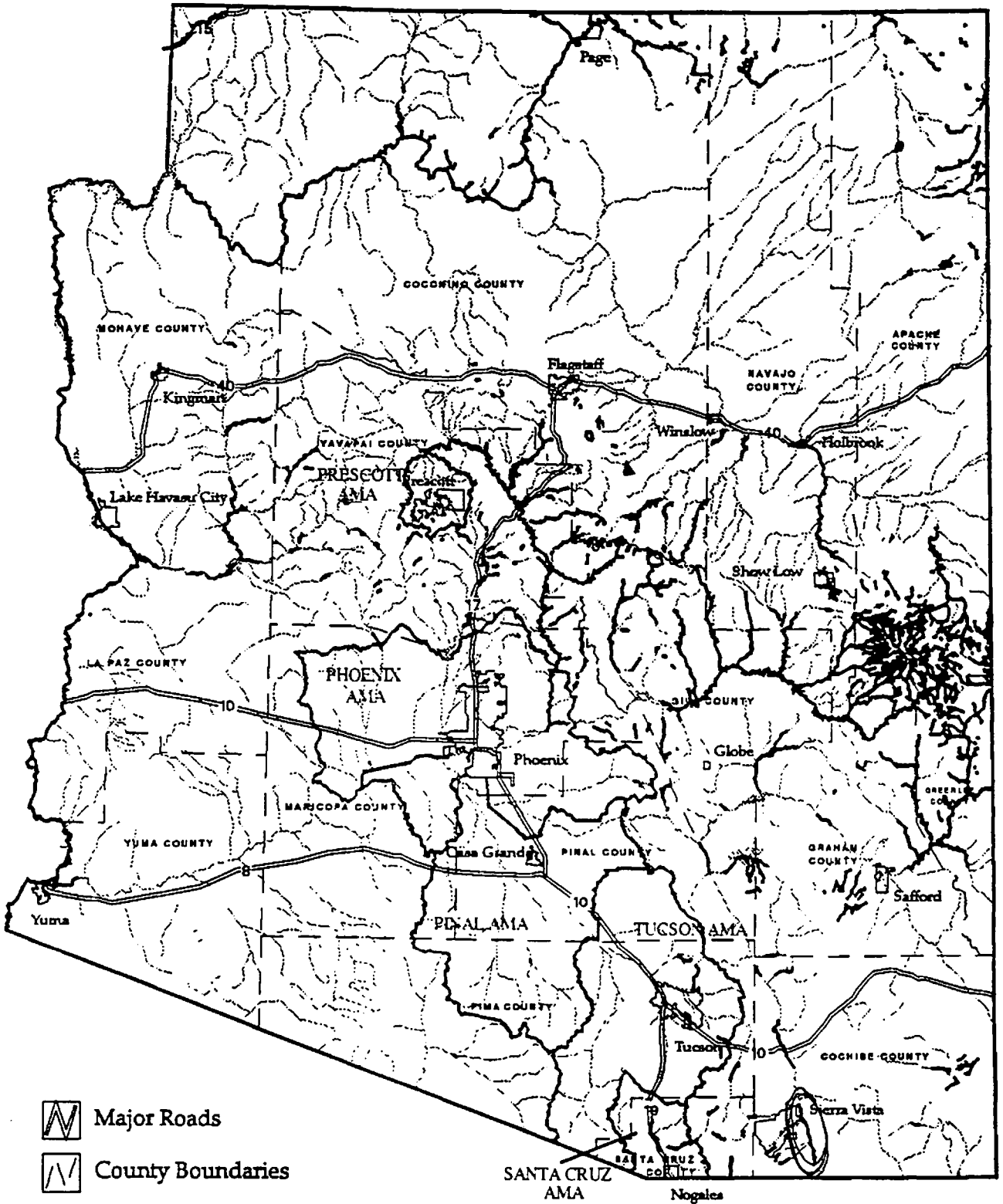
Signature: Donald Charpin for Bill Charpin






Date Signed: 8/1/96



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.



-  Major Roads
-  County Boundaries
-  Perennial Streams
-  Intermittent or Ephemeral Streams
-  Active Management Areas



PROJECT NAME: San Pedro RNCA
Watershed Protection and Improvement

Summary:

The purpose of this project is to improve, enhance and protect the riparian and upland habitats and water quality of the San Pedro Riparian National Conservation Area on the San Pedro River.

The main objective is to achieve and maintain proper functioning condition of the riparian resources and improve water quality of the San Pedro by eliminating livestock trespass on 36 miles of the SPRNCA.

To accomplish the objectives of the project the BLM will survey and design the necessary fencing to keep livestock out of the NCA. BLM will issue construction contracts to build approximately 11-1/2 miles of new fence and upgrade 7 miles of old fence.

This project will help resolve a critical issue identified in the Bureau's Riparian Management Plan, The Safford District Grazing Plan and the San Pedro River Riparian Management Plan. Accomplishing the project objective will provide long term benefits for the wildlife and human communities that depend upon the resources of the San Pedro River for life and leisure. The project enhances the economic benefits of ecotourism without undue effects on the upland grazing allotments.

Accomplishing the goal of this project is supported by local groups who are actively pursuing methods to improve riparian habitat and water quality and quantity through stabilization and restoration of the riparian corridor of the San Pedro River.

LOCATION INFORMATION SHEET/LAND OWNERSHIP FORM

1. County: **Cochise County** 2. Section: **Numerous sections in township**
3. Township: **18S through 24S** 4. Range: **21E, 22E**
5. Stream Name: **San Pedro River & Babocomari**
6. Landownership of project area: **Bureau of Land Management**
7. Current land use of project area: **Preservation, Recreation**
8. Length of stream through project area: **36 miles**
9. Size of project area (in acres): **approximately 45 acres, approximately 11-1/2 miles of new fence and upgrade 7 miles of old fence**
10. Is the project area fully defined at this time:
Area is defined, but BLM will need to survey fence line.
11. Provide directions to the project site from the nearest town. List any special access requirements.
Access can be obtained along Highway 90, seven miles east of Sierra Vista.
12. Describe the agreements which give you legal access to the project area throughout the project period. Include signed copies of any agreements already in effect.
BLM Ownership

Statement of problem/s:

This project is recommended as a means of improving, enhancing and protecting the riparian and upland habitats and water quality of the San Pedro Riparian National Conservation Area on the San Pedro River. The main problem is an inability to achieve and maintain proper functioning condition of the riparian resources and improved water quality due to livestock trespass.

Statement of cause/s of the problem/s:

New acquisitions within and bordering the RNCA are unfenced and some existing fence lines are old and inadequate, particularly in water gaps. Also, existing fence lines are usually not designed to accommodate safe wildlife access to the river. This situation results in unmanaged cattle access and grazing within the RNCA thus damaging the riparian area and reducing the opportunity for success in establishing and maintaining proper functioning riparian conditions.

Statement of remedies or solutions:

Proper management of cattle and wildlife access to the area by constructing new fences in unfenced areas and repairing / replacing portions of existing fence lines.

Introductory Information:

The San Pedro Riparian National Conservation Area is 45 miles southeast of Tucson, Arizona in Cochise County. The RNCA includes an approximately 35 mile segment of the San Pedro River from the Mexican Border to the town of Saint David. A single perennial waterway, Babocomari Creek, flows into the San Pedro at the ghost town of Fairbank.

The San Pedro was designated as the first Riparian Conservation Area by congressional legislation in 1988. It is awaiting congressional designation as a wild and scenic river. The Conservation Area is widely recognized as the best remaining example of a Southwestern riparian corridor. The San Pedro has been called one of the "Last Great Places" by the Nature Conservancy and in 1995 was designated by the American Bird Conservancy as the Nation's first Globally Important Bird Area. It was designated critical habitat for the endangered Southwestern Willow Flycatcher in 1994.

This segment of the San Pedro is a broad, relatively flat channel with Fremont Cottonwood and Gooding Willow, considered the rarest woodland type in the country. Other communities include mesquite bosques and sacaton and other grasslands. It is situated in the Basin and Range Physiographic Province in a transition zone between Sonoran and Chihuahuan biotic communities. Because it drains mountains that have affinities with both the Sierra Madre to the south and the Rocky Mountains to the north the San Pedro RNCA is one of the most biologically diverse areas in the United States. The shorelines are mostly remote and undeveloped with dense riparian vegetation associated with proper functioning condition.

The approximately 2500 acres of riparian vegetation communities along the 35 miles of the river provide essential or critical habitat for a wide variety of species including 86 species of mammals, over 350 species of birds, 43 species of reptiles and amphibians and 2 species of native fish. It also provides habitat for over 40 special status species. The river is widely considered a very important migratory corridor for many species of neotropical birds which led to its IBA designation. It has been estimated that as many as 5 million songbirds per day use this critical corridor during migration. Songbird nesting densities have been documented to be the highest noncolonial nesting densities in the country.

Prior to 1988, the San Pedro NCA was grazed year around by several livestock operators. In 1986 the Bureau of Land Management acquired the land in a trade with White Tank Associates and by January of 1988 all the livestock were removed from within the boundaries. At this time a 15 year grazing moratorium was initiated to study the effects of exclosure. Vegetation and wildlife monitoring programs were initiated that have documented the changes from a grazed to an ungrazed condition. These studies have documented tremendous increases in bird populations and impressive recovery of the riparian corridor.

With decreasing federal budgets, adequate fencing of the Conservation Area has not been completed. Some areas had old, inadequate fence when acquired and other fence lines have deteriorated in the 12 years since they came into BLM control. As new lands have been acquired within the NCA, some boundaries have changed and sections of new fence are needed. As a result, livestock trespass from adjacent allotments has increased each year. This has become increasingly apparent during drought cycles. Cows on degraded rangelands adjacent to the NCA have continually pushed through the fence to get to dramatically greener pastures. This has led to increased hiker/cow conflicts and in some areas declining riparian conditions.

The primary benefit of this project would be to effectively restrict access by livestock to the NCA along all the boundaries. Additional benefits would include eliminating illegal ORV access which is occurring through some of these fence lines and helping adjacent allottees keep control over their herds. These benefits would lead to better riparian and upland conditions within the NCA.

The San Pedro Riparian Conservation Area has been the source of many of the studies that have been published regarding the impacts to riparian areas from livestock grazing and livestock exclusion. The results of this project will further substantiate these studies. BLM will continue to present the results of studies and the benefits of this project in local, regional, state and national forums.

Objective

See Objective section

Methods

To complete the project of preventing livestock access to the San Pedro River within the RNCA it will be necessary to complete perimeter fence lines.

Surveys will be conducted to site fence alignments in areas where no fence now exists. Fence corridors will be flagged by BLM crews. All fence will be on BLM lands and BLM engineers will design the fencing. All fence installation will be supervised by BLM staff.

BLM will complete an environmental assessment for the proposed construction activities once the funding is awarded. This process will be completed within 90 days of initiation. Once the environmental assessment is completed, BLM will solicit competitive bids, evaluate proposals and award the contract for the construction projects. Construction of the project will commence 30 days after the contract is awarded. Fences in the area will be maintained through cooperative agreements with local ranchers or other land holders.

All fences will be built to BLM specifications allowing safe movement for wildlife. These specifications call for a four strand fence, with three barbed wire strands and the bottom strand smooth wire. Fence posts will be 30 feet apart with three stays in between. Wire spacing will be in accordance with illustration 10 of the BLM Handbook 6510 (attached).

Monitoring

Riparian areas are functioning properly when there is adequate structure present to provide the listed benefits applicable to a particular area. In order to determine if the benefits are applicable to a particular riparian area, an analysis must be made based on the riparian area's capability and potential. If, for example, the system does not have the potential to support fish habitat, that criteria would not be used in the assessment. Bureau of Land Management Technical Reference 1737-9, Process for Assessing Proper Functioning Condition contains a complete discussion of the application of the concept. (A copy of the manual is included with the grant application.)

Numerous on-going monitoring projects are already in place that will help assess the progress made by the completion of this project.

In addition, a proper functioning condition assessment will be conducted every three years by a BLM interdisciplinary team. This team will consist of a BLM vegetation specialist, hydrologist, wildlife biologist and soil scientist. The team will

1) Continue to conduct avian monitoring at the Lewis Springs/San Pedro House sites. This monitoring will include Point Count Transects and MAPS (Monitoring Avian Productivity and Survivorship) constant effort mist netting as well as Foliar Height Diversity (FHD) measurements at an additional 10 transect points. This monitoring project now consists of 10 years of transect data and 2 years of MAPS data.

2) Established photo points will be retaken every 3 years.

3) Conduct vegetation transects at 11 established line intercept transects to determine total ground cover, species frequency and foliar height and density every 3 years.

Conducting the proper functioning condition assessments will provide the information to determine if the actions taken are meeting the objective. Since proper functioning condition can take several years to reach, the photo points and vegetation transects will document incremental change from project completion to proper functioning condition.

Regular hydrological monitoring is conducted throughout the length of the NCA. This and other available data will be analyzed to determine sediment load and coliforms.

Quarterly progress and expenditure reports will be filed during the term of the contract. Data from the BLM interdisciplinary team will be available for the AWPFC Committee and its staff to review whenever they desire.

End Products and Significance of the Project

1) Approximately 13 miles of new fencing will be built to eliminate trespass grazing on the San Pedro River within the RNCA, approximately 36 miles of riparian habitat.

2) The desired long term effect of this project is to complete and ensure the restoration of the 36 miles of the San Pedro within the SPRNCA to a "proper functioning condition" (in about 10 years) which should have the following effects:

- a) provide clean water and habitat for aquatic species,
- b) provide and protect dense root systems along stream banks that will provide overhanging banks, pool reaches and diverse habitat for aquatic species,
- c) increase and diversify wildlife habitat,
- d) continue to increase the quantity and quality of habitat available for neotropical migratory birds,
- e) continue to improve suitable habitat for Willow Flycatcher,
- f) protect a population of Lowland Leopard Frog,
- g) continue to reduce peak flows and act as a buffer to reduce downstream flood damage,
- h) continue to increase the vegetative ground cover and organic matter production which will improve soil stability and provide better protection from periodic flooding,
- i) improve the visitor experience within the San Pedro RNCA. (Visitation now exceeds 100,000 per year).

3) A final project report will be compiled and forwarded to the Water Protection Fund Committee. While numerous articles and studies have been published regarding the impacts to riparian areas from livestock grazing and livestock exclusion, the results of this project will further substantiate the effectiveness of such management practices in the Desert Southwest. BLM has and will continue to seek opportunities to present the results of this project at various forums.

Objective #1:

The primary objective of the San Pedro RNCA's Riparian Improvement Project is to protect current improvements and continue to improve the conditions within the entire RNCA. These improvements will ensure that all of the riparian corridor of 36 miles will become and/or remain in "proper functioning condition".

Accomplishing the primary objective would result in additional San Pedro riparian wetland areas having adequate vegetation, landform and large woody debris to:

- a) dissipate stream energy associated with high water flows, thereby reducing erosion and improving water quality;
- b) filter sediment, capture bedload and aid floodplain development;
- c) improve flood-water retention and ground-water recharge;
- d) develop root masses that stabilize streambanks against cutting action;
- e) develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration and temperature necessary for fish production, waterfowl breeding and other uses;
- f) and support greater biodiversity.

Benefits:

The desired long term effect of this project is to complete and ensure the restoration of the 36 miles of the San Pedro within the SPRNCA to a "proper functioning condition" (in about 10 years) which should have the following effects:

- a) provide clean water and habitat for aquatic species,
- b) provide and protect dense root systems along stream banks that will provide overhanging banks, pool reaches and diverse habitat for aquatic species,
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- d) continue to increase the quantity and quality of habitat available for neotropical migratory birds,
- e) continue to improve suitable habitat for Willow Flycatcher,
- f) protect a population of Lowland Leopard Frog,
- g) continue to reduce peak flows and act as a buffer to reduce downstream flood damage,
- h) continue to increase the vegetative ground cover and organic matter production which will improve soil stability and provide better protection from periodic flooding,
- i) improve the visitor experience within the San Pedro RNCA. (Visitation now exceeds 100,000 per year).

Proper functioning condition is based on the understanding of the physical and biological processes associated with riparian areas. It can be thought of as the threshold where vegetation, woody debris or geology prevents continual channel degradation from flowing water. Achievement and maintenance of proper functioning condition will enhance habitat for neotropical migratory birds, native fish, mammals and reptiles and amphibians. It will assist in the down or de-listing of the Southwestern Willow Flycatcher. In addition, bank stability will increase, water quality will improve increasing the quality of the aquatic habitat.

The Bureau of Land Management's Riparian Management Goal is to restore and maintain 75 percent of the Bureau's riparian wetland areas in a "proper functioning condition" by 1997.

Objective #2:

To improve water quality of the San Pedro River.

Benefits:

Recreationists on the San Pedro RNCA and downstream users will benefit from having use of improved water quality.

Task #1 Description:

Survey locations for fencing.
Design fencing.

AWPF task cost: \$5,000
Deliverable description: Survey markers and defined boundary lines.

Deliverable due date: January 1, 1997

Task #2 Description:

Perform environmental assessment.

AWPF task cost: 0
Deliverable description: Completed environmental assessment..

Deliverable due date: February 1, 1997

Task #3 Description:

Prepare and issue construction contract.

AWPF task cost: \$4,250
Deliverable description: Contract issued.

Deliverable due date: April 1, 1997

Task #4 Description:

Supervise fence installation.

AWPF task cost: 0
Deliverable description: Proper fence installation

Deliverable due date: April 1, 1998

Task #5 Description:

Quarterly Report including photos.

AWPF task cost: 0
Deliverable description: Report submitted to Arizona Water Protection Fund Committee.

Deliverable due date: Every 3 months

Task #6 Description:

Complete new fence construction.

AWPF task cost: \$65,000.00
Deliverable description: New boundary fence completed.

Deliverable due date: April 1, 1998

Task #7 Description:

Complete old fence reconstruction.

AWPF task cost: \$15,000.00
Deliverable description: Reconstructed old fences completed.

Deliverable due date: April 1, 1998

Task #8 Description:

Ongoing monitoring of area to ensure proper functioning condition of riparian corridor.

AWPF task cost: 0

Deliverable description: Various bureau reports, studies, publications and presentations.

Deliverable due date: Ongoing.

PROJECT BUDGET

	FUNDING SOURCES			
	AWPF	Other	Donated Mat./Serv.	TOTAL
ADMINISTRATION COSTS (1)				
Administer and prepare contract and budget	\$4,250	\$11,050		\$15,300
DIRECT LABOR COSTS (2)				
Jack Whetstone, Project Leader \$12.85x280hrs.		\$3,600		\$3,600
Grant Drennen, Project Co-Leader \$22.67x60hrs.		\$1,360		\$1,360
Tony Herrell, Resource Chief \$27.36x20hrs.		\$550		\$550
Howard Kahlow, Realty Specialist \$28.13x20hrs.		\$570		\$570
Mark Fredlake, Wildlife Biologist \$21.19x40hrs.		\$850		\$850
John Swift, Maintenance Supervisor \$18.93x140hrs.		\$2,650		\$2,650
OTHER DIRECT COSTS				
Vehicle Expense		\$2,800		\$2,800
Photo Expense		\$200		\$200
Computer Time		\$300		\$300
Supplies & Materials		\$350		\$350

	FUNDING SOURCES			
	AWPF	Other (L&WCF Dollars)	Donated Mat./Serv.	TOTAL
Sub Totals	\$4,250	\$24,280		\$28,530
OUTSIDE SERVICES				
Fencing Contractors	\$80,000			\$80,000
Surveyors	\$5,000	\$4,500		\$9,500
CAPITAL OUTLAY				
Tech/Industrial Equip. (3)	0			0
Water (CAP/Effluent)	0			0
Other (describe)	0			0
TOTALS	\$89,250	\$28,780	0	\$118,030

- (1) Administration costs are 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

Budget Information:

The BLM is willing to waive 13% of the normal 18% of the administrative overhead cost associated with administering reimbursable grants and for the issuing contracts over \$25,000 by the Denver Service Center. This amounts to \$11,050 above the 5% of the AWPf grant amount being requested (\$85,000). The BLM will also contribute \$4,500 toward the fence line survey cost from Land and Water Conservation Fund monies received by the area in association with the new acquisitions.

Existing Plans:

This project is consistent with the Safford District Resource Management Plan, the Final San Pedro River Riparian Management Plan and Environmental Impact Statement and the San Pedro Habitat Management Plan.

Community Support:

The San Pedro RNCA was established by action of the US Congress and has been subjected to all public planning and National Environmental Protection Act policies relative to public notice and involvement. The proposed project and actions have been supported by the public and worked out with, and are supported by, the affected ranchers during the planning process. Letters of support are attached.

Personnel:

Jack Whetstone will serve as the Project Leader and contact person. Jack has spent the last 4 years with BLM conducting bird, water and vegetation monitoring and surveys. Jack has 11 years in the construction business and has built fences for U.S. Forest Service.

Tony Herrell will be using his expertise as a manager to advise on this project. Tony has been with the BLM since 1983 and serves in the capacity of Chief of Nonrenewable Resources with the Tucson Resource Area.

Grant Drennen is the Range Conservationist for the Tucson Resource Area. Grant will assist Jack Whetstone as project co-leader. His contacts with ranchers in the area will provide the necessary coordination for maintenance and livestock related issues.

Howard Kahlow, Realty Specialist, will assist with planning and coordinate survey work. Howard has been a BLM Realty Specialist specializing in acquisitions for the last 5 years. Prior to his work at the Bureau, Howard worked for the USDA Farmers Home Administration as an Agricultural Management Specialist.

Mark Fredlake has been a Wildlife Biologist with the Bureau for over 16 years. Mark will serve on the interdisciplinary team monitoring the effects of this project and will assist in design and construction.

John Swift, Maintenance Supervisor will help Grant Drennen and Jack Whetstone in supervising the contract for labor on this project. John had been involved in a variety of construction and maintenance jobs for 13 years prior to coming to the Bureau. John has 5 years service with the Bureau, restoring historical buildings, maintaining rental property, building ramadas and maintaining fencing.

Cattle Ranchers holding adjacent permits will assist in various phases of the project and will be responsible for removing cattle once fencing is in place. Rancher assistance in monitoring fences will be an ongoing contribution to the riparian and water quality management efforts in the San Pedro RNCA.

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: San Pedro Riparian National Conservation Area Watershed Protection & Improvement Plan

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: _____ NO: X

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: X

Are there any known prehistoric and/or historic archaeological sites within the project area? YES: _____ NO: X

Are you aware of any archeological investigations that have been performed within one (1) mile of the project area? YES: _____ NO: X

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. YOU MUST SUBMIT THIS FORM WITH YOUR COMPLETED APPLICATION.

Gary Stumpf
Authorized Signature

8/1/96
Date

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

If you answered yes to question #1, specifically identify any surface or subsurface impacts that are expected. Attach extra sheets if more space is needed.

Blank lines for providing details on impacts.

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 a natural undisturbed condition, or has it been bladed, paved, graded, used for agriculture, etc.).

Attach extra sheets if more space is needed.

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

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.

YOU MUST SUBMIT THIS FORM WITH YOUR COMPLETED APPLICATION

Fence type:	cattle only BLM wire spacing standards see item 4-1741-1 FENCING BLM
Fence description:	barbed 4 wire, max height 42"
Purpose of fence:	restrict livestock access define conservation area boundary
Approximate fence length:	18.5 miles
Approximate number of gates to be installed:	0
Approximate number of cattle guards to be installed:	0
Cost of fence in budget:	\$83,000 / 11.5 mi@\$6,000 per mile / 7 mi. @\$2,000 per mile
Cost of gates and cattle guards in budget:	0
Have you included a map indicating the approximate location of all fence segments? If NO, please explain WHY.	yes
Who will be responsible for fence maintenance once the fence is complete?	adjacent permittees
Additional information if required	

AWPF Task Form for common Monitoring Activities

Item	Applicant's response
Groundwater monitoring (Y/N): if Y,	Y
Depth to water (Y/N): if Y	Y
method?	monitor wells
approx. # of sample pts.?	21
sample frequency?	continuous to monthly
start date & end date?	1986-ongoing
GW quality (Y/N): if Y	N
constituents?	
approx. # of sample pts.?	
sample frequency?	
start date & end date?	
Surface water monitoring (Y/N)	Y
Discharge (Y/N): if Y	Y
method?	stream flows
approx. # of sample pts.?	10
sample frequency?	monthly
start date & end date?	1986-ongoing
Stage (Y/N): if Y	Y
method?	USGS gauges
approx. # of sample pts.?	2
sample frequency?	
start date & end date?	
SW quality (Y/N): if Y	N
constituents?	
approx. # of sample pts.?	
sample frequency?	
start date & end date?	

AWPF Task Form for common Monitoring Activities

Photo point monitoring (Y/N): If Y,	Y
Approximate number of points, and photos per point?	10 / 4
How often will photos be taken?	3 year intervals
Additional information if needed	
Wildlife monitoring (Y/N): If Y,	Y
Aquatic (Y/N): If Y,	N
Which plant and/or animal categories?	
Which parameters?	
How often will monitoring be performed?	
Start and end dates for monitoring?	
Terrestrial (Y/N): If Y,	Y
Which plant and/or animal categories?	Bird, General Vegetation
Which parameters?	Point count transects/Line intersect/Monitoring avian productivity and survivorship (MAPS)/Foliar height diversity
How often will monitoring be performed?	Avian (2-3x per month) Vegetation (every 3 years)
Start and end dates for monitoring?	1986-ongoing
Additional information if needed	
Fisheries habitat (Y/N): If Y,	N
List abiotic parameters	
List biotic parameters	

How often will monitoring be performed?	
Start and end dates for monitoring?	
Climatic data (Y/N): If Y,	Y
List types of data?	Rainfall
How often will monitoring be performed?	Continuous
Start and end dates of monitoring?	1986-ongoing
Additional information if needed	
Soil monitoring (Y/N): If Y,	
Soil type (Y/N)	
Soil moisture (Y/N): If Y,	
How often will monitoring be performed?	
Start and end dates for monitoring?	
Additional information if needed	
Channel morphology (Y/N): If Y,	N
List parameters measured?	
How often will monitoring be performed?	
Start and end dates for monitoring?	
Aerial imagery: photos/videography (Y/N): If Y,	N
List formats that will be used	
How often will imagery be taken?	
Start and end dates for imagery?	

Additional information if needed	
Will transects be used (Y/N) during any of the activities mentioned above: If Y,	Y
List which activities involve the use of transects	Avian monitoring, vegetation monitoring
Transect dimensions? (If more than one type/size, please indicate)	Avian transect 4,000 meters Vegetation transect 1,000 meters per
Approximate number?	11
Location selection parameters?	
Will quadrats be established along transects (Y/N): If Y,	N
Quadrat dimensions? (If more than one size/type please indicate)	
Approximate number?	
Location selection parameters?	
Additional information if needed	



DEPARTMENT OF THE ARMY
UNITED STATES ARMY INTELLIGENCE CENTER AND FORT HUACHUCA
FORT HUACHUCA, ARIZONA 85613-0000



REPLY TO
ATTENTION OF
Directorate of Engineering
and Housing

31 July 1996

Mr. Tony Herrell
U.S. Department of the Interior
Bureau of Land Management
1763 Paseo San Luis
Sierra Vista, AZ 85635

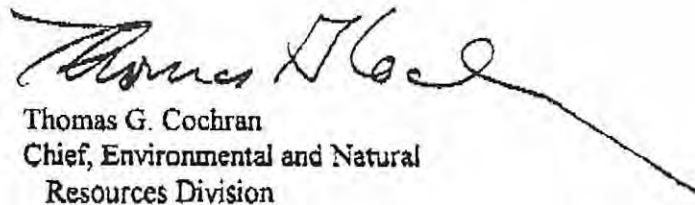
Dear Mr. Herrell:

I am pleased to write this letter in support of the Bureau of Land Management San Pedro National Conservation Area's Water Protection Fund application.

The San Pedro National Conservation Area is an important element in this area. To restore, protect, and enhance the resources of the National Conservation Area (NCA), managing unauthorized livestock and vehicle trespass is necessary.

The recovery within the San Pedro NCA has been one of the land management success stories in southern Arizona. Continuing this recovery benefits the community and the downstream users.

The Bureau of Land Management's long-term management and improvement goals for the San Pedro River provide significant benefit to the local ecology and I believe this fencing proposal will contribute to achieving those ends.


Thomas G. Cochran
Chief, Environmental and Natural
Resources Division



HUACHUCA AUDUBON SOCIETY

POST OFFICE BOX 63 SIERRA VISTA, ARIZONA 85636

August 1, 1996

Arizona Water Protection Fund Grant Committee

This letter is written in support of the BLM's San Pedro Riparian National Conservation Area's Water Protection Fund application.

The San Pedro Riparian National Conservation Area has recently been designated as the western hemisphere's first Globally Important Bird Area. In order to protect this national treasure, it is imperative that the boundaries be fenced to manage livestock and prevent unauthorized vehicle trespass.

The recovery of the riparian area has been one of the major success stories of land management in southern Arizona. A continuation of this recovery not only benefits this community and downstream users but due to the river's importance as a migratory corridor, the benefits are distributed throughout the west.

We definitely endorse the BLM's fencing proposal and believe it will have widespread positive impacts.

Sincerely,

LeAnn Whetstone

President



Friends of the San Pedro River, Inc.

1763 Paseo San Luis • Sierra Vista, Arizona 85635-4611
(520) 459-2555

July 31, 1996

Arizona Water Protection Fund Grant Committee

As an organization dedicated to assisting the BLM in its stewardship of the NCA, we are pleased to write this letter in support of the Bureau of Land Management San Pedro Riparian National Conservation Area's Water Protection Fund application.

The San Pedro Riparian National Conservation Area is important to this area. In order to protect the San Pedro National Conservation Area, it is necessary to fence the boundaries to prevent livestock trespass.

We strongly support the BLM's fencing proposal and believe it will greatly benefit this community.

Sincerely,

Todd Doser
President