

LAGUNA SAN IGNACIO CONSERVATION ALLIANCE





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San Francisco Chronicle

“Conservation is as much about social justice as it is protecting wildlife”



The San Diego
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“Empowering local people to become stewards of their own land”

Los Angeles Times

“A different view for a lagoon”



“Environmentalists raising money to protect whale breeding ground”



“Land around Laguna San Ignacio protected to help gray whales”



“Laguna San Ignacio Conservation Alliance completes the largest private coastal conservation project in Mexico”

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Executive Summary

Laguna San Ignacio, a UNESCO World Heritage Site, is the last undeveloped gray whale birthing lagoon on the planet. Part of the Vizcaíno Biosphere Reserve, the Laguna San Ignacio Wetland Complex is home to gray whales, green sea turtles, peregrine falcons, and hundreds of thousands of migratory waterfowl and shorebirds.



Protecting Laguna San Ignacio is a once-in-a-lifetime opportunity to save a global treasure and one of the world's most biologically significant coastal sites. This project is our last chance to protect the world's last undeveloped gray whale lagoon. By preserving the Laguna San Ignacio Wetland Complex, we will provide a model of wildlands and wetlands conservation that demonstrates that local people can be effective stewards of wildlife habitats and that conservation and local economic development are compatible.

In March 2000, a coalition of environmental organizations pressured former President Ernesto Zedillo to cancel the Mitsubishi Salt Project. Despite the victory, the Laguna San Ignacio Wetland Complex is once again threatened by major development. Salt mining, resort

development, and land speculation could dramatically alter the pristine gray whale lagoon, wetlands, and mangrove lagoons that cover hundreds of square miles of coastline.

Local people, including members of the six surrounding ejidos (communal land cooperatives) are now legally able to sell their land. There is a great danger that many could sell their lands to industrial-scale developers or land speculators. In order to permanently protect one of the world's most precious treasures, Pronatura-Noroeste, WiLDCOAST, International Community Foundation (ICF), Natural Resources Defense Council (NRDC), the Ejido Luis Echeverría Alvarez, and the Laguna Baja Asociación Rural de Interés Colectivo (ARIC) have formed the Laguna San Ignacio Conservation Alliance.

The Alliance mission is to work with community-based organizations and private land owners within the Laguna San Ignacio Wetland Complex to protect one-million acres of pristine coastal ecosystems. Over the next two years the Alliance will preserve the seven project sites that include communal lands, private property and federal lands for a total cost of 9.9 million dollars. The Global Green Grant Fund, Sandler Family Supporting Foundation, International Community Foundation, Natural Resources Defense Council, San Diego Foundation Orca Fund and the North American Wetlands Conservation Act (NAWCA) Grants Program provided seed funding and organizational support to develop this project.

The Laguna San Ignacio Conservation Alliance will permanently protect the lagoon by developing conservation easements for biologically significant communal and privately owned



lands in the six individual ejidos and the federal lands that surround the Laguna San Ignacio Wetland Complex.

During the first project phase in 2005, the Alliance established a 120,000-acre conservation easement comprising all the communal lands within the ejido Luis Echeverría Alvarez (ELA) on the southern shore of Laguna San Ignacio. This legally binding deal is being touted as a model for conserving both the environment and the area's cultural identity. In 2006, the Alliance will complete the protection of 20,000 acres of private lands within ELA to complete Phase 1 of the San Ignacio Conservation Alliance Conservation Plan. The Alliance will also launch Phase 2 in order to protect 100,000 acres of wetlands along the northern shore of San Ignacio Lagoon.

The International Community Foundation manages individual donor-advised funds for each conservation easement as it is negotiated.

The International Community Foundation is a signatory to the easement agreements, with Pronatura and each ejido. The International Community Foundation will make an annual payment from the donor-advised fund based on the agreed-upon terms of each conservation easement.

At each conservation site, the Alliance will establish conservation reserves by structuring conservation easements over communally, parceled and privately held lands. The Alliance will also work on the investigation of the National Lands legal status and the legal conservation strategies to secure the protection of over 66,000 acres of Federal Zone lands within the Laguna San Ignacio Wetland Complex. As a part of the methodology, the Alliance will develop legal and environmental baselines, create conservation zoning maps, prepare management plans, and structure conservation easements.



Laguna San Ignacio Wetland Complex

Laguna San Ignacio, a UNESCO World Heritage Site, is the most pristine gray whale birthing lagoon on the planet. The 1.5 million acre Laguna San Ignacio Wetland Complex is located on the Pacific Coast of Baja California Sur, Mexico in the municipality of Mulege. The wetland complex extends along 248 miles of coastline, including the lagoon and the Pacific coast of the Baja California Peninsula. It is located within the Vizcaíno Biosphere Reserve and is 600 miles south of the United States–Mexico border.

The Laguna San Ignacio Wetland Complex (LSIWC) includes the lagoon, intertidal mudflats, salt flats, and sandy beaches, halophilic vegetated coastal plains intersected by densely vegetated arroyos all of which rank among the most productive on earth. The LSIWC extends over six ejidos and an area of federal lands. Three mountain ranges surround the lagoon, the Sierra de Santa Clara, the Sierra de San Francisco, and the Sierra de Guadalupe.

The organic productivity (i.e., the amount of life and life-giving nutrients) of the lagoon complex is extraordinarily high. It supports an amazing variety of plants and animals including gray whales, green sea turtles and migratory birds. The lagoon complex also provides critical habitat for rare species such as the endangered Peninsular pronghorn, peregrine falcons, golden and bald eagles, and osprey.

Gray whales migrate from the high Arctic waters of the Bearing and Chukchi Seas to the warm coastal lagoons of Baja California. The protection of the LSIWC is not only crucial for the survival of these cetaceans, but it is also

important for the whale watching industry at the lagoon and all over the Baja California Peninsula and the U.S. Pacific Coast.



The LSIWC provides critically important habitat for migratory and waterfowls such as black brant (*Branta bernicla*) and godwits (*Limosa* spp). Ninety-eight species of terrestrial birds and 123 species of waterfowls have been reported on site.

Laguna San Ignacio is divided into northern and southern sections and has three entrances to the Pacific Ocean. The lagoon is relatively shallow (19.7-39.4 ft.) with maximum channel depths of 52.5 feet. Wetlands and mangroves extend along 198 miles of the 247 miles of LSIWC coastline. The mangrove is a salt-tolerant tree that grows in intertidal areas of tropical and subtropical oceans. Mangrove marshes are important bird habitat, breeding and feeding areas, as well as nurseries for many species of ocean fish. The LSIWC include white mangrove (*Languncularia racemosa*) and red mangrove (*Rizophora mangle*) species.



Threats

Mitsubishi/Exportadora de Sal

Despite the cancellation of Exportadora de Sal's (ESSA) project by President Ernesto Zedillo on March 2, 2000, the Mitsubishi's Industrial Salt Production project continues to pose a threat to the Laguna San Ignacio Wetland Complex. The decision of the federal government of granting a new salt production concession in 2001 is evidence that San Ignacio lagoon is still in jeopardy.

ESSA was, and continues to be, owned by Mitsubishi (49%) and the Mexican Government (51%). The cancelled industrial salt production project was a private/government venture. Mexican government officials have been discreetly considering divesting Mexico's interest in ESSA. A private company purchasing the Mexican government's 51% interest would not be subject to President Zedillo's cancellation of the private/government venture. In effect, the

industrial salt project would be transformed into a new and viable project.

The industrial salt production project's components would have a devastating impact on the lagoon complex. One-hundred-and-sixteen square miles would be converted into evaporative and crystallization ponds. Six thousand gallons of saltwater per-second would be pumped by 17 diesel engines operating around the clock. A 1.2 mile-long pier would be built in the nearby town of Punta Abreojos (Ejido El Baturi). An industrial complex and a planned community to house temporary and permanent workers would be built near the lagoon.

These installations would result in major changes to the area. Intense economic activity would undoubtedly draw people in search of employment and thereby negatively exert pressures on the currently pristine environment and gray whale sanctuary.



The Nautical Stairway

The mega-development project Nautical Stairway or “Escalera Nautica” continues to be a threat to Laguna San Ignacio. The project, conceived in the 1970’s, was passed to successive administrations and ultimately inherited by President Vicente Fox.

Mexico’s National Tourism Board (FONATUR), the lead agency, announced the plan to build twenty-four resort/marinas along the Baja California peninsula. FONATUR boasted that the Escalera Nautica would attract 52,000 boats and one million visitors annually. These estimates proved to be grossly exaggerated. EDAW, an independent international concluded that FONATUR had over-estimated the market by 600%. No site specific Environmental Impact Assessments (EIAs) were ever submitted. Punta Abreojos (inside ejido El Baturi) continues to be an Escalera Nautica marina site and a number of FONATUR maps show the marina in the exact location proposed for the Mitsubishi salt project’s 1.2-mile pier.

The Escalera Nautica project encountered, and continues to encounter, fierce national and international environmental opposition. A coalition of environmental groups eventually reached an agreement with FONATUR in which the project would be scaled back. FONATUR agreed to only promote existing marina upgrades under the banner of “Programa Mar de Cortez.” FONATUR breached this agreement when it announced plans for new marinas in the Sea of Cortez and the Pacific Ocean including the recent marina approval for Punta Abreojos.



Pemex – Oil and Natural Gas Drilling

Oil and gas drilling also pose a serious threat to the region. Petroleos Mexicanos (PEMEX) has conducted extensive exploratory oil and natural gas drilling in Laguna San Ignacio. Oil industry benchmarks are located throughout the lagoon complex. Rising global oil and gas demand and industry market manipulation have significantly increased the likelihood of future operations in the area.

Unregulated Urban Sprawl and Natural Resource Use

A lack of local planning and regulatory structures threatens the well being of local communities and ecosystems. For political reasons, local agencies often support the formation of irregular settlements and seasonal fishing camps along the coast.

In the fish camp at El Cardon, squatters have settled next to an extensive mangrove area. This settlement is located in a low-lying coastal mud flat that is subject to flooding. The ejido Luis Echeverría has unsuccessfully attempted to convince the settlers to relocate to the nearby community. Despite the potential harm to the mangrove environment, landowners have not addressed the issue because no governmental incentives or law enforcement compel them to do so.

These settlements and fish camps are in violation of the Vizcaíno Biosphere Reserve’s prohibition against new settlements. Instead of inducing the settlers to relocate, state and municipal politicians have supported them in exchange of election support and votes. This situation has led to an increase in the number of squatters entering Laguna San Ignacio.



Conservation Plan

The Alliance approach is to: (1) establish open and participatory discussions; (2) incorporate the ejidos into the Alliance; (3) develop fair and effective conservation legal structures in partnership with the ejidos; (4) responsibly manage individual ejido trust accounts; and (5) monitor and defend the established conservation structures. The Alliance's goal is to protect 894,035 of the 1.5 million acres of coastal ecosystems surrounding Laguna San Ignacio. The estimated cost of the project is around 9.9 million dollars.

CONSERVATION TARGET AREA: 894,035 ACRES
TOTAL COST: \$9,944,545



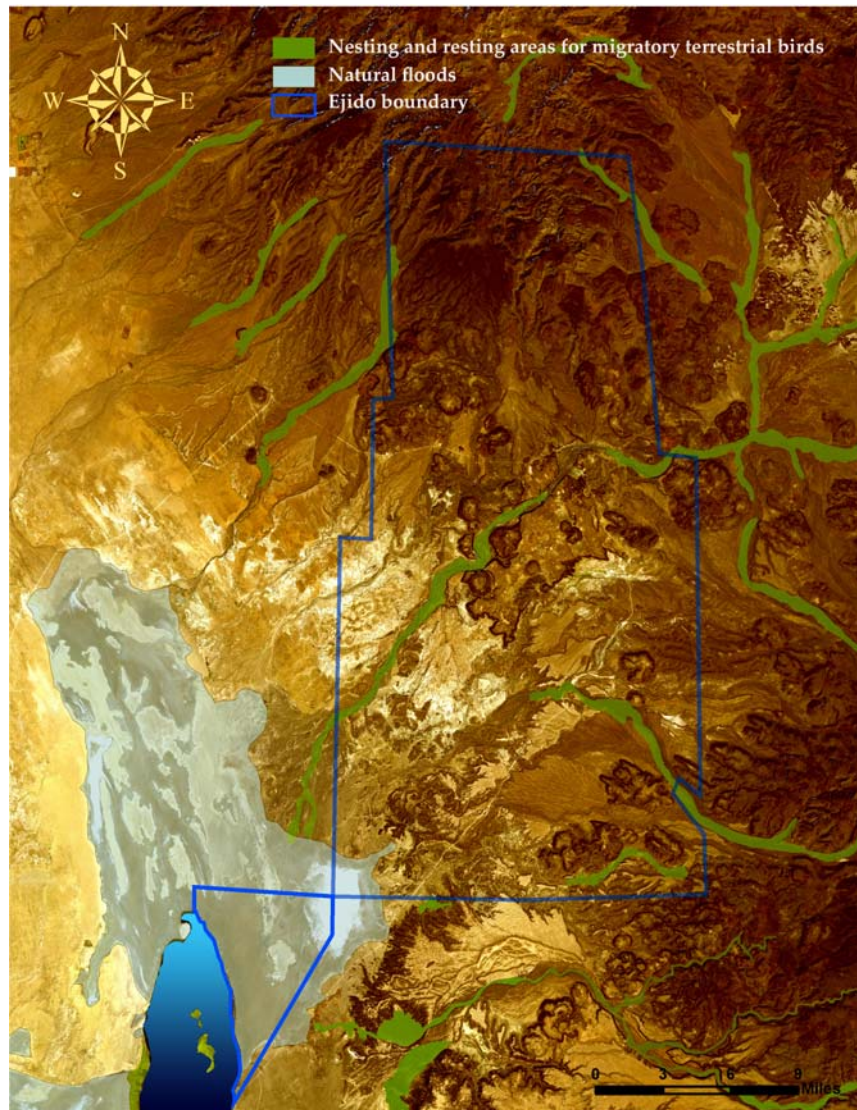
Phase	Ejido	Conservation Target Area (Acres)	Total Cost
1	Luis Echeverria Alvarez	Common lands: 120,847 ACCOMPLISHED Private lands: 20,000	\$1,586,471
2	Mexican Federal Lands	66,503	\$738,221
3	San Ignacio	126,684	\$1,382,471
4	Emiliano Zapata	174,317	\$1,837,921
5	El Baturi	137,502	\$1,528,508
6	Los Cuarenta	102,337	\$1,225,906
7	San Jose de Gracia	145,845	\$1,645,047

Ejido Luis Echeverria
Total Area: 140,847 Acres
Conservation Target Area: 140,847 Acres
Accomplished: 120,847 Acres
Total Cost: \$1,586,471



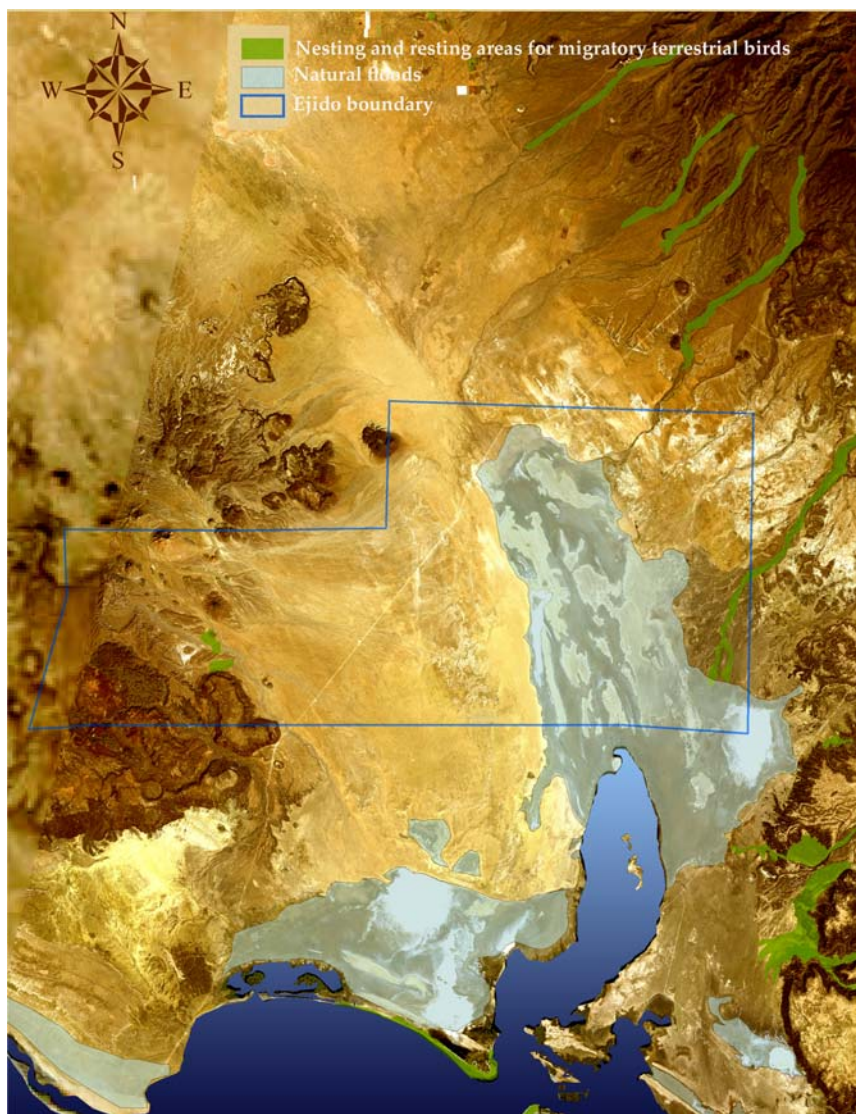
Financing Requirements	\$ USD
1. Communal Lands Incentives	675,000
2. Private Property Incentives	545,040
3. Stewardship endowment	122,004
4. Legal defense fund	122,004
5. Implementation Costs (Pronatura & Wildcoast)	122,423

Ejido San Ignacio
Total Area: 316,710 Acres
Conservation Target Area: 126,684 Acres
Total Cost: \$1,382,471



Financing Requirements	\$ USD
1. Communal and Private Lands Incentives	1,102,151
2. Stewardship endowment	110,215
3. Legal defense fund	110,215
4. Implementation Costs (Pronatura & Wildcoast)	59,890

Ejido Emiliano Zapata
Total Area: 290,528 Acres
Conservation Target Area: 174,317 Acres
Total Cost: \$1,837,921



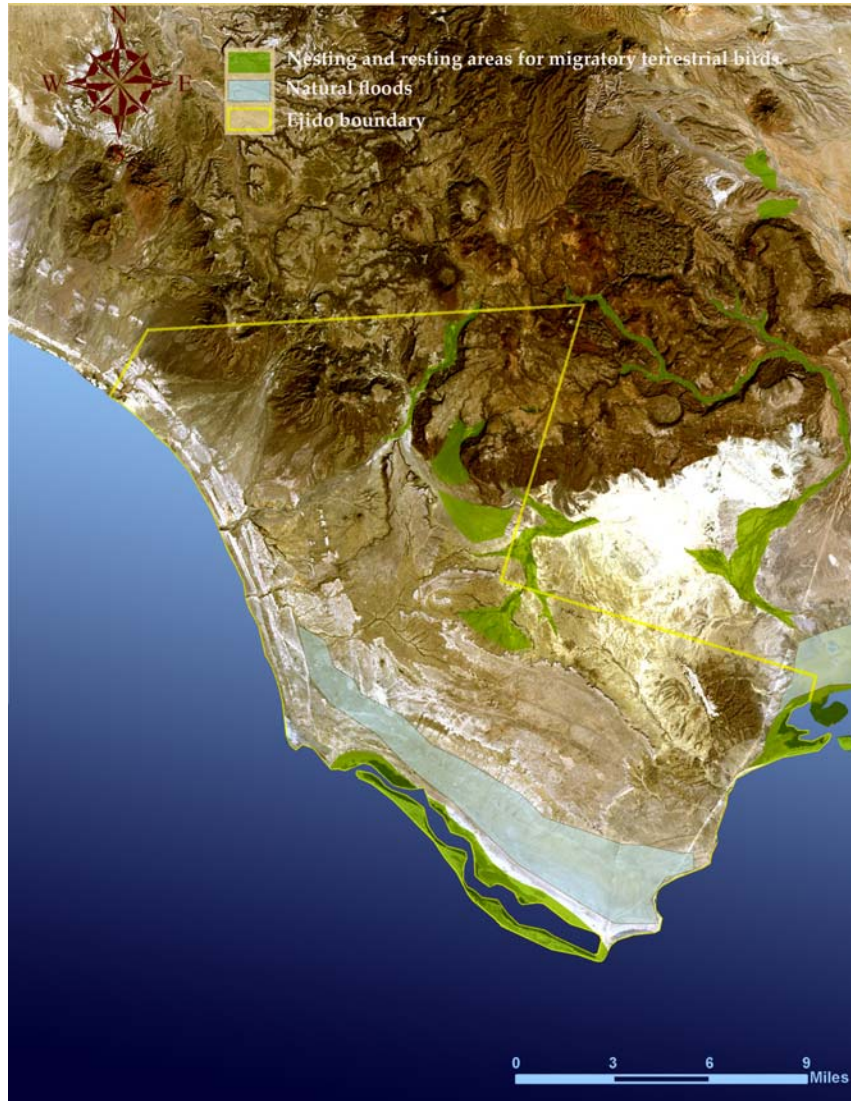
Financing Requirements	\$ USD
1. Communal and Private Lands Incentives	1,481,693
2. Stewardship endowment	148,169
3. Legal defense fund	148,169
4. Implementation Costs (Pronatura & Wildcoast)	59,890

Mexican Federal Lands
Total Area: 208,728 Acres
Conservation Target Area: 66,503 Acres
Total Cost: \$738,221



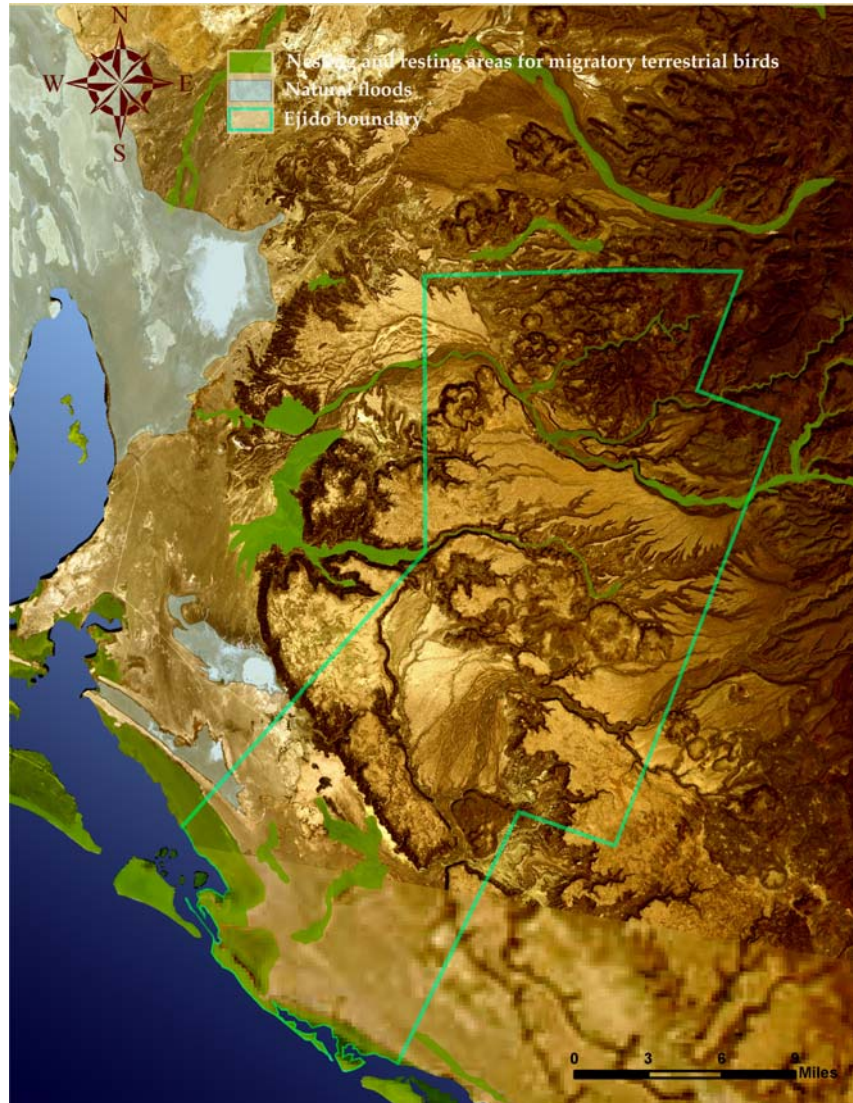
Financing Requirements	\$ USD
1. Federal Land Concessions	565,276
2. Stewardship endowment	56,528
3. Legal defense fund	56,528
5. Implementation Costs (Pronatura & Wildcoast)	59,890

Ejido El Baturi
Total Area: 137,502
Conservation Target Area: 137,502 Acres
Total Cost: \$1,528,508



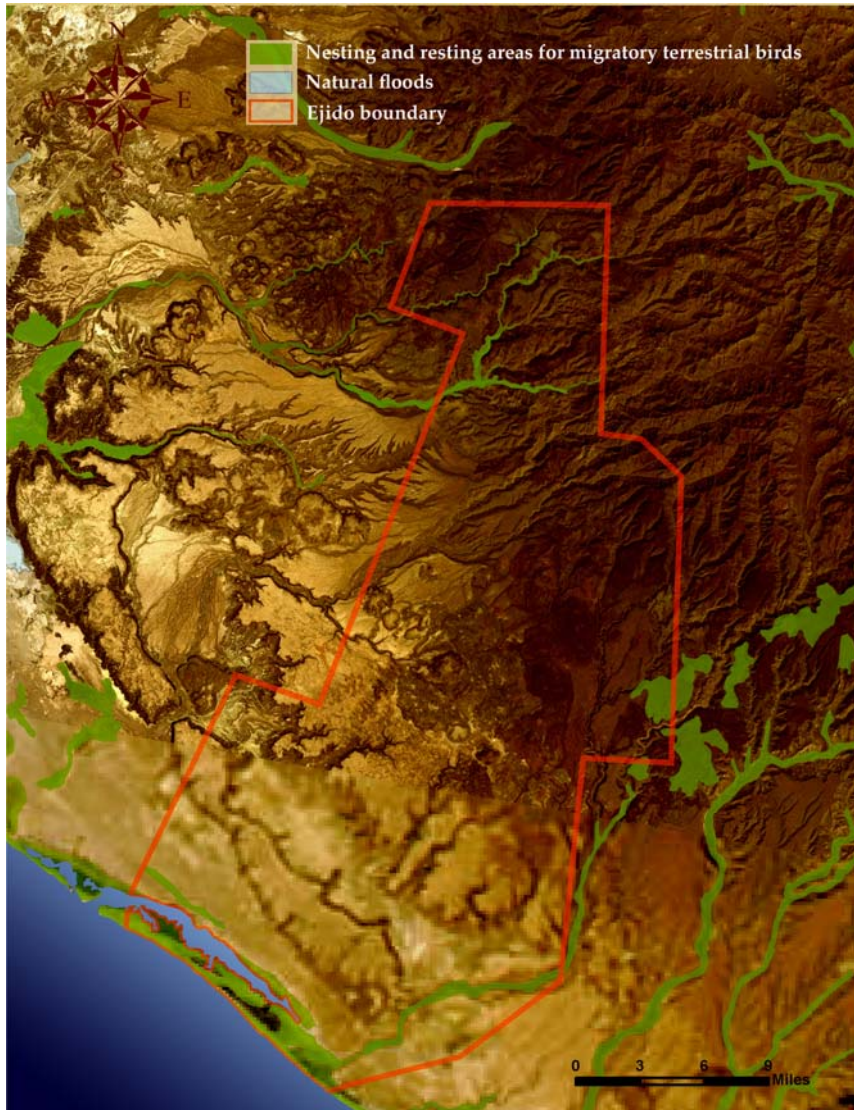
Financing Requirements	\$ USD
1. Communal and Private Lands Incentives	1,168,767
3. Stewardship endowment	116,877
4. Legal defense fund	116,877
5. Implementation Costs (Pronatura & Wildcoast)	125,988

Ejido Los Cuarenta
Total Area: 255,842 Acres
Conservation Target Area: 102,337 Acres
Total Cost: \$1,225,906



Financing Requirements	\$ USD
1. Communal and Private Lands Incentives	890,330
3. Stewardship endowment	89,033
4. Legal defense fund	89,033
5. Implementation Costs (Pronatura & Wildcoast)	157,510

Ejido San Jose de Gracia
Total Area: 364,613 Acres
Conservation Target Area: 145,845 Acres
Total Cost: \$1,645,047



Financing Requirements	\$ USD
1. Communal and Private Lands Incentives	1,268,853
3. Stewardship endowment	126,885
4. Legal defense fund	126,885
5. Implementation Costs (Pronatura & Wildcoast)	122,423

Conservation Strategy

The Alliance is working to establish conservation easements to permanently protect the Laguna San Ignacio Wetland Complex. Fundamental to the project's success was the formation of a multi-level stakeholder alliance. Once formed, the Alliance worked in partnership to structure appropriate legal conservation mechanisms, namely conservation easements (*servidumbres ecológicas*).

A *servidumbre ecológica* (conservation easement) is a voluntary legal agreement between two or more property owners in which the land use rights of one are restricted and provided to another, with the objective of preserving natural resources, scenic beauty, or historical and cultural values of the land in perpetuity. A *servidumbre ecológica* runs with the land and not with the property owner and is given full faith and credit by Mexican courts.

An extended dialogue between Alliance members was conducted in order to determine economic and environmental baselines, identify local and international threats, and visualize the community's future. During these meetings, ejidatarios and ecotourism outfitters became an integral part of the conservation project. The participation of local Alliance members was key to structuring the first of a series of legal agreements designed to permanently protect the entire Laguna San Ignacio Wetland Complex.

Conservation Easements and Mexican Law

In Mexico, the laws and legislative processes concerning real property rights are derived from the Civil Code. Private lands protection has mainly taken place at the state level where conservation organizations such as Pronatura have used civil legislation to establish contractual civil law land rights that are durable and effective against third parties.

In Baja California Sur, land conservation has taken place through the use of appurtenant easements created under Civil Code (articles 1062, 1063 and 1114). These voluntary agreements restrict the type or intensity of use over the land in order to preserve the land's natural resources or archeological, historical or cultural attributes. The easements are formalized before a Notary Public, recorded in the public registry or in the Registro Agrario Nacional if the property is ejido land.

Pronatura is Mexico's leader in private lands conservation. Pronatura structured Mexico's

first conservation easement in 1998 at Las Cañadas, in the state of Veracruz. The following year, a government road-building project began to cut a swath through the private conservation reserve. The Court hearing the case held that the protected property provided a public benefit and ordered a halt to the construction project.

In "Rancho El Paval," Pronatura structured a private property conservation easement within El Triunfo Biosphere Reserve in the state of Chiapas, in which the conservation easement's dominant parcel is the entire Biosphere Reserve, with Pronatura and the Biosphere Reserve sharing legal enforcement power.



In Baja California, project partners have formed the Bahia de los Angeles Conservation Alliance to permanently protect the 150-mile La Asamblea-San Francisquito Coastal Corridor. Project partners established Mexico's first coastal private conservation reserve at La Unica. Pronatura and WiLDCOAST structured the 300-acre conservation easement with the Smith family. The conservation easement, one of seven coastal corridor priority sites, delineates appropriate sustainable development and zoning. The conservation easement was reviewed by the Mexican Center for Environmental Law (CEMDA) to make sure the validity of the contract and constitutes an important conservation model for the region. The International Community Foundation manages the Bahia de los Angeles Conservation Trust.

In December 2004, project partners structured a conservation easement with five other

different owners, permanently protecting 1,127 acres of wetlands in the Guadalupe Wetland complex. The International Community Foundation, which manages the Bahia de los Angeles Conservation Fund, was instrumental in securing the conservation easements. In 2005, Pronatura-Noroeste secured 2650 acres in Bahia de Los Angeles, safeguarding three of seven ecosystems considered vital for biological conservation in the region.

Ejido Lands – Communal and Private

Ejididos are communal land grant towns. Ejidal lands are categorized as private parcels or common use lands. Conservation easement negotiations are divided according to the ejido land category. All ejido members participate in structuring a common use land conservation easement. Additionally, all ejido members retain an interest in common use lands, even if they are owners of individual parcels. Discussions related to private parcels are conducted with the respective owners and the legal conservation structure is unique to each parcel.

Under the terms and conditions of a conservation easement, a management plan is created indicating proper and improper uses for three main distinct zones:

- **Conservation Zones.** - Areas of high environmental value such as wetlands, beaches, or arroyos. Land use and development in this area is highly restricted.
- **Buffer Zones.** - Areas bordering Conservation Zones and have intermediate environmental value. Land use and development is permitted according to the terms and conditions of the conservation agreement.
- **Sustainable Use Zones.** - Areas of intermediate to low environmental value or areas that have been identified in the legal conservation agreement for a specific use. Examples are the urban center and aquaculture project sites.

Federal Lands

Federal Lands are tracts of land held by the Mexican Federal Government. The federal government can make use of land by itself, in partnership with a private company or by granting concessions. A large tract of federal land located on the northwest coast of the lagoon was the proposed site of ESSA's crystallization ponds, the concentration ponds, and the saturated brine ponds.

Project team strategy for federal lands includes requesting a concession of the coastal Fed-

eral Zone (60 feet in from mean high tide) and granting the rights of the concession to the Vizcaíno Biosphere Reserve. If the Mexican government denies the application and decides to grant mining concession, the Alliance will legally challenge this concession. Implementation funds will be available to the project team for Federal Zone legal services, costs, challenges, and implementation.

Laguna San Ignacio Conservation Trust Funds

The International Community Foundation is managing individual donor-advised funds for each conservation easement. Funds are deposited into a donor-advised account on the day the conservation easement is signed. Annual payments are based on semi-annual monitoring reports from Pronatura, which ensure that the conditions of the easement are adhered to. Stewardship funds for this purpose are also managed by ICF.

Stewardship Fund

The Laguna San Ignacio Conservation Alliance agreements are the first legal land conservation structures in Mexico with integrated stewardship funds. The International Community Foundation manages a stewardship fund, which finances: (1) a legal and ecological baseline study; (2) long-term monitoring activities regarding baseline, land use issues, environmental conditions and limitations, and; (3) conservation easement status and review. The monies generated from each project site stewardship fund account will finance two site inspections per year, one report per visit, and one annual report. Each report will analyze key baseline indicators including, legal, environmental, land use, and easement status. All parties involved in the conservation easement negotiation will receive a copy of the reports.

Legal Defense Fund

The Laguna San Ignacio Conservation Alliance is establishing the first legal conservation agreements in Mexico with integrated legal defense fund accounts. The International Community Foundation will manage these accounts within the Laguna San Ignacio Conservation Trust. The funds will be utilized exclusively to legally enforce and defend the terms and conditions of the conservation easements against all internal and external parties. Pronatura is granted full legal power to enforce and defend the terms and conditions of the executed legal conservation struc-

tures under the terms and conditions of the conservation easements. The legal defense fund accounts for three violations per year for five years and includes lawyer's fees and expenses, and court costs.



Stakeholders

The conservation of the Laguna San Ignacio Wetland Complex involves players at the community, local, regional and international level. Conservation projects often require local, regional, national, and international collaboration in order to succeed. The incorporation of new stakeholders and their subsequent collaboration helps keep conservation viable.

Community level stakeholders depend on healthy marine and coastal ecosystems. Local stakeholders include local ejidos, ejido members and fishers, fishing cooperatives, tourist outfitters and guides, and local businessmen. Accordingly, they play an important leadership role in local government's inaction and lack of presence in the lagoon.

On the regional level, the Vizcaino Biosphere Reserve plays a prominent conservation role. The reserve was approved by the government as a National Biosphere Reserve in 1988 and was internationally recognized as a biosphere reserve under UNESCO's Man and Biosphere Reserve Program in 1993. The national decree legally established the reserve's core and buffer zones, along with regulations for the use of each of these zones. The reserve is an example of international cooperation enhancing natural protected area capacity and administrative operations. The reserve has also increased the in-

volvement of local people through a number of conservation and sustainable development programs with ejidos. These successes demonstrate the reserve's leadership position and ability to work collaboratively with a wide variety of stakeholders.

National and international organizations, such as Pronatura, WiLD Coast, Natural Resources Defense Council and Global Green Grant Fund, play an important role as conservation promoters and intermediaries in the lagoon.



Laguna San Ignacio Conservation Alliance

Pronatura-Noroeste, WiLDCOAST, International Community Foundation (ICF), the Natural Resources Defense Council (NRDC), the Laguna Baja Asociacion Rural de Interes Colectivo (ARIC), and the Ejido Luis Echeverría Alvarez have formed the Laguna San Ignacio Conservation Alliance. The Alliance mission is to work with community-based organizations and private landowners within the Laguna San Ignacio Wetland Complex to protect one-million acres of pristine coastal ecosystems.



Pronatura is Mexico's most established conservation organization and a pioneer in Mexican private lands conservation. The organization is currently working on a number of private lands protection projects with WiLDCOAST including the Bahia de Los Angeles Coastal Corridor and Bahia Concepcion Peninsula Conservation Project. Pronatura recently developed a bi-national private lands conservation corridor in the Tecate-Tijuana border region and established the 25,000-acre Lucenilla Peninsula Conservation Reserve along the Sea of Cortez in the state of Sinaloa. Staff includes:

- Juan Carlos Barrera. Executive Director. Juan Carlos is one of the most experienced conservation professionals in Mexico. Prior to managing Pronatura-Noroeste, he directed the Sea of Cortez Program for the World Wildlife Fund. He also managed the one-million acre Upper Sea of Cortez Biosphere Reserve.

- Miguel Angel Vargas Téllez. Land Conservation Program Coordinator. Miguel's achievements include the establishment of the bi-national conservation easement in Tecate, coastal easements in Bahia de Los Angeles, and the Lucenilla Peninsula Conservation Trust in Sinaloa, the largest coastal easement in the Mexican Pacific Coast. He holds a degree in marine resources administration from the University of Baja California.

- José María Beltrán Abaunza. Conservation Information Center Coordinator. José has been a Geographic information Systems consultant since 1995.

- Martín Gutiérrez Lacayo. Land Conservation Program Coordinator. He recently coordinated

the conservation of 350,000-acres of rainforest habitat in southern Mexico in partnership with The Nature Conservancy. He worked for the Federal Environmental Protection Office before joining Pronatura. He is co-author of the Environmental Law of Naucalpan de Juárez County, and represents Pronatura at the National Forestry Council. Martín holds an environmental law degree from the Universidad Iberoamericana.

- José Fernando Ochoa Pineda. Land Conservation Program Legal Advisor. He holds a law degree from the Universidad Intercontinental and a graduate diploma in Environmental Law from the Universidad en Estudios de Posgrado en Derecho. He helped establishing the bi-national conservation easement in Tecate, coastal easements in Bahia de Los Angeles, and the Lucenilla Peninsula Conservation Trust.



Founded in 2000, WiLDCOAST is an international conservation team dedicated to protecting coastal communities, wildlands, and wildlife. Through community outreach, activism and media campaigns, WiLCOAST works to eliminate threats to ecosystems and to develop reserves to permanently protect sensitive areas. Since its inception, WiLDCOAST has successfully protected more than one million acres of coastal wildlands. Staff includes:

- Serge Dedina. Executive Director. Serge received the 2003 *Environmentalist of the Year* Award. Over the past ten years Serge helped develop the 500,000-acre Loreto Bay National Park and the 24,000-acre Isla Espíritu Santo Refuge. He initiated the campaign to stop the Mitsubishi Corporation from building a salt project in Laguna San Ignacio. He founded The Nature Conservancy's Baja California and Sea of Cortez Program. The author of *Saving the Gray Whale*, he received his Ph.D. in Geography from the University of Texas at Austin.

- Saúl Alarcón Farfán. Wildlands Conservation Program Manager. A native of Mexico Saúl received his M.S. in Natural Resource Management and Geographic Information Systems from the University of Michigan and has worked

on natural resource issues for the U.S. and Mexican government on both sides of the border. Before working with WiLDCOAST, Saúl worked with Jones & Stokes in San Diego as a biological consultant.

- **Fay Crevoshay.** Communications Director. Fay is a former National Public Radio and El Financiero reporter. She is considered to be Mexico's top environmental communications professional. She arranged recent coverage by the San Diego Union-Tribune, Associated Press, USA Today and Christian Science Monitor of the conservation easement deal with Ejido Luis Echeverría. She holds a M.A. in Political Science from the University of Toronto. Fay is a native of Mexico.



The Natural Resources Defense Council (NRDC) is a national, non-profit organization of scientists, lawyers and environmental specialists dedicated to protecting public health and the environment. NRDC was instrumental in defending pristine gray whale habitat during the five-year global campaign to stop the Mitsubishi Industrial Salt Project in Laguna San Ignacio. NRDC continues to support conservation and sustainable development projects in the communities surrounding Laguna San Ignacio. NRDC has led the effort to block the U.S. Navy's global deployment of a new high intensity submarine detection system Low Frequency Active Sonar that has devastating impacts on marine mammals. Staff includes:

- **Joel Reynolds.** Marine Mammal Protection and Southern California Ecosystem projects Director and Urban Program co-director. As head of NRDC's Coastal Ecosystem and Marine Mammal Protection projects, he has spearheaded NRDC's efforts to obtain or preserve legal protection for wildlife and its habitat in California and Baja California, including the Pacific gray whale and the coastal California gnatcatcher. He co-directed NRDC's successful five-year campaign against Mitsubishi Corporation's plan to industrialize the World Heritage Site at Laguna San Ignacio.
- **S. Jacob Scherr.** International Program Director and BioGems Initiative Coordinator. A

senior attorney in NRDC's Washington D.C. office, Jacob was a leader with Joel Reynolds in the successful campaign to stop the construction of a massive saltworks project at Laguna San Ignacio. During the course of his career at NRDC since the mid-1970s, Jacob has worked on a broad range of international environmental issues around the world. He has a particular interest in strengthening the capacity of communities in Latin America to protect the natural ecosystems upon which they depend.



Established in 1990, the International Community Foundation (ICF) is a public charity working to foster lasting philanthropy to benefit under-served communities throughout the Americas and Asia. With over 70% of ICF's recent grantmaking benefiting charitable causes along the Baja California peninsula, ICF is committed to assisting U.S. donors with charitable giving needs from Tijuana to Los Cabos. ICF established and manages the Laguna San Ignacio Conservation Trust. ICF was a principal partner in the protection of Isla Espíritu Santo in the Sea of Cortez, a 3.1 million dollar conservation agreement that permanently protected a Mexican national protected area in 2003. The foundation is also a principal partner in the Bahia de Los Angeles Conservation Alliance and has funded and helped structure private-land conservation reserves with Pronatura on the U.S.-Mexican border. Staff includes:

- **Richard Kiy.** President and CEO. Prior to joining ICF, Kiy served as Senior Vice President for Business Development at PriceSmart, Inc. Before joining PriceSmart, Richard served as Principal Deputy Assistant Secretary for Environmental Health and Safety at the U.S. Department of Energy. A graduate of Stanford University and Harvard University's John F. Kennedy School of Government, Kiy is also the co-author of the book *Environmental management along North America's borders*.
- **Anne Mcenany.** Sustainable Communities Director. Prior to working with ICF, Anne was the Director of Development and Program Marketing at the Trust for Public Land. She has worked at The Nature Conservancy and Conservation International in addition to numer-

ous consultin assignments for non-profits and businesses. Anne has a M.S. from Tulane University in Applied International Development with a concentration in environmental planning.



The Laguna Baja Asociación Rural de Interés Colectivo (ARIC) is a coalition of nine small-scale ecotourism enterprises operating in Laguna San Ignacio. Fishermen by trade, ARIC members hold exclusive government-issued permits to work as whale-watching guides. The ARIC's livelihood depends on healthy lagoon ecosystems and therefore it is actively involved in conservation and management efforts. The ARIC has been an active partner in structuring the Ejido Luis Echeverría conservation easement and is considered to be Mexico's leading locally based ecotourism organization. Staff includes:

- Raúl López Góngora. Raúl has worked as a fisherman and whale-watching guide in Laguna San Ignacio since 1981 and is a member of the Ejido Luis Echeverría. The company he co-founded, Ecoturismo Kuyima, is one of Mexico's most distinguished ecotourism and whalewatching outfitters. Raúl coordinated the micro-credit program supported by Eco-Logic Enterprise Venture Fund for Laguna San Ignacio. Raúl works with Pronatura and WILD Coast as the lead outreach coordinator with ejidos surrounding the lagoon.



The Ejido Luis Echeverría (ELA) is a conservation leader in Baja California. The forty-three member ejido has been instrumental in defending Laguna San Ignacio from large-scale development threats including the Mitsubishi Industrial Salt Project. ELA community members led the effort to organize the lagoon's whale watching guides and outfitters under the organization Laguna Baja ARIC. The ejido has actively participated in structuring ejido-wide conservation easements. Every member of the ejido signed the ELA conservation easement.



Appendices

Independent Legal Review

Pronatura conservation easements structures meet the highest standards of legal scrutiny. Mexican laws and legislative processes concerning real property rights are derived from the Civil Code. Private lands protection primarily takes place at the state level where conservation organizations such as Pronatura use civil legislation to establish contractual civil law land rights that are durable and effective against third parties. Legal conservation structures in Mexico are analyzed by a combination of in-house legal advisors. Pronatura attorneys thoroughly review legal agreements to ensure they meet present and future conservation goals. First, attorneys structuring the legal agreements are required to thoroughly review the documents. Second, the documents are referred to Pronatura's national headquarters for a review by senior attorneys. Additionally, Pronatura's conservation agreements are reviewed by independent legal consultants. For example, The Centro Mexicano de Derecho Ambiental (CEMDA) reviewed and approved Pronatura's conservation easements established in the Bahía de Los Angeles Coastal Corridor. Baker & McKenzie also reviewed the Ejido Luis Echeverría conservation easement. The outcome of this rigorous review is long-lasting, solid legal agreements.

Risk Assessment

- Federal, State, and Local Government. The Mexican Constitution and civil codes give the government regulatory powers over private and public lands. These regulatory powers have been exercised in a both positive and negative manner in regards to conservation.

Government's negative exercise of regulatory powers has severely impacted and threatened conservation in Baja California. The Federal and State Governments have promoted large-scale development projects that favor economic development agencies in direct conflict with natural protected area regulations and national conservation goals. Current threats include the Mitsubishi/Exportadora de Sal industrial salt project and the Nautical Stairway mega-tourism development project.

Immediate conservation efforts are required to address the high probability of negative government action in the Laguna San Ignacio Wet-

land Complex. Legal conservation structures that permanently protect private property and strengthen existing conservation schemes such as national protected areas must be established. Legal conservation structures such as conservation easements must be established in partnership with local, regional, and national stakeholders in order to foster multi-level conservation participation. Government agencies must be incorporated into the Laguna San Ignacio Alliance (LSICA) and conservation structures. The National Forestry Commission has pledged support to the LSICA efforts and has committed to providing technical assistance as well as financial incentives in the form of payment for environmental services provided by LSICA conservation easements. The Vizcaíno Biosphere Reserve administration has also pledged support to LSICA efforts and will be expanding reserve conservation programs in the newly created ejido reserves. The National Agrarian Registry (NAR) and its administrative agency the Procuraduría Agraria recognized the Ejido Luis Echeverría's request to empower its representative to execute an ejido-wide conservation easement. The National Agrarian Registry formally recorded the conservation easements. These government actors, in partnership with the LSICA, represent an important base from which to build a public/private constituency capable of countering threats to LSICA goals.

Government's positive exercise of regulatory powers has promoted conservation. Nationally, Mexico has established 138 natural protected areas covering 12.4 million-acres. Seventy-percent of the total number of protected acres are privately owned, subject to regulations limiting certain development rights. The Mexican federal government's general policies protect important biodiversity areas while recognizing private property rights. The Natural Protected Areas National Commission (CONANP) and the Vizcaíno Biosphere Reserve both favor a model of public and private areas subject to land use restrictions according to conservation goals. The two agencies are actively promoting the establishment of the proposed conservation easements in the Laguna San Ignacio Wetland Complex.

- Private Industry and Land Speculation. Immediate efforts are required to address the negative impacts caused by industrialization

and land speculation within the Laguna San Ignacio Wetland Complex. The Mitsubishi/ESSA industrial salt project continues to pose the most serious threat to the region. ESSA representatives approached the Ejido San Ignacio in order to discuss the possible purchase of 21,000-acres along Laguna San Ignacio coastline. The ESSA project would annihilate 116-square miles of intertidal, mud, and salt flats. Some documents indicate that the federal government is considering divesting itself of the industrial salt project, and a private Mexican corporation purchasing the project rights would not be subject to President Ernesto Zedillo's cancellation of the project.

The National Tourism Fund and the Baja California Secretary of Tourism continue to promote the Nautical Stairway. This project would produce devastating primary and secondary impacts on the wetland complex. First, megaresort and marina projects would destroy pristine coastal ecosystems. Second, increased economic activity combined with improved transportation corridors would ignite widespread land speculation and a large inflow of economic immigrants from other regions of Mexico.

The high probability of negative environmental impacts due to industrialization and land speculation can be restricted via legal conservation structures. For example, ejido-wide legal conservation structures directly address industrialization and land speculation: large-scale industrialization is prohibited by the terms and conditions of conservation easements. Ejido-wide conservation easements are solid legal structures that reduce the risks that development projects pose to the rights, use, enjoyment, and benefits derived from the easement. In exchange of executing the conservation agreements, LSICA establishes Ejido Annuity Accounts. Through the establishment of LSICA conservation structures, local ejidos leverage the biodiversity and conservation potential of their lands and at the same time they secure the economic sustainability of their communities.

- **Mexican Law.** It is very unlikely that the Mexican government would repeal or enact legislation seriously abridging basic contractual or property rights. Mexico is a civil law society and therefore legislation may not adversely affect rights retroactively. Conservation easements are based on contract law and are granted full faith and credit by Mexican courts. Additionally, legal conservation structures are authorized by the Procuraduria Agraria and re-

corded in the Registro Agrario Nacional.

National legislation recognizes conservation easements and the Registro Agrario Nacional and the Procuraduria Agraria recognize and codify conservation easements in the national federal registry, thus it is unlikely that court challenges to conservation easements and management plans would overturn voluntary contractual agreements.

The Mexican government could revise and weaken environmental laws. For example, the environmental agency SEMARNAT recently undermined a law that gives protected status to wetlands and mangroves. Nevertheless, conservation easement management plans are not affected by changes to Mexican environmental laws. The regulations embodied in management plans, based on contract law, would remain in full force and effect. The LSICA easements currently establish a higher protection regime than the embodied in environmental laws protecting wetlands and mangroves.

Strategies that would increase the chances of conservation easement success include: (1) the establishment of a political conservation constituency capable of enacting, enforcing, and defending federal and state conservation legislation; (2) the enactment of a federal law that establishes a national legal standard for the creation of appurtenant and in gross conservation easements; and (3) the enactment of legislation improving state and federal incentives to promote private land conservation.

- **Ejidos and Ejidatarios.** It is very unlikely that current ejido members will fail to meet the responsibilities and obligations embodied in conservation easements. Ejido members have been instrumental in the decision making process that created the legal conservation structures. The LSICA has carefully described post agreement contingencies such as interpretation, implementation, transition period, and conflict resolution. The LSICA will continue to maintain participatory discussions and technical assistance to ejidos and ejido members. Post agreement involvement, assistance, and local capacity building by the LSICA in ejido reserves are critical to avoid conflicts in the long term.

- **Alliance member.** It is improbable that any of the main Alliance members will cease to exist in the short term. However, in the case of a party withdrawal, the selection of successors and roles shall be made by the party one-level up on the chain of command. The authorized party shall make decisions according to its own

internal by-laws and decision-making processes. The chain of command is as follows: (1) principal foundations and funders; (2) the International Community Foundation; (3) Pronatura; (4) the LSICA Advisory Committee; and (5) ejidos.

Valuation

Pronatura and WiLDCOAST conducted a central Baja California peninsula land valuation analysis in order to determine appropriate financial conservation easement costs in the Laguna San Ignacio Wetland Complex. The analysis included: (1) a market value survey; (2) environmental services payments; and (3) negotiation guidelines. The analysis resulted in a acre easement cost ranging from \$8 to \$100.

The principal factors determining the land market value were land speculation, coastal location, economic and development potential, public services, size, and access. The high-end market value range was primarily driven by commercial real estate and industrial land speculation. The highest market value, \$8,100 per acre was found at La Unica in Bahia de Los Angeles. La Unica is a property located in the coast with a beautiful scenic view that has a tremendous economic potential. Some small parcels also showed a very high market value, but these lands were extremely rare and not representative of the market value. The low-end of the market value range was characterized predominantly by land transactions involving land speculators and local community members. Land speculators paid as low as \$8 per acre to local property owners.

Even though an overwhelming majority of the ejido members in the region are not interested in selling their parcels, ejidatarios in the Ejido San Ignacio and Ejido Emiliano Zapata have received offers from Mitsubishi/ESSA and ESSA representatives met with the Ejido San Ignacio to discuss the possibility of buying 21,000 coastal acres. Because of this offer, the LSICA proposal also considers the option of purchasing land as an alternative for conservation in

the Laguna San Ignacio Wetland Complex.

The National Forestry Commission has established price points for environmental service payments ranging from \$8 - \$20 per acre. Five annual payments, totaling \$100 - \$250, are made to qualified property owners participating in the Environmental Service program. A piece of property must meet strict guidelines in order to qualify for the program. Property owners are paid for proper management and conservation of important ecosystems and biodiversity. The LSICA, utilizing CONAFOR criteria, established conservation easement costs ranging from \$8 to \$100 per acre.

Long-term local stakeholder buy-in is an essential element in conservation easement success. The LSICA and the Ejido Luis Echeverría structured a funding scheme that addresses financial supra and socio-political considerations. An annuity payment of at least \$25,000 is conditioned on the ejido's fulfillment of the terms and conditions of the conservation easement. The conditional nature of the annuity payments fosters long-term compliance. Additionally, the LSICA will provide additional incentives including legal and technical assistance, the introduction of government conservation programs, and local institutional capacity building.

Accounting for Inflation Over Time

The LSICA is establishing long-term strategies to account for the impact of inflation over time. For example, the LSICA determined that a \$675,000 account will meet the proposed annuity targets (approximately 4.2% return) and costs.

The International Community Foundation and WiLDCOAST prepared with Merrill-Lynch (ML) financial advisors Trust Account management options. The management options include strategies designed to promote long-term Trust Account growth and protection against lean years. Finally, the ejido's participation in the decision making process reinforced LSICA partnerships.

