



INTRODUCTION¹

The Good Neighbor Environmental Board (GNEB or Board) is an advisory committee to the President and Congress of the United States. It was created by the Enterprise for the Americas Act of 1992 and is administered by the U.S. Environmental Protection Agency (EPA) to provide advice on environmental and sustainable development issues along the U.S.-Mexico border. The 25-member board is comprised of representatives from federal, tribal, state, and local government, non-governmental organizations (NGOs), academia, private organizations, and the community.

At the June 1999 GNEB meeting, EPA approached the Board to explore the possibility of developing an independent assessment of the Border XXI Program for this Progress Report. This Border XXI Progress Report has been developed because the conclusion of the five-year planning period is approaching, and its timing roughly coincides with the end of the Clinton and Zedillo administrations in the United States and Mexico. EPA's stated reason for this request was to ensure there was an outside entity to evaluate how Border XXI Program activities are moving toward meeting and measuring program goals. The GNEB agreed that the inclusion of its independent assessment of the Border XXI Program would enhance the report's utility.

This GNEB "assessment" for the Border XXI Progress Report is the Board's product. The EPA agreed to incorporate it as an unedited addendum to the Progress Report. The Board's goal was, in part, to evaluate resource commitments and progress on Border XXI objectives on a policy basis. The Board does not have the time or resources to examine and evaluate the quantitative data being assembled in the Border XXI Program as a whole. As such, we have chosen to focus on the Mission, Goal, and three Strategies described in the 1996 U.S.-Mexico Border XXI Program: Framework Document (Framework Document).

The Board places much emphasis on transboundary conditions and activities due to the strong binational links and relationships that characterize the U.S.-Mexico border region. However, before doing so, we note that under its charter, the GNEB covers those issues inside the U.S. territory and does not presume to suggest actions that should be undertaken by Mexico. This said, we must fulfill our obligation to inform the President and Congress of transboundary environmental impacts on U.S. territory, as well as their sources and causes because it is directly relevant to spending U.S. tax dollars in Mexico through grants and other programs. Any of our observations about Mexico in this report are informed by our discussions with our Mexican counterpart, the Consejo Consultivo para el Desarrollo Sustentable, Region 1 (Region 1 Advisory Board for Sustainable Development), and by its assessment of Border XXI that was prepared in parallel with ours.

With its diverse representation, the GNEB can bring to bear a comprehensive understanding of U.S.-Mexico border environmental and infrastructure issues. As a consensus-driven body with numerous perspectives, the Board's views are sometimes quite diverse. In the spirit of inclusiveness, disparate views are communicated in this assessment along with points of general consensus.

Border XXI Mission:

"To achieve a clean environment, protect public health and natural resources, and encourage sustainable development along the U.S.-Mexico Border."

Border XXI Goal:

- Promote Sustainable Development
- Border XXI Strategies:
 - Ensure Public Involvement
 - Build Capacity and Decentralize Environmental Management
 - Ensure Interagency Cooperation

ADDENDUM

1

GNEB

Assessment

of the

Border

XXI

Program

¹ The GNEB thanks its drafting subcommittee for its work on this document: Irasema Coronado, Placido dos Santos, Judith Espinosa, and Mark Spalding. We acknowledge that some of the text is borrowed from Spalding, Mark "Governance Issues under the Environmental Side Agreements to NAFTA" chapter for Economic Integration and the Border Environment to be published by the Regents of the University of California (forthcoming in early 2000).

BORDER XXI BACKGROUND

The United States and Mexico signed the 1983 Border Environmental Agreement (La Paz Agreement), which, focused on promoting cooperative efforts to address environmental issues along the U.S.-Mexico border. It defines the border area as the region situated 100 kilometers on either side of the international boundary. The agreement also establishes that the U.S. and Mexico will “cooperate in the field of environmental protection in the border area on the basis of equality, reciprocity and mutual benefit.”

The Border XXI Program (Border XXI or Program) is a binational plan to address the environmental issues along the length of the U.S.-Mexico Border. The United States and Mexico adopted the Border XXI Program with the release of the Framework Document dated October 1996. The Program is the most recent in a series of steps designed to promote binational cooperation on environmental issues along the U.S.-Mexico border. Border XXI was created pursuant to the La Paz Agreement and builds upon its workgroup structure. The Program is the follow-on to the Integrated Border Environmental Plan (IBEP), which spanned 1992–1994.

The EPA serves as the lead U.S. agency for the Border XXI Program. EPA's equivalent in Mexico is the Secretariat of Environment, Natural Resources, and Fisheries (SEMARNAP). A host of other U.S. entities are identified in the Framework Document as agencies involved in the Border XXI Program, but they seem to have fulfilled lesser roles in the program's actual implementation. These include, but are not limited to, the U.S. Departments of State and Agriculture and the President's Council on Environmental Quality (Framework Document, Appendix 3). The U.S. Department of Interior (DOI) serves as the lead federal agency for the program's natural resources activities and the Department of Health and Human Services co-leads environmental health activities with EPA.

The following nine binational working groups are recognized under Border XXI:

- **AIR**
- **WATER**
- **HAZARDOUS AND SOLID WASTE**

- **CONTINGENCY PLANNING AND EMERGENCY RESPONSE**
- **POLLUTION PREVENTION**
- **COOPERATIVE ENFORCEMENT AND COMPLIANCE**
- **NATURAL RESOURCES***
- **ENVIRONMENTAL HEALTH***
- **ENVIRONMENTAL INFORMATION RESOURCES***

* The first six of these workgroups were initially authorized in the La Paz Agreement. Those denoted with an asterisk were created under Border XXI.

GNEB PERSPECTIVE

The Border XXI Program has been the subject of some controversy as a result of misunderstandings and a desire to search for precise definitions, which are sometimes elusive. Even the very nature of the program has been misunderstood by many. Several of the program's ambiguities are identified and explored throughout this assessment. The Board takes this opportunity to present its collective view of the Border XXI Program in order to establish the context for this evaluation.

The Border XXI Program is a coordination mechanism between the United States and Mexico. The Program does not establish new regulatory authorities for any of the involved agencies. It is not really part of the NAFTA package that included the creation of the Border Environment Cooperation Commission (BECC) and the North American Development Bank (NADB). However, because Border XXI came after the NAFTA package was finalized and the NAFTA environmental institutions were starting, the effort was influenced by sustainable development theory and is an evolution and refinement of previous binational efforts to address environmental and natural resources issues between the United States and Mexico.

The Border XXI Program is an innovative binational effort which brings together the diverse U.S. and Mexican federal entities responsible for the shared border environment. It is intended to promote cooperative efforts toward sustainable development through protection of human health and the environment, and proper management of natural resources in both countries.

Although numerous environmental, environmental health, and natural resources projects are undertaken along the length of the border, there is no clear litmus test to help define what falls under the Border XXI coordination umbrella. Consequently, it is sometimes unclear if the efforts of the NAFTA environmental institutions such as the Commission for Environmental Cooperation (CEC), BECC, and NADB, or other border focused institutions such as the Southwest Center for Environmental Research and Policy (SCERP) and the U.S.-Mexico Foundation for Science (FUMEC), fit under the Border XXI umbrella and, as such, are part of the Program. Even the GNEB itself is identified as a component of Border XXI in the 1996 Framework Document (page I.9) yet the Board's precise function as a part of Border XXI has been ambiguous at best until now.

The Border XXI Framework Document indicates that the GNEB fulfills a role for the development of the Border XXI Annual Implementation Plans (page I.8), but the Board has never been formally asked to provide input on these during their development, even though plans have been developed for the years 1996-1998. This evaluation was the first formal request for input by the Board since it commented on the original Border XXI Framework and workplans. We also note that a 1999 Implementation Plan has not been developed even though the year was practically over at time of writing (December 1999). This said, the Board acknowledges that the Border XXI Program always was something it could and did make recommendations about in its annual reports to the President and Congress.

The Board members see great potential from continued collaboration with Mexico's similar advisory body called the Consejo Consultivo para el Desarrollo Sustentable, Región 1 (the Consejo).² However, many members of the GNEB were unaware that the purpose of their annual meeting with the Consejo is established in the Framework Document. The document states that at least once a year, the two advisory boards will convene a joint meeting to evaluate the progress of the Program (Framework Document, page II.2). Some of this ambiguity may be attributed to the fact that the Board's membership changed significantly during 1999. The experi-

ence points to opportunities and the great need for continual coordination efforts among Border XXI participants and observers. EPA's request for GNEB input on this Border XXI Report is a very positive step because this role was also envisioned and expressly stated in the Border XXI Framework Document (page I.8) and we concur that this role is appropriate.

Ambiguity among the Border XXI participants has contributed to suspicion and doubt among some members of the public and representatives of some local governments. Public outreach efforts are vital to counter erroneous interpretations of the Program's objectives and strategies even if some definitional ambiguities persist. At its core, the Border XXI Program seems to implement pollution control and pollution prevention to protect public health and the environment in the transboundary setting of the U.S.-Mexico border. Natural resources efforts are also currently a component of the Border XXI Program. Such natural resources efforts predate Border XXI and, to a large extent, are independent of the Program's core pollution control and pollution prevention functions, water supply management notwithstanding.

An alternative perspective advanced by some members of the EPA describes the Border XXI Program as a water infrastructure and conservation/environmental health program. This latter interpretation would include natural resources as an integral part of the program, but it is unclear how cooperative enforcement, one of the nine workgroups, would fit well into this structure. Another perspective holds that natural resources were incorporated into Border XXI because public input reflected a desire for that inclusion. The fact that there is disagreement about the program's core components reinforces the sense of ambiguity of what the program entails, particularly since the program's stated goal is to promote sustainable development.

Environmental health is more directly linked to the other pollution-related aspects of the Border XXI Program because the activities can directly or indirectly reduce human health exposures. For this reason, the Environmental Health Workgroup has asked to work closely with others such as the Air Workgroup.

² It should be noted that the GNEB and Consejo do not precisely match each other as they have different geographic focuses and membership.

Regardless of where they originate, border environmental problems significantly impact communities and ecosystems on both sides of the border. Border XXI respects the sovereign rights of the United States and Mexico to manage their own resources according to their own policies, and seeks to ensure that such activities do not damage the environment of the neighboring country.

PROGRESS ON THE BORDER XXI STRATEGIES

Ensure Public Involvement

To date, the Border XXI workgroups have included federal government and state government representatives. Formalizing places at the table for state and tribal governments has recently augmented them. This still omits civil society (especially environmental nongovernmental organizations [NGO]) and the private sector. With regard to the last group, we are concerned that EPA and SEMARNAP have done little to effectively integrate border private sector, including but not limited to, industrial entities.

Implementation of public outreach is a relatively new activity for some of the parties involved in Border XXI. It has been performed with varying degrees of success and effectiveness all along the U.S.-Mexico border. The federal governments' incorporation of public input opportunities within the Border XXI workgroups, subgroups and the high-profile annual National Coordinators Meetings, is a significant step forward. The workgroup, subworkgroup, and National Coordinators' Meetings are appropriate vehicles for incorporating public input into the program. However, it is disappointing to see some workgroup meetings minimally advertised, intentionally exclude the public, or hastily organized to be conducted in cities far beyond the border region where the public cannot reasonably attend, or even not meet at all except at the annual National Coordinators' Meeting. In a general sense, both federal governments should be congratulated for the progress that has been made since the beginning of the Border XXI Program. However, full transparency has not been achieved and is necessary to truly incorporate the public in this program.³

The establishment of EPA's Border Offices in San Diego, El Paso, and Brownsville are helping considerably with outreach needs. However, outreach efforts should be developed and implemented in close coordination with tribal, state and local governments, as well as civil society organizations, which usually have stronger links to the residents of border communities. The offices have taken a positive approach by establishing their own "workshops" or "open house meetings" but more should be held in border communities outside the offices' home bases. Greater effort should also be made to identify and use locally available fora ranging from Municipal Environmental Committee meetings to local Rotary Club meetings. The EPA should consider preparing a concise annual public outreach plan that would describe the Border XXI outreach events envisioned for the forthcoming year in the United States.

EPA should also recognize and use the great value of the local media for delivering its border environmental messages. Newspapers, television, and radio are underutilized but are potentially key allies in the efforts to change behaviors and increase public awareness about environmental issues. The successful pursuit of media coverage often requires personal effort and interaction at the local level. The mere generation of press releases or media advisories is often insufficient to draw out positive media coverage. Consequently, close interaction with state and community representatives is necessary to bring attention to the real world issues and to the progress that is being made. Although this must be executed carefully and in conjunction with local officials, the EPA outreach offices should develop and implement media outreach plans for U.S. border communities. Outreach efforts should also continue to be undertaken with bilingual, binational and class-sensitive approaches that recognize that many border residents do not have access to advanced communications technology such as e-mail. It should also be noted that many residents of U.S. border communities rely heavily on Mexican media for information conveyed in Spanish. Consequently, outreach efforts should be oriented toward local conditions, further emphasizing the importance of integrating local govern-

³ For some GNEB members, this concern has been around for some time, and has been the subject of considerable remediation effort. In particular some view the activity by EPA to reach a broad cross section of the stakeholder/public as extensive and that at the technical level there is strong participation by NGOs and other knowledgeable sources.

ment representatives in the design and implementation of public outreach efforts.

Additional focused effort should be made along the length of the U.S.-Mexico border to seek public comment and provide the public with information regarding plans and progress. EPA made efforts to integrate state and local government, as well as some civil society input during development of the Framework Document. However, genuine public outreach has been virtually nonexistent in the development of the Annual Border XXI Implementation Plans. Because these are essentially the blueprints for the projects and activities to be performed during two-year periods, public input opportunities should be organized throughout the border region to provide residents with progress reports while also seeking suggestions for future activities. This should also reach out to Native Americans when the necessary collaboration with tribal governments has been performed.

The new Environmental Information Resources Workgroup seems to have been developing well, and has the potential to make some difference in the dissemination of environmental information. As such this multi-media workgroup has a difficult job, but one that is crucial to make Border XXI effective as a multi-disciplinary and cross-media effort. In this regard, there is a need for greater inter-connection between workgroups (i.e., Air, Health, Water, etc.). Some of this is underway, but the new Environmental Information Resources Workgroup and Environmental Health Workgroup can and should play a vital role in making this a reality.

The workgroups should also do more to emphasize environmental education efforts throughout the border region. Investing in future generations and promoting environmental education at all levels will help border communities develop the long-term technical skills, interest and knowledge necessary to address local problems.

EPA and SEMARNAP have agreed that Border XXI documents be binational in nature. Consequently, they are developed with input from both nations, ostensibly incorporating public and subnational governmental input. Because they are subject to binational approval, numerous logistical complexities are introduced including the development of binationally acceptable text, working within binational time frames, completing accurate transla-

tions, and finally approving the reports in their entirety. These binational complexities tend to bog down report production and create a great deal of work for the agency staff. As an unfortunate consequence, public outreach is often ignored or is shifted to a lower priority in the world of deadlines that are dictated from the central governments of each nation. Nevertheless, as one of the three fundamental strategies of the Border XXI Program, both federal governments must do more to fully incorporate their public in the development of these reports.

The Border XXI Program has been described as having ulterior motives such as surrendering national sovereignty of the border region to the United Nations, or pursuit of a "new world order." These accusations are patently false, yet they have persisted for years in certain circles of border communities. Their prominence in public statements by some public figures is largely an artifact of inadequate public outreach efforts to discredit such misrepresentations of the Border XXI Program. Public outreach describing the environmental issues of the border region and identifying the locally specific efforts to address these problems is vital to counter these baseless claims. A particularly sad result of this was the lack of full participation by all of the border states in Border XXI until the execution of the Coordination Principles document in mid-1999.

Build Capacity and Decentralize Environmental Management

The GNEB perceives that the decentralization strategy of the Border XXI Program is directed primarily at Mexico's governmental operations. It is important to state this because of some perceived ambiguities pertaining to this topic in the Border XXI Framework document. The following paragraph clarifies the nature of the confusion surrounding the decentralization theme in the Framework Document.

Appendix 5 of the Framework Document, entitled "State and Municipal Decentralization and Strengthening in Mexico in the Context of Border XXI," is a proposed federal strategy for decentralization in Mexico. Portions of the text in this Appendix were not written clearly enough and led to very serious misunderstandings among governmental entities in the United States. For example,

the appendix states, "In terms of water concerns the laws of border States are significantly outdated." It adds that, "Under Border XXI, existing legislation will be revised to give more legal authority to state and municipal administrators. Specifically a new legal framework will be established for each border government entity" (Framework Document, Appendix 5.8). Such language generated profound concerns among state and local governmental representatives in the United States because the text did not state with sufficient clarity and emphasis that this was contemplated in Mexico but not in the United States. Thus, this language seemed to conflict with the voluntary nature of the Border XXI Program, which was described as an effort that does not create new regulatory authorities. The problem within the United States was one of clarity, not one of intent. To avoid such problems in the future, the EPA should provide timely opportunities for review and comment from state and municipal environmental agencies. The drafters of text should always recognize the great importance of emphasizing what is intended in the binational context and what is intended for either the United States or Mexico.

Through Border XXI and more generally, Mexico's federal government has expressed a commitment to decentralize regulatory authorities to the state and local levels. Progress has been incremental but the declaration of this objective in the Border XXI Program is a very positive development in itself. Additional movement toward decentralization in Mexico would help shift decision-making toward the level of government closest to the affected communities and would lead to greater parity with state environmental agencies in the United States. However, sectors of the Mexican government and certain binational institutions have resisted this objective for a variety of reasons.

Mexico's regulatory authority for environmental management is currently and primarily centralized at the federal level. For institutional reasons, Mexican federal agencies historically focused their interaction with U.S. federal agencies and had limited interaction with U.S. state agencies. With adoption of Border XXI, Mexican agencies have recognized and accepted the strong authorities at the state level in the United States. This has led to the development of important functional links between

state environmental agencies and their Mexican federal counterparts. For example, through the Border XXI Enforcement Subworkgroup, Arizona, California, and Texas have developed important operational relationships with Mexico's Attorney General for Environmental Protection (PROFEPA), thus permitting the U.S. states to interact on various specific issues with transboundary implications. Similar important links have been established with other Mexican federal agencies responsible for other aspects of environmental management.

Because one of the three Border XXI strategies is "Building Capacity and Decentralizing Environmental Management," the Board takes this opportunity to address this key area. However, before doing so, we again note that under its charter, the GNEB provides advice to the President and Congress on issues inside the U.S. territory and does not presume to suggest actions that should be undertaken by Mexico. This said, we wish to inform the President and Congress of transboundary environmental impacts on U.S. territory, as well as their sources and causes in order for the U.S. appropriations process to be well informed in any decisions on grants and other assistance offered to neighbors.

Mexico's financial management and decision-making systems are highly centralized, with power and resources located in Mexico City. Such a centralized structure has profound significance for how and when transboundary environmental issues are addressed and thus has generated much interest and discussion between the GNEB and the Consejo. Progress has definitely been made in Mexico during the period of the Border XXI Program, but this has not included financial decentralization, which is vital if decentralization is to be pursued in a meaningful way. Mexican states have readily accepted new authorities with the expectation that training and funding would follow but progress has been slow.

The Transboundary Environmental Impact Assessment (TEIA) process may ultimately prove to be a casualty of the decentralization problem. One of the NAFTA parallel agreements created the Montreal-based CEC. The CEC was charged with laying the groundwork for a trilateral U.S.-Mexico-Canada agreement to provide transboundary governmental notice whenever a proposed project has the potential of causing a significant trans-

boundary environmental impact to the neighboring country. Although the CEC did an excellent job in its fundamental planning and preparation of draft text for negotiations, the trilateral discussions quickly became mired in the issue of environmental permits or licenses subject to approval at subnational (i.e. tribal, state and local) levels. The centralized governmental structure in Mexico seemed to be at odds with the decentralized system of government present in the United States and Canada. The fundamentally different systems of government led to disagreements that have not yet been resolved despite years of federal negotiations. It appears that Canada and the United States may ultimately develop a bilateral TEIA agreement while a similar agreement may be elusive for the U.S.-Mexico border. In fact, the effort to adhere to a centralized notification mechanism for TEIA to function from states to our federal government, as proposed by some federal representatives, would merely perpetuate the centralized system that currently exists.

The management of water supplies and water quality issues in the Border region has also been notably centralized with the current structure of the International Boundary and Water Commission (IBWC), whose efforts are sometimes described as falling under the Border XXI umbrella. Although the United States and Mexico Sections of the IBWC have made some progress in attempting to incorporate stakeholder input for its border infrastructure planning in accordance with BECC criteria, the IBWC mechanism itself remains highly centralized. This may be best typified by the organization's role as the only official conduit for sharing water-related information between parties in the two countries. The different scopes of the activities performed by the IBWC and the Border XXI Water Workgroup remains unclear after three years of the Program's existence.

However, the efforts of the BECC and the NADB, through their capacity-building efforts for local communities, have made a substantial contribution toward the decentralization goals described in the Border XXI Program. Efforts such as the NADB's Institutional Development Program (IDP) should be recognized and nurtured by the two federal governments.

Ensure Interagency Cooperation

Numerous agencies and academic institutions are performing environmental monitoring, research, infrastructure planning, and pollution control planning along the border. The Border XXI Program is an established coordination mechanism to help facilitate and integrate these efforts with related activities such as environmental health studies. The Annual Border XXI National Coordinators Meetings afford outstanding opportunities for interaction with our Mexican counterparts. Nevertheless, overall coordination and communication among the states and other participants in the Border XXI Program sometimes fall short of the actual needs.

The EPA, SEMARNAP and the environmental agencies of the four U.S. and six Mexican border states have signed a Coordination Principles document for the Border XXI Program. The agreement grew out of state concerns that they had not been adequately incorporated into the Program. The states' call for standard operating procedures or minimum performance standards for Border XXI Workgroups evolved into the Coordination Principles document. The Coordination Principles document establishes mutual expectations for interagency cooperation and the incorporation of subnational participants into the Border XXI Program. It was designed so that other state entities may also execute the document and become officially recognized participants in the Program. The EPA has expressed a strong interest in having Native American tribal authorities formalize their participation through the Coordination Principles document.

The development of the Coordination Principles document has resulted in greater involvement of Mexican state environmental authorities in the Border XXI Program. After years of being excluded, the progress that is now occurring to engage them into this process is very gratifying and, in fact, is vital to address long-term border environmental issues.

The Coordination Principles document, which was developed by the border states, the federal governments, and the Western Governors' Association, is an important movement toward interagency coordination. The document does not go far enough to remedy the problems that can be noted in the operation of some Border XXI workgroups. There is still a great need for minimum per-

formance standards for each of the Border XXI workgroups. The Coordination Principles document establishes that the workgroups will meet at least once per year. If this is the only interaction among workgroup participants, progress will be illusory for those workgroups that make minimal effort to collaborate with state, local, and tribal governments as well as the public.

The workgroups operate in vastly different ways and some meet very infrequently. The absence of formalized operational procedures for the workgroups has led to a counterproductive disparity among the workgroups. Some workgroups meet only once per year and make negligible genuine progress, while others, such as the Hazardous and Solid Waste Workgroup, usually coordinate with tribal, state, and local authorities in an exemplary fashion with frequent, planned conference calls. To ensure adequate interagency coordination, EPA and SEMARNAP should establish minimum performance requirements for all of the workgroups and should promote the establishment of regional subworkgroups whenever affected tribal, state, and local authorities concur that subworkgroups would be useful.

The Board also recognizes that many of the Border XXI projects have been labeled with the misnomer of "subworkgroup." This misnomer leads to the mistaken conclusion that the Border XXI Program has many functional subworkgroups operating along the length of the border. The terms "subworkgroup" and "project" should not be interchangeable. Subworkgroups should be regionally based, and have regularly scheduled meetings with agendas and broad representation. Subworkgroups should also specifically be co-chaired by state representatives whenever possible as described in the Border XXI Coordination Principles document. Recognizing criteria such as these will help identify the legitimate subgroups working along the border such as those formed under the Border XXI Cooperative Enforcement and Compliance Workgroup.

EPA has stepped up its efforts to engage U.S. tribes in the Border XXI Program. With a Border XXI tribal conference held in San Diego, allocation of border infrastructure funding for tribes, appointment of a Border XXI

tribal coordinator in EPA Region 9, and inclusion of tribal representatives in the Arizona-EPA Border Retreat, it is clear that EPA is making a genuine effort. Tribal members in Mexico have historically been limited to participating in Border XXI as individuals. The addition of states and tribes has been very positive; next we must see an opening of the Border XXI Program to environmental NGOs and other forms of civil society, as well as to private sector voices.⁴

Besides the federal governments, several other Border XXI participants have made some progress in their efforts to integrate state and local governments into the Program. BECC and NADB have made notable strides to integrate states and local entities into their planning activities. Although some similar environmental infrastructure programs exist for Indian communities, Tribal representatives have made a call for enhanced access to the NADB and the BECC. This can and should be considered by the Administration. Through a Joint Declaration in 1999, the Border Governors Conference, the ten governors of the U.S. and Mexico border states, also expressed a strong interest in nominating the state representatives on the BECC's Board of Directors and Advisory Board in accordance with the NAFTA side agreement that requires state representation.

The consortium of five American universities that comprise the SCERP, along with their seven Mexican university associates, has also demonstrated a stronger interest in engaging the states and tribes through their outreach and solicitation of input on their proposed research agendas. SCERP has also sought guidance on the appropriate mechanisms for more fully integrating tribes, Mexican states, and Mexican academic institutions into their operations. The prospect of tangible improvements in SCERP's activities is good, as long as the consortium's management continues to work with states and tribes to develop applied research with defined clients and practical applications. In addition, SCERP's conversion to programmatic research rather than individually-driven research agenda is positive. We also have high hopes for the SCERP/BECC border needs assessment as a vehicle to do better regional planning

⁴ The possibility of binational tribal involvement in the next joint meeting of the GNEB and the Consejo is a positive step toward enhanced collaboration.

Also omitted have been civil society and private sector interest groups. Private sector participation is particularly critical because of the need for their involvement in designing and implementing industrial pre-treatment programs that the FUMEC has attempted to support for border communities. Because it has focused on water issues, some of the FUMEC's shortcomings may be partly attributable to the Border XXI Water Workgroup, which has been the subject of widespread criticism and whose scope is ill defined with regard to the IBWC activities.

The CEC is a trilateral organization among the U.S., Canada and Mexico, but some of its activities have been linked to the Border XXI Program (Framework Document, pages I.9, and II.3, item 7). The CEC learned a great deal about the importance of integrating the local perspectives, both governmental and citizen views, as a result of some serious controversy related to its Article 13 study of the globally-important San Pedro River that straddles the Arizona-Sonora border. The CEC has made substantial progress on interagency cooperation as a Border XXI participant (Framework Document, page I.9). The CEC's broader mission involving the entire North American Continent, coupled with its Canadian-based headquarters, presents it with challenges for interagency cooperation on the border yet it approaches these issues very capably with its multinational staff.

PROGRESS TOWARD THE BORDER XXI MISSION AND GOAL

The principal goal of Border XXI is "to promote sustainable development in the border region by seeking a balance among social and economic factors and the protection of the environment in border communities and natural areas" (Framework Document, page I.1). A precise reading of the Framework Document clarifies that the Program's goal is to promote sustainable development without having a parallel aspiration to achieve it. Consequently, the EPA's Border XXI Program efforts to promote sustainable development through events such as the 1998 Border Institute held in Rio Rico, Arizona, and the 1999 Sustainable Development Workshop held in Brownsville, Texas, and the various other activities that are consistent with sustainable development, could be

identified as evidence of the program's success. However, promoting sustainable development without an aspiration to achieve it seems to trivialize the massive binational coordination effort that is underway and directed toward sustainable development.

Some perceive a glaring disconnect between the Border XXI Program's sustainable development goal and the activities performed under the Border XXI umbrella. The Program's scope and composition are inadequate to genuinely move the border region toward sustainable development.

If the Program's only measure of effectiveness were the border region's progress toward sustainable development, the Program might be considered a failure. However, this would ignore the important progress that has been made toward pollution control and pollution prevention between the United States and Mexico. It would also ignore the strong impact that North American socio-economic factors play in constantly driving us further from sustainable development along the border.

Regardless of the definition that one uses, sustainable development in the U.S.-Mexico border region is a more distant goal today than it was in 1996 with inception of the Border XXI Program. In the three years that the Border XXI Program has been in place, the border region's population increased from about 11 million to 12 million people. The border region continues to grow at a remarkable rate and projections suggest that the population may double to 24 million people by the year 2020. The growth of the border region is, to a large extent, fueled by the economic disparity that exists on either side of the international border that separates our two nations as much as it unifies them.

A key element of this growth is the industrialization of Mexico's northern border spurred by U.S. demand for inexpensive consumer goods. Throughout the world, companies competing in the global market have made sensible business decisions to seek out the lower wage labor force available in developing nations. Many labor-intensive industries, largely U.S., for decades have sought to minimize shipping costs and to have ready access to facilities, including suppliers, by establishing operations in communities in Mexico, particularly along the border. This was further facilitated by adoption of laws for "in bond" assem-

bly and manufacturing facilities with favorable import/export tariff treatment and known as maquiladoras. These maquiladoras are often matched by related company facilities in the United States that house management, warehousing, distribution and other functions. Together they are often referred to as "twin plants."

The maquiladora industry has offered new opportunities for those in other sections of Mexico where socioeconomic problems, including high unemployment and very low wages, are more severe. The result has been the influx to the border communities of hundreds of thousands from the interior of the country, particularly central and southern Mexico. Because the number of migrants may exceed the maquiladora job opportunities, some individuals remain unemployed or underemployed in border communities. Consequently, many individuals must supplement their incomes by working multiple jobs or by sharing household expenses with others.

A 1999 report by Mexico's national statistics agency, INEGI, indicates that maquiladoras employ over one million workers in Mexico with approximately 804,000 of those jobs located in the border region.⁵ The report also indicates that the average wages for maquiladora workers (obrerros) is about US\$1.00 per hour including benefits (i.e. about US\$2,500 annually). The average hourly wage for technical level workers is about US\$2.90 including benefits (i.e. about US\$6,700 annually).⁶ A 1999 report by the U.S. Department of Labor indicates that the average maquiladora wage for "export processing" was US\$14.00 per day in 1998, or about US\$1.56 per hour excluding benefits such as meals and subsidized housing if available.⁷

While maquiladora wages are considerably higher than Mexico's minimum wage of US\$3.00 per day, the maintenance of low absolute salaries on both sides of the border, coupled with rapid growth of the region, undoubtedly contribute to the environmental and environmental health issues that exist along the length of the border. Some critics assert that the great physical distance between the border communities and the twin plant facility owners (parent companies) generates a sense of detachment for so-called "absentee-owned corporations."

While some twin plants have yet to effectively address the issues of border communities, it should be noted that others are considered model corporate citizens. Regardless, twin plant operations often minimize taxes paid to Mexico by avoiding making their maquiladoras profit centers. In addition, when maquiladoras pay taxes to the centralized financial bureaucracy in Mexico City, much of these taxes do not return to the border communities, and are instead used to address needs elsewhere throughout Mexico.

The tax base of U.S. and Mexican border communities is often too small for current needs, much less for the provision of infrastructure for projected growth. The result is that border communities are unable to generate enough in tax revenues to support the governmental entities that implement and manage environmental infrastructure systems for potable water, sewage collection, wastewater treatment, solid waste management and road paving projects which are necessary to control particulate air pollution. This socioeconomic problem thus manifests itself in domestic and transboundary environmental and health problems.

Many of the citizens of the border region are unable to afford the basic housing that is required for a suitable standard of living. The impoverished population in border communities, whether employed, unemployed, or underemployed, leads to shantytowns, often referred to as colonias. The colonias located on either side of the border, usually lack potable water systems and sewage collection systems. During winter, the inadequate housing of the colonias often leads to burning of wood fuel within the homes for warmth. This can lead to unsafe conditions and has resulted in fatalities from carbon monoxide build-up within homes. It also represents an important area-wide air pollution source. The inadequate wastewater management systems in colonias contaminate shared rivers and groundwater.

In this terribly unsustainable scenario, heavy dependence on U.S. grant funding is an inescapable conclusion if the needs are to be addressed to protect the residents of U.S. border communities. Many contend that U.S. grant funding is the appropriate monetary source to address bor-

⁵ Instituto Nacional de Estadística, Geografía e Informática (INEGI), Feb 1999 - Estadísticas Económicas, Industria Maquiladora de Exportación.

⁶ Ibid.

⁷ U.S. Department of Labor, 1999 - Foreign Labor Trends in Mexico.

der environmental issues because the economic benefits are realized by consumers throughout the United States whenever they purchase products that were assembled or manufactured in the border region. However, long-term dependence on federal grant funding may place the border environment at risk if such federal funding continues to be reduced, as has been the recent trend.

Although the NADB has made notable strides to move border communities toward financially sustainable solutions, the bank projects that \$1 billion in new grant funding will be necessary over the next ten years (NADB's U.S.-Mexico Border Ten-Year Outlook, Summer 1999). The absence of this grant funding will make the NADB's loans unaffordable to border communities in both countries. The Board notes that the Congress reduced EPA's FY2000 appropriation for border infrastructure needs from \$100 million to \$50 million. This significant reduction in EPA's appropriations for border water and wastewater infrastructure projects will impede the construction of necessary projects and is a major setback for poor communities along the length of the border.

A long-term strategy is necessary to address the root cause of the unsustainable nature of the border region's growth. The U.S. government should engage the Mexican government and the private sector in pursuit of new economic mechanisms that will address environmental and humanitarian needs without eternal dependence on larger and larger federal grants. The pursuit of low-cost housing for every employee of U.S.-owned companies should be an integral part of these governmental discussions with the private sector. Optimally, appropriate economic compensation should be pursued for twin plant workers to ensure that they are able to acquire adequate housing while addressing the appurtenant infrastructure needs.

Because the NAFTA is the first trade liberalization agreement that contains provisions to deal with the environmental issues that arise in the context of trade relations and disputes, and because the NAFTA package includes two environmental side agreements, the NAFTA's ultimate success depends on the development and implementation of a long-term economic strategy for the environmental well-being of the U.S.-Mexico border region.

This is a binational problem that will require innovative public and private sector cooperation to resolve.

OTHER BORDER XXI ISSUES

As noted above, binational cooperation on natural resources issues predates the Border XXI Program. When Border XXI was developed, Natural Resources was one of three new workgroups created by the federal governments without consulting the states or local governments. The inclusion of a Natural Resources Workgroup in the Border XXI Program has created apprehension and some confusion while producing minimal benefit for those that have been working together on binational natural resources issues for many years without the Border XXI umbrella.

Widespread public apprehension about the natural resources component of Border XXI can be traced back to the powers of the Endangered Species Act (ESA) and the actions of federal land management and wildlife management agencies in the western United States.⁸ This became particularly alarming to some when ESA's powers were viewed in the context of the U.S.-Mexico border region. Many wondered what the outcome or actions might be. The ESA does have implications for private property rights in the United States including land management and water management. The inclusion of natural resources into the Border XXI Program introduced volatility that, in some circles, painted over the Border XXI Program as a whole. Many environmental agency representatives in the United States were concerned that ESA-related actions that happened to occur within the defined 100-kilometer border region would somehow be misconstrued as Border XXI "actions" and thus generate an uproar about the Program as a whole.

State natural resources agencies have not readily embraced the Border XXI Program, choosing instead to handle their binational pursuits through other pre-existing fora. We have also noted that the Border XXI Program, as a coordination mechanism, has had very little benefit for DOI's pursuits on natural resources issues in general. Meanwhile, DOI has been very successful with its Mexican counterpart (SEMARNAP) without having to wave the Border XXI flag.

⁸ We note that some of us view the ESA as lacking in adequate power to really accomplish its mandate, while many feel its powers are too strong.

It is apparent that the Natural Resources Workgroup is not a good fit in the Border XXI Program, which is essentially a pollution control and pollution prevention effort. Some members of the public made a call for inclusion of natural resources issues during the public comment period for the Framework Document but it is now clear that other members of the public believe it should be excluded. The GNEB recognizes Mexico's more holistic view of the environment which has integrated natural resources with other environmental quality responsibilities under a single federal institution called the SEMARNAP. However, the fundamentally different regulatory scheme in the United States, as well as its sensitive political implications, should be evaluated as important considerations for the Program's current structure, and for the future content of a successor program after 2001.

While some of the Annexes to the La Paz Agreement address air issues, the GNEB also notes the absence of a binational institution charged with providing financial assistance to address air quality issues. As the results of binational air quality studies emerge, it is becoming clear that area sources, such as unpaved roads and the lack of adequate public transportation, present important health risks for border residents. Although road paving projects are undertaken with state and federal assistance, U.S. and Mexican communities suffer from the same funding issues described earlier in this paper for water and wastewater infrastructure. The two federal governments should evaluate possible financial mechanisms to assist with transboundary air pollution problems ranging from burning landfills to unpaved roads.

The Border XXI Program itself seems to be minimally funded, but the Program's existence has elevated awareness of the need for additional binational environmental infrastructure funding. Even so, Congressional appropriations have decreased for environmental programs as a whole and for border environmental programs in particular. This trend is very disconcerting because the border region's needs are not being addressed due to funding shortfalls.

A second aspect of the funding issues relates directly to EPA's internal allocation of border funding. The bulk of the border-related funding apparently comes from other EPA programs such as Water and Wastewater Man-

agement but there is no firm process for the allocation of these funds to border needs. In addition it appears that there is no line item in EPA's budget strictly for funding border programs, with the possible exception of water and wastewater infrastructure funding. The functional link between the Border XXI Program's initiatives and funding distribution is not clear at this time. EPA should develop a strategic link between activities performed under the Border XXI Program, and the funding that is necessary to carry out those activities over the course of the Program. This is a very difficult issue due to the annual nature of budget appropriations. Nevertheless, budget appropriations should be initiated and pursued with as much commitment, vigor and interagency cooperation as is needed for the project activities themselves. It can also eliminate some ambiguity about the Border XXI Program, because it might pave the way for the development of a more precise definition to identify Border XXI projects. An EPA line item for border funding could establish a litmus test for defining a Border XXI project or activity. Such a line item should also establish that broad binational coordination needs, which are fundamental to the success of the Program, requires firm and consistent financial support.

We note that the BECC's operational budget may barely suffice for the water and wastewater infrastructure efforts that it pursues but, assuming additional resources are identified, the institution's mandate should eventually be expanded to address the need for additional hazardous waste management facilities (Treatment, Storage and Disposal or "TSDs"). The critical shortage of such facilities, particularly in Mexico, raises serious concerns about the ultimate disposition of hazardous wastes in the border region. TSDs are private sector business endeavors, but the BECC could play a very useful role in promoting and certifying the establishment of such facilities in Mexico.

Also pertaining to hazardous wastes, binational efforts are still needed to ensure the completeness, accuracy and compatibility of the U.S. HAZTRAKS and Mexico's SIRREP hazardous waste tracking mechanisms which is supposed to address transport in the transboundary setting. The adequacy and compatibility of these two databases is necessary to ensure that hazardous waste gen-

erators are properly managing their materials in accordance with applicable laws.

CONCLUSION

As a five-year plan, Border XXI looks beyond single Congressional appropriation cycles, but falls short of taking the long-term view. It is notably attempting to put in place the use of long-term indicators of human and ecosystem health.⁹ It is still heavily focused on federal interaction and has not fully succeeded in building local capacity or in thoroughly fostering public support. It has, however, made the work of the La Paz workgroups more accountable to the public through their individual transparency or failure to work transparently.

Because Border XXI is a continuation of the IBEP and is the result of the La Paz Agreement, which was signed by the President of each country in 1983, it is likely that Border XXI or a similar successor will continue to serve as a coordinating mechanism for the two countries. As Border XXI continues to emphasize transparency to the public as well as to tribal, state, and local governments, there will be more participation by those governments and from NGOs and the private sector in the workgroup and subworkgroup process. Most likely this will also mean a lengthier decision-making process. As decentralization continues to result in greater decision-making capability by state and local governments, particularly in Mexico, there will be more state-to-state collaboration on local regional projects. One can already see collaboration among the four United States and six Mexican border states through the Ten State Alliance that ironically gelled out of concerns about being excluded from the Border XXI Program. The federal governments will probably play a different role in this decision-making paradigm.

The improved communications and dialogue that exists between state and federal environmental officials in the United States and Mexico is an important benefit of the Border XXI Program. A variety of binational projects have been implemented which might otherwise not have been possible without the Border XXI Program or

some other binational coordination mechanism. We must ensure that the communications avenues that lead to such projects continue to be available because they are the underlying basis for cooperative binational efforts to mitigate environmental issues. As with any massive coordination effort, the Border XXI Program does have room for improvement. This will always be the case.

The GNEB hopes to see more rapid decentralization and greater local empowerment as the Border XXI Program continues to mature. This delegation of authority and the need for more local implementation should be accompanied by a commensurate distribution of funding to support the tribal, state and local involvement which is vital to the success of the Program.

In the broader context of trade, environment, and quality of life, the ultimate success of the NAFTA is heavily dependent upon the involved parties' ability to mitigate and, whenever possible, remedy the challenging environmental issues of the rapidly-growing border region. The importance of resolving these environmental issues in a binationally cooperative manner cannot be overstated. The Border XXI Program is the only existing coordination mechanism to this end. Consequently, GNEB supports the Program and we encourage the federal governments to perpetuate these binational efforts beyond 2001. Such efforts must be accompanied by commensurate funding from both federal governments.

⁹ The development of a follow-up Border XXI indicators report is greatly desired by some border community representatives. This would be especially useful to achieve coordination with the OECD process.