

# National Park Service-Sonoran Institute Partnership for Sonoran Desert Conservation

*A brief summary of accomplishments from 1992-2004*



Organ Pipe Cactus National Monument in full spring wildflower bloom, 1998  
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## Background

The Sonoran Institute is a non-profit organization that brings diverse people together to achieve their conservation goals in Western North America. Our work began in 1991 and initially centered on the Arizona-Sonora borderlands, a binational landscape of global conservation significance, much of which is under federal stewardship.

Over the past 12 years, the Institute has partnered with the National Park Service (NPS) in a strategy to build collaboration for the preservation and restoration of shared natural and cultural resources in the Sonoran Desert. This partnership recognizes the mutual benefit of combining respective organizational strengths in common cause and has effectively implemented a wide range of field, training and policy work with lasting impact. NPS brings to this effort a legal framework for



Pinacate Biosphere Reserve Manager and Organ Pipe Cactus National Monument Superintendent discussing joint management plans  
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coordinating cross-border work with Mexican public land management agencies, has strong experience in international conservation work, and manages units situated at critical places along the U.S.-Mexico border. It is committed to the inventory and monitoring of shared resources and has a history of financing collaborative borderlands projects that support community participation and science-based decision making. It is challenged in carrying out some of its cross-border objectives because personnel are stretched thinly along the border. Recently, border security concerns have resulted in travel restrictions and budget constraints that weaken its ability to maintain historic binational conservation work and have the potential of undermining established relationships with Mexican colleagues.

The Institute has extensive formal and informal working relationships with Mexican and U.S. agencies, universities, and community organizations. Cross-cultural and bilingual staff provide technical assistance in the implementation of complicated binational field and policy projects and, in the process, leverage millions of private dollars in support of NPS objectives along the border. The Institute's relatively small size has minimized administrative effort and heightened efficiency of project execution. Importantly, the Institute has been instrumental in maintaining congressional support for federal work along the border.

## History

Collaboration between the Sonoran Institute and Organ Pipe Cactus National Monument (ORPI) began in 1992 with development of a community/land manager vision for the Sonoran Desert. Two years later, the Institute helped secure an initial \$250,000 congressional allocation in support of NPS border programs. In 1994, the Institute and NPS signed a five-year cooperative agreement to promote cross-border resource management. In 1994, the NPS point of contact on the agreement transferred to the Mexico Affairs Office in Las Cruces, New Mexico (MEAF, now the Intermountain Region International Conservation Programs

Office or IMRICO). At the conclusion of the first cooperative agreement in 1999, a second five-year agreement was signed, which is now in its final year of implementation.

Since 2000, related work has been implemented through the Desert Southwest Cooperative Ecosystems Studies Unit (DSCESU) Cooperative Agreement. In addition, the Institute is often requested to provide logistical, technical and communication assistance to IMRICO and individual park units in support of the sister parks agreement with Mexico. For example, the Institute regularly hosted the annual program planning meeting of IMRICO and border parks and in 2003 arranged a joint work plan meeting of NPS border parks and their Mexican colleagues. The Institute is regularly invited to meetings and field trips of the Field Coordinating Committee of federal agencies to discuss border issues of concern.

Throughout this partnership, the Sonoran Institute has developed and implemented a comprehensive program to promote cross-border resource management. The initial five-year cooperative agreement threw a broad net over many diverse activities that by the end of agreement had coalesced around three themes:

- Building institutional capacity
- Promoting environmentally sound economic development
- Restoring riparian habitats in the Sonora-Arizona borderlands



Buffelgrass along a Southern Arizona highway  
© Steve Cornelius

The goal of the second five-year cooperative agreement was to build partnerships among private, community, indigenous, and grassroots stakeholders in support of the objectives of IMRICO and the Mexican Commission on Natural Protected Areas (CONANP). A weakness of both agreements was a failure to connect this theme more directly to priorities of border park units. More recently, the Institute has strengthened the work with IMRICO by establishing a close working relationship with staff of the NPS Sonoran Desert Inventory and Monitoring Network through the DSCESU Cooperative Agreement.

## Accomplishments

The accomplishments of the NPS-Sonoran Institute collaboration over the past twelve years are many and significant. This summary is illustrative only and is not an exhaustive list of the diversity of collaboration realized. Detailed semiannual reports



Visitors to Cienega de Santa Clara,  
Upper Gulf of California and Colorado  
Delta Biosphere Reserve  
© La Ruta De Sonora

are on file with NPS/IMRICO. Attachment 1 of this document includes a summary of specific task orders of the first cooperative agreement and shows how they collapsed into four themes, three of which—Ecosystem Monitoring, Sustainable Tourism, and River Restoration—formed the specific projects of the second cooperative agreement. By the end of the first cooperative agreement, \$962,000 was invested in 38 task orders with the following outcomes:

- Creation of the **International Sonoran Desert Alliance (ISDA)** as a trinational movement balancing community, environment, economic development and cultural

sensitivity in the Sonoran Desert border region.

- Establishment of **“Roots” and “Juntos”** border environmental education programs through ISDA, Organ Pipe Cactus National Monument, and Environmental Education Exchange.
- Design of a comprehensive strategy to restore the **Colorado River Delta ecosystem** that has framed the last six years of multi-organizational work.
- Establishment of **La Ruta de Sonora Ecotourism Association** to promote heritage tourism in collaboration with public land managers and communities.
- Conceptual design of the **Sonoran Desert Ecosystem Monitoring Partnership** supported by 10 state and federal agencies in Mexico and the U.S.
- Bilingual publication of the report, **“Human Dimensions of Sonoran Desert Conservation.”**



Lalo Luzania, leader of “Los Halcones,” a local birdwatching club, leading birders along the Santa Cruz River, Sonora  
© Steve Cornelius

- Initiation of community-based riparian restoration actions in the binational **Santa Cruz River** that flows through Tumacacori National Historic Park.
- Signing by the U.S. Department of Interior and Mexico’s Environment Secretary (SEMARNAT) of a **Letter of Intent** to cooperate on the conservation and management of natural resources along the US-Mexico Border.

Just over \$500,000 was invested in the most recent cooperative agreement, which expired in late 2004. This has resulted in:

- Coordinating the preparation of a highly acclaimed science-based, participatory process to **identify and map the 100 areas of highest biological importance in the Sonoran Desert**. This has become the “road map” for landscape scale conservation planning in the U.S. and Mexico.
- Development of candidate social and ecological indicators for a **binational ecosystem monitoring framework** that will inform the selection of candidate vital signs for the NPS Sonoran Desert Inventory and Monitoring Network.
- Establishment of the **Sonoran Desert Invasive Species Council**, including seven federal agencies and five non-governmental organizations.
- Establishment of two **Cooperative Weed Management Areas** to coordinate invasive plant management activities on six million acres in the border region.
- Publication of the bilingual **“Field Guide to Invasive Plants of the Sonoran Desert”** with collaboration of 17 U.S. and Mexican institutions.
- Formation of a **Community Conservation and Interpretation Center** in Ejido Miguel Hidalgo, Sonora Mexico that hosts training workshops on water quality and public health; innovative livestock grazing strategies; community pollinator gardens; and bird, vegetation and water quality monitoring.
- Coordination of civic science, environ-



La Ruta de Sonora visitors hiking in the Pinacate Biosphere Reserve  
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Institute is on top of events that are relevant to NPS's cross-border responsibilities. Because of its professionalism and non-profit status, the Institute has been able to provide quick and effective responses to the opportunities and needs of the NPS border program and the Institute's mission.

## The Future

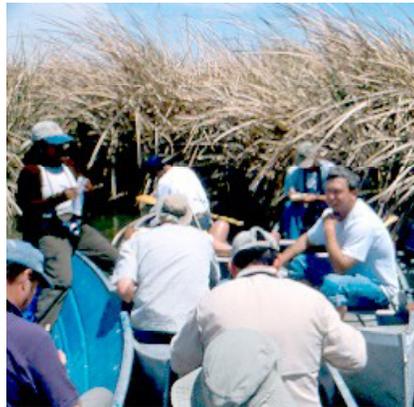
Conservation threats and opportunities are dynamic, nowhere more so than in the borderlands of the desert southwest. Future collaboration by NPS and the Sonoran Institute must respond to a changing political environment that influences respective missions and priorities in the borderlands. The Institute looks forward to exploring how to continue this historic partnership with NPS and expand our role in facilitating cross-border collaboration that further conservation and management goals.

mental education and riparian restoration in the **Santa Cruz River** from San Lazaro, Sonora to Tumacacori National Historic Park.

- Confirmation of La Ruta as the premier trainer and provider of **conservation-based tourism** in the Sonoran Desert.

During the past 12 years, the Institute has leveraged over \$3,000,000 from the Ford, Packard, Compton, Homeland, Summit, Goldman, and Arizona Community foundations. It has also gained the support of the U.S. Department of Defense, Bureau of Land Management, U.S. Fish and Wildlife Service, State of Arizona, and others, in support of the goals of the NPS-Sonoran Institute cooperative agreement. In addition, it has directed the investment of the equivalent of \$130,000 in Mexican contributions to these same projects.

Finally, the cooperative agreements have served NPS as a responsive vehicle for information exchange and coordination with Mexican agencies and other U.S. non-governmental organizations (NGOs). Through its network of government, community, NGO and university contacts, the



Mexican journalists doing investigative reporting on borderlands conservation issues with CONANP officials  
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Attachment 1. Funded Projects and Activities of NPS/SI Cooperative Agreement 1994-1999.

Mod.	Project/Activity	Community Participation	Sustainable Development	Building Partnerships	River Restoration
1	Produce action plan from ISDA conference	X			
2	Carry out public workshops on action plan	X			
3	Prepare feasibility report for interpretive center	X			
4	Produce materials on conservation/development needs	X			
5	Carry out training program for ISDA board	X			
6	Prepare report on alternative economic development		X		
7	Carry out environmental education curriculum	X			
8	Prepare regional profile		X		
9	Carry out workshops on international biosphere reserve			X	
10	Prepare strategic plan for computer network			X	
11	Establish resource center and library	X			
12	Develop "Roots" environmental education program	X			
13	Develop pilot project for sustainable development		X		
14	Establish legal identity for ISDA in Mexico	X			
15	Provide computer services to Pinacate Reserve			X	
16	Provide administrative support to ISDA	X			
17	Continue environmental education program	X			
18	Conduct workshops on river restoration				X
19	Assist in Pinacate community outreach			X	
20	Carry out regional workshop on sustainable alternatives		X		
21	Prepare report on fragmented management			X	
22	Carry out Phase I Santa Cruz River restoration				X
23	Carry out Phase II Santa Cruz River restoration				X
24	Provide administrative support to ISDA	X			
25	Foster communication and community cooperation			X	
26	Carry out community sustainable development workshops		X		
27	Assist ISDA to facilitate communication	X			
28	Draft MOU for Sonoran Desert Ecosystem Council			X	
29	Establish La Ruta de Sonora Ecotourism Association		X		
30	Secure local internet access in Ajo		X		
31	Prepare report on Colorado Delta conservation options				X
32	Contract Hermosillo-based staff to promote partnerships			X	
33	Disseminate experiences in borderlands conservation			X	
34	Design Sonoran Desert ecosystem management partnership			X	
35	Community stewardship on Santa Cruz River				X
36	Support avian monitoring along border			X	
37	Continue administrative support to ISDA	X			
38	Continue design support for ecotourism association		X		

## **Attachment 2. Option for future Sonoran Institute-National Park Service collaboration in the U.S.-Mexico Borderlands**

**Project Title:** Communicating Challenges and Successes in Border Conservation

**Project Duration:** January 2005-December 2006

**Total Funds Requested:** \$162,658

**Project Goal:** To improve messaging of the challenges and successes in conserving protected areas and surrounding landscapes of the U.S.-Mexico border.

**Background:** The National Park Service and other U.S. federal agencies have a 10-year history of collaborating with each other and their Mexican counterparts to conserve shared natural and cultural resources in the Sonoran and Chihuahuan Deserts. Sister protected area agreements are in place for a number of parks, reserves, and refuges that promote exchanges in personnel, equipment, and experiences. For example, Organ Pipe Cactus National Monument has assisted the Pinacate and Gran Desierto de Altar Biosphere Reserve in establishing climate monitoring stations and removing invasive plants. Imperial National Wildlife Refuge has provided equipment to the Upper Gulf and Delta of the Colorado River Biosphere Reserve. Los Ajos Forest Reserve and Chiricahua National Monument have exchanged experiences on fire management, and Saguaro National Park and San Pedro Martir National Park are exploring collaboration on management of sky island forests.

In a broader context, NPS, joined by the University of Arizona, U.S. Geological Survey, U.S. Fish and Wildlife Service, Bureau of Land Management, Department of Defense, Mexico's Environment Secretary and others, has committed to developing a Sonoran Desert ecosystem-monitoring framework. Unfortunately, few outside these public land agencies are aware of such collaborative work on endangered species, invasive plants, public awareness raising, and river restoration.

**Current Status:** A new threat has appeared along the border that has the potential to not only devastate portions of the natural protected landscape but

to generate such a high profile as to cause policy makers and the general public to forget about preexisting threats and ignore the collaborative successes. This threat is related to the illegal passage of undocumented workers and drug smugglers across U.S. border parks, reserves, and tribal lands.

The purpose of this proposal is to draw attention to both the challenges facing public land managers in the border region and the successes they have had in preserving the sanctity of this remote and fragile environment. Specifically, this project will advance public understanding of management of shared natural and cultural resources and how the NPS and other federal agencies are responding to border impacts.

**FY2005-2006 Objectives:** The total amount requested from the NPS Intermountain Region International Conservation Programs Office through a new NPS/Sonoran Institute Cooperative Agreement for this project is \$162,658 over two years to cover project management, operational expenses, technical assistance, and publications related to the activities described below.

- **Raising awareness of border impacts**  
The National Park Service's Sonoran Desert Network Inventory and Monitoring Program will complete a pilot study of impacts in Organ Pipe Cactus National Monument and Coronado National Memorial in 2004. Using information from this technical report and other sources, the Institute will prepare and distribute a bilingual overview of the importance of border protected areas, the range of threats affecting these cultural and natural resources—including non-sanctioned recreational use, illegal immigration, law enforcement, and invasive plant species, the pro-active efforts the NPS is taking to understand these impacts, and the collaboration and partnerships in place or planned to protect the parks and surrounding landscapes. The audience for the publication will be resource managers in Arizona and Mexico, national decision makers, and the general public. The NPS/Inventory & Monitoring study will be enlarged in

FY04-05 to include cultural impacts and expand assessment of natural resource impacts along the entire U.S.-Mexico border. This proposal includes cost of Sonoran Institute's participation in the design of a complimentary and ongoing communications effort for this larger study.

- **Communicating successful border stories**

The Institute will develop and implement a media strategy to distribute positive stories highlighting the efforts of federal agencies and residents to collaborate on border resource management. These may include natural resource management on military lands, work of the Department of the Interior U.S.-Mexico Field Coordinating Committee, relevant projects of La Frontera workgroup of the Southwest Strategy, the Desert Southwest Cooperative Ecosystem Studies Unit program, La Ruta de Sonora Ecotourism efforts, activities supported through the NPS/CONANP joint work plan, the U.S. Fish and Wildlife Service Sonoran Joint Venture, Bureau of Land Management's approach to conservation, and other federal work that deserves a higher profile. The stories will place a human face on tangible outcomes, and appear in diverse formats. Audiences will be the general public, congressional delegation, state leaders, and agency management. Some stories will appear as case studies, printed and distributed by the Institute. In addition, the Institute will work with a network of U.S. and Mexican print and electronic journalists to place investigative stories in newspapers, magazines, radio and television. The strategy may also include tours for congressional delegations, media, and influential decision makers, web site postings, and opinion editorials. Finally, the Institute will seek additional financial support from other federal agencies that would benefit from a broader appreciation of collaboration in border conservation.

- **Supporting cross-border collaboration**

The NPS/IMRICO periodically encounters obstacles to implementing its work plan commitments with Mexico. This usually relates to delays in transferring funding for sister park projects or in logistical arrangements of planning or operational meetings. Through this cooperative agreement with the NPS, the Institute will provide logistical and program support towards implementation of the NPS/CONANP annual work plans—or other agreements—to conserve shared resources in the U.S.-Mexico border, thus providing ongoing stories for the communication strategy. Relevant activities may include travel support to planning meetings, staff technical exchanges between sister parks, fiscal administration of fieldwork called for by the work plan, and other work as mutually agreed to by the Institute and the IMRICO.

**Budget**

*Staff (salary and benefits)*

[Program Director (.2 fte); Communications director (.2 fte); Ecosystem Monitoring Manager (.3 fte); support staff (.2 fte)]: \$46,000

*Other Labor*

Writers, graphic designers, Spanish translation: \$15,000

*Travel*

Staff preparation for meetings, workshops: \$5,000

*Meetings*

Support of NPS/CONANP workplan: \$10,000

*Contractural*

Grants to sister parks in support of NPS/CONAIP work plan: \$50,000

*Materials production*

Printing brochures, reports, communications materials: \$141,000

*Overhead (23.8%)* \$21,658

**TOTAL** \$161,658