

**Arizona Water Protection Fund
FY 2014 Grant Application Review**

Application # WPF 0406 Applicant: Cocopah Indian Tribe
Title of Project: Cocopah Colorado River Restoration
Project

Additional materials were submitted with this application that could not be reproduced and distributed for review. These materials may be reviewed in person at the Arizona Water Protection Fund offices at (3550 N. Central Avenue, 2nd Floor, Phoenix). The additional materials available are the following:

Maps
 Photographs
 Disk
 Other SanDisk USB Flash Drive

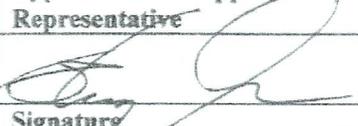
WPF 0406

RECEIVED

Arizona Water Protection Fund
Application Cover Page
FY 2014

AUG 26 2013

Water Protection Fund

Title of Project: Cocopah Colorado River Restoration Project											
Type of Project: <input checked="" type="checkbox"/> Capital or Other <input type="checkbox"/> Water Conservation <input type="checkbox"/> Research	Stream Type: <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral										
Your level of commitment to maintenance of project benefits and capital improvements: <input type="checkbox"/> < 5 years <input type="checkbox"/> 5-10 years <input type="checkbox"/> 11-15 years <input checked="" type="checkbox"/> 16-20 years											
Applicant Information: Name/Organization: Cocopah Indian Tribe Address 1: 14515 S. Veterans Drive Address 2: City: Somerton State: AZ ZIP Code: 85350 Phone: 928-627-2025 Fax: 928-627-3173 Tax ID No.:											
Inside an AMA: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, which AMA: <input type="checkbox"/> Phoenix <input type="checkbox"/> Tucson <input type="checkbox"/> Prescott <input type="checkbox"/> Pinal <input type="checkbox"/> Santa Cruz											
Type of Application: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation											
Contact Person: Name: Barbara Mathias Title: EPO Director Phone: 928-627-2025 Fax: 928-627-3173 e-mail: cocoeppo@cocopah.com											
Any Previous AWPf Grants: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, please provide Grant #(s): 08-156WPF											
Arizona Water Protection Fund Grant Amount Requested: \$143,598.00 If the application is funded, will the Grantee intend to request an advance: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Matching Funds Obtained and Secured: <table border="1"> <thead> <tr> <th>Applicant/Agency/Organization:</th> <th>Amount (\$):</th> </tr> </thead> <tbody> <tr> <td>1. Applicant</td> <td></td> </tr> <tr> <td>2.</td> <td></td> </tr> <tr> <td>3.</td> <td></td> </tr> <tr> <td colspan="2" style="text-align: right;">Total:</td> </tr> </tbody> </table>	Applicant/Agency/Organization:	Amount (\$):	1. Applicant		2.		3.		Total:	
Applicant/Agency/Organization:	Amount (\$):										
1. Applicant											
2.											
3.											
Total:											
Has your legal counsel or contracting authority reviewed and accepted the Grant Award Contract General Provisions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A											
Signature of the undersigned certifies understanding and compliance with all terms, conditions and specifications in the attached application. Additionally, signature certifies that all information provided by the applicant is true and accurate. The undersigned acknowledges that intentional presentation of any false or fraudulent information, or knowingly concealing a material fact regarding this application is subject to criminal penalties as provided in A.R.S. Title 13. The Arizona Water Protection Fund Commission may approve Grant Awards with modifications to scope items, methodology, schedule, final products and/or budget.											
Sherry Cordova	Chairwoman, 928-627-2102										
Typed Name of Applicant or Applicant's Authorized Representative	Title and Telephone Number										
	8-22-2013										
Signature	Date Signed										

COCOPAH INDIAN TRIBE

COCOPAH COLORADO RIVER RESTORATION PROJECT

AWPF GRANT PROPOSAL

August 23, 2013

Executive Summary

This proposal will restore 15 acres of native riparian and upland vegetation within the Cocopah Indian Reservation North Reservation. This restoration project is an integral piece to the restoration of the Lower Colorado River in order to increase habitat for wildlife by providing greater connectivity to native habitats as well as providing recreational, educational, and cultural opportunities for the Cocopah Tribe and the public. In fact, the project will be immediately adjacent to an existing 5-acre restoration project being conducted by the tribe as well as a 45-50 acre restoration project being planned by the Bureau of Land Management, thus potentially providing 65-70 acres of contiguous restored habitat.

The aquatic, wetland, and riparian ecosystems of the Lower Colorado River have been greatly altered and reduced by over a century of water development projects, deforestation, agriculture and development, and non-native species invasion. These activities have impacted native stands of cottonwood, willow, mesquite, and a variety of native grass, forb, and shrub communities further promoting the establishment and proliferation of non-native, invasive species such as saltcedar and common reed. Seasonal flooding that provided alluvial seed beds of native cottonwood and willow have ceased to occur causing the demise of natural recruitment of these species as well as ending the natural process of soil desalinization. The ecological integrity of this system has been compromised, which has fostered the growth of low quality habitat dominated by saltcedar and common reeds. Wildlife species, particularly resident and migratory bird populations, have declined with the loss of suitable cottonwood/willow and bulrush/cattail habitat. In the arid southwest, native wetland and riparian habitats have higher species diversity and density than any other habitat type in the overall landscape. Therefore, impacts to these habitats cause a disproportionate threat to regional species diversity.

The Lower Colorado River is the homeland of the Cocopah Indian Tribe, and is the center of the Tribe's way of life. However, with the advent of hydroelectric power and various water management projects the riparian and wetland areas of the reservation have suffered a radical loss of flow and have deteriorated. This project will provide an opportunity to restore productive native habitat that will help recover native wildlife and plant species, which are valuable environmental and cultural resource for the Cocopah Tribe. The tribe has invested over \$600,000, via AWPf, federal, and foundation grants in restoring over 60 acres of native, riparian habitat. This new project is the next logical location to restoring additional native habitat, prevent exotic vegetation re-growth, and provide high quality habitat for wildlife. In order to accomplish this 15-acre wetland, riparian and upland restoration project, the following objectives have been proposed:

1. Restore self-sustaining riparian habitat where water table and soil conditions allow on the Colorado River within the project area on the Cocopah Indian Tribe's North Reservation.
2. Stabilize and/or revegetate riparian and upland habitat impacted by saltcedar and common reed infestation along the Colorado River within the project area.
3. Obtain valuable data to apply to future restoration activities within the Limitrophe District.

This will be accomplished by completing the following tasks:

1. Planting and irrigation design based upon water table and soil salinity analysis.
2. Invasive removal and mechanical/herbicide weed removal on the 15-acre site.
3. Revegetate 15 acres of native riparian and upland habitat.
4. Plant monitoring within the revegetation areas for one growing season post-revegetation.

Project Overview

Background:

Riparian ecosystems are renowned for their high levels of biodiversity, productivity, dynamism, and threatened status. Riparian and aquatic environments comprise the smallest areas in the arid southwest, but support a disproportionately higher species diversity and density than any other habitat type in the overall landscape. However, particularly in Arizona, these ecosystems are increasingly imperiled due to extensive modification and exotic species invasion. The Lower Colorado River, including the corridor along the Cocopah Indian Reservation, has been modified extensively by over a century of flood-control, water diversion, and agricultural activities, which have affected the native vegetation and wildlife that depend on it.

The Cocopah Indian Tribe is proposing to restore 15 acres of high quality native habitat on the Cocopah North Reservation. The primary goal of implementing this plan is to restore native habitat for both resident and migratory wildlife species along the Lower Colorado River. Some of these species include species of special concern, such as the southwestern willow flycatcher (*Empidonax traillii extimus*), the yellow-billed cuckoo (*Coccyzus americanus*), Yuma hispid cotton rat (*Sigmodon hispidus eremicus*), and MacNeill's sootywing skipper (*Polypore graceless*). The restoration of these habitats will involve three main activities:

- Exotic species removal on the 15-acre site using hand removal and mechanical techniques.
- Revegetating 15 acres along the river with native riparian, wetland, and upland species including cottonwood, willow, mesquite, and other native species.
- Conducting one year of post-revegetation monitoring of native plant growth and health.

This area encompasses 15 acres on the Cocopah North Reservation and is located approximately 1 mile northwest of Yuma. One of the most ecologically altered riparian landscapes in the Southwest, this area has sustained nearly a century of flow regulation, channelization, and non-native species invasion. It is now largely comprised of non-native, invasive vegetation such as, saltcedar (*Tamarix spp.*) and common reed (often referred to as phragmites) (*Arundo donax*).

Along with restoring habitat for wildlife, another goal of the project is to provide recreational, cultural, interpretive, and educational opportunities. Once an important element in the Cocopah Tribal culture, the Colorado River has become dramatically less accessible to Tribal members and the public due to non-native species invasion and illegal border crossings and trash dumping. Conducting this restoration project will provide productive native habitat that will reestablish links between tribal members and the Colorado River. The vision of the Cocopah Indian Tribe is to incrementally restore riparian and wetland areas along the Lower Colorado River on Tribal lands and eventually create traditional native plant gardens, nature parks, and interpretive trails. This project will be an essential step to achieving the Tribe's vision. Without this project, the area will degrade further, continuing the decline of species of special concern that depend on this habitat. The Cocopah Tribe has also undertaken an effort to partner with local, state and federal agency, and environmental organization partners to leverage capacity, resources, and expertise for restoring habitat along the Lower Colorado River. In 2011, they joined with these entities to form the Limitrophe Coordinated Restoration Partnership. The proposed project will be immediately adjacent to an existing 5-acre restoration project being conducted by the tribe as well as a 45-50 acre restoration project being planned by the Bureau of Land Management, thus potentially providing 65-70 acres of contiguous restored habitat.

Goals:

1. Establish/enhance 15 acres of self-sustaining native habitat, including cottonwood, willow, mesquite and other native species.
2. Evaluate the success of the 15-acre project through post-revegetation plant monitoring.

Objectives:

1. Restore self-sustaining riparian habitat where water table and soil conditions allow along the Colorado River within the project area on the Cocopah Indian Tribe's North Reservation.
2. Stabilize and/or revegetate any wetland and riparian habitat impacted by saltcedar and common reed infestation along the slope of the Colorado River within the project area.
3. Obtain valuable data to apply to future restoration activities within the Limitrophe District.

Statement of Problems/Causes:

- Damaged/Degrading riparian and wetland habitat.
- Excessive reproduction of non-native plant species.
- Insufficient reproduction of native plant species.
- Lack of critical habitat for several endangered species including the southwestern willow flycatcher and other wildlife species.
- Dams
- River channelization
- Introduction of highly flammable, quickly-regenerating, exotic saltcedar
- Human encroachment /Development

Statement of Solutions:

1. Conduct mechanical and hand removal of exotic plant species from a 15-acre area of the Cocopah Indian Reservation and revegetate this area with native species.
2. Monitor the success of the revegetation site to determine the potential for other revegetation efforts within the Cocopah Indian Reservation.
3. Work with city, state and federal agency, and organizational partners to restore habitat and leverage capacity and resources to increase the amount of habitat that can be restored and protected.

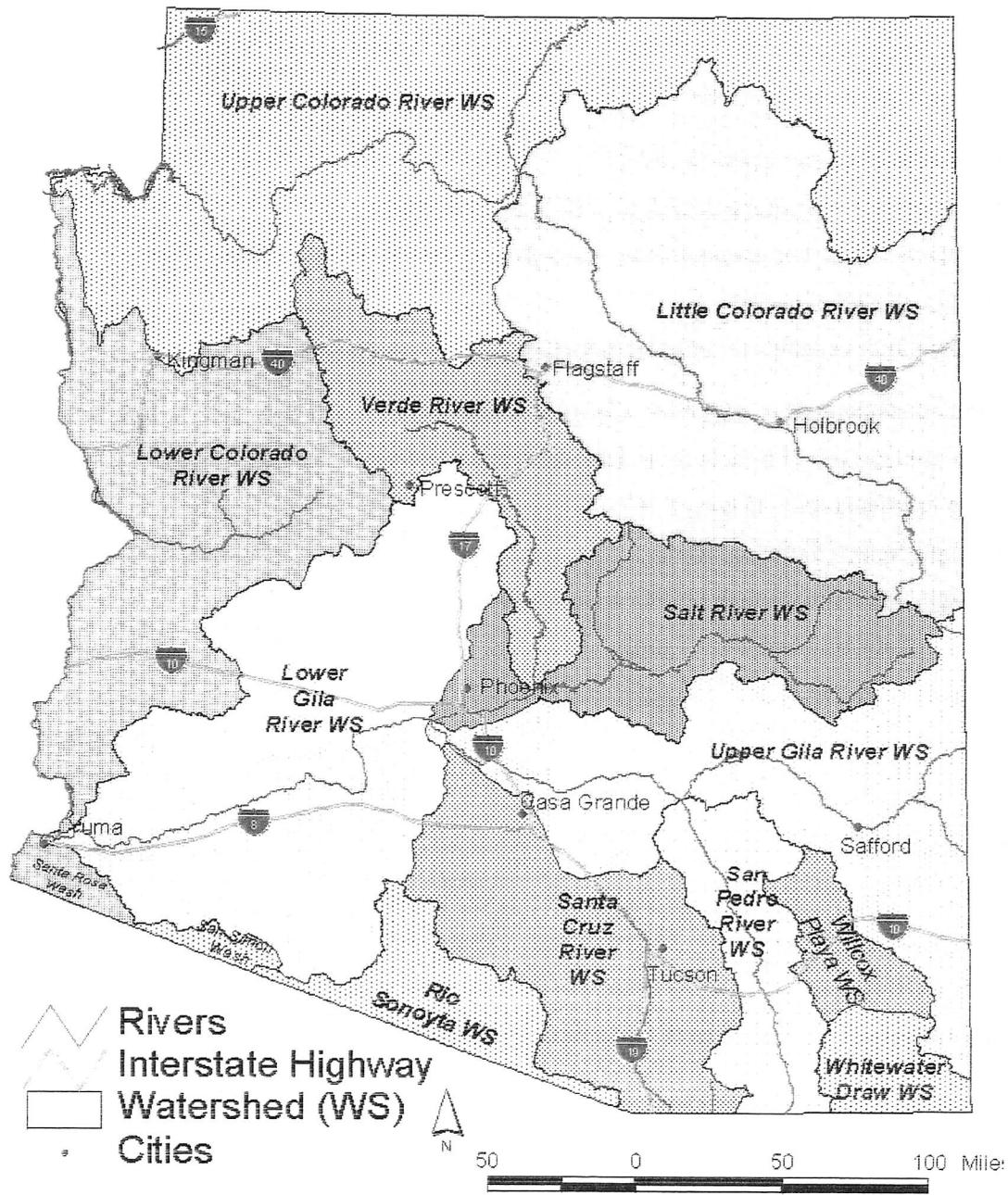
Statement of Project Years of Benefits

The 15-acre revegetation project will be designed and implemented based on the specific water table and soil conditions of the site, and therefore should become self-sustaining by the end of the second full growing season. The Cocopah Tribe intends to work to monitor the success of this project, and will use the information to plan and, where feasible, implement control programs in the foreseeable future. Follow-up maintenance required at this 15-acre site will consist of weed eradication and tree stand evaluation. The projected years of benefit for this project should exceed 20-plus years.

Project Location & Environmental Contaminant Information FY 2014

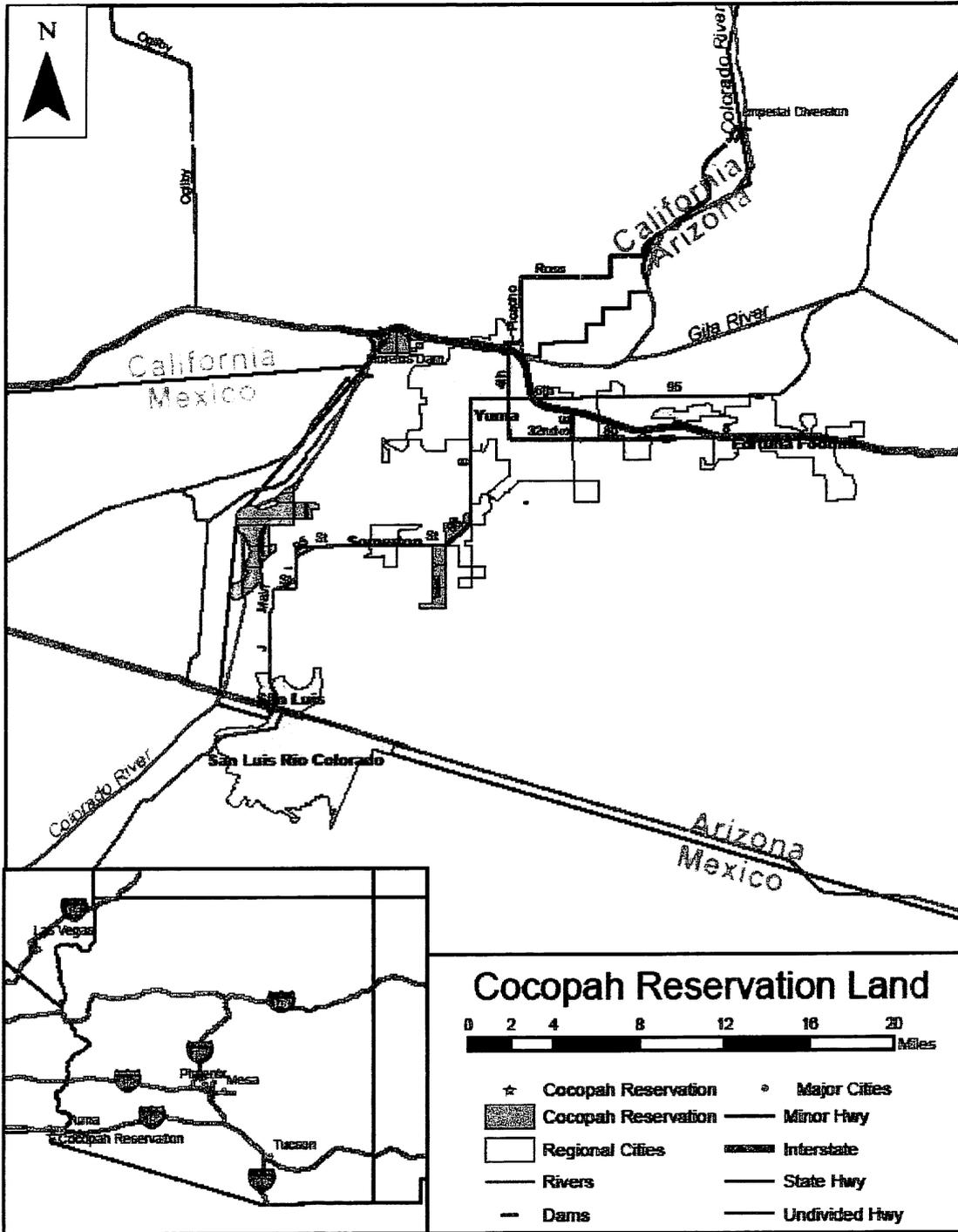
Project Location Information			
1. County: Yuma	2. Section: 29	3. Township: 16	4. Range: 22
5. Watershed: Lower Colorado River 6. 8 or 10 Digit Hydrologic Unit Code (HUC): 12090302 7. Name of USGS Topographic Map where project area is located: Yuma West 8. State Legislative District: 7 (Information available at: http://azredistricting.org/districtlocator/) 9. Land ownership of project area: Cocopah Indian Tribe 10. Current land use of project area: Degraded River Habitat 11. Size of project area (in acres): 15 12. Stream Name: Colorado River 13. Length of stream through project area: 2 miles 14. Miles of stream benefited: <u>2 miles</u> 15. Acres of riparian habitat: <u>15 acres</u> will be: <div style="margin-left: 40px;"> <input type="checkbox"/> Enhanced <input type="checkbox"/> Maintained <input checked="" type="checkbox"/> Restored <input type="checkbox"/> Created </div>			
16. Provide directions to the project site from the nearest city or town. List any special access requirements: <i>From Yuma, AZ take 1st St. heading West. Turn West on Riverside Dr. to South Ave. D. Go North or South Ave. to the Entrance to the North Cocopah Reservoir. Head North on Ave. D. After passing over lateral canal, turn right onto access road. Head East for approximately 0.4 miles to the project area.</i>			
Environmental Contaminant Location Information			
1. Does your project site contain known environmental contaminants? <input type="checkbox"/> YES <input checked="" type="checkbox"/> 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? <input type="checkbox"/> YES <input checked="" type="checkbox"/> 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 contaminant are present? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			

Arizona Watershed Map FY 2014



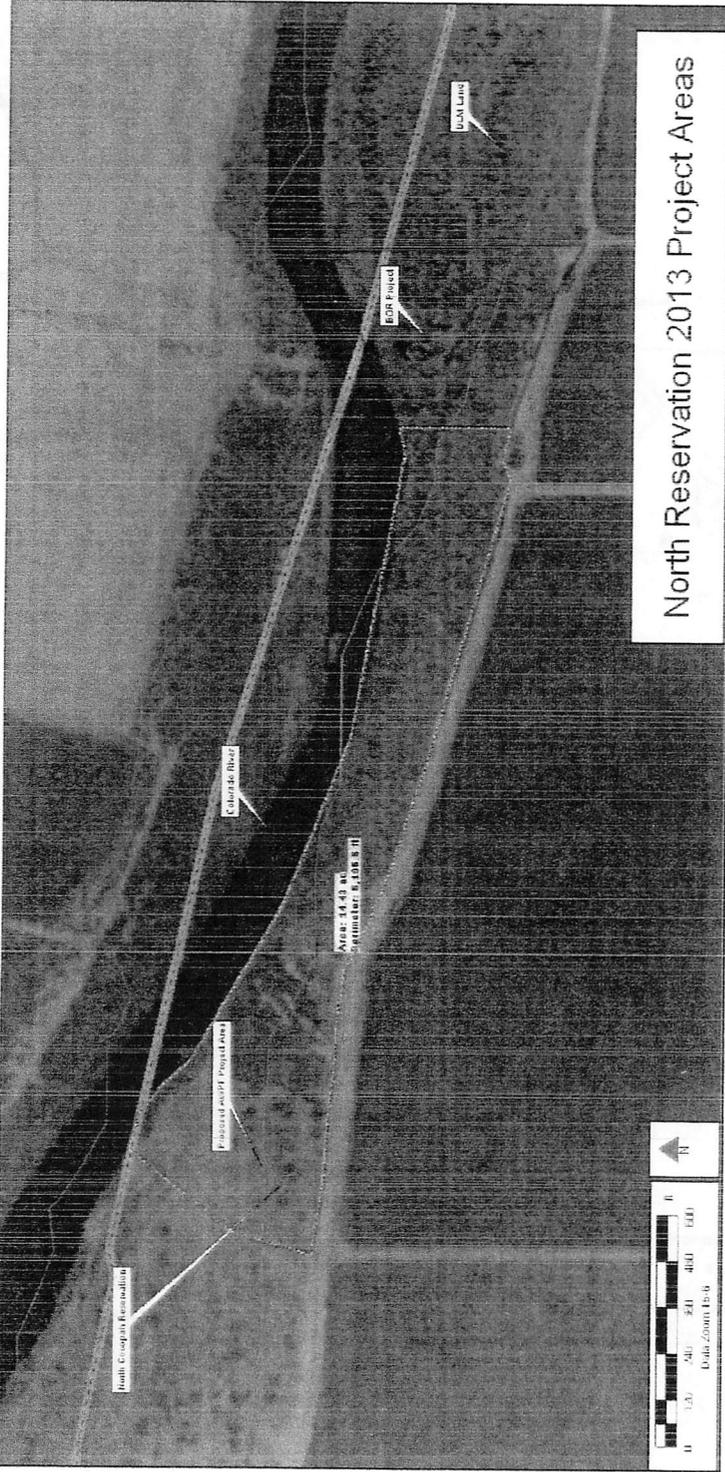
Title of Project: Cocopah Colorado River Restoration Project

Project Location/Ownership Map(s)





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Scope of Work: Task Descriptions

Task #1: Permits, Authorizations, Clearances and Agreements

Task Description: The Grantee shall obtain all permits, authorizations, clearances and agreements necessary to conduct the work described in this Scope of Work.

Task Purpose: To comply with all local, state and federal permit requirements, environmental laws such as NEPA and obtain legal access to project area.

Deliverable Description: Copy of necessary permits required to implement project.

Deliverable Due Date: Prior to any ground disturbing activities

AWPF Reimbursable Cost: \$336

Task #2: Overall Project Coordination

Task Description: Project Coordination will include negotiating contracts with outside services involved with the project to make sure: 1. All deliverables are being fulfilled as stated in the contract. 2. All reporting information and budgetary forms are submitted to the AWPf in a timely matter in accordance with the grant contract. 3. That any problems or difficulties that arise during the grant project are addressed and satisfactorily resolved. The project coordination will also include gathering deliverables from the involved parties and packaging the quarterly, annual and final reports necessary for project completion.

Task Purpose: To ensure adequate coordination and communication between AWPf and grantee.

Deliverable Description: Deliverables will consist of all quarterly, annual and final reports required by all tasks for the grant project. The project coordinators will be responsible for compiling all of the necessary deliverables from project contractors. The project coordinators will develop the overall project reports, produce and track the budgetary information and forms, and ensure that all projects are done to standard and in a timely matter in accordance with the grant contract.

Deliverable due dates: Every three Months after Contract Execution or as required by AWPf

AWPF Reimbursable cost: \$14,910

Task #3: Depth to Water and Soil Salinity Analyses

Task Description: Before initiating restoration activities, salinity and depth-to-water will be mapped across the 15-acre site. Composite soil samples of 0-12" will be collected for at least every 5 acre area. Additionally a single core will be collected every 7.5 acres in 1-ft increments down to the water table in conjunction with well installation. All soils samples will be sent out for pH, salinity, texture, and fertility analysis. The depth to water table will be measured with the installation monitoring wells at least every 2-3 acres. Depth will be measured in the well at least once per month for at least 6 months to monitor seasonal fluctuations. Maps displaying the depth-to-water and soil characteristics will be prepared for the revegetation planting design.

Task Purpose: To ensure that the revegetation design and implementation are appropriate the specific site conditions present on the restoration site.

Deliverable Description: A depth to water and soil salinity map of the site will be included in the restoration plan prepared under Task #4.

Deliverable due date: After the completion of water monitoring.

AWPF Reimbursable cost: \$6,405

Task #4: Prepare and Submit Restoration and Monitoring Plan

Task Description: The restoration ecologist will prepare and submit a 15-acre wetland and riparian restoration and vegetation-monitoring plan. This plan will include details on any additional required saltcedar removal and restoration of 15 acres of self-sustaining riparian habitat adjacent to the Colorado River to cottonwood, willow, mesquite, and other native species. The plan will also include specific monitoring methods and success parameters.

Task Purpose: To develop a site-specific plan that incorporates soil and water table information and directs restoration implementation.

Deliverable Description: Revegetation and vegetation monitoring plans.

Deliverable Due Date: After Contract Execution

AWPF Reimbursable Cost: \$4,872

Task #5: Site Clearing

Task Description: Exotic vegetation on the 15-acre site will be thinned, cleared by mechanical and hand removal, and targeted herbicide application. Existing native plant material will remain on site. The cleared vegetation material will be mulched or piled in windrows on areas that are of low habitat value on the site, covered with sediment, and planted with native vegetation.

Task Purpose: To reduce competition for the native species and move toward the goal of a native self-sustaining habitat.

Deliverable Description: A report with photo documentation of the cleared 15-acre area.

Deliverable Due Date: After the completion of the clearing.

AWPF Reimbursable cost: \$29,022

Task #6: Revegetation at the 15-Acre Site

Task Description: Fifteen acres of riparian area along the Colorado River will be planted with native species that are appropriate to the community and the existing water table and soil conditions. When possible, cottonwood, willow, and mesquite species will be planted as pole cuttings and/or tall pots down to the water table. Irrigation will be used during the first few years after planting. Where soil chemistry will not support any of the tree species, a mixture of native shrub, grass, and herb seed will be used. This seed mixture will also be used in the understory of the areas planted with riparian trees to build structure and inhibit exotic species invasion. The final planting design will determine the density and location of these species within the site, which will be based on the results of the soil and depth to water table analyses as well as other site characteristics.

Task Purpose: To establish/enhance a native self-sustaining habitat along the Colorado River on the Cocopah West Reservation.

Deliverable Description:

1. Annual reports including planting plans, photos, and project revegetation activities to date.
2. A final year report describing all revegetation construction activities for the 15-acre project.

Deliverable due dates: 12 and 24 Months after Contract Execution

AWPF Reimbursable cost: \$64,995

Task #7: Irrigation

Task Description: All trees planted in the riparian area will be planted down to the water table where possible and be irrigated to assist root establishment down to the water table in the first two growing seasons. Water table conditions will inform the revegetation design, species selected, and extent of irrigation. Irrigation may include individual tree watering or flood irrigation depending on the requirements of the site.

Task Purpose: To achieve greater revegetation success

Deliverable Description: An irrigation design outlining the planned system and timeline
Deliverable due dates: Prior to revegetation implementation.
AWPF Reimbursable cost: \$10,710

Task #8: One-Year Post Revegetation Monitoring

When planting is complete the grantee will conduct bi-annual plant monitoring at the beginning (April-May) and the end (September-October) of the growing season at the revegetation site. Monitoring will include native tree and shrub height measurements, survivorship, condition, and factors affecting growth; rate of exotic weed recolonization; and success of native herbaceous ground cover growth. Monitoring will help determine success of the project by documenting vegetation establishment and survivorship and control of exotic species regrowth. Additionally, this monitoring effort will help guide future revegetation efforts.

Task Purpose: To determine the success of the project and inform future restoration efforts.

Deliverable Description:

1. A monitoring report describing all monitoring results as outlined in the above task description.

Deliverable due dates: Approximately 24 Months after Contract Execution depending upon the date of the contract execution, which will determine when revegetation can occur (revegetation must take place between November and early March, which are the coolest parts of the year and outside of potential nesting/breeding times of threatened species).

AWPF Reimbursable cost: \$8,715

Task #9: Final Report

Task Description: The Grantee shall prepare and submit a comprehensive final report in accordance with the Arizona Water Protection Fund Final Report Guidelines. The final report shall include a summary of all methodologies used, outcomes of all Tasks, analysis of all Project data, suggestions for any changes or future actions, and an evaluation of the success of meeting Project objectives. The Grantee shall provide all data generated under this Contract, unless otherwise specified in the Special Provisions.

Task Purpose: To provide AWPF a full and final report on the project.

Deliverable description: Final report

Deliverable due date: 24 Months after Contract Execution

AWPF Reimbursable Cost: \$3,633

Detailed Budget Breakdown

<i>Item</i>	<i>AWPF Funding Request</i>			
	<i>Item/Hours</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Task #1 Permits, Authorizations, Clearances and Agreements				
Direct Labor Costs:				
Cocopah Environmental Director	8	Hours	\$40	\$ 320
Administrative Costs (5%):				\$ 16
Total for Task #1				\$ 336
Task #2 Overall Project Coordination				
Direct Labor Costs:				
Cocopah Environmental Director	100	Hours	\$40	\$ 4,000

Outside Services:					
Project Coordination Consultant	100	Hours	\$70	\$	7,000
Other Direct Costs:					
Consultant Airfare	4	Trips	\$300	\$	1,200
Consultant Travel (meals @ \$50/day, 6 nights lodging @ \$100, rental car @ \$50/day)	12	Days	varies	\$	2,000
Administrative Costs (5%):				\$	710
Total for Task #2				\$	14,910
Task #3: Depth to Water and Soil Salinity Analyses					
Direct Labor Costs:					
Cocopah Environmental Director	20	Hours	\$40	\$	800
Outside Services:					
Restoration Ecologist	40	Hours	\$80	\$	3,200
Other Direct Costs:					
Survey Equipment Rental	5	Days	\$100	\$	500
Soil Auger Rental	5	Days	\$20	\$	100
Soil Sample Lab Analysis	15	Samples	\$100	\$	1,500
Administrative Costs (5%):				\$	305
Total for Task #3				\$	6,405
Task #4 Prepare and Submit Restoration and Monitoring Plans					
Outside Services:					
Restoration Ecologist	50	Hours	\$80	\$	4,000
GIS Technician	16	Hours	\$40	\$	640
Administrative Costs (5%):				\$	232
Total for Task #4				\$	4,872
Task #5: Site Clearing					
Direct Labor Costs:					
Cocopah Environmental Director	16	Hours	\$40	\$	640
Outside Services:					
Invasive Species Removal Contractor	15	Acres	\$1,800	\$	27,000
Administrative Costs (5%):				\$	1,382
Total for Task #5				\$	29,022
Task #6: Revegetation at the 15-acre Site					
Revegetation Project Oversight					
Direct Labor Costs:					
Cocopah Environmental Director	20	Hours	\$40	\$	800
Outside Services:					
Restoration Ecologist	40	Hours	\$80	\$	3,200
Riparian Revegetation on 15 Acres					
Outside Services:					
Native Seed & Fertilizer Application Contractor					

Labor	15	acres	\$500	\$	7,500
Equipment	15	acres	\$300	\$	4,500
Materials (Native seed mix + fertilizer)	15	acres	\$900	\$	13,500
Poles/Container Transplant Installation Contractor					
Labor	300	Plants	\$40	\$	12,000
Equipment	300	Plants	\$30	\$	9,000
Materials (10' poles and/or container stock)	300	Plants	\$38	\$	11,400
Administrative Costs (5%):				\$	3,095
Total for Task #6				\$	64,995
Task #7: Irrigation					
Direct Labor Costs:					
Cocopah Environmental Director	10	Hours	\$40	\$	400
Cocopah Environmental Technician	200	Hours	\$30	\$	6,000
Outside Services:					
Restoration Ecologist	10	Acres	\$80	\$	800
Other Direct Costs:					
Pumps and Hoses			3,000	\$	3,000
Administrative Costs (5%):				\$	510
Total for Task #7				\$	10,710
Task #8: One-Year Post Revegetation Monitoring					
Direct Labor Costs:					
Cocopah Environmental Director	10	Hours	\$40	\$	400
Outside Services:					
Restoration Ecologist	80	Hours	\$80	\$	6,400
GPS Survey Equipment	10	Days	\$100	\$	1,000
Monitoring equipment	10	Days	\$50	\$	500
Administrative Costs (5%):				\$	415
Total for Task #8				\$	8,715
Task #9: Final Report					
Direct Labor Costs:					
Cocopah Environmental Director	8	Hours	\$40	\$	320
Outside Services:					
Project Consultant	30	Hours	\$80	\$	2,400
GIS Technician	16	Hours	\$40	\$	640
Other Direct Costs:					
Printing Materials Postage	1	Lump	\$100	\$	100
Administrative Costs (5%):				\$	173
Total for Task #9				\$	3,633
Total Grant Request				\$	143,598

Labor	15	acres	\$500	\$	7,500
Equipment	15	acres	\$300	\$	4,500
Materials (Native seed mix + fertilizer)	15	acres	\$900	\$	13,500
Poles/Container Transplant Installation Contractor					
Labor	300	Plants	\$40	\$	12,000
Equipment	300	Plants	\$30	\$	9,000
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Other Direct Costs:					
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GIS Technician	16	Hours	\$40	\$	640
Other Direct Costs:					
Printing Materials Postage	1	Lump	\$100	\$	100
Administrative Costs (5%):				\$	173
Total for Task #9				\$	3,633
Total Grant Request				\$	143,598

STATE HISTORIC PRESERVATION OFFICE

Review Form

In accordance with the State Historic Preservation Act (SHPO), A.R.S. 41-861 *et seq.*, effective July 24, 1982, each State agency must consider the potential of activities or projects to impact significant cultural resources. Also, 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. Therefore, it is understood that **recipients of state funds are required to comply with this law** throughout the project period. All projects that affect the ground-surface that are funded by AWPf require SHPO clearance, **including those on private and federal lands.**

The State Historic Preservation Office (SHPO) must review each grant application recommended for funding in order to determine the effect, if any, a proposed project may have on archaeological or cultural resources. To assist the SHPO in this review, the following information **MUST** be submitted with each application for funding assistance:

- A completed copy of this form, and
- A United States Geological Survey (USGS) 7.5 minute map
- A copy of the cultural resources survey report if a survey of the property has been conducted, and
- A copy of any comments of the land managing agency/landowner (i.e., state, federal, county, municipal) on potential impacts of the project on historic properties.

NOTE: If a federal agency is involved, the agency must consult with SHPO pursuant to the National Historic Preservation Act (NHPA); a state agency must consult with SHPO pursuant to the State Historic Preservation Act (SHPA),

OR

- A copy of SHPO comments if the survey report has already been reviewed by SHPO.

Please answer the following questions:

1. Grant Program: Arizona Water Protection Fund
2. Project Title: Cocopah Tribe Colorado River Restoration Project
3. Applicant Name and Address: Cocopah Indian Tribe, 14515 S. Veterans Drive, Somerton, AZ 85350
4. Current Land Owner/Manager(s): Cocopah Indian Tribe
5. Project Location, including Township, Range, Section: T 16 - Range 22 - Section 29 - Yuma West Quadrangle
6. Total Project Area in Acres (or total miles if trail): 15
7. Does the proposed project have the potential to disturb the surface and/or subsurface of the ground? YES NO
8. Please provide a brief description of the proposed project and specifically identify any surface or subsurface impacts that are expected: The project will restore 15 acres of native riparian and habitat for both resident and migratory wildlife species along the Lower Colorado River on the Cocopah Reservation. The restoration of this area will impact the surface and subsurface by

removing exotic plant species on 15 acres using hand removal and mechanical techniques. The area will be replanted with cottonwood, willow, mesquite and other native species.

9. Describe the condition of the current ground surface within the entire project boundary area (for example, is the ground in a natural undisturbed condition, or has it been bladed, paved, graded, etc.). Estimate horizontal and vertical extent of existing disturbance. Also, attach photographs of project area to document condition: The project area has had extensive river scouring and mechanical excavation. The level of vertical disturbance is estimated at 5 feet.

10. Are there any known prehistoric and/or historic archaeological sites in or near the project area?
 YES NO

11. Has the project area been previously surveyed for cultural resources by a qualified archaeologist?
 YES NO UNKOWN

If YES, submit a copy of the survey report. Please attach any comments on the survey report made by the managing agency and/or SHPO

12. Are there any buildings or structures (including mines, bridges, dams, canals, etc.), which are 50-years or older in or adjacent to the project area? YES NO

If YES, complete an Arizona Historic Property Inventory Form for each building or structure, attach it to this form and submit it with your application.

13. Is your project area within or near a historic district? YES NO

If YES, name of the district:

Please sign on the line below certifying all information provided for this application is accurate to the best of your knowledge.

Applicant Signature /Date

Applicant Printed Name

FOR SHPO USE ONLY

SHPO Finding:

- Funding this project will not affect historic properties.
- Survey necessary – further GRANTS/SHPO consultation required (*grant funds will not be released until consultation has been completed*)
- Cultural resources present – further GRANTS/SHPO consultation required (*grant funds will not be released until consultation has been completed*)

SHPO Comments

For State Historic Preservation Office:

Date:

removing exotic plant species on 15 acres using hand removal and mechanical techniques. The area will be replanted with cottonwood, willow, mesquite and other native species.

9. Describe the condition of the current ground surface within the entire project boundary area (for example, is the ground in a natural undisturbed condition, or has it been bladed, paved, graded, etc.). Estimate horizontal and vertical extent of existing disturbance. Also, attach photographs of project area to document condition: The project area has had extensive river scouring and mechanical excavation. The level of vertical disturbance is estimated at 5 feet.
10. Are there any known prehistoric and/or historic archaeological sites in or near the project area?
 YES NO
11. Has the project area been previously surveyed for cultural resources by a qualified archaeologist?
 YES NO UNKNOWN

If YES, submit a copy of the survey report. Please attach any comments on the survey report made by the managing agency and/or SHPO

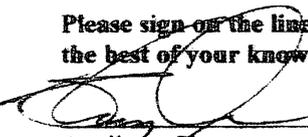
12. Are there any buildings or structures (including mines, bridges, dams, canals, etc.), which are 50-years or older in or adjacent to the project area? YES NO

If YES, complete an Arizona Historic Property Inventory Form for each building or structure, attach it to this form and submit it with your application.

13. Is your project area within or near a historic district? YES NO

If YES, name of the district:

Please sign on the line below certifying all information provided for this application is accurate to the best of your knowledge.


Applicant Signature

8-22-2013
Date

SHERRY CORDOVA
Applicant Printed Name

FOR SHPO USE ONLY

SHPO Finding:

- Funding this project will not affect historic properties.
- Survey necessary – further GRANTS/SHPO consultation required (*grant funds will not be released until consultation has been completed*)
- Cultural resources present – further GRANTS/SHPO consultation required (*grant funds will not be released until consultation has been completed*)

SHPO Comments

For State Historic Preservation Office:

Date:

Supplemental Information

Key Personnel

Barbara Mathias, Cocopah Tribe

Barbara Mathias is the Director of the Environmental Protection Office for the Cocopah Indian Tribe. The mission of the Environmental Protection Office is to restore and preserve the native habitat, ecosystems and maintain water quality within Cocopah Tribal lands. The Cocopah Tribe has actively worked with various State and Federal Agencies and NGOs to partner in these efforts.

Jill McCormick, Cocopah Tribe

Jill McCormick is the Director of the Cultural Resources Department for the Cocopah Indian tribe. The main mission of the department is cultural sustainability through projects that address culture and environmental issues. As the director of the Cultural Resources Department she works with the tribal youth, elders, and community members on community education projects in the areas of culture, language, and environmental preservation issues. Many of these projects center the 23-mile Lower Colorado River Limitrophe region. The department has partnered with various State and Federal agencies and NGOs (including National Wildlife Federation) to address conservation, restoration and preservation issues within the Limitrophe region.

Garrit Voggeser, National Wildlife Federation

Garrit Voggeser is the National Director of the National Wildlife Federation's (NWF) Tribal Partnerships Program with the mission to ensure the well-being of wildlife populations and habitat on and near tribal lands by working in partnership with tribal governments, environmental staff, and members, while respecting tribal culture and sovereignty. As Director of the Tribal Partnerships Program, Voggeser's work focuses on a variety of ecosystem restoration and protection projects, wildlife, habitat, climate change, and water quantity and quality issues with tribes throughout the nation.

For the past 11 years, NWF has partnered with the Cocopah Indian Tribe to protect the environmental and cultural integrity of the 23-mile Lower Colorado River Limitrophe (the final stretch of the river in the U.S.), including 12 miles within the Cocopah Reservation. NWF has served as a consultant to the Cocopah Tribe on the development of a reservation natural resource management plan, reservation riparian restoration plan, and native habitat restoration on the reservation.

Megan Lahti, Arizona Western College

Megan Lahti is a Professor of Biology and Environmental Science at Arizona Western College and currently serves as the Science Division Chair. Megan will serve as the restoration ecologist for this project. Megan's background is in ecology and natural history, primarily of reptiles and amphibians. She also has over 8 years experience with habitat restoration throughout southern California and southwest Arizona. Previously, Megan worked as a Biologist and Restoration Ecologist with RECON Environmental in San Diego, CA and oversaw various habitat restoration and preserve management projects throughout southern California. Most recently, Megan is involved with the restoration and monitoring of local projects along the lower Colorado River in Arizona, primarily through the Cocopah Indian Tribe.

Project Site Photographs

The proposed project area is adjacent to the Colorado River near the city of Yuma, Arizona on the North Cocopah Reservation.

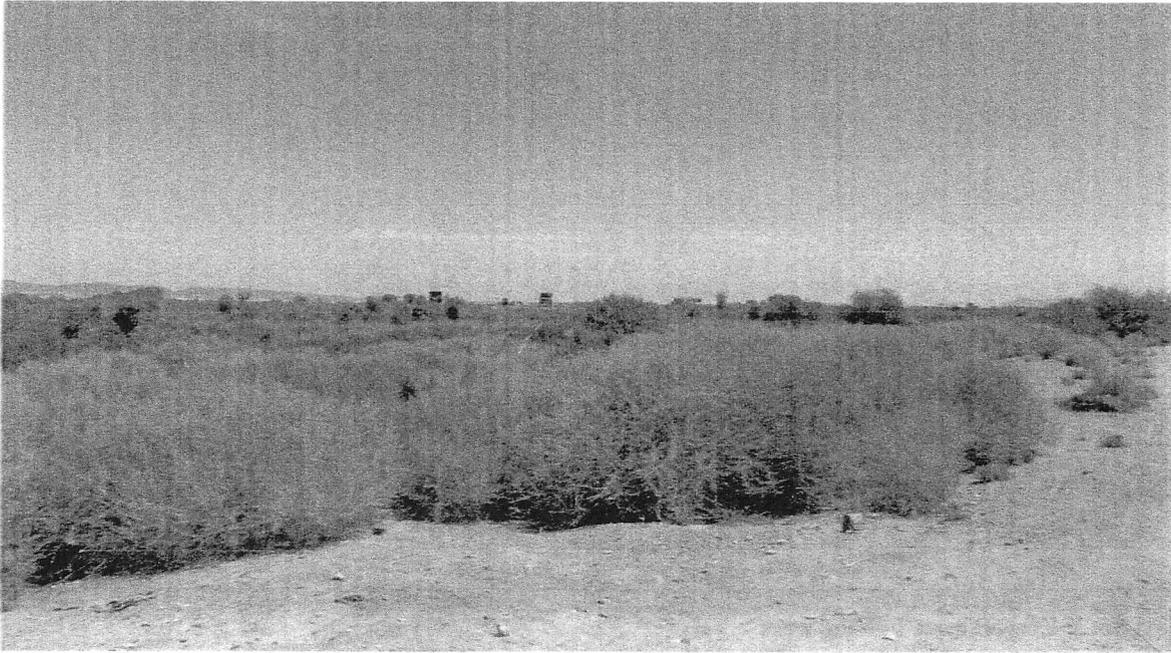


Figure 1: Project area facing North-East



Figure 2: From Colorado River Bank looking west (project area left side of river)



Figure 3: Project area looking west

Description of Monitoring/Sampling Plans

Vegetation Monitoring

The primary purpose of monitoring vegetation is to determine if vegetation is establishing and thriving, if conditions are suitable for the vegetation planted, document the success of the project, and help guide future revegetation efforts. Vegetation sampling will evaluate the vegetative cover, transplant success, and revegetation method success. Monitoring will occur at the beginning (March-April) and end (September-October) of the first full growing season after revegetation is completed. Both quantitative and qualitative techniques will be used to monitor vegetation growth at the site. Specific monitoring methods will be described in the submitted revegetation and monitoring plan and will be tailored to the specific revegetation methods that are implemented. Monitoring methods will include:

- Vegetation cover transects;
- Shrub density and species diversity belt transects;
- Transplant survival, growth, and health monitoring;
- Photo documentation; and
- Development of a site-wide species list.

Line transects (25-meters in length) will be established at the site to quantitatively measure vegetation and ground cover by species and life form. The transects will be established on a grid using mapping software and located in the field using a sub-meter accuracy GPS unit to prevent sampling bias. Line transect data will be used to evaluate revegetation success in terms of vegetative cover. These data will also be used to evaluate the presence and extent of non-native

species such as saltcedar. A belt transect extending 1 meter on either side of the line transect will be used to collect shrub/tree density counts. All species occurring within this belt transect will be recorded to evaluate species diversity on the site. All trees and/or shrubs transplanted on the site as poles or containerized stock will be mapped at the time of planting. A subset (5-15%) of these individuals will then be randomly selected for survival monitoring. The randomly selected transplants will be located in the field a sub-meter accuracy GPS unit to prevent sampling bias. Each transplant will be evaluated for survival rate, condition, and size (height and basal diameter or volume for trees or shrubs, respectively).

In addition to quantitative evaluations, photos will be taken to evaluate the site qualitatively over time. Photo points will be established prior to site clearing activities and mapped with a sub-meter accuracy GPS unit. Photos will be taken from the same photo points multiple times during site clearing, revegetation implementation, and during each of the subsequent monitoring periods. These photos will be used to evaluate the success of the project on a site-wide qualitative basis.

Success Criteria

Productive native habitat development is the primary criterion that measures project success. The following table provides an example of criteria for vegetation that will be used to assess the success of this revegetation project in relation to pre-treatment conditions. We expect to see an increase in the diversity and abundance of avifaunal and all wildlife use in the restoration site.

Performance Measure	1-Year Performance Goal	5-Year Performance Goal
Tree/Shrub Transplant survival	50-60 % survival	35-45% survival
Vegetation Cover	10-15 % cover	20-30% cover
Saltcedar Cover	< 3% cover	<5% cover

Under this AWPf-funded project, vegetation will be monitored after revegetation. Above-ground growth is typically slow in the first two years. However, the data from this project will provide a general forecast of revegetation success. Vegetation survival is better understood with a longer monitoring period, typically 5 to 10 years. Thus, the grantee will continue to monitor and maintain the vegetation after completion of the project.

Certain site features may influence data collection: insect damage, browsing, beaver activity, soil erosion and drift, and “edge effects,” including vandalism. These and other influences will be noted throughout the monitoring period. Baseline conditions for vegetation will be established for the project using maps and results of preliminary site analyses. These data will provide information to assess whether the project objectives are being met. Vegetation monitoring data will be evaluated along with soil and depth-to-water data to evaluate trends. Community health will be measured as a function of vegetation growth, survival, extent of insect damage or browsing, weed encroachment, and regeneration.

Description of Revegetation/Restoration Plans or Research Designs

Exotic Vegetation Clearing

Prior to revegetation activities, invasive saltcedar and common reeds will be thinned and cleared from the project site using mechanical removal in areas where plants/trees are greater than 5’ and hand removal/targeted herbicide application of saltcedar in areas where invasives are smaller in size. All cleared non-native plant material will be mulched or left on site in spoils piles in areas of low habitat value.

Planting and Irrigation

Soil samples will be collected and ground water monitoring wells will be installed prior to revegetation activities to characterize the site and inform the revegetation design. It is critical to understand the soil and water table conditions on the site before selecting revegetation species or methods for revegetation. Many native species are sensitive to soil salinity, alkalinity, and texture as well as drought. Thus, the appropriate species for the site can only be selected after these conditions are known.

After all soil and ground water data are analyzed, a planting, irrigation, and monitoring design will be developed for the site. This design will specify the species to be planted, along with planting locations, monitoring transects, and an irrigation plan.

Revegetation Construction Activities

This project will involve a total of 15 acres to be planted with native species that are appropriate to the community and the existing water table and soil conditions. This will likely mean that multiple species and revegetation methods will be used in various portions of the project area.

When possible, cottonwood, willow, and mesquite species will be planted as pole cuttings and/or tall pots down to the water table. Where soil chemistry will not support any of these tree species, a mixture of native shrub, grass, and herb seed will be spread. This seed mixture will also be used in the understory of the areas planted with riparian trees. The native seed mix will include more alkaline tolerant and drought resistant species to build understory structure and inhibit exotic species invasion. The final planting design will determine the density and location of these species within the site, which will be based on the results of the soil and depth to water table analyses as well as other site characteristics.

Planting

The following native plant species may be used in the revegetation project:

- Fremont cottonwood (*Populus fremontii*)
- Goodding willow (*Salix gooddingii*)
- Sandbar willow (*Salix exigua*)
- Honey mesquite (*Prosopis glandulosa*)
- Screwbean mesquite (*Prosopis pubescens*)
- Four-wing saltbush (*Atriplex canescens*)
- Quailbush (*Atriplex lentiformis*)
- Seepwillow (*Baccharis salicifolia*)
- Arrowweed (*Pluchea sericea*)
- Inkweed (*Suaeda torreyana*)
- Alkali bulrush (*Schoenoplectus maritimus*)
- Olney three-square bulrush (*Schoenoplectus americanus*)
- Hardstem bulrush (*Schoenoplectus acutus*)
- Giant cattail (*Typha spp.*)
- Inland saltgrass (*Distichulus Spicata*)
- Alkali sacaton (*Sporobolus airoides*)
- Yerba mansa (*Anemopsis californica*)
- Wolfberry (*Lyceum andersonii*)
- Evening primrose (*Oenothera deltoids*)
- Western sea purslane (*Sesuvium verrucosum*)
- Wild heliotrope (*Heliotropium curassavicum*)

- Sonoran Panic Grass (*Panicum sonorum*)
- Other suitable native riparian and wetland species

The final planting design will determine the density and location of these species within the site, which will be based on the results of the soil and depth-to-water analyses and other site conditions. The area may be hand-weeded or selectively treated with herbicides during native vegetation establishment to limit the encroachment of saltcedar and common reed, thereby enhancing the natural recruitment of native grasses and forbs.

Site Maintenance

When planting is complete the grantee will conduct regular maintenance of the revegetation site for two years. Maintenance activities will be conducted during the growing season and will include: maintaining irrigation, removing exotic weeds, and re-planting vegetation in the case of mortality (dependent upon sufficient resources). By the end of the first growing season, the plantings should be well established for long-term self-sustainability.

Letters of Support



NATIONAL WILDLIFE FEDERATION®

2995 Baseline Road, Suite 300
Boulder, CO 80303
303-786-8001
www.nwf.org

August 20, 20103
Arizona Water Protection Fund Commission
Arizona Department of Water Resources
3550 North Central Avenue
Phoenix, Arizona 85012

To Whom It May Concern:

On behalf of the National Wildlife Federation, I am writing to pledge my strong support for the Cocopah Indian Tribe's proposal to the Commission for the tribe's riparian restoration efforts. We champion the Cocopah's proactive approach to riparian restoration and public outreach to protect wildlife and habitat for future generations. We have worked with the Cocopah Tribe since 2002 to restore and protect the Colorado River.

The Cocopah's protection of the Lower Colorado River is an ambitious and admirable undertaking. Their conservation efforts unite a coalition of local, tribal, non-governmental, and state and federal agency partners for the protection of this critical ecosystem and its wildlife. The Cocopah's efforts recognize that it is critical to form broad-based partnerships to meet the conservation challenges we all face. It is that respect for cooperation as well as the effort for protecting culturally and ecologically critical areas that we all have a stake in that makes conservation successes possible. I highly recommend the Cocopah's proposal to your Commission.

Sincerely,

Garrit Voggeser
National Director, Tribal Partnerships Program

NWF - Protecting wildlife for our children's future

Arizona Water Protection Fund Commission
Arizona Department of Water Resources
3550 North Central Ave.
Phoenix, AZ 85012

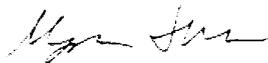
To Whom It May Concern:

Please accept this letter as my strong support for the Cocopah Indian Nation's (Tribe) proposal to the Arizona Water Protection Fund Commission. I am a Professor of Biology and Environmental Science at Arizona Western College, and currently serve as the Science Division Chair. I am also an experienced restoration ecologist and after reviewing this proposal, I give my full support for this grant proposal.

The Tribe is seeking funds to restore 15 acres of wetland, riparian, and upland habitat along the Lower Colorado River near Yuma, AZ. This project will provide direct, long-term benefits to the Lower Colorado River watershed, native flora and fauna, and the local ecosystem. Additionally, this project will support various educational, recreational, and interpretive opportunities for members of the Cocopah Indian Tribe, Science students at Arizona Western College, as well as the community at-large.

Cocopah Indian Tribe actively seeks habitat restoration opportunities in an effort to protect the Lower Colorado River ecosystem. As a vital resource for the southwest, the River is a critical resource and must be protected. Combined, the various restoration projects implemented by the Tribe have been critical to the ongoing recovery of the River ecosystem. Cocopah Indian Nation's projects serve as models for other local restoration efforts and the proposed restoration project will contribute significantly towards this effort. I highly recommend the Tribe's proposal to your commission and appreciate your consideration.

Kind Regards,



Megan Lahti, Ph.D.
Arizona Western College
Science Division Chair
Professor of Biology and Environmental Science
2020 S. Ave. 8E
Yuma, AZ 85367

Evidence of Control and Tenure of Land

15567

WHEN RECORDED
MAIL TO:

THE COCOPAH INDIAN TRIBE
County 15th and Avenue G
Somerton, AZ 85350



FEE #: 1987 - 16567
06/12/1997 03:13 PAGES: 0002
FEES: 6.00 4.00 1.00 2.00 .00
REQ BY: CITIZENS TITLE
REC BY: JENNIFER ARCE

CT 96060165

WARRANTY DEED

For the consideration of Ten Dollars, and other valuable considerations, I or we,
JAMES L. POWER and SHARON BANKS, Co-Personal Representatives of the Estate of
WILLIAM S. POWER, deceased
do hereby convey to
THE COCOPAH INDIAN TRIBE

the following described property situated in the County of Yuma, State of Arizona.

LEGAL DESCRIPTION ATTACHED HERETO AS EXHIBIT "A" AND BY THIS
REFERENCE MADE A PART HEREOF.

SUBJECT TO: Current taxes, assessments, reservations in patents and all easements, rights of way, encumbrances, liens,
covenants, conditions and restrictions as may appear of record.

And I or we do warrant the title against all persons whomsoever, subject to the matters above set forth.

Dated this 5th day of May, 1997.

James L. Power
JAMES L. POWER, Co-Personal Representative
Sharon Banks
SHARON BANKS, Co-Personal Representative

STATE OF ARIZONA)
County of Yuma)



NOTARY PUBLIC
STATE OF ARIZONA
YUMA COUNTY
SHELLEE LITLEDYKE

This instrument was acknowledged before me this 12 day of May, 1997
by JAMES L. POWER & SHARON BANKS, Co-Personal Representatives of the Estate of
WILLIAM S. POWER, deceased

Shelley Little Dyke
Notary Public
My commission will expire: 5-2-98

EXHIBIT 'B'

LEGAL DESCRIPTION

OWNER NO. 96820163 22/222

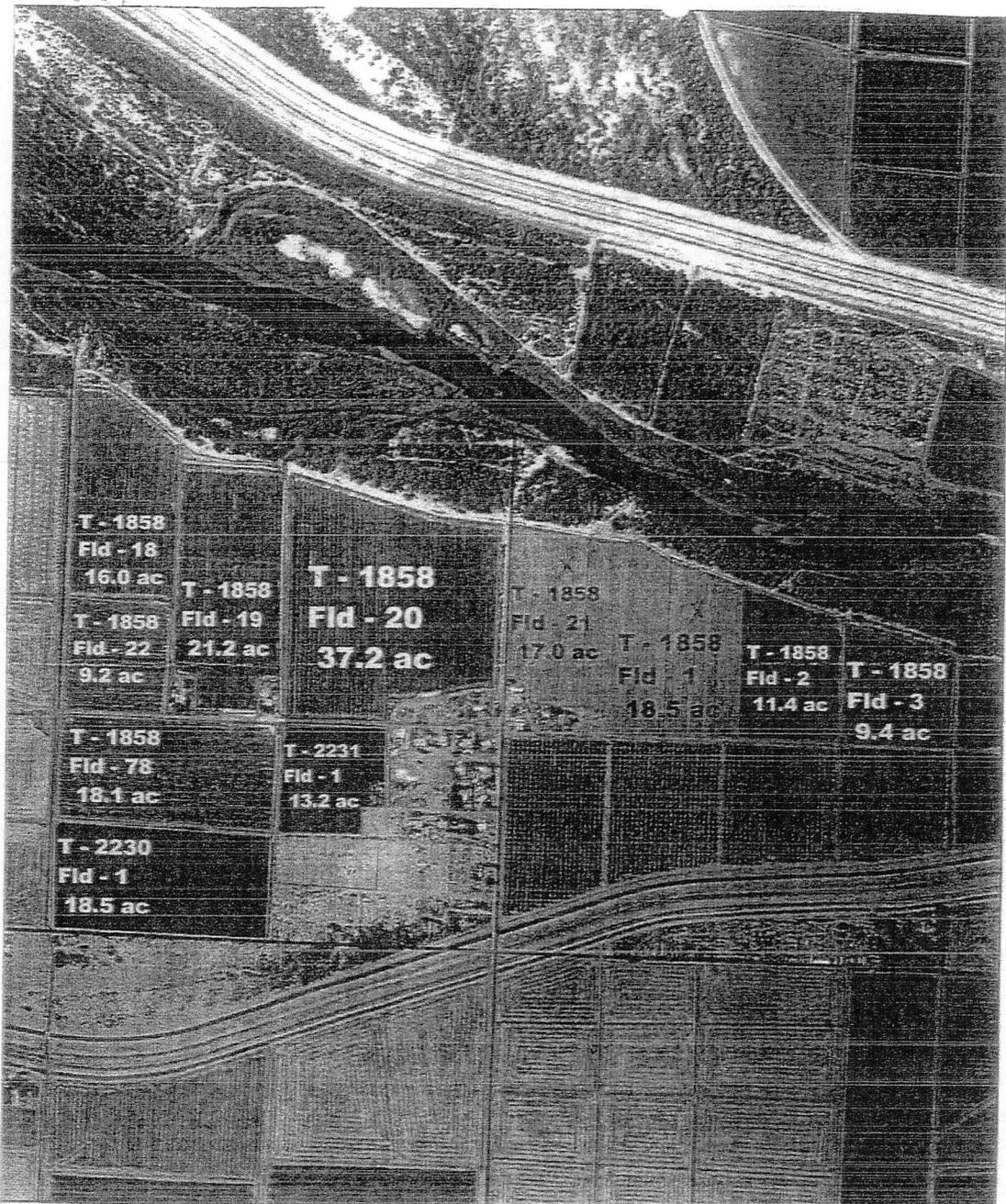
Lots 21, 24 and 25, Section Twenty-nine (29), and Lots 16 and 17 and the North half of the Southwest quarter of the Southeast quarter of Section Thirty (30), Township Sixteen (16) South, Range Twenty-two (22) East of the San Bernardino Meridian, Yuma County, Arizona, according to the Dependent Resurvey of the United States Department of the Interior Bureau of Land Management, accepted December 9, 1968.

33-4

2

15567

STEWART TITLE
GUARANTY COMPANY



Yuma/La Paz County FSA
 2197 S 4th Ave Suite 104
 Yuma, AZ 85364



Photo 002/E1
 Sec. 30/29
 T-16-S

Evidence of Physical and Legal Availability of Water