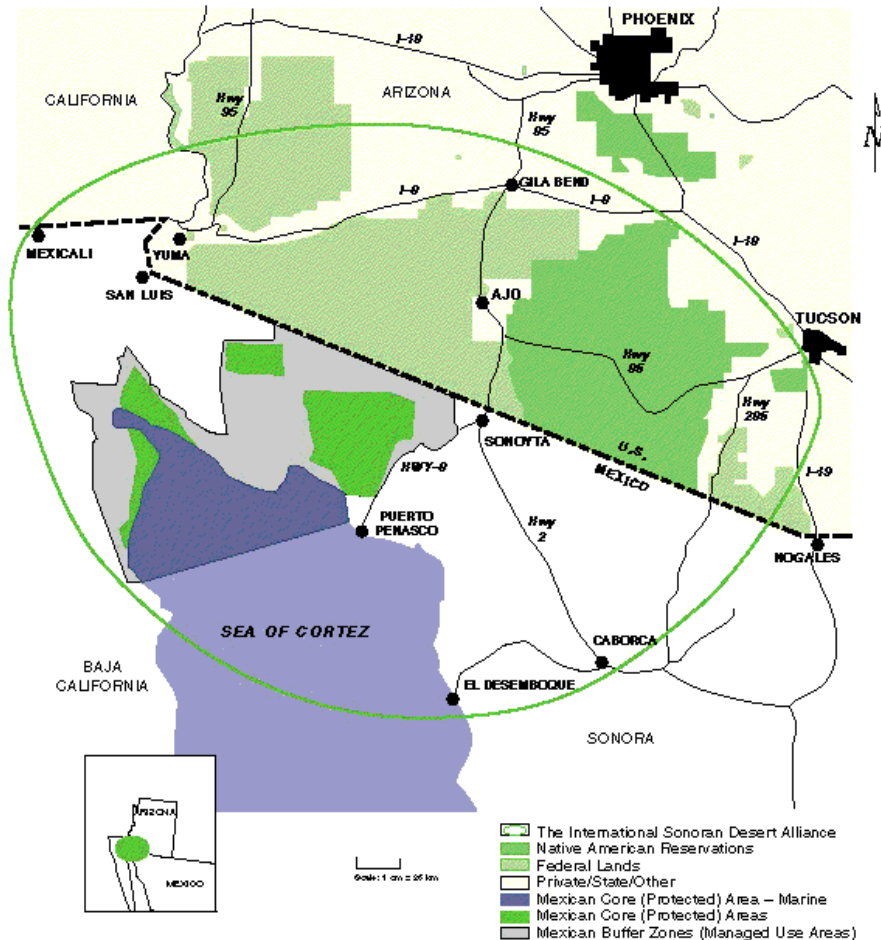


# THE INTERNATIONAL SONORAN DESERT ALLIANCE

Arizona, U.S. – Baja California and Sonora, Mexico

## The International Sonoran Desert Alliance *La Alianza del Desierto Sonorense*



Source: U.S. State Department

## INTRODUCTION

Prevalent throughout the Sonoran Desert, saguaro and organ pipe cacti dot the landscape from the southwestern corner of the U.S. to the northwestern regions of Mexico. Working to promote conservation throughout the western portion of this unique transboundary ecosystem is a community-based effort called the International Sonoran Desert Alliance (ISDA). As its mission, ISDA has embraced the challenge of instilling a

common stewardship ethic among the scattered communities of this expansive region.<sup>1</sup> With a staff of four and a board of fifteen, ISDA is an ambitious effort that continues to grow and yet is firmly planted in its grassroots foundation.

While much of the Western Sonoran Desert is under some form of governmental protection, the management of protected areas on both sides of the border has been largely disjointed and public participation regarding the development of conservation strategies has not been consistently sought. Recognizing local communities as the key to sparking regional interest in environmental issues, ISDA hopes to foster a network of environmental education and sustainable communities projects aimed at improving the quality of life for all Sonoran Desert residents – humans, animals, and plants alike.

### **Why Transboundary Management?**

The U.S. and Mexico share an obligation to protect and preserve the natural resources of the Western Sonoran Desert. Due to the fact that air and water pollution flow back and forth across the border, each country is partially responsible for the other's health and well being. The human communities affected by this situation are the American, Mexican, and tribal stakeholders who rely upon the region's natural resources for sustenance, employment, enjoyment, and ceremony. Until ISDA formed in the early 1990s, there was no organized forum for cross-border discussions of conservation as it related to these issues.

In an attempt to reflect the diversity of regional communities, ISDA solicits, and currently enjoys, the participation of all three Sonoran Desert nations (the U.S., Mexico, and the Tohono O'odham Tribe). The leadership roles that local community members and government officials from these nations have played in ISDA projects have helped with the implementation of ISDA's mission on the ground. In addition, ISDA maintains relationships with well-established and respected conservation organizations throughout the region and has been able to garner funding and attention as result of these associations.

## **CONTEXT**

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### **The Sonoran Desert Ecosystem**

Located along the borderlands of the U.S. states of Arizona and California and the Mexican states of Baja California Norte, Baja California Sur, and Sonora, the Sonoran Desert covers approximately 119, 00 square miles (190,000 square kilometers).<sup>2</sup> This desert is among the wettest and warmest<sup>3</sup> of the four great deserts of North America.<sup>+</sup> Geographers and biologists have divided the Sonoran Desert into six subdivisions. The area covered by the International Sonoran Desert Alliance includes the Arizona Upland and Lower Colorado River Valley subregions, more simply referred to as the Western

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<sup>+</sup> The four great North American deserts are: the Chihuahuan, Great Basin, Mojave, and Sonoran Deserts. See Chester (1999), pp. 163-4.

Sonoran Desert.<sup>4</sup> Spanning the U.S.-Mexico border, this portion of the Sonoran Desert is one of the largest primarily intact arid ecosystems in the world.<sup>5</sup>

### **Ecological and Economic Values**

In many ways, the Sonoran Desert is not a typical desert in that it covers a wide range of environments, from extremely dry to moderately moist.<sup>6</sup> Due to its relatively high rainfall and the diversity of geological substrates and resultant soil complexes, the Sonoran Desert supports the highest biodiversity of all North American deserts.<sup>7</sup> It is home to a number of endangered species, federally listed as such in the U.S., including: the Sonoran pronghorn antelope, the desert pupfish, the lesser-long-nosed bat, and the Nichol's Turk's head cactus.<sup>8</sup>

In addition to supporting a dynamic desert ecosystem, the ecological features of the Western Sonoran Desert have been integral to the traditional economic activities of the region. Natural resource extraction, particularly copper mining, once comprised the region's economic backbone. However, the copper deposits of this area are now virtually exhausted, and mining has been replaced by tourism, agriculture,<sup>+</sup> and manufacturing.<sup>9</sup> The warm climate has also attracted numerous retirees to the region.

### **Ecosystem Stresses**

Population growth is one of several factors threatening the environmental integrity of the Western Sonoran Desert. From 1970 to 1990, the region's population doubled and has shown few signs of slowing since then. Coupled with the physical border control measures, the increased urbanization and road construction associated with population growth has fragmented wildlife habitat and transboundary migration corridors. Likewise, groundwater overdrafts, livestock grazing, the introduction of invasive species, and ore mining have all had direct negative impacts on environmental quality.<sup>10</sup>

### **Land Ownership Pattern**

Although much of the western portion of the Sonoran Desert is under the protection of government ownership, there are a variety of agencies carrying out independent, and often disjointed, management activities on these lands.<sup>11</sup> The largest and most significant blocks of public land include: the Organ Pipe Cactus National Monument (an internationally-recognized Biosphere Reserve managed by the U.S. National Park Service), the Cabeza Prieta and Buenos Aires National Wildlife Refuges (managed by the U.S. Fish and Wildlife Service), the Barry M. Goldwater Airforce Range (managed by the U.S. Air Force and the U.S. Marine Corps), and *El Pinacate y El Gran Desierto de Altar* and the *Alto Golfo de California y Delta del Rio Colorado* Biosphere Reserves of Mexico.<sup>12</sup> In total, the government owns 6.5 million acres of this region.<sup>13</sup> Additionally, the U.S. Tohono O'odham Indian Reservation and a number of communal farms (called *ejidos* in Mexico) on both sides of the border own notable amounts of land.<sup>14</sup>

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<sup>+</sup> This includes dry land farming and ranching. See The U.S. State Department (November 16, 2000).

## History of Cooperation

For several decades, there has been some indication of interest in the pursuit of an ecosystem approach to Sonoran Desert conservation.<sup>15</sup> In the 1960s, Stewart and Morris Udall, brothers serving as the Secretary of the Interior and a U.S. Congressman from Arizona, respectively, put forth the first proposal for a single national park protecting the U.S. portion of the Sonoran Desert.<sup>16</sup> Although a park was never established, there are a number of contemporary environmental groups who believe that the Udalls' plan should be resurrected. The Department of Defense's lease on the Barry M. Goldwater Airforce Range is coming to an end, and if a park or protected area is not established, it is likely that the Bureau of Land Management will assume responsibility over these lands. Some think that such a transfer will lead to development of the area, since there is reason to believe that the BLM would sell this parcel to private entities.<sup>17</sup> Park advocates are optimistic, however, claiming that "the idea of a Sonoran Desert National Park and Preserve has significant public support."<sup>+</sup> Although a park has yet to be established, the U.S. Department of the Interior did designate a portion of the Sonoran Desert a National Monument in the winter of 2001, building off previous attempts to highlight the ecological significance of this unique ecosystem.

In 1996, the Governors of Arizona and Sonora signed an agreement endorsing the creation of the network of binational Biosphere Reserves that exist throughout the Sonoran Desert today.<sup>18</sup> At the federal level, U.S. Secretary of the Interior Bruce Babbitt and Mexico's Secretary of the Environment Julia Carabias signed a letter of intent in 1997, committing themselves and their agencies to the protection of critical natural areas along the U.S.-Mexico border, with specific emphasis given to the Sonoran Desert portion of this area.<sup>19</sup> As signified by the signing of these two landmark agreements, there is clearly vested interest on both sides of the border in protecting the shared ecosystem of the Sonoran Desert.

This commitment is apparent in ISDA's work, particularly in terms of the often overlooked or underplayed Mexican interest in environmental issues. ISDA's programs reflect Mexican concern for desert and urban revitalization, waste disposal, and the reduction of air, water, and soil pollution.<sup>20</sup> In addition, the ISDA Board enjoys the official participation of individuals representing Mexican environmental groups like *Pronatura*, *Fundación de Pinacate* (The Pinacate Foundation) and *La Ruta de Sonora*.<sup>21</sup> Other Mexican Board members have been working hard to engage local levels of Mexican government in the work of ISDA. ISDA staff were recently asked to create a ten-minute presentation on the organization so that legislators in the Mexican town of Puerto Penasco could deliver it to officials in the Sonoran capital of Hermosillo to spark their interest.<sup>22</sup>

The Native Americans of the region, particularly the Tohono O'odham, have also set an example in transboundary communication. They have long maintained relationships between brethren on both sides of the border, despite the fact that their shared homeland

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<sup>+</sup> 84% of Arizonans are in favor of creating a park. See Broyles and Martínez del Rio (2000), p. 56.

was officially bisected by the U.S.-Mexico divide that was carried out under the Gadsden Purchase Treaty of 1853.<sup>23</sup>

## History of ISDA

In hopes of fostering similar levels of transboundary cooperation as had been experienced in the past, the International Sonoran Desert Alliance eventually coalesced as the result of several years of stakeholder gatherings. Beginning in 1988, the U.S.-based Friends of Pronatura<sup>+</sup> organized a conference in Hermosillo, Sonora so that scientists and others could share the results of various research projects being conducted in the ecologically rich Pinacate region of the Sonoran Desert. Approximately 200 individuals attended this meeting, including twenty members of the Tohono O’odham Nation. The native people gave a memorable presentation conveying their concerns over the preservation of the Pinacate’s sacred grounds and natural resources. The openness of the conference forum allowed the O’odham to speak about their spiritual and environmental interests and be taken seriously among an audience of scientific practitioners. The former President of the now-defunct Friends of Pronatura said, “I knew what had happened at that 1988 meeting was kind of magic. From that point on, I started really trying to find a way to create a forum in this part of the world that would permit people from various cultures to speak with each other rather than at each other.”<sup>24</sup>

The 1988 Pinacate conference opened conservationists’ eyes to the fact that the interests and concerns of stakeholders throughout the Western Sonoran Desert were social as well as environmental. As the former Friends of Pronatura’s President stated in reference to this meeting, “We approached it from an environmental standpoint but certainly we found people whose concern about the environment was spiritual and social – the native peoples – and they came saying unless we take care of the spiritual aspects of this all the research in the world is not going to do anything.”<sup>25</sup>

In December of 1992, Friends of Pronatura joined the Tucson-based Sonoran Institute and the Lincoln Institute of Land Policy in organizing a Western Sonoran Desert land use conference in Ajo, Arizona.<sup>26</sup> Invitees included environmental non-governmental organizations, local chambers of commerce, Native American groups, and local governmental bodies.<sup>27</sup> Again, about 200 people attended. In response to the enthusiasm generated at this gathering, a congressional allotment on the order of \$250,000 was granted to further conservation effort in the Sonoran Desert.<sup>28</sup> These funds were managed by the National Park Service and provided a firm financial base from which to grow an organization aimed at fostering communication and joint projects among the range of stakeholders spread throughout the Sonoran Desert.<sup>29</sup>

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<sup>+</sup> Pronatura is a major Mexican conservation organization. Friends of Pronatura (FPN) phased out of existence in 2000. Due to a lack of effective communication between FPN and Pronatura Central in Mexico, all formal ties were severed. Former FPN president, Carlos Nagel, created Friends of the Sonoran Desert in FPN’s stead. It is completely dissociated from Pronatura Central but maintains friendly relations with various branches of the organization.

It was not long after this conference that ISDA was established. In the words of ISDA's Executive Director, "ISDA was born with some great karma and a big bang."<sup>30</sup> Officially incorporated as a U.S. nonprofit organization in 1994,<sup>31</sup> ISDA has focused on consensus building and information-sharing on issues related to ecologically sound economic development and environmental education.<sup>32</sup> In 1995, an event similar to the 1992 land use issues conference was held in Caborca, Sonora, and this was when ISDA really "crystallized."<sup>33</sup> Representatives from the U.S., Mexico, and the Tohono O'odham Nation were all present and eager to find the best ways to foster communication and cooperation between government land managers and local residents of the Western Sonoran Desert.<sup>34</sup> At this time, the Bureau of Land Management (BLM) and the U.S. Fish and Wildlife Service (FWS) both awarded ISDA grants to help supplement a recent contribution from the Ford Foundation which was funneled through the Sonoran Institute.<sup>35</sup>

### Significant Milestones

- 1988**- Conference on the environmental science of the Pinacate region (Hermosillo, Sonora)
- 1992**- Conference on land use issues in the Western Sonoran Desert (Ajo, Arizona)
- 1993**- Alto Golfo and Pinacate Biosphere Reserves established in Mexico
- 1994**- ISDA incorporated as a 501(c)(3) nonprofit organization in the U.S.
- 1995**- 2<sup>nd</sup> conference on land use issues in the Western Sonoran Desert (Caborca, Sonora)
- 2001**- (pending) Conference on economic sustainability through conservation (Sonoyta, Sonora)

The foundation money, \$60,000 a year for three years, was particularly important in that it was earmarked specifically for "institution building." In other words, this money went to operational costs and significantly helped ISDA get off the ground.<sup>36</sup> In addition, this grant mandated that ISDA officially separate from its main fiduciary agent to date, the Sonoran Institute. Over a two-year period, an ISDA Board of Directors was established and tasked with the development of internal procedures and structures for ISDA. At this point, it was assumed that ISDA would largely be a board-driven organization, reliant upon board members for all essential operations.<sup>37</sup>

Impressed by the direction in which ISDA seemed headed, the Ford Foundation renewed its initial grant in 1999 for another three years at an increased level of \$100,000. This substantial revenue stream has played an important part in putting ISDA on the conservation map and has given the organization the confidence and capacity to diversify its funding portfolio with a broader range of partners.<sup>38</sup>

## APPROACH TO TRANSBOUNDARY COOPERATION

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### Involved Stakeholders

In addition to funders, there are a number of other parties concerned about the fate of the Western Sonoran Desert, including government agencies, environmental groups, and

several clans of the native O’odham people (Tohono, Hia-Ced, and Tona).<sup>39</sup> Pulling from these pools as well as the local citizenry, ISDA hopes to bring together those individuals and organizations that can affect the most sustainable ecological benefits for the transboundary region. Although ISDA has not solicited the explicit involvement of government officials in its work, various government agencies have supported ISDA through their encouragement of community participation. In addition, ISDA maintains working partnerships with those agencies that grant them funding, such as the BLM and FWS.<sup>40</sup> As stated by the ISDA Executive Director, these are “good, harmonious relationships. They fund us and we try to help them put out their programs.”<sup>41</sup> For example, some agencies call upon ISDA to disseminate the environmental education programs they simply do not have the mechanisms to implement effectively on their own.<sup>42</sup>

### Local Participation

Although it covers a large area, ISDA aims to have its major impacts at the local level, and this focus has led to a significant amount of public participation. In fact, the nature of ISDA’s support in Mexico has come mainly from local citizens.<sup>43</sup> While its board maintains policy level connections to academics and government, ISDA has the potential to be most effective among its target audience because of the committed on-the-ground network of local community members that promote its programs. According to ISDA’s executive director, “it would be absolutely impossible, of course, [for us to accomplish our community level agenda] if we didn’t have people who were helping us in the communities.”<sup>44</sup>

Most ISDA programs take place in communities on the Mexican side of the border. In the U.S., only Ajo, Arizona and portions of the Tohono O’odham Nation are regularly engaged in ISDA activities.<sup>45</sup> Meanwhile, Sonoran towns like Caborca, Puerto Penasco, San Luis, and Sonoyta as well as Mexicali, Baja California are all active ISDA participants.<sup>46</sup> Take San Luis for example, where the Director of Instruction for four schools implemented an ISDA environmental education project in her district. This endeavor involved having students paint fifty-five gallon drums with Sonoran Desert themes and put them around town to raise consciousness about litter prevention.<sup>47</sup> Ajo, Arizona, also participated in this project. Although based in Ajo, ISDA works effectively in Mexico because it is legally registered with the Mexican government as a foreign non-profit corporation that can meet and promote certain limited activities in Mexico.<sup>+</sup> The current director of ISDA enjoys the fact that “because [ISDA] is not a government organization [it] can jump across the border real easily.”

Although ISDA is supported on both sides of the U.S.-Mexico border, the nexus of its activities is not aimed at directly influencing environmental policy in either country, per se. According to a Mexican board member, “this is partly due to the fact that the organization does not have a definite direction in lobbying for or against the enactment of

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<sup>+</sup> ISDA is not recognized as an NGO (*asociacion civil*) in Mexico even though it is registered as a 501(c)(3) nonprofit organization in the U.S. The laws which authorize the operation of ISDA as a corporation in Mexico are found in the Mexican civil code (Article 27, paragraph 1; Article 28, paragraphs 27-36, 27-37, 27-38; and Article 60, paragraph 3). See Cantú (February 12, 2001).

new policy or changes to the existing ones.”<sup>48</sup> In addition, most of ISDA’s projects do not operate at the policy level. “We are more involved with trying to get into the communities – we’re more like the guys in the trench,” says the executive director of ISDA.<sup>49</sup>

### The ISDA Board

However, ISDA does maintain an overarching Board of Directors which advises on the direction and diversity of projects undertaken by the organization. The ISDA Board is comprised of five members from Mexico, five members from the U.S., and five members from the O’odham Nation. Although the Board has not traditionally included government representatives, a current Board member is the Secretary of Puerto Penasco.<sup>50</sup>

#### ISDA Board of Directors

- 8 U.S. members representing:
  - Friends of the Sonoran Desert
  - Hia Ced O’odham Alliance
  - Ajo business community
  - Tohono O’odham Nation
- 7 Mexican members representing:
  - *La Ruta de Sonora* (environmental organization)
  - Tohono O’odham Nation
  - Municipality of Puerto Penasco

The ISDA Board is an interesting creature due to the fact that its members serve voluntarily and are elected at board meetings by those that are present.<sup>51</sup> While this approach can be applauded for its democratic intent, it has flaws in that elections are often held at meetings that not all board members can attend. Several ISDA board and staff members have noted the frustrating challenge inherent in reconciling scheduling conflicts and facilitating travel to meeting locations.<sup>52</sup> In some cases, border crossing has been a very real barrier to representative elections. The current ISDA executive director laments this situation:

We’ve got some members who can’t get across the border to this side so we’ve had our meetings mainly in Mexico. We’re having our next one at the end of this month here in Ajo [Arizona] just because we haven’t had one here in the U.S. for about three years, but there are some board members that can’t cross – they don’t have permission. They’re O’odham natives and, for whatever reason, they can’t get passports unless they renounce their allegiance to the tribe. According to Mexico, there are no tribes – just Mexicans. So you’re either Mexican or you’re not. And the requirements for getting in on the U.S. side are kind of rigid – they ask you for rent receipts and utility payments...and we deal with some people with scant resources, so it’s been tough.<sup>53</sup>

In addition, this election of new board members occurs only every three years and can lead to a temporary dominance of priorities in one area or even one municipality of the region, depending on where the last election meeting was held.<sup>54</sup>

### ISDA’s Organizational Structure

Although ISDA was born as a board-driven organization, this strategy, in lieu of having dedicated program staff, did not prove to be most effective over time. “Fifteen board members means fifteen different human natures, and it’s sort of difficult to get things done that way,” noted the current ISDA Executive Director.<sup>55</sup> So, in 1998, some

structural changes took place in the organization. For one, an executive director was hired and took charge of the daily, on-the-ground operations of ISDA. There had been one previous director of the organization, but time had lapsed between her departure and the hiring of a new director, and ISDA quickly fell behind in filing the grant applications that were essential to its continued operation.<sup>56</sup> During this time, the current executive director was contracted by the board to publish a newsletter which, for quite a while, was the only thing that existed of ISDA.<sup>57</sup> He had also worked for ISDA as a board meeting translator, and these collective experiences familiarized him with ISDA, its mission, and its need for some administrative guidance.

Today, ISDA has four staff members: an executive director, program director, director of development, and office manager. The Development Director, the organization's newest position,<sup>+</sup> is focused on establishing a long-term endowment program for ISDA so that it will no longer be at the mercy of various disjointed grants.<sup>58</sup> How the ISDA board and growing program staff can most effectively coordinate and benefit from one another without stepping on toes has been a challenge and a work in progress. In some cases, this relationship needs to be redefined in order for ISDA to maintain an appropriate position in the local communities within which it works. For example, ISDA's executive director notes that "if a board member decides to get involved with a project, that board member should probably waive his or her 'authority,' temporarily, and become part of a project team that would be under the management of the staff."<sup>59</sup>

### ***ISDA's Mission and Established Programs***

The mission of ISDA is "to encourage a healthy, positive relationship between the Sonoran Desert, its inhabitants, and the needs of humanity."<sup>60</sup> According to a U.S. board member, "ISDA is trying to create that space where people can come together and dialogue with each other so that there can be a truly participatory approach to problem-solving."<sup>61</sup> In addition to sponsoring regional conferences on environmental sustainability,<sup>\*</sup> ISDA has a number of programs in place that are aimed at helping local residents "guide their own destiny" in this area.<sup>62</sup> Established programs include: "*Juntos: Maestros y Ninos del Desierto*" ("Together: Teachers and Students of the Desert") which is a bilingual, Sonoran Desert-specific environmental education (EE) curriculum being used through the region, and "*Roots/Raices*" which is a high school-based beautification program centered around recycling and tree planting.<sup>63</sup> The first approach to these EE efforts was to organize autonomous local youth groups to take the lead on various projects, but this failed to be sustainable when the older student leaders graduated and left the schools. Now, ISDA's EE focus is on working with education officials to implement an EE delivery system that will implement ISDA programs directly through the classroom.<sup>64</sup>

### ***ISDA's New Direction***

These days ISDA is focused on the development of new projects that seek to "make money with the environment."<sup>65</sup> According to one of the board members, "the theme for the next three years is 'conservation through economic development.'"<sup>66</sup> In order to

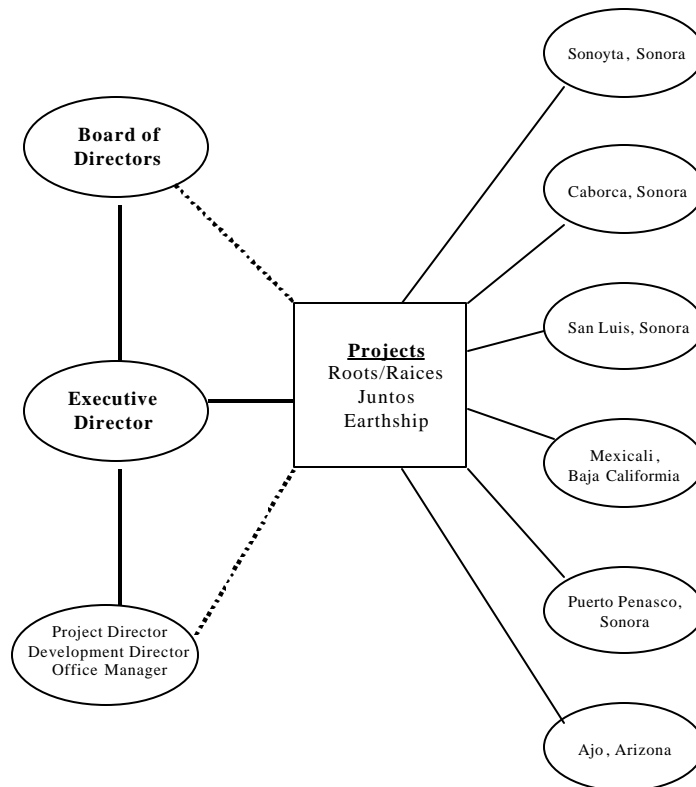
<sup>+</sup> Created in January 2000. See Cantú (February 12, 2001)

<sup>\*</sup> A conference similar to the 1995 gathering is being planned for October 2001, to be sponsored by ISDA.

achieve this goal, ISDA is promoting a variety of environmentally appropriate business and economic development initiatives throughout the region. For example, much of the Western Sonoran Desert is currently facing energy and water shortage crises. One innovative solution is the “earth ship” demonstration project. An earth ship is a self-sufficient housing unit that is constructed from recycled bottles, cans, and tires and utilizes solar and wind energy and water catchment systems.<sup>67</sup> The prototype is being built in Mexicali in cooperation with architecture students from the University of Baja California. It is hoped that housing officials from around the region will visit this pilot project and consider implementing these environmentally sound dwellings in their areas.<sup>68</sup>

In addition, various opportunities for local residents to become involved in ecotourism and green business ventures are being highlighted with ISDA’s help. Through workshops held in all parts of the region, ISDA board members and staff hope to encourage at least ten new “eco-entrepreneurs” over the next three years.<sup>69</sup> While the effort put into the development of these new projects may, in effect, de-emphasize ISDA’s environmental education and other youth-related programs, it is going to give the organization another dimension to add to its portfolio.<sup>70</sup>

### Organizational Diagram of ISDA



This is a simple pictorial diagram of basic organizational structure and is not meant to be wholly representative of all that ISDA is or does.

## **Barriers to Working Across Borders**

Although ISDA is able to call itself a transboundary effort, there have been a number of real and perceived challenges it has had to overcome. Perhaps illustrated most clearly by the physical barrier separating the U.S. and Mexico at the border are deep-set differences such as the English-Spanish language divide and the differing priorities and laws of the two countries.<sup>71</sup> As a former ISDA participant from the Sonoran Institute has noted, “collaboration has a long history here but are certain barriers too great to overcome?”<sup>72</sup>

Attempts to reconcile the language barrier include the presence of a translator at all ISDA board meetings and publication of the ISDA newsletter in both Spanish and English. While these gestures toward ISDA’s Spanish-speaking participants are appreciated, one Mexican board member contends that it would be helpful if all persons working in the program development and management of ISDA were bilingual – including both Mexicans and Americans.<sup>73</sup> In addition, locating some dedicated ISDA staff in Mexico could greatly advance the group’s efforts there.<sup>74</sup>

Coordinating mutually beneficial joint conservation strategies between two countries with inherently different approaches to environmental protection has been a more difficult barrier to break down due to its subtle yet engrained nature. As discussed earlier, ISDA works mainly with Mexican communities in Sonora, and the top priority for individuals in many of these areas is basic survival. This sentiment has been aptly summarized by one American board member: “You have to have enough money to feed your family, clothe yourself, and have a roof over your head. If you’re hungry and you can’t feed your family, you’re not going to care about any of the fuzzy creatures in the world.”<sup>75</sup> ISDA’s executive director echoes this need to take an economic approach to environmentalism in the region: “Our feeling is that we need to start from the perspective of people’s economic lives. What we’re really realizing now is that, in order to really deal with conservation as a consciousness issue, people have to first have the capacity to feed themselves and take care of their families.”<sup>76</sup>

Out of necessity, money is the most vital concern of many of the people living within the Mexican portion of the Western Sonoran Desert -- hence the direction of ISDA’s new programs aimed at educating people about generating income in environmentally-sustainable ways.<sup>77</sup> This is an especially important task in the areas of Mexico where the Alto Golfo and Pinacate Biosphere Reserves exist. When these areas were declared protected in 1993, people who had been gathering wood and hunting there were no longer allowed to continue these activities.<sup>78</sup> Without viable alternatives, illegal logging and poaching may threaten these reserves today.

### ***Opposition to ISDA***

Although conflicting forces have not confronted ISDA outright, there are undercurrents of opposition flowing throughout the region. Only occasionally does this opposition manifest into action. For example, ISDA proposed the creation of a native plants interpretive trail and outdoor study area for a school in Ajo that had acquired several acres of property, only a fraction of which was needed to build amenities such as new ball fields. To get their proposal approved, ISDA had to go to the school board, where they

encountered the opposition of a board member who was adamantly against environmental education because he thought it was “a plan to get the government into the schools.”<sup>79</sup>

Also surfacing in the U.S. have been negative reactions to attempts to further involve the government, particularly the federal government, in the lives of individuals. At one point in time, it was suggested that the protected areas within the Sonoran Desert become part of an integrated United Nations (U.N.) environmental management plan, but due to the fact that the U.N. is such a “political hot potato” in Arizona,<sup>+</sup> the concept was dropped altogether.<sup>80</sup> As the executive director of ISDA has said, his organization is not interested in fighting with people. According to him, ISDA is “trying to get people to understand that a sustainable economy can come from conservation -- that’s where energy is being focused.”<sup>81</sup>

## ACCOMPLISHMENTS

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Among those who have written about it, ISDA is generally considered to be a success in terms of its promotion of community-level conservation throughout the Western Sonoran Desert. It has been heralded as a “regional cooperative” that has “empower[ed] its members to achieve community goals compatible with maintaining a healthy desert ecosystem.”<sup>82</sup> ISDA’s community focus is one of its most unique and strongest features. The ISDA approach has encouraged communication among people who have not traditionally consulted one another despite the fact that they rely upon the health of a shared ecosystem.<sup>83</sup> In addition, “ISDA has succeeded in building self-confidence and self-reliance among its members and has been able to build a regional identity” centered on the Sonoran Desert.<sup>84</sup>

### An Effective Process

Those people directly involved in ISDA have equally praiseworthy comments to make about this transboundary conservation effort. For one, ISDA’s long-term agenda has been noted as being important to the creation of meaningful relationships between it and the communities that hope to benefit from its work.<sup>85</sup> Environmental restoration does not occur over night, and ISDA has been able to facilitate an understanding of this phenomenon without sacrificing local commitment to its projects. Moreover, ISDA’s flexibility as a non-governmental non-profit organization has allowed it to follow a “dynamic process which is very difficult to achieve when it is mandated.”<sup>86</sup>

From the perspective of a Mexican ISDA board member, one of the most important accomplishments of ISDA over the years has been its ability to prove that “effective multicultural coalitions can be formed across borders.”<sup>87</sup> The initial impact of ISDA’s public relations strategies point that way as the organization tends to generate considerable amounts of interest in Sonoran communities.

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<sup>+</sup> The U.N. is also involved in immigration issues in the region. See Cantú (February 12, 2001).

## Positive Ecological Outcomes

In terms of ecological accomplishments, the effects of ISDA's environmental education programs are often cited.<sup>88</sup> Another notable success is ISDA's raising of an awareness of environmental issues in parts of the region where such consciousness had not previously existed.<sup>89</sup> According to ISDA's executive director, "the best thing [ISDA is] doing is developing an environmental consciousness that just didn't exist before in kids. As one of our project members once said, 'It's like watching the ocean fill up with drops of water' – it's like starting from ground zero because there is generally no consciousness of environmental issues in Mexico – even in terms of things as basic as littering."<sup>90</sup> As far as on-the-ground ecological work is concerned, ISDA has plans in place to help support the revival of the Sonoyta River for the creation of endangered desert pupfish habitat.<sup>91</sup>

## Special Factors Facilitating Transboundary Action

In spite of the inherent differences between the U.S. and Mexico, some believe that the relationship between Arizona and Sonora in particular is a special one. According to one ISDA board member, these states have maintained close ties through family and business connections for hundreds of years.<sup>92</sup> While the wall running along the border grows taller and taller over time, "it doesn't alter the fact the relationships between [Arizona and Sonora] and [its] people are really extraordinary."<sup>93</sup> When it comes down to it, ISDA can function because its work is a matter of people working with people, not governmental institutions trying to mesh their skewed laws and policies with one another.

Individuals and organizations have also been credited with helping ISDA along. Specifically, ISDA has benefited from the involvement of board members with experience in community organization and cross border relations.<sup>94</sup> These people are instrumental in utilizing their colleague networks to establish contacts and advisors for ISDA's various projects. In addition, organizations like the Sonoran Institute and the University of Sonora, particularly the Caborca Campus, have played key roles in facilitating ISDA's work.<sup>95</sup>

## CONCLUSION

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In many ways, ISDA embodies the ethos of "eco-regionalism" – a new way of thinking about conservation which "acknowledges the myriad relationships that tie species, habitats, and human communities into a larger, independent whole."<sup>96</sup> Implicit in cross-border conservation is that fact that *binational* (or in the case of ISDA, *trinational*) responsibility for the fate of the shared eco-region must be assumed.<sup>97</sup> Not only does ISDA reflect a recognition of this fact at the national level, it has instilled a sense of commitment to conservation in local communities throughout the Western Sonoran Desert. Although many of ISDA's day-to-day programs take place on the Mexican side of this ecosystem, they do not act as if they are working in a vacuum. Every place within the Western Sonoran Desert that becomes less polluted has positive benefits for the entire desert, and local citizens are beginning to realize the impacts of their participation in ISDA's efforts.

In addition, the network of protected areas in the region is testament to the fact that it is considered ecologically significant, and ISDA has been able to build from this backbone of government support. However, giving the desert's residents the ideas and tools to take conservation into their own hands is a contribution unique to ISDA. By creating as seamless of a crossborder community as it could, ISDA is trying to build a foundation upon which the desert can be saved.

## Lessons Learned

There are a number of lessons for those interested in transboundary resource stewardship that be gleaned from the ISDA experience:

- **Build self-reliance for environmental conservation among local communities.**  
 In order for the conservation of any ecosystem to be sustainable, commitment must exist at all levels. The local level is sometimes overlooked, and the ISDA case points to importance of making local communities part of the solution. ISDA's executive director feels strongly about this approach for his organization: "We're trying to give people the power. If what we're doing doesn't do that, then we're not doing the right thing."<sup>98</sup>
- **Recruit knowledgeable and connected board members.**  
 This lesson is two-fold. ISDA has particularly benefited from those board members with cross-border experience and connections to people on "the other side." At the same time, one board member has lamented that there is no regular and consistent program of evaluation for the board (or staff for that matter), and no consistent effort is made to ensure that participants are bilingual to the extent that that is possible.<sup>99</sup>
- **Tackle the most solvable obstacles first.**  
 Not only will the challenges to transboundary ecosystem management be institutional in nature, as exemplified by incongruity of governmental structures that exist between various nations, they will also be personal in the sense that the priorities of parties involved may not be the same. The ISDA case illustrates the importance of focusing efforts on common interests to reconcile these more subtle differences (by pursuing conservation through economic development for example) while avoiding institutional roadblocks however possible.
- **Be creative.**  
 When the going gets tough, the tough get creative. Such was the case with ISDA when it became a legalized Mexican corporation. This move allowed ISDA to operate effectively on both sides of the border and lent it legitimacy that would have otherwise been more difficult to garner as an American organization attempting to work with local communities in Mexico.
- **Address *current* concerns.**  
 Any effort will be more effective when it taps into people's immediate interests. When ISDA realized that it could reach a wider audience with a green business approach, it moved in that direction.

### Interview Contacts

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- **Carlos Nagel**, ISDA Board Member (U.S.), Friends of the Sonoran Desert

## ENDNOTES

<sup>1</sup> The U.S. State Department, "Biosphere Reserves in Action: Case Studies of the American Experience," <http://www.state.gov/www/global/oes/case6.html> (November 16, 2000).

<sup>2</sup> Charles Chester, "Civil Society, International Regimes, and the Protection of Transboundary Ecosystems: Defining the International Sonoran Desert Alliance and the Yellowstone to Yukon Conservation Initiative," *Journal of International Wildlife Law and Policy*, Volume 2, Number 2, 1999, p.163

<sup>3</sup> National Parks Conservation Association, "Parks in the 21<sup>st</sup> Century Initiative: The Sonoran Desert," [http://www.npca.org/explore\\_the\\_parks/new\\_parks/sonoran.asp](http://www.npca.org/explore_the_parks/new_parks/sonoran.asp) (November 11, 2000).

<sup>4</sup> Chester (1999).

<sup>5</sup> John Anderson and Wendy Laird, "Building the International Sonoran Desert Alliance," *AridLands Newsletter*, Number 39, Spring/Summer 1996, <http://ag.arizona.edu/OALS/ALN/aln39/laird.html> (November 16, 2000).

<sup>6</sup> Broyles and Martínez del Rio (2000), p. 54.

<sup>7</sup> Chester (1999), pp. 163-4.

<sup>8</sup> Chester (1999), p. 164; Anderson and Laird (1996).

<sup>9</sup> Anderson and Laird (1996); The U.S. State Department (November 16, 2000).

<sup>10</sup> Gary Paul Nabhan, *Enduring Seeds* (1989) in "Civil Society, International Regimes, and the Protection of Transboundary Ecosystems: Defining the International Sonoran Desert Alliance and the Yellowstone to Yukon Conservation Initiative" by Charles Chester, *Journal of International Wildlife Law and Policy*, Volume 2, Number 2, 1999, p.166; Cornelius (2000).

<sup>11</sup> Broyles and Martínez del Rio (2000).

<sup>12</sup> Bill Broyles and Carlos Martínez del Rio, "The Sonoran Desert National Park: A Modest Proposal of Extraordinary Scope," *Wild Earth*, Summer 2000; Chester (1999), p. 165; The U.S. State Department (November 16, 2000).

<sup>13</sup> Broyles and Martínez del Rio (2000).

<sup>14</sup> Anderson and Laird (1996).

<sup>15</sup> Steve Cornelius, "Transborder Conservation Areas: An Option for the Sonoran Desert?" *Borderlines*, Volume 8, Number 6, July 2000.

<sup>16</sup> National Parks Conservation Association (November 11, 2000).

<sup>17</sup> Broyles and Martínez del Rio (2000), p. 55.

<sup>18</sup> Chester (1999).

<sup>19</sup> Chester (1999).

<sup>20</sup> Manuel Gonzalez-Montesinos, Board Member, International Sonoran Desert Alliance, personal communication (February 16, 2001).

<sup>21</sup> Cantú (February 12, 2001).

<sup>22</sup> *Ibid.*

<sup>23</sup> Anderson and Laird (1996), p. 4.

<sup>24</sup> Nagel (February 15, 2001).

<sup>25</sup> *Ibid.*

<sup>26</sup> Anderson and Laird (1996), p. 5.

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- <sup>27</sup> Chester (1999), pp. 166-7.
- <sup>28</sup> Chester (cchester@tufts.edu), email communication, April 17, 2001.
- <sup>29</sup> Nagel (February 15, 2001); Chester (1999), p. 167.
- <sup>30</sup> Cantú (February 12, 2001).
- <sup>31</sup> Anderson and Laird (1996).
- <sup>32</sup> The U.S. State Department (November 16, 2000).
- <sup>33</sup> Nagel (February 15, 2001).
- <sup>34</sup> Community Stewardship Exchange, "Case Studies: International Sonoran Desert Alliance," <http://www.sonoran.org/garden/isda.html> (June 13, 2000).
- <sup>35</sup> Nagel (February 15, 2001).
- <sup>36</sup> *Ibid.*
- <sup>37</sup> Cantú (February 12, 2001).
- <sup>38</sup> Nagel (February 15, 2001).
- <sup>39</sup> Broyles and Martínez del Rio (2000); *Keystone*, p. B-3
- <sup>40</sup> *Ibid.*
- <sup>41</sup> *Ibid.*
- <sup>42</sup> *Ibid.*
- <sup>43</sup> Gonzalez-Montesinos (February 16, 2001).
- <sup>44</sup> Cantú (February 12, 2001).
- <sup>45</sup> *Ibid.*
- <sup>46</sup> Manuel Gonzalez-Montesinos, Board Member, International Sonoran Desert Alliance, personal communication (March 1, 2001).
- <sup>47</sup> *Ibid.*
- <sup>48</sup> Gonzalez-Montesinos (February 16, 2001).
- <sup>49</sup> Cantú (February 12, 2001).
- <sup>50</sup> Cantú (February 12, 2001).
- <sup>51</sup> Community Stewardship Exchange (June 13, 2000).
- <sup>52</sup> Cantú (February 12, 2001), Gonzalez-Montesinos (February 16, 2001), Nagel (February 15, 2001).
- <sup>53</sup> Cantú (February 12, 2001).
- <sup>54</sup> *Ibid.*
- <sup>55</sup> *Ibid.*
- <sup>56</sup> *Ibid.*
- <sup>57</sup> *Ibid.*
- <sup>58</sup> *Ibid.*
- <sup>59</sup> *Ibid.*
- <sup>60</sup> International Sonoran Desert Alliance, *VISTA* (The Voice of the International Sonoran Desert Alliance), Volume 6, Number 1, January 2001.
- <sup>61</sup> Nagel (February 15, 2001).
- <sup>62</sup> Anderson and Laird (1996).
- <sup>63</sup> Community Stewardship Exchange (2000).
- <sup>64</sup> Cantú (February 12, 2001).
- <sup>65</sup> Nagel (February 15, 2001).
- <sup>66</sup> *Ibid.*
- <sup>67</sup> Cantú (February 12, 2001).
- <sup>68</sup> *Ibid.*
- <sup>69</sup> *Ibid.*
- <sup>70</sup> *Ibid.*
- <sup>71</sup> Cornelius (2000), p. 1; Anderson and Laird (1996).
- <sup>72</sup> Cornelius (2000).
- <sup>73</sup> Gonzalez-Montesinos (March 1, 2001).
- <sup>74</sup> Gonzalez-Montesinos (February 16, 2001).
- <sup>75</sup> Nagel (February 15, 2001).
- <sup>76</sup> Cantú (February 12, 2001).
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<sup>79</sup> *Ibid.*

<sup>80</sup> *Ibid.*

<sup>81</sup> *Ibid.*

<sup>82</sup> The U.S. State Department (November 16, 2000).

<sup>83</sup> The U.S. State Department (November 16, 2000).

<sup>84</sup> Chester (1999).

<sup>85</sup> Nagel (February 15, 2001).

<sup>86</sup> *Ibid.*

<sup>87</sup> Gonzalez-Montesinos (March 1, 2001).

<sup>88</sup> Nagel (February 15, 2001).

<sup>89</sup> Gonzalez-Montesinos (March 1, 2001).

<sup>90</sup> Cantú (February 12, 2001).

<sup>91</sup> *Ibid.*

<sup>92</sup> Nagel (February 15, 2001).

<sup>93</sup> *Ibid.*

<sup>94</sup> Gonzalez-Montesinos (March 1, 2001).

<sup>95</sup> *Ibid.*

<sup>96</sup> Serge Dedina, "The New Face of Northern Mexico's Nature Preserves," *Borderlines* 43, Volume 6, Number 2, March 1998, p. 2.

<sup>97</sup> Dedina (1998).

<sup>98</sup> Cantú (February 12, 2001).

<sup>99</sup> Gonzalez-Montesinos (March 1, 2001).