

# **BORDER XXI PROGRAM FRAMEWORK DOCUMENT**

## **Executive Summary**

### **INTRODUCTION**

The Border XXI Program (Border XXI or Program) is an innovative binational effort which brings together the diverse U.S. and Mexican federal entities responsible for the border environment to work cooperatively toward sustainable development through protection of human health and the environment and proper management of natural resources in both countries.

Over the last 30 years, the border region has experienced a dramatic surge in population and industrialization. Unfortunately, this growth has exceeded the existing infrastructure capabilities of the region, leading to inadequate sewage treatment and hazardous and solid waste infrastructure, insufficient drinking water supplies, and dramatic impacts on habitats and the biodiversity they support. Increased urbanization and the lack of paved roads along the border have also impacted air quality.

Border XXI will help to ensure a commitment to sustainable development along the border by seeking a balance among social and economic factors and the protection of the environment in border communities and natural areas.

### **BACKGROUND**

In order to protect, improve, and conserve the environment of the border region, in 1983 both governments signed the Agreement for the Protection and Improvement of the Environment in the Border Area (La Paz Agreement) which provided a formal foundation for cooperative environmental efforts. The La Paz Agreement defined the border region as the area lying 100 kilometers to the north and south of the U.S.-Mexico boundary.

In February of 1992, the environmental authorities of both governments released the Integrated Environmental Plan for the Mexican-U.S. Border Area (IBEP). As the next phase of binational planning, the Border XXI Program builds on the efforts of the IBEP and increases the scope to include environmental health and natural resource issues.

In 1993, U.S.-Mexico cooperative activities were further enhanced by the North American Free Trade Agreement (NAFTA) and related environmental

agreements. In one such agreement, the Border Environment Cooperation Commission (BECC) and the North American Development Bank (NADBank) were created to develop, certify, and finance environmental infrastructure projects in the border area between the U.S. and Mexico. Additionally, the Border XXI Program will coordinate with the Commission for Environmental Cooperation (CEC) also created under NAFTA to promote environmental cooperation throughout North America.

## **MISSION, OBJECTIVES AND STRATEGIES**

Border XXI is a comprehensive program designed **to achieve a clean environment, protect public health and natural resources, and encourage sustainable development.** The principal goal of the Border XXI Program is to promote sustainable development in the border region which “meets the needs of the present without compromising the ability of future generations to meet their own needs.”

The Border XXI Program emphasizes the following strategies in advancing the goal of sustainable development:

- Ensure public involvement** in the development and implementation of the Border XXI Program.
- Build capacity and decentralize environmental management** in order to augment the participation of state and local institutions in implementing the Border XXI Program.
- Ensure interagency cooperation** to maximize available resources and avoid duplicative efforts on the part of government and other organizations, and reduce the burden that coordination with multiple entities places on border communities.

The Border XXI Framework Document, a product of significant public input, defines five-year objectives for the border environment and describes mechanisms for fulfilling those objectives. The central challenge facing Border XXI participants is translating long-term objectives into tangible environmental improvements. As part of their overall strategic planning efforts for the border region, both governments recognize the importance of program evaluation and are committed to developing performance measures for the Program.

In the next few years, U.S. federal agencies will be incorporating performance-based management into the development and implementation of federal programs. A similar process which incorporates environmental performance measures into long-term strategic planning is being initiated in Mexico. Accordingly, the Border XXI Program will attempt to link budget processes and programmatic management to specific results through environmental

performance measures. The two governments will provide the public information on specific Border XXI performance measures as they are developed.

To this end, the National Coordinators will lead a Strategic Planning and Evaluation Team to review the long-term Border XXI objectives, develop indices to measure progress toward meeting these objectives, and report on performance to both those respective U.S. and Mexican entities responsible for annual budget allocations, and the general public. Considering that funding for Border XXI is received on an annual basis, it is essential that progress be clearly measured and reported to ensure the continued support of the general public and federal budget decision-makers in both countries.

## **PARTICIPANTS**

The success of Border XXI depends on broad-based binational cooperation and collaboration between federal, state and local governments, Indian tribes, international institutions, educational centers, non-governmental organizations, industry organizations, and grass-roots community organizations.

The key federal agencies involved in developing and implementing Border XXI are:

- 1) Environmental Protection: the U.S. Environmental Protection Agency (EPA) and Mexico's Secretariat for Environment, Natural Resources and Fisheries (SEMARNAP) and Secretariat for Social Development (SEDESOL).
- 2) Natural Resources: the U.S. Department of the Interior (DOI), the U.S. Department of Agriculture (USDA), and SEMARNAP.
- 3) Border Water Resources: U.S. and Mexican Sections of the International Boundary and Water Commission (IBWC), DOI, EPA, and SEMARNAP.
- 4) Environmental Health: the U.S. Department of Health and Human Services (HHS) and Mexico's Secretariat of Health (SSA).

Other important Federal participants involved in the Border XXI Program include the U.S. Department of State and Mexico's Secretariat of Foreign Relations, as well as international institutions such as BECC and NADBank.

The six Mexican and four U.S. border states and their local entities will play an important role in Border XXI. In the U.S., the Indian Nations located in the border region will also be involved in Program implementation.

To further public participation in Border XXI, both governments will enlist the assistance of their respective advisory boards, the Good Neighbor Environmental Board for the U.S. and the Advisory Council for Sustainable Development (Region 1) in Mexico.

## **IMPLEMENTATION**

Border XXI will be implemented through nine binational Workgroups that integrate the efforts of other participating entities and define specific projects to achieve the Program's objectives. The Workgroups are committed to encouraging active state participation in their endeavors and exploring additional mechanisms to promote border community participation and integrated regional planning.

The six Workgroups that were initiated under the La Paz Agreement are (1) water, (2) air, (3) hazardous and solid waste, (4) pollution prevention, (5) contingency planning and emergency response, and (6) cooperative enforcement and compliance. Recognizing that the environment needs to be considered from a comprehensive perspective, Border XXI integrates three new Workgroups. These are (7) environmental information resources, (8) natural resources, and (9) environmental health.

Each year, the nine Workgroups will develop Annual Implementation Plans that will identify federal funding levels for a given year and, based upon available funds, describe specific projects that will advance the long-term objectives contained in the Framework Document. The development of these Annual Implementation Plans will ensure correlation of short-term budget realities with the long-term planning required to fulfill the Border XXI objectives. Accordingly, it must be emphasized that project implementation is contingent upon the availability of resources.

In order to track the extent to which actual projects identified in the Annual Implementation Plans build toward the five-year objectives, the two governments have agreed to issue Biennial Progress Reports that will provide a more comprehensive evaluation of the entire Border XXI Program. To ensure public input into this evaluation, both the Annual Implementation Plans and the Biennial Progress Reports will be made publicly available. In addition, in conjunction with the release of the Biennial Progress Report, the two governments will hold public meetings every two years to foster discussion on the success of Border XXI implementation.

Under SEMARNAP's decentralization program, Mexican states will have an

increasingly direct role in Border XXI implementation. Therefore, both federal governments consider state environmental, natural resource, and health agencies essential participants in Border XXI implementation and will support their participation through the appropriate decentralization mechanisms.

In recognition of the diversity of the border area, the Framework Document is also organized around five distinct geographic regions. Five-year objectives are established for each region which are to be implemented through the Workgroups. These regions are: California-Baja California, Arizona-Sonora, New Mexico-Texas-Chihuahua, Texas-Coahuila-Nuevo Leon, and Texas-Tamaulipas.

## **BORDER XXI WORKGROUP OBJECTIVES**

### ***Natural Resources Workgroup***

The border region of both countries includes a vast wealth of resources and diverse ecosystems including freshwater, marine and wetland ecosystems, deserts, rangelands, and several forest types. Identified environmental problems include: degradation of air, soil and water; introduction of exotic species; habitat loss; poaching; illegal trade in protected species; increased wildfires; illegal exploitation of forest and marine resources; over cultivation of plants and animals; overgrazing; trespassing of livestock; and, road construction.

Three topic areas have been identified for which some of the five-year objectives include:

#### **A) Biodiversity and Protected Areas**

- o Improving and expanding protection of species and habitats.
- o Promoting sustainable management of natural resources in the entire border zone through productive projects to improve the quality of life for local communities.
- o Managing natural protected areas to guarantee the conservation of ecosystems and biodiversity.

#### **B) Forest and Soil Conservation**

- o By using native species, encouraging the conservation and sustainable use of forest, rangeland, soil, and wildlife resources.
- o Undertaking efforts to stop desertification and increasing green areas by: discouraging the use and consumption of certain flora, providing tax incentives to real estate owners, and restricting road construction and urban sprawl into forested or erosion susceptible areas.

### **C) Marine and Aquatic Resources**

- o Protecting, conserving, and restoring marine and freshwater ecosystems and species in the border area with special consideration to endangered and threatened species and their habitats.
- o Promoting sustainable aquaculture development while preventing habitat degradation and declines in resident species.

In addition, some of the objectives that are common to the three topic areas include:

- o Improving binational law enforcement capabilities through cooperation and strengthening mechanisms for verifying regulatory compliance;
- o Expanding links between research and natural resource management;
- o Furthering training and educational programs, as well as outreach activities that promote the conservation and sustainable use of natural resources.

### ***Water Workgroup***

Water pollution is one of the principal environmental and public health problems facing the border area. Deficiencies in the treatment of wastewater, the disposal of untreated effluent, and inadequate operation and maintenance of treatment plants result in health risks. Additionally, the lack of adequate distribution systems for drinking water increases potential risk for gastrointestinal infections. In the Mexican border region, the greatest need is for water and wastewater infrastructure in urban areas where sewer systems have exceeded their useful life and require rehabilitation; similar needs also exist in small communities. In the U.S. border area, there is a great need for water and wastewater infrastructure in unincorporated communities called “colonias” as well as in small communities. Some of the five-year objectives include:

- o Developing and rehabilitating infrastructure for drinking water, wastewater collection and wastewater treatment;
- o Establishing binational guidelines for developing and implementing pretreatment programs;
- o Developing long-term binational priorities and programs for watershed planning and management;
- o Continuing and expanding water quality monitoring programs to determine water quality status of surface and ground waters;
- o Supporting personnel training and programs related to water management issues;
- o Developing consciousness about water and promoting its efficient and rational use; and,

- o Encouraging public participation in water infrastructure decision-making processes.

### ***Environmental Health Workgroup***

The border area is characterized by conditions which impact the health of border communities including: rapid urbanization without commensurate development of health and environmental infrastructure; increased industrial/manufacturing development and attendant occupational risks; increases in the number of young, working adults and children resulting from migration; the high rate of poverty; lack of sufficient drinking water supplies and inadequate drinking water quality; inadequate treatment and disposal of domestic and industrial wastewater, domestic solid and hazardous waste and industrial wastes; and improper handling and storage of pesticides.

The two governments intend to increase binational collaboration between environmental and public health entities. The ultimate goal is to address environmental health concerns that will result in a reduction of associated disease rates along the border. Within this context, environmental health is defined as human health influenced by exposure to chemical, physical, and biological agents in the community, workplace or home. Some of the five-year objectives include:

- o Improving the capacity of state, tribal, and local health and environmental agencies to assess the relationship between human health and environmental exposures by conducting surveillance, monitoring, and research,
- o Supporting projects to improve the capacity of state, tribal, and local health and environmental agencies to deliver environmental health intervention, prevention, and educational services,
- o Increasing opportunities for all border stakeholders (individuals, community organizations and occupational groups) to participate in environmental health initiatives,
- o Improving training opportunities for environmental and health personnel, and
- o Improving public awareness and understanding of environmental health problems by providing information and educational opportunities.

### ***Air Workgroup***

Many border area residents are exposed to health-threatening levels of air pollutants including ozone, particulate matter, carbon monoxide and sulfur dioxide. The need to evaluate levels of targeted air pollutants is particularly urgent in heavily populated urban areas where air quality problems are compounded by emissions from increasing numbers of vehicles - many of which are older and poorly maintained; extensive industrial activity; and

numerous air sources (e.g., unpaved roads, waste disposal fires). To this end, the Air Workgroup will build on the efforts of geographic sub-workgroups to promote regionally based air quality management programs. Some of the five-year objectives include:

- o Developing air quality assessment and improvement programs (e.g., monitoring, emissions inventories, modeling);
- o Continuing to build institutional infrastructure and technical expertise in the border area;
- o Encouraging on-going involvement of local communities;
- o Promoting air pollution abatement strategies (e.g., reduced vehicle emissions related to idling at border crossings, lowered emissions from brick kilns); and,
- o Studying potential for economic incentive programs for reducing air pollution.

### ***Hazardous and Solid Waste Workgroup***

Rapid industrialization and population growth have created a need for improved hazardous and solid waste management infrastructure. Important waste issues include the illegal transboundary shipment of hazardous waste, health and environmental risks posed by inactive and abandoned disposal sites, the need for proper development of new sites, and the proper operation and closure of existing sites. Priorities for addressing these issues include facilitating projects that promote sound waste management practices. Some of the five-year objectives include:

- o Developing a vulnerability atlas to target geographic priorities for solid and hazardous waste management activities;
- o Improve monitoring of the transboundary movement of hazardous wastes and substances in the border area;
- o Continuing enforcement activities related to illegal hazardous waste practices;
- o Improving waste management practices and promoting waste minimization and recycling; and,
- o Building institutional expertise and capability.

### ***Contingency Planning and Emergency Response Workgroup***

The Workgroup seeks to increase municipal and local capacity to prepare for and respond to hazardous material emergencies and optimizing the use of U.S. and Mexican resources in environmental emergency situations. One area of concern raised in public outreach meetings is that planning has focused on sister city areas, failing to address large areas which are not major population centers but where there still may be a risk of hazardous incidents because of



increasing cross-border traffic. Some of the five-year objectives include:

- o Completing revision of the binational Joint Contingency Plan which provides for coordinated responses to chemical accidents affecting the border region;
- o Working with the sister cities to develop binational plans for each of the 14 sister city pairs;
- o Exploring ways to solve issues raised by state and local governments, including reducing barriers to the free movement of equipment and personnel across the border to respond to chemical emergencies;
- o Promoting the creation of and coordination between Local Emergency Planning Committees (LEPCS) in the U.S. and Local Committees for Mutual Assistance (CLAMS) in Mexico in developing information on hazardous materials inventories in computer databases; and,
- o Establishing cross-border notification system, exercising and testing annually the established procedures and response systems for all emergencies that activate the international system.

#### ***Environmental Information Resources Workgroup***

While considerable information about the border environment exists, there is no comprehensive inventory of border environmental data and information to enable the U.S. and Mexico to identify and address the most urgent information needs. Therefore, the Environmental Information Workgroup will focus its efforts towards producing comprehensive information resources as well as the mechanisms needed to access the information. Some of the five-year objectives include:

- o Establishing an environmental information inventory;
- o Creating effective information sharing mechanisms with government agencies and among Border XXI Workgroups;
- o Providing increased public access to information;
- o Establishing a unified Geographic Information System (GIS) for the border;
- o Promoting environmental education in border communities; and,
- o Developing environmental indicators to evaluate the effectiveness of environmental policies.

#### ***Pollution Prevention Workgroup***

Investing resources to reduce or prevent pollution is often much more cost effective than spending resources on regulation, treatment, storage, and disposal. The mission of the Pollution Prevention Workgroup is to demonstrate and promote the benefits of pollution prevention to protect the environment and to encourage sustainable development in border communities. Because

pollution prevention is a tool to be implemented by each Border XXI Workgroup, close coordination and cooperation between the Workgroups are essential. Some of the five-year objectives include:

- o Increasing the exchange of technical information at all government levels to enhance assistance and outreach to industry;
- o Increasing technical assistance and outreach to federal, state, and municipal authorities, and to the general public;
- o Developing an initiative for the management and recycling of solid waste; and,
- o Increasing cooperation and coordination with other Border XXI Workgroups and other organizations involved in promoting pollution prevention.

### ***Cooperative Enforcement and Compliance Workgroup***

Effective enforcement of and compliance with environmental laws in the U.S.-Mexico border area are essential to ensure realization of each country's environmental goals, as well as to prevent transboundary environmental problems. Border activities relating to enforcement and compliance have centered on cooperation in detecting violations and targeting enforcement; cooperation in specific case investigations and sharing enforcement information; capacity building through training and technical consultations; and promoting voluntary compliance through environmental auditing and pollution prevention. Some of the five-year objectives include:

- o Continuing efforts to achieve compliance with environmental requirements in the border area;
- o Establishing and enhancing networks of cooperation among the various state, local and Federal agencies on both sides of the border involved in environmental enforcement and compliance;
- o Encouraging voluntary compliance by industry, through strategies such as environmental auditing and the use of clean technologies and less-contaminating raw materials as a complement to the strong program of law enforcement;
- o Developing similar systems of reporting regarding compliance and enforcement, in accordance with the legal framework of each country;
- o Promoting the development of mechanisms to enhance the evaluation of compliance with environmental law;
- o Promoting pollution prevention as a mechanism for solving compliance problems; and,
- o Continuing to promote public participation within the legal framework of each party.

## **ADDITIONAL INFORMATION**

The *Executive Summary* provides a general description of the Border XXI Program, amplified in the *Framework Document*, which in addition contains appendices providing other relevant information.

Other available documents:

- *Comment and Response Report* -- discusses the major issues raised during the public comment period and how they were incorporated into the Program.
- *Annual Implementation Plans* -- set of each Workgroups' annual implementation plans, to be issued annually beginning in 1996.
- *Biennial Progress Report* -- a status report and comprehensive evaluation of the Program, to be issued every two years beginning in 1998.