

# BORDER 2020: U.S.-MEXICO ENVIRONMENTAL PROGRAM





EPA-160-R-12-001

The National Coordinators (EPA's Office of International and Tribal Affairs and SEMARNAT's Office of International Affairs) express appreciation to the local task forces, the 10 Border States, the 26 U.S. Border Tribes, the co-chairs and staff of the former Border 2012 coordinating bodies, the EPA Regional and Border Offices, the SEMARNAT and PROFEPA Border Delegations, the U.S. Good Neighbor Environmental Board and SEMARNAT's Advisory Council for Sustainable Development whose support was essential to the completion of this document.

We give special thanks to the members of the Border 2020 Advisory Committee, composed of U.S. and Mexican Border States, U.S. Border Tribes, EPA, and SEMARNAT.

# TABLE OF CONTENTS

|  |    |
|--|----|
| MISSION STATEMENT .....  | 1  |
| BORDER 2020 GUIDING PRINCIPLES .....   | 2  |
| BORDER 2020 FUNDAMENTAL STRATEGIES .....   | 3  |
| I. INTRODUCTION .....  | 8  |
| II. BACKGROUND .....   | 10 |
| III. BORDER 2020 GOALS AND OBJECTIVES .....                                      | 17 |
| Goal 1: Reduce Air Pollution .....   | 17 |
| Goal 2: Improve Access to Clean and Safe Water .....                             | 19 |
| Goal 3: Promote Materials Management and Waste Management, and Clean Sites ..... | 23 |
| Goal 4: Enhance Joint Preparedness for Environmental Response .....              | 25 |
| Goal 5: Enhance Compliance Assurance and Environmental Stewardship .....         | 27 |
| IV. BORDER 2020 TOOLS .....  | 29 |
| Pollution Prevention Techniques .....  | 29 |
| Public Health Interventions .....  | 29 |
| Sustainable Management of Water Resources .....                                  | 29 |
| Environmental Information .....  | 30 |
| Regulation and Policy Development .....  | 30 |
| Cooperative Enforcement and Compliance Assistance .....                          | 31 |
| Environmental Education and Training .....                                       | 31 |
| Infrastructure Planning and Development .....                                    | 31 |
| V. ORGANIZATIONAL STRUCTURE .....  | 32 |
| National Coordinators .....  | 32 |
| Committees on Communication and Environmental Indicators .....                   | 33 |
| Regional Workgroups .....  | 35 |
| Policy Fora .....  | 36 |
| Task Forces .....  | 36 |
| Responsibilities of the Coordinating Bodies .....                                | 36 |
| Communication .....  | 36 |
| Operational Guidelines .....   | 37 |
| Stakeholder Engagement and Participation .....                                   | 38 |
| Planning and Accountability .....  | 39 |
| Partnerships and Cooperation .....   | 39 |
| Funding Sources .....  | 39 |
| VI. ACCOUNTABILITY/REPORTING RESULTS .....                                       | 40 |
| Highlight Reports .....  | 40 |
| Midterm Assessment Report .....  | 40 |
| Biennial Action Plans .....  | 40 |
| Environmental Indicators .....   | 40 |
| LIST OF ACRONYMS .....   | 42 |
| CONTACTS .....   | 43 |
| ADVISORY COMMITTEE MEMBERSHIP .....  | 43 |



# MISSION STATEMENT

*As a result of the partnership among U.S. Border Tribes and federal, state and local governments in the United States and Mexico, the mission of the Border 2020 program is to:*  
**Protect the environment and public health in the U.S.-Mexico border region, consistent with the principles of sustainable development.<sup>1</sup>**

---

<sup>1</sup>In this program, sustainable development is defined as “conservation-oriented social and economic development that emphasizes the protection and sustainable use of resources while addressing both current and future needs and present and future impacts of human actions.”

---

# BORDER 2020

## GUIDING PRINCIPLES

The following Guiding Principles will support the mission statement, ensure consistency among all aspects of the Border 2020 Program, and continue successful elements of previous binational environmental programs.

- **Reduce the highest public health risks**, and preserve and restore the natural environment.
- **Adopt a bottom-up approach** for setting priorities and making decisions through partnerships with local, state, U.S. tribal governments and Mexico's indigenous communities.
- **Address disproportionate environmental impacts** in border communities.
- **Improve stakeholder engagement** and ensure broad-based representation from environment, public health, and other relevant sectors.
- **Foster transparency, public participation, and open dialogue** through provision of accessible, accurate, and timely information.
- **Strengthen the capacity** of local communities and stakeholders to learn about and manage environmental and environmentally-related public health issues.
- **Promote sustainable communities** by improving social, economic, and environmental systems in the border regions.
- **Achieve concrete, measurable results** while maintaining a long-term vision.
- **Measure program progress** through development of environmental and public health-based indicators.
- **The United States recognizes** that U.S. tribes are separate sovereign governments, and the equity issues affecting tribal governments must be addressed in the United States on a government-to-government basis.
- **Mexico recognizes** the historical debt it has to its indigenous peoples. Therefore, appropriate measures will be considered to address their specific concerns, as well as to protect and preserve their cultural integrity within the broader environmental purposes of this program.

# BORDER 2020 FUNDAMENTAL STRATEGIES

**As a companion to the five strategic goals (and associated objectives), which outline the anticipated results to be achieved in the next eight years, the following six fundamental strategies set the expectation for how program partners will approach and consider complex and critical environmental challenges faced by communities along the U.S.-Mexico Border. The fundamental strategies will complement and inform the work undertaken to achieve the mission and goals of the Border 2020 Program.**

## **Working to Improve Children's Health**

As a result of environmental degradation in the border region, some residents, especially children, are exposed to environmental conditions that are detrimental to their health. Compared to adults, children are uniquely affected by environmental stressors. Children's exposure patterns and resulting health outcomes are different from those of adults. For this reason, programs for protection and exposure reductions are needed. Research has demonstrated that prenatal and early life exposure to environmental hazards can cause lifelong diseases, medical conditions, and disabilities. These health problems can be related to air pollution, inadequate water supply or poorly managed sewer systems, improper management of pesticides, chemical exposures and waste disposal issues.

The Border 2020 Program will use a variety of approaches to protect children from environmental and human health hazards, including: outreach, building capacity of local health care providers (Promotoras), community-based programs, and state/tribal/local children's health partnerships. Success in advancing children's health protection along the border will result from fully integrating this priority into all Border 2020 goals. This may include engaging communities to address critical issues affecting children's health by working with environmental health experts specifically considering women of child bearing age, infants, children and adolescents.

## **Building Capacity towards Climate Change Resiliency**

The risks posed from climate change are well-documented and vast. These risks may include increases in smog levels, rising sea levels, increased precipitation intensity and droughts, which can also pose significant economic, environmental and public health challenges to border communities. The Border 2020 climate change efforts will focus on reducing greenhouse gas (GHG) emissions and on actions to help border communities become more resilient to the effects of climate change.

Prior binational efforts to create GHG emissions inventories in border states have helped to identify sources of GHG emissions, and more effectively forecast GHG emissions. Such efforts have provided governments with the data necessary to support GHG emissions reductions, through climate change action planning.

## BORDER 2020 FUNDAMENTAL STRATEGIES

---

Energy efficiency is one of the primary means of reducing GHGs, and a key component in state climate change action plans or strategies to address climate variability. Sharing information on energy efficiency technologies throughout the Border 2020 Program will build institutional capacity to achieve reductions, as well as realize cost savings over the long-term. Anticipated energy efficiency and renewable energy efforts in Border 2020 may include energy efficient indoor and outdoor lighting, elements of green building, regional solar energy projects, methane recovery, and training on renewable and energy efficiency technologies.

### **Protecting Disadvantaged & Underserved Communities**

For the past two decades, the U.S. and Mexican governments have implemented domestic<sup>2</sup> and binational efforts to improve environmental and public health conditions for communities along the 2,000-mile border. While significant progress has been made, many border communities still face dire economic and health disparities, disproportionate environmental impacts, lack of access to resources and environmental information, and are at a higher risk of poor health outcomes.

The Border 2020 Program acknowledges these disparities and is committed to addressing these through a combination of approaches, including:

- Improving access to bilingual environmental information, promoting transparent decision-making and embracing a “bottom-up” approach in decision-making.
- Improving access to environmental data sources and right-to-know tools for the border region.
- Facilitating access to federal funding and encouraging border communities to participate in funding opportunities and binational dialogue via Regional Workgroups and other fora.
- Establishing partnerships with local, state, tribal, and federal governments and stakeholders to achieve healthy and sustainable communities.
- Developing and using environmental indicators to measure improvements in environmental conditions and to identify health disparities in underserved communities.



<sup>2</sup>U.S. Executive Order 12898, signed in February 11, 1994, identifies federal actions that address environmental justice in minority and low income populations.

## BORDER 2020 FUNDAMENTAL STRATEGIES

---

### **Promoting Environmental Awareness**

Environmental Awareness is an important component to the success of the Border 2020 Program. The goal of environmental education along the U.S.-Mexico border is to increase public awareness and knowledge about environmental issues. Border 2020 will also support stakeholders by providing them with as much environmental information as possible to make informed decisions and take responsible actions toward the environment.

The Border 2020 Program will promote diverse measures to enhance the environmental culture in the border region, such as: developing strategies to provide educational information; strengthening capacities of strategic partners, such as the health service providers; community programs; and forming partnerships between state, municipal and tribal entities to protect children and other vulnerable populations from risks to environmental and human health. By integrating this strategy into the Border 2020 goals, the sense of environmental advocacy can be instilled in future generations throughout the border region.

### **Promoting Environmental Health**

Since the signing of the North American Free Trade Agreement, the U.S.-Mexico border region is bustling with a growing and transient population, diverse industry, and agriculture. This rapid growth has placed increased burdens on public health and the environment along the border. Residents, many of them young families with children, workers, as well as tribal and indigenous communities, are exposed to a variety of environmental health hazards including: air pollution from autos and diesel trucks at ports of entry, emissions from maquiladoras and domestic manufacturing, agricultural impacts such as smoke from burning, and air and water contamination from pesticide use; and inadequate and overburdened infrastructure for wastewater, drinking water and chemical and solid waste disposal. Border 2020 will aim to increase awareness of these issues and offer safer best management practices to improve human health and the environment.

Environmental health education and outreach is essential along the U.S.-Mexico border, where vulnerable populations, especially farmworkers and their families, have insufficient knowledge about worker and chemical safety and the links between chemical exposure, asthma triggers, and other negative health outcomes. Continuous education and outreach focused on families, schools and especially farmworkers will demonstrate and encourage safer alternatives such as integrated pest management for insect and rodent control; chemical and pesticide safety and proper storage; and identification and avoidance of household and work-related items that contain lead and mercury (such as home remedies, toys, candy, glazed pottery, homemade facial creams, traditional stained glass, and some home repair/construction materials such as copper pipe solder).



## BORDER 2020 FUNDAMENTAL STRATEGIES

---

The Border 2020 Program will coordinate with partners and focus on:

- Identifying and promoting best practices for handling and disposal of excess pesticides and other chemicals used to control insect and rodent pests.
- Promoting the safe storage and handling of pesticides and other chemicals.
- Reducing exposure to hazardous chemicals and asthma triggers in and around the home by educating families on the proper use of integrated pest management, the identification and dangers of lead, mercury and other heavy metals, other environmental hazards, and open waste dumps.
- Developing pilot projects to foster the adoption of integrated pest management in the school environment to reduce children's exposures to pesticides and asthma triggers while achieving effective pest control on school property.
- Training health care providers, practitioners, physicians, and/or Promotoras on the recognition and reporting of illnesses and poisonings caused by lead, pesticides, and other chemical exposure.
- Providing information and outreach to agricultural workers and their families.
- Compiling existing border environmental health information from credible sources (such as local and state health statistics from public health authorities) to better document environmental health issues along the U.S.-Mexico border.

In addition, the Border 2020 Program will adopt a variety of capacity building tools and communication methods, including sharing information via the Internet, printed materials, and educational materials; collaboration between the Policy Foras and Regional Workgroups with school administrators and heads of household.

The U.S.-Mexico Border Health Commission (BHC), created in 2000 by the U.S. and Mexico Secretaries of Health, is undertaking a number of binational public health efforts, including Environmental Health objectives, in their Healthy Border 2010/2020 initiative. The U.S. Environmental Protection Agency (EPA) and Mexico's Secretariat for the Environment and Natural Resources (SEMARNAT) are committed to collaborating with the BHC to identify and support future environmental health objectives that complement the U.S.-Mexico Border Environmental Program (Border 2020). The BHC will launch a new Healthy Border 2020 initiative in the fall of 2013.

### **Strengthening Tribal, State, Federal, and International Partnerships**

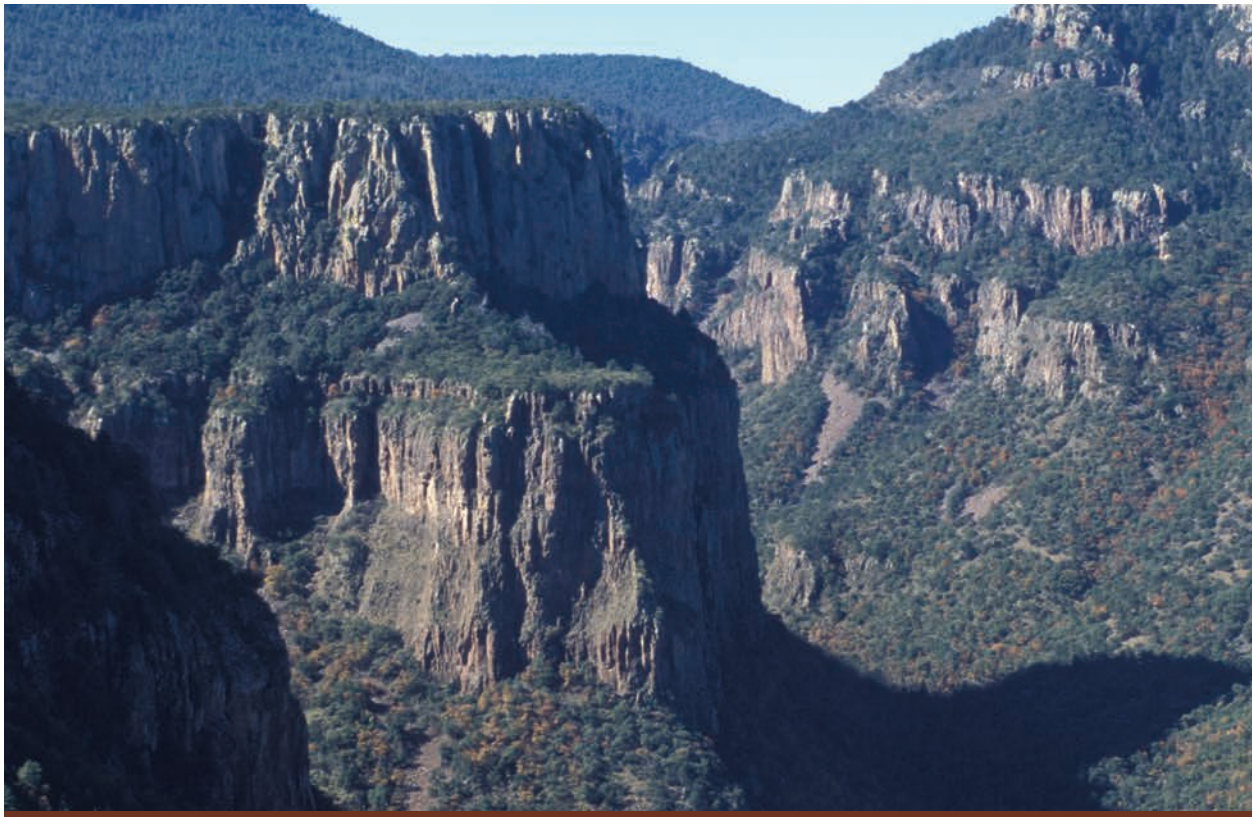
A central component of the Border 2020 Program is to ensure strong and effective tribal, local, state, federal, and international communications and partnerships. Through strong partnerships and interagency cooperation, available resources can be better leveraged and maximized while waste and duplication of efforts can be minimized.

## BORDER 2020 FUNDAMENTAL STRATEGIES

---

The Border 2020 Program is committed to strengthening tribal, local, state, federal, and international partnerships through a combination of approaches, including:

- Encouraging and enabling full participation by tribal, state, and local governments in the effort of the Regional Workgroup and Task Forces.
- Encouraging and enabling full participation in policy forums by tribal or indigenous communities, and state governments.
- Frequent and effective communication on progress to border communities and program partners.
- Developing joint action plans, strategies, and priorities to address program goals, objectives, and emerging issues such as sustainable urban growth models for border cities.
- Engaging with relevant tribal, local, state, and federal agencies to help with technical assistance, resources, and/or appropriate expertise to address the challenges contained in the various goals and objectives of the program.
- Strengthening our cross-cultural sensitivity with tribes, recognizing that tribes have cultural, jurisdictional, and legal aspects that must be considered when coordinating and implementing environmental projects on tribal lands.



# I. INTRODUCTION

The **U.S.-Mexico Environmental Program: Border 2020** is an eight-year (2013-2020) binational effort designed “to protect the environment and public health in the U.S.-Mexico Border region, consistent with the principles of sustainable development.” Its implementation will be accomplished within the framework of the respective laws and regulation of the U.S. and Mexico.

Border 2020 is the latest cooperative effort implemented under the 1983 La Paz Agreement. It builds on previous binational efforts, particularly Border 2012, which emphasized a regional bottom-up approach as the basis for decision making, priority setting, and project implementation to address the environmental and public health problems in the border region. In addition to adopting and incorporating this approach in its framework, Border 2020 has established six fundamental strategies that set expectations on how program partners will work along the border and achieve results.

Border 2020 has identified five long-term strategic goals to address environmental and environmental health challenges in the border region. Within the five goals are specific objectives that identify priority areas and activities that program partners will undertake for the duration of the Border 2020 Program. The goals and objectives were carefully written based on extensive input from program partners and border stakeholders about ongoing environmental challenges. Biennial action plans will outline priorities and implementation strategies to accomplish the various goals and objectives, based on available resources, emerging issues, and regional and community priorities. The Border 2020 strategic goals are:

- Goal 1: Reduce Air Pollution
- Goal 2: Improve Access to Clean and Safe Water
- Goal 3: Promote Materials Management and Waste Management, and Clean Sites
- Goal 4: Enhance Joint Preparedness for Environmental Response
- Goal 5: Enhance Compliance Assurance and Environmental Stewardship

To achieve the long-term strategic goals and associated objectives, Border 2020 will track progress through highlight reports, a mid-term assessment, and a final report. Border 2020 plans to build on the indicators developed in the Border 2012 Program to select, refine, and develop qualitative and quantitative environmental performance indicators and reports. These will help measure program achievements, as well as integrate and identify additional needs and targets for near-term planning.

In order to ensure effective program implementation, cooperation, and communication, the U.S. EPA and Mexico’s SEMARNAT, will provide guidance and oversight to Border 2020 coordinating bodies: Policy Fora and Regional Workgroups. Policy Fora will provide border-wide technical and policy support on issues that are primarily of a federal nature and border-wide scope. Regional Workgroups



## INTRODUCTION

---

will prioritize and implement projects and efforts in the four geographic regions of the border: California-Baja California, Arizona-Sonora, New Mexico-Texas-Chihuahua and Texas-Coahuila-Nuevo León-Tamaulipas. The workgroups will create and oversee local task forces.

Border Regional Task Forces will engage and seek input from communities, governments, and stakeholders familiar with local and regional issues. In addition, Border 2020 will rely on Communication and Indicators Committees to support program implementation. The Committee on Communications will provide recommendations to the National Coordinators on the design, implementation, and maintenance of effective communication strategies. The Committee on Border Indicators will select, refine and use environmental and performance indicators to identify program needs, outputs and outcomes.

Border 2020 aims to improve environmental conditions in underserved communities and sensitive populations by fulfilling its five goals and associated objectives. Border 2020 also aims to provide stakeholders timely access to environmental data and will continue to promote training and capacity building that focuses on environmental and programmatic sustainability within border communities.





## II. BACKGROUND

### MEXICAN INDIGENOUS PEOPLES IN THE BORDER REGION

Cochimí  
Cucapá  
Kikapúes  
Kiliwa  
Kumiai  
Pai Pai  
Pápagos  
San Francisquito (Tohono O'odham)  
(Source: Instituto Nacional Indigenista)

### U.S. TRIBES IN THE BORDER REGION

Barona Band of Mission Indians  
Campo Band of Mission Indians of the  
Kumeyaay Nation  
Capitan Grande Band of Mission Indians  
(Reservation held in trust for Barona and Viejas Tribes.)  
Cocopah Indian Tribe  
Ewiiapaayp Band of Kumeyaay  
Iipay Nation of Santa Ysabel  
Inaja Band of Indians  
Jamul Indian Village  
Kickapoo Traditional Tribe of Texas  
La Jolla Band of Luiseno Indians  
La Posta Band of Mission Indians  
Los Coyotes Band of Indians  
Manzanita Band of the Kumeyaay Nation  
Mesa Grande Band of Mission Indians  
Pala Band of Mission Indians  
Pascua Yaqui Tribe  
Pauma Band of Mission Indians  
Pechanga Band of Luiseno Indians  
Quechan Indian Tribe  
Rincon Band of Luiseno Indians  
San Pasqual Band of Mission Indians  
Sycuan Band of Kumeyaay Nation  
Tohono O'odham Nation  
Torres-Martínez Desert Cahuilla Indian Tribe  
Viejas Band of Kumeyaay Indians  
Ysleta del Sur Pueblo

### SISTER CITIES ON THE U.S.-MEXICO BORDER

San Diego – Tijuana  
Calexico – Mexicali  
Yuma – San Luis  
Nogales – Nogales  
Naco – Naco  
Douglas – Agua Prieta  
Columbus – Puerto Palomas  
El Paso – Sunland Park – Ciudad Juárez – Ysleta del Sur Pueblo  
Presidio – Ojinaga  
Del Río – Ciudad Acuña  
Eagle Pass – Piedras Negras  
Laredo – Nuevo Laredo  
McAllen – Reynosa  
Weslaco – Río Bravo  
Brownsville – Matamoros

### Geography

The U.S.-Mexico border region is one of the most dynamic in the world. It spans an area of approximately 2,000 miles (3,100 kilometers) from the Gulf of Mexico to the Pacific Ocean, and 62.15 miles (100 km) on each side of the international border. The region includes remarkable biodiversity, including many endemic species of flora and fauna. The natural beauty of the region and its unique history can be seen in its vast deserts, coastal areas, national parks and protected areas.

### Demography

Today, the border region is home to more than 14 million people, with about 7.3 million living in the United States and 6.8 million in Mexico<sup>3</sup>. Some 90% of the population resides in the 15 pairs of border “sister cities”. The remaining population lives in small towns and rural communities. There are 26 U.S. federally-recognized Native American tribes in the border region, many of which share extensive cultural and familial ties with indigenous peoples in the border region of Mexico.

Growth rates projected for the population in the border region exceed anticipated national average growth rates in some cases by more than 40 percent for each country. If current trends continue, the border population is expected to increase by an additional 4.6 million people by the year 2020 and by an additional 9.3 million by the year 2030 (based on population estimates for a high growth path)<sup>4</sup>.

The urban centers along the border have grown significantly in the past several decades, due in part to the Maquiladora Program in Mexico that began in 1965, which provided economic incentives to open foreign assembly plants (mostly U.S.-owned) in the border region. The rate of industrial development increased further after enactment of the North

<sup>3</sup>Source: EPA/SEMARNAT, “State of the Border Region: Indicators Report”, 1st edition, 2011.

<sup>4</sup>Source: EPA/SEMARNAT, “State of the Border Region: Indicators Report”, 1st edition, 2011.

## BACKGROUND

---

American Free Trade Agreement (NAFTA) in 1994. In 1990, about 1,700 maquiladora plants were operating in Mexico; by 2006, that figure more than doubled to 2,810, of which 2,289 were in the Mexican Border States<sup>5</sup>.

While economic growth has contributed to greater employment, the environmental infrastructure of the region has not kept pace. As a result, natural resources are strained and the environment and public health are adversely affected on both sides of the border.

### **Environmental Degradation and Public Health**

The rapid population growth in urban areas has often resulted in unplanned and/or hasty development, increased the demand for land and energy; created traffic congestion; increased the generation of waste; increased the frequency of chemical emergencies<sup>6</sup>; and has resulted in inadequate and/or insufficient waste treatment and disposal facilities. Water and air quality have also been adversely impacted.

Local communities along the border are affected by the degradation of ecosystems. Some residents suffer health problems that may be closely linked to poor air and water quality, improper management of pesticides, and illegal or inadequate disposal of solid and hazardous waste. The elderly and children are especially at risk. Tribal communities, indigenous communities and the residents of settlements lacking infrastructure are also at considerable risk, as they are more likely to have inadequate water supply and treatment systems, and to lack mechanisms for the proper management of solid and hazardous waste.

### **The Basis for Binational Cooperation - La Paz Agreement**

To address environmental and health problems in the border region, the Governments of Mexico and the United States signed the *Agreement on Cooperation for the Protection and Improvement of the Environment in the Border Area* (the La Paz Agreement), in the city of La Paz, Baja California Sur, Mexico, in 1983. This agreement is the foundational basis for cooperation in the border region between the U.S. EPA and Mexico's SEMARNAT, which serve as National Coordinators for activities undertaken in accordance with the Agreement.

### **Prior Binational Programs**

Implementation of the La Paz Agreement and its priorities has been largely carried out through three binationally-negotiated environmental programs, as follows:

#### ***1) Integrated Environmental Plan for the Mexican-U.S. Border Area (IBEP)***

The Integrated Environmental Plan for the Mexican-U.S. Border Area (known as the Integrated

---

<sup>5</sup>Source: Instituto Nacional de Estadística y Geografía (INEGI), Mexico.

<sup>6</sup>Source: EPA/PROFEPA, "EPA-PROFEPA Accidental Release Report 2011".

---

## BACKGROUND

---

Border Environmental Plan or IBEP), established in 1992 between the environmental authorities of the United States and Mexico, was the first implementation program developed in the context of the La Paz Agreement to address the most serious environmental problems in the border region.

The IBEP envisioned an integrated approach to implementation of numerous environmental solutions. Its stated goals were to (1) continue media-specific and multimedia monitoring and pollution control activities in the Border Area, including the performance of baseline and periodic environmental health risk assessments; (2) strengthen environmental regulatory activities, as appropriate, in the Border Area through new cooperative programs and projects supplementing the La Paz Agreement; (3) mobilize additional resources for pollution prevention and control in the Border Area; and (4) supplement current pollution control programs through pollution prevention and voluntary action programs.

In accordance with Specific Implementation Plans included in the IBEP for 1992-1994, the environmental authorities of the United States and Mexico took actions in the following areas: Cooperative Enforcement Strategy; Industrial Multimedia Source Controls Requiring Government and Private Sector Initiatives; Protection of Water Quality/Conservation of Water Resources; Border Wastewater Control; Air Quality; Hazardous Materials and Hazardous Waste; Municipal Solid Waste; Pesticides; Contingency Planning/Emergency Response; Regulation of Activities Impacting the Environment; Pollution Prevention; Environmental Education; Conservation of Natural Resources; and Urban Development.



## BACKGROUND

---

### ***2) Border XXI Program***

The Border XXI Program established a five-year bilateral effort to bring together government institutions responsible for the border environment, primarily U.S. EPA and the Environment, Natural Resources and Fisheries Secretariat (SEMARNAP) and the Social Development Secretariat (SEDESOL) of Mexico. Unlike IBEP, Border XXI brought additional federal partners to achieve its environmental goals, and welcomed the states and U.S. tribes into the workgroups.

To promote sustainable development in the region, protection of human health and the environment, and properly manage shared natural resources, after extensive public participation along the U.S.-Mexico border the Border XXI Program added three working groups -- environmental information, natural resources and environmental health -- to those already established by the La Paz Agreement -- water, air, solid and hazardous waste, pollution prevention, planning and response to emergencies, and environmental law enforcement.

Border XXI made significant contributions to the prevention of pollution and enhancing sustainable development principles: creation of the U.S.-Mexico Consultative Mechanism to share information on hazardous waste treatment, storage, and disposal facilities; development of institutional infrastructure and expertise on air quality through technical assistance, training, and information and technology transfer; development of pollution prevention manuals for the textile, wood finishing, metals and electronics industries; construction of drinking water and wastewater infrastructure; and development of sister city emergency response agreements for six border cities. Border XXI further complemented its efforts to prevent pollution through capacity building (formal and informal training), education sessions, workshops, and the production and distribution of a training video titled "Environmental Auditing and Pollution Prevention: Strategies for Compliance in the Maquiladora Industry".

The Border XXI Program, like the IBEP, led the way in the establishment of environmental issues as a priority in the bilateral agenda between the United States and Mexico. At the same time, Border XXI has served as the foundation for the establishment of the U.S.-Mexico Environmental Program: Border 2012.

### ***3) United States-Mexico Environmental Program: Border 2012***

In 2003, the Border 2012 Program was negotiated and began with the active participation of 10 Border States, 26 U.S. tribal nations of the border region, EPA, SEMARNAT, the U.S. Department of Health and Human Services Ministry and the Mexican Secretariat of Health.

Border 2012, a 10-year program, emphasized a regional bottom-up approach incorporating local decision-making, priority setting, and project implementation as the basis for addressing environmental issues in the border region. The Border 2012 Program brought together a wide range



of stakeholders to generate sustained and priority actions that met the environmental needs of the various border communities.

The Border 2012 Program also incorporated a significant participation process in which representatives from industry, non-governmental organizations (NGO's), academia, state and local governments, federal agencies and the general public could contribute their ideas and recommendations. The adoption of this inclusive approach allowed Border 2012 to more effectively address environmental and health problems in the border region.

In accordance with the La Paz Agreement, Border 2012 established six structural goals to address environmental challenges and public health:

- Goal 1: Reduce water contamination;
- Goal 2: Reduce air pollution;
- Goal 3: Reduce land contamination;
- Goal 4: Improve environmental health;
- Goal 5: Enhance Joint Readiness for Environmental Response<sup>7</sup>; and
- Goal 6: Improve environmental performance through compliance, enforcement, pollution prevention, and promotion of environmental stewardship.

Under Border 2012, water quality and environmental health in the U.S.-Mexico border region were significantly improved by completing infrastructure projects that benefited more than 7 million residents. These projects provided greater access to safe drinking water and wastewater treatment.

Air quality and the public's understanding of air pollution impacts were significantly improved through implementation of diesel truck/bus retrofitting programs and road paving projects, establishment of air monitoring networks and increasing accessibility to ambient air quality data, which contributed to public awareness and advocacy for the attainment of National Ambient Air Quality Standards.

Reduced land contamination was achieved through clean-up, proper disposal and improved waste management of used electronics and more than 12 million scrap tires, collection events for obsolete pesticides, and cleanup and revitalization of hazardous waste sites. Progress in joint readiness for environmental response in the U.S.-Mexico Border area was enhanced through training and knowledge/equipment exchanges that allowed local responders to prepare for border incidents.

Finally, Border 2012 supported community health workers (Promotoras) to educate underserved communities about potential environmental health risks associated with exposure to chemicals and

---

<sup>7</sup>The original title of this goal (Reduce Exposure to Chemicals as a Result of Accidental Chemical Releases and/or Acts of Terrorism) was modified in 2007 since "responding to acts of terrorism" was not in the purview of SEMARNAT.

## BACKGROUND

---

pesticides. Additional efforts to improve environmental health resulted in the removal of obsolete agricultural pesticides and projects to remove mercury waste from hospitals in the border region.

### A New Approach

Prior to developing the Border 2020 Program, EPA and SEMARNAT held working meetings with program partners to define the scope of the new binational agreement, building on Border 2012 and its structure. Both institutions initiated a public consultation process to gather input and suggestions from border stakeholders as well as co-chairs of the Border 2012 coordinating bodies.

The comments received from this effort supported the continuation of the bottom-up structure, the five main goal areas, the inclusion of overarching fundamental strategies, and more ambitious environmental and public health goals.

An Advisory Committee representing the U.S. and Mexican Border States, U.S. Tribes, EPA and SEMARNAT was established to help shape the new binational program. The Advisory Committee was responsible for providing guidance on the key elements of the new program, and circulated draft documents for additional comments and input.

The **United States-Mexico Environmental Program: Border 2020** is a binational continuing effort that aims to address environmental and public health issues along the U.S.-Mexico border. Border 2020 supports the principle that decision-making, priority-setting and project implementation are best done at the local level to better address environmental issues in the border region. The program integrates six fundamental strategies: working to improve children's health; building capacity towards climate change resiliency; protecting disadvantaged and underserved communities; promoting environmental awareness; promoting environmental health; and strengthening tribal, state, federal, and international partnerships, to complement its mission and goals.

### A Stronger Focus on Sustainability

Border Communities are comprised of interdependent social, economic, and environmental systems that require meaningful attention and investment to make them sustainable. When sustainability is achieved, these systems work together to improve the quality of life for border residents while reducing impacts on the environment. The Border 2020 Program aims to support these systems through its Guiding Principles, Fundamental Strategies, and Goals by promoting substantive public engagement (especially in underserved communities), increasing institutional capacity to address environmental problems, and contributing to a more sustainable development model.

Future Border Program efforts will focus on the area's many underserved communities to support sustainable environmental and economic development in the U.S. and Mexico. Examples of some of these future efforts include: operation and maintenance of air quality monitoring networks and

## BACKGROUND

---

real-time access to air quality data; supporting energy efficiency and renewable energy projects along the border; enhancing operational and managerial efficiency of drinking water and wastewater utilities; and increasing recycling capacity and materials recovery by developing markets and institutional waste management capacity. The Border 2020 Program will leverage institutional, technological, and financial capacity from numerous local, state, federal, and multi-national organizations to promote these activities.



### III. BORDER 2020 GOALS AND OBJECTIVES

Border 2020 has identified five long-term strategic goals to address serious environmental and environmentally-related public health challenges in the border region. Within the five goals are specific objectives that identify priority areas and activities that program partners will undertake for the duration of the program. The goals and objectives were carefully written based on extensive input from program partners, border stakeholders, and ongoing environmental challenges that remain. Biennial action plans will be developed for these goals and objectives which will outline priorities and implementation strategies to accomplish the various goals and objectives, based on available resources, emerging issues, and community or regional priorities.

Border 2020 recognizes that there are other critical issues such as energy, smart growth planning, transportation, housing, and biodiversity that go beyond the scope of the La Paz Agreement and associated binational environmental programs. However, the EPA and SEMARNAT are committed to engaging with the relevant government agencies in order to address these issues in a coordinated and collaborative way.

#### GOAL 1: REDUCE AIR POLLUTION



Economic and population growth in the U.S.-Mexico border region has had a significant impact on urban and rural air quality. Today, air pollution presents a substantial environmental risk in some border communities that are frequently exposed to elevated concentrations of particulate matter  $PM_{10}$  and  $PM_{2.5}$ , ozone, and toxic air pollutants. Emissions from electrical generation and other industrial sources, unpaved roads, diesel trucks, buses and cars, including those idling for long periods of time at ports-of-entry, are significant contributors to poor air quality along the border.

The border region includes a number of cities that share common airsheds; thus, activities in one city can directly affect the other, whether in the same country or across the border. As such, strategies and solutions to address air pollution along the border need to be developed and implemented binationally, with active engagement from the community, as well as local, state, federal, and Tribal authorities.

**Objective 1:** By 2020, in accordance with the NAFTA, promote the reduction of the number of vehicles operating in the border region that do not comply with the respective vehicle emissions standards, and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible reduction measures.



## BORDER 2020 GOALS AND OBJECTIVES

---

Vehicles are a significant source of atmospheric emissions impacting border communities. Under this objective, the U.S. and Mexico seek to develop mutually benefitting strategies to reduce vehicle emissions (criteria pollutants and greenhouse gases) in the border region, including, but not limited to: improved fuels availability, improved engine standards, establishment of emissions standards, ensuring compliance with applicable emissions standards, vehicle inspection and maintenance efforts, used cars and reduced idling while waiting at ports-of-entry.

**Objective 2: By 2020, reduce pollutant emissions in order to approach attainment of respective national ambient air quality standards in the following airsheds:**

- San Diego/Tijuana
- Imperial County/Mexicali
- Ambos Nogales
- Paso del Norte (El Paso/Juarez/Sunland Park)

Border areas that do not yet meet health-based air quality standards, with negative effects on public health, especially for particulate matter and/or ozone, include San Diego/Tijuana, Imperial County/Mexicali, Ambos Nogales, and El Paso/Juárez and the lower valley of the Rio Bravo. Sources of air emissions are diverse, but often include passenger vehicles, buses, diesel trucks, manufacturing and electricity generation, dust from unpaved roads, and agricultural practices, including open burning. Strategies and responsibilities for reducing these emissions vary. For example, road paving to control dust is generally a local or state responsibility (although financing could potentially be available from the North American Development Bank, NADBank), while vehicle emissions are generally reduced largely through vehicle admission standards better fuel quality.

**Objective 3: By 2018, maintain effective air monitoring networks and provide real-time access to air quality data in:**

- California/Baja California
- Arizona/Sonora
- Paso del Norte Airshed
- Any additional binational airshed that is designated as non-attainment for U.S. or Mexican air quality standards prior to 2015.

Air quality monitoring networks provide data essential to developing plans and assessing progress in reducing air pollution. This objective focuses on development and operation of air quality monitoring networks to inform the public and air quality planners about current conditions and trends. The purpose of this objective is to ensure that these monitoring networks provide real-time reliable data to AirNow and to the National Information System on Air Quality (SINAICA, in Spanish), as well as

## BORDER 2020 GOALS AND OBJECTIVES

---

historical data to air quality databases, such as EPA's Air Quality System, consistent with national policies on data quality.

**Objective 4:** By 2015, support completion of climate action plans in each of the six northern Mexican Border States (as appropriate), and build the necessary capacity to guarantee sustained implementation.

Along the U.S. border, California, Arizona, and New Mexico have completed Climate Change Action Plans. Along the Mexican border, greenhouse gas emissions inventories and forecasts have been completed for all six Mexican Border States. Using this information, climate change action plans have been completed in Nuevo Leon and have been initiated in Baja California, Sonora and Coahuila. As a result, the purpose of this objective is to complete climate change action plans for all six Mexican states. When the climate change action plans are completed, capacity building (training, demonstration projects, etc.) will be needed as states begin implementing their respective climate change action plans.

**Objective 5:** By 2020, reduce emissions and associated impacts through energy efficiency and/or alternative/renewable energy projects.

Possible projects could include: *Border-wide* training for border stakeholders in instituting and sustaining urban energy efficiency measures; green building training/workshops; forums in which states, localities, non-governmental organizations (NGOs) and industry can share program information and technologies; and energy efficiency co-benefits through reduction of criteria air contaminant emissions (stationary and vehicle sources).

Projects could also include financing of solar energy projects or other alternative sources of energy in the various border regions. It is envisioned that the primary vehicle for achieving such large-scale potential projects under this objective would be the Border Environment Cooperation Commission (BECC) through its project certification and subsequent NADBank financing.

## GOAL 2: IMPROVE ACCESS TO CLEAN AND SAFE WATER



Watersheds in the U.S.-Mexico border region are shared bi-nationally, with rivers flowing from one country to the other or forming the international boundary. Protecting and restoring watersheds and water quality in these rivers and providing adequate drinking water and basic sanitation services

## BORDER 2020 GOALS AND OBJECTIVES

---

requires collaborative bi-national, multi-jurisdictional planning efforts. The border region faces significant challenges in shared watersheds that are exacerbated by high population growth rates and impacts from climate change.

The Border 2020 Water Goal builds upon the successes and lessons learned from the Border 2012 Program. Under the Water Goal, the United States and Mexico will work together to address the following challenges:

- Lack of access to safe drinking water, which poses a significant threat to public health in border communities.
- Inadequate collection and treatment of wastewater, which contaminates surface waters and aquifers and threatens public health and the environment.
- Inadequate management of stormwater pollution that contributes significantly to water pollution problems and the potential for floods.
- Inadequate public access to water quality data, which decreases the public's ability to know whether a waterbody is safe for recreational use.
- Impacts of climate change that affect precipitation patterns and duration of droughts, making water availability even more challenging in an already arid region, and making wastewater infrastructure more vulnerable to damage from floods.

### **Objective 1: Promote the increase in the number of homes connected to safe drinking water and adequate wastewater treatment.**

- **Objective 1a:** By 2015, promote access to safe drinking water to at least 5,000 households. Revise target every two years.
- **Objective 1b:** By 2015, promote access to adequate wastewater sanitation 42,000 households. Revise target every two years.

In alignment with Goal 7c of the United Nations Millennium Development Goals, which recognizes safe and clean drinking water and sanitation as a human right essential to the full enjoyment of other human rights, the U.S.-Mexico Border Water Infrastructure Program, which, in Mexico, is implemented through the EPA-CONAGUA *Memorandum of Understanding Concerning the Joint Grant Contributions for Drinking Water Supply and Wastewater Infrastructure Projects for Communities in the United States - Mexico Border Area*, continues to provide under-served border communities with first-time safe drinking water and adequate sanitation facilities.

Targets under objectives 1a and 1b of this Goal are based on projects funded by the U.S.-Mexico Border Water Infrastructure Program, which, in Mexico, is implemented through the EPA-CONAGUA *Memorandum of Understanding Concerning the Joint Grant Contributions for Drinking Water Supply and Wastewater Infrastructure Projects for Communities in the United States -*

## BORDER 2020 GOALS AND OBJECTIVES

---

*Mexico Border Area*, and will be accomplished through the program's existing mechanisms<sup>8</sup>. Targets are based on the completion of projects currently in the development or construction phase. Once every two years, EPA and CONAGUA will jointly revise the connections targets based on expected project completions. Decentralized wastewater treatment facilities may be funded in the future if identified as technically feasible and as the best option to meet community needs.

**Objective 2: Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.**

- **Objective 2a:** Incorporate sustainable infrastructure elements, as feasible and appropriate, into U.S.-Mexico Border Water Infrastructure Program-supported BECC-certified projects, which, in Mexico, are implemented through the EPA-CONAGUA *Memorandum of Understanding Concerning the Joint Grant Contributions for Drinking Water Supply and Wastewater Infrastructure Projects for Communities in the United States - Mexico Border Area*.
- **Objective 2b:** Improve energy efficiency and efficient water use provided by drinking water and wastewater service providers in the border region.
- **Objective 2c:** Build operational, managerial and financial capacity through training of drinking water and wastewater service providers in the border region.

Providing safe drinking water and properly treating wastewater requires a substantial amount of energy and is a major cost to service providers. The above three objectives will promote the incorporation of effective utility management practices and the concept of sustainability into the planning, design, operation, and maintenance of drinking water and wastewater infrastructure projects. Examples of sustainable infrastructure practices/components include, but are not limited to, the use of water conservation, solar power, anaerobic digestion/cogeneration, high-efficiency equipment such as variable speed pumps, re-use of treated wastewater to reduce demand for potable water or to restore ecosystems, leak detection equipment, tiered rate structures, and green building materials.

**Objective 3: Work bi-nationally to identify and reduce surface water contamination in transboundary waterbodies and watersheds.**

- **Objective 3a:** Develop a binational watershed protection plan in the Lower Rio Grande below Falcon International Dam. Initial activities could include partnership building, watershed characterization, definition of goals/identification of solutions, determination of waste load, load allocations for each country, and development of an implementation plan.
- **Objective 3b:** Every two years, identify and implement at least one project to reduce the level of heavy metals, sediment, and/or bacteria entering the Santa Cruz River and/or the Nogales Creek. Examples of potential projects include industrial source control (pretreatment), inspector

---

<sup>8</sup>In Mexico, all matters related to water have to fall under the National Waters Law (Ley de Aguas Nacionales).



## BORDER 2020 GOALS AND OBJECTIVES

---

- training, and construction of stormwater regulation and water harvesting/storage devices.
- **Objective 3c:** Every two years, identify and implement at least one project to reduce the levels of bacteria, biochemical oxygen demand (BOD), trash, and/or phosphates entering the New River. Examples of potential projects include assessment and control of slaughterhouse discharges, phosphate detergent bans, and trash prevention and cleanup activities.
  - **Objective 3d:** Every two years, identify and implement at least one project to reduce the level of bacteria, sediment, and/or trash that enters the Tijuana River. Examples of potential projects include demarcation of federal land in floodplains to prevent irregular settlements, establishment of conservation easements, use of sediment control best management practices, and trash prevention and cleanup programs.

Transboundary water quality impairments are common throughout the border region, as evidenced by the U.S. Clean Water Act section 303(d) list of “impaired waterbodies”. These water quality problems cannot be addressed through the increase of wastewater treatment and infrastructure alone.

This objective will focus on specific pollutants in high priority waterbodies and watersheds, recognizing the importance of community involvement, pollution prevention, urban planning and stormwater-control Best Management Practices on both sides of the border. Regional Workgroups, with input from Border 2020 Task Forces, will identify actions to be taken in each watershed to address pollutant(s) of major concern. Regional Workgroups may also identify activities to be taken in other transboundary watersheds not specifically mentioned in the above objectives.

### **Objective 4: Provide the public with timely access to water quality data in binational waterbodies and watersheds in a readily understandable, web-based format.**

- **Objective 4a:** Develop a binational website that displays timely information on beach advisories on both sides of the border in the Brownsville/Matamoros area, and ensure its operation through 2020.
- **Objective 4b:** Develop a binational website that displays timely information on beach advisories on both sides of the border in the San Diego/Tijuana area, and ensure its operation through 2020.
- **Objective 4c:** Develop a binational website that displays timely information on water quality in high-priority watersheds including the Lower Rio Grande, the New River, and the Tijuana River and ensure its operation through 2020.

Access to timely and accurate information on the water quality of waterbodies used for recreation can help individuals make informed decisions about whether to enter the water. Beaches in the area are important recreationally and economically, and providing timely and accurate information on water quality at beaches will protect public health and encourage their use during appropriate times.

## BORDER 2020 GOALS AND OBJECTIVES

---

These water quality data can also help show long-term and seasonal trends in water quality, and help governments determine the efficacy of wastewater and stormwater treatment projects. Existing water quality data will be accessible to the general public in an easy-to-understand and timely manner via the Internet and via water quality postings and advisories, where appropriate.

### **GOAL 3: PROMOTE MATERIALS MANAGEMENT AND WASTE MANAGEMENT, AND CLEAN SITES**



The border region faces significant challenges that threaten its ability to achieve clean, sustainable communities. Waste management programs and services have not kept pace with border communities' needs and the current waste management structure is not adequate to meet these increasing needs. It is necessary to collaborate at all levels to ensure that limited resources are applied in a way that limits additional threats of land contamination and prevents adding to legacy land contamination in the region. Increasing trade and manufacturing in the border region has resulted in exponential population growth and these industries should be engaged to ensure that they are an active part of the solution. Future regional success will be defined by those who shift from an end-of-life waste management to a sustainable materials management practice.

Achieving future sustainability requires new solutions that can be explored through better tools such as life cycle analysis. Optimizing material design and packaging, making better use of natural resources, and avoiding waste and toxic materials will result in more sustainable products. Improving collection to recover, reuse, and recycle materials will lessen or eliminate end-of-life discards that end up in landfills or indiscriminately dumped. Addressing these issues is more challenging given that they require a coordinated approach across environmental program sectors, at the multi-government level and the private sector. Over the next eight years and through Biennial Action Plans, the U.S. and Mexico will work collaboratively to address the following challenges:

- Lack of adequate planning programs in the U.S. and Mexico that establish strategies to minimize waste, maximize collections systems, support secondary materials markets, and reduce overall disposal in landfills and open dumps;
- Limited knowledge and experience on how to apply a material life cycle approach to existing international policies to implement sustainable materials management programs;
- Increase in amounts of U.S. and Mexican E-waste, used cars, household appliances, tires and green waste predominantly imported into Mexico combined with inadequate infrastructure

## BORDER 2020 GOALS AND OBJECTIVES

---

- and services to manage discarded materials;
- Trash, especially plastic materials, eventually reaching shared waters contributing to river or marine debris;
- Lack of conditions favorable to secondary markets for materials, especially when compounded by U.S. sourced used tires, used cars, electronics, and household appliances; and
- Environmental, social and economic impacts of indiscriminate dumping and contaminated sites, and high remedial cost.

### **Objective 1: By 2020, increase local and state-level institutional knowledge and experience in the area of sustainable material management practices.**

Increasing institutional capacity for material and waste management in the border region will facilitate incorporating these practices into existing or new regulations. Strategies should consider traditional and social-media communication, community-based outreach, webinar-based workshops, and pilot projects through public-private partnerships. Activities will focus on priority waste streams, especially E-waste, used cars, household appliances, tires and green matter. These activities will support and leverage respective national and international efforts to minimize waste through better collection and recycling and also efforts that increase more efficient use of resources and avoid discards to landfills.

### **Objective 2: By 2014, identify priority waste streams and by 2020 develop sustainable material management practices that strengthen their respective market value.**

Each region of the northern border presents different economic, social and cultural situations, bringing as a result the generation of waste and management of materials. In many cases, the management is inadequate, and what is a priority for a region is not for another, therefore, it is convenient to identify priority waste streams by region and develop sustainable practices enabling the proper management of materials through the development of their respective markets. This goal can be achieved by creating or increasing institutional capabilities through technical assistance, thus enabling the development of programs, projects or actions taking into account the life cycle analysis and the support recycling markets for the materials contained in the waste that would otherwise be lost in landfills. Demonstration projects with sustainable goals can be developed to improve collection of materials such as plastic bottles through public-private partnership programs and infrastructure investments in the border region to avoid costly cleanup efforts. Scrap tires could be among the regional priorities and state and national regulatory efforts should be leveraged to support local scrap tire management initiatives.

### **Objective 3: By 2020, improve knowledge at every level of government (federal, state, local) to characterize and remediate contaminated sites.**

## BORDER 2020 GOALS AND OBJECTIVES

---

Efforts under this objective provide for binational training on public health and environmental risk management, site characterization, identification of cleanup alternatives, site-specific technical assistance, and cost-effective remedial action practices applicable to either hazardous waste contaminated sites or former solid waste dumps, or both.

### **Objective 4: On an annual basis, implement the Binational Consultative Mechanism on sharing information on border area hazardous waste facilities.**

The Consultative Mechanism is a binational notification mechanism that has been in practice for more than a decade. It is being included as a priority under Border 2020 to affirm its value to both countries and interest in maintaining this notification mechanism. The only modification from previous practice is that the notification will occur once per year, given that changes in the status of hazardous waste management facilities on the border are typically limited and thus two notifications per year are considered unnecessary.

## **GOAL 4: ENHANCE JOINT PREPAREDNESS FOR ENVIRONMENTAL RESPONSE**



The 1985 Annex II of the La Paz Agreement establishes cooperative measures for preparing and responding to oil and hazardous substance incidents along the Mexico-United States (U.S.) inland border. The agreement also requires a Joint Contingency Plan (JCP) which was developed in 1988 and signed in 1999. An updated version was finalized and signed in 2008. The Mexico-U.S. JCP has provided the foundation for the 15 Sister Cities Bi-national Emergency Response Plans that have been developed over the last several years. The Emergency Preparedness and Response Policy Fora is co-chaired by U.S. EPA's Office of Emergency Management (OEM), Mexico's Procuraduría Federal de Protección al Ambiente (PROFEPA), and Secretaría de Gobernación, Coordinación General de Protección Civil (Mexico's Office of Civil Protection).

The Joint Response Team (JRT), another La Paz Agreement requirement, is also co-chaired by Mexico's PROFEPA, Protección Civil, and U.S. EPA's OEM. Additional JRT partners include representatives from other U.S. and Mexican federal agencies, including state, Tribal and local offices responsible for emergency prevention, preparedness, and response in the border region. The workgroup essentially functions as the steering committee of the Joint Response Team (JRT). The work of the JRT is supported by a notification system for the binational reporting of emergency



## BORDER 2020 GOALS AND OBJECTIVES

---

response incidents, drills, and threats; local Emergency Response Plans developed jointly by sister cities along the border; certified training courses; and analyses of potential risks in the border region.

Both countries have increased coordination with their federal, state and local partners and thanks to this collaboration many of the millions of residents within the border region will benefit from improved training, state-of-the-art equipment, and enhanced emergency response capabilities for both countries. These actions fulfill numerous U.S. and Mexican objectives, the U.S.-Mexico Border 2012 Goal 4 to “Enhance Joint Readiness for Environmental Response.” In addition, EPA, PROFEPA and Protección Civil agreed to jointly enhance border notification and agency communication protocols to expand participation of all stakeholders in the Policy Fora and Task Forces.

**Objective 1:** Update as necessary, the current Mexico-U.S. Joint Contingency Plan and on an annual basis, continue to evaluate and update the emergency notification mechanism between Mexico and the United States.

A notification mechanism was established as part of the 2008 United States-Mexico Joint Contingency Plan. However, it must be further revised, updated, and exercised in order to reflect changes in technology and protocol.

**Objective 2:** By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building.

With the completion of 15 sister city plans, the JRT is working to expand preparedness efforts. While some risk identification has been completed by both Mexico and the United States, such as commodity flow studies and hazard analysis, the JRT is working on a more coordinated plan of action for risk identification and reduction in order to better protect border communities from chemical accidents.

**Objective 3:** By 2016, the US-Mexico JRT will make available technical outreach and training materials for distribution and dissemination along the border.

As we enhance coordination with federal, state and local partners as well as with border residents we encourage improved training, the use of state-of-the-art equipment, and enhanced emergency response capabilities of our border partners by providing capacity building materials that will enhance response readiness, cross-border coordination, and training continuance for responders and counterparts.

**Objective 4:** By 2016, the US-Mexico JRT will analyze existing agreements (including sister city plans) that allow trans-boundary movement of equipment and personnel for comparison purposes.

## BORDER 2020 GOALS AND OBJECTIVES

---

Based on the La Paz Agreement, the U.S. and Mexico support each other during incidents that may occur along the shared international borders. U.S. and Mexican personnel and equipment may cross the borders to respond to border environmental emergencies. EPA and local responders also work with Mexican counterparts to perform joint exercises of contingency plans and discuss preparedness and response issues. These preparedness activities as well as responses to real world incidents necessitate liability coverage and expediting cross-border travel of personnel and equipment for both countries.

### GOAL 5: ENHANCE COMPLIANCE ASSURANCE AND ENVIRONMENTAL STEWARDSHIP



Environmental stewardship compliance assurance and enforcement efforts are essential in any successful environmental regulatory program. Achieving these goals is made more difficult in a transboundary context, such as the U.S.-Mexico border, where laws and requirements may be significantly different and the ability to exercise domestic enforcement authority across a national border is limited. Despite this challenge, both the United States and Mexico share a common goal of ensuring compliance with respective environmental laws at the border. For this reason, policing the movement of waste, and especially hazardous waste, across the border is a high priority for the Border 2020 Program. For instance, it is important for inspectors to understand the patterns of movement of hazardous waste along each side of the border and across the border at the ports of entry, and how that waste is ultimately disposed of or treated, and the Border 2020 Program will seek to promote this important information sharing.

The rapid industrial growth along the border region from *maquiladoras*, their suppliers, and other industries also presents environmental impact concerns of this growing industrial base, while also providing an opportunity to better engage industry to promote greener business practices. To this end, the United States and Mexico are committed to supporting the development of environmental stewardship recognition programs, where appropriate, and extending them throughout the border region. Additional focus will be placed on public education, outreach, and information dissemination to help citizens and companies better understand and comply with environmental laws and adopt more environmentally friendly practices, including environmental self-audit programs.

**Objective 1:** By 2020, strengthen effective information sharing between U.S. and Mexican agencies regarding the movement of hazardous waste across the border and its ultimate treatment or disposal. In addition, ensure that land ports-of-entry have sufficient inspection capacity to

## BORDER 2020 GOALS AND OBJECTIVES

---

### **police hazardous waste shipments.**

Ensuring compliance and protection of cross-border movement of hazardous waste, and the appropriateness of the waste's ultimate treatment or disposal, remains a high concern of the various agencies that have jurisdiction at the border. Effective information sharing greatly enhances the compliance efforts of these agencies.

**Objective 2:** By 2020, in Mexico, increase by 25 percent the number of businesses in the border region enrolled in the *National Program for Environmental Auditing (PNAA)* and/or similar programs at the state level for facilities not regulated by the federal government, using 2012 as a baseline.

The *National Program for Environmental Auditing (PNAA)* has been very successful at obtaining positive environmental results at industrial facilities along the Mexican side of the border. Mexico's commitment to expanding the implementation of this program in the border region should increase these positive results.

**Objective 3:** Using the U.S. Toxic Release Inventory (TRI) and the Mexican Registry of Emissions and Transfers of Pollutants (RETC), along with other sources of environmental information, share information regarding activities contributing pollution to transboundary air and/or water basins along the border.

Identifying releases of toxic chemicals along the border should help regulatory agencies on both sides of the border focus their compliance and pollution prevention efforts. These efforts will aim to focus available resources on identifying pollution loading to transboundary air basins or watersheds that may receive a disproportionate amount of pollution. Examples may include identifying sources of pollutant discharges into the priority watersheds in Goal 2 and implementing regulatory and/or voluntary measures to reduce water and air pollution.

**Objective 4:** By 2020, implement at least five (5) binational workshops targeted to environmental enforcement professionals, including port-of-entry customs professionals, to promote the exchange of information and improve understanding of each country's respective compliance and enforcement programs and tools, including field inspection and case studies.

Training workshops help ensure that inspectors, prosecutors, police and other enforcement personnel on both sides of the border have the minimum level of expertise and skills necessary to perform their jobs efficiently and effectively, as well as understand applicable laws and regulations in the U.S. and Mexico. Such an understanding is crucial when making a determination as to whether a hazardous waste being exported across the border is being sent for legal disposal.

## IV. BORDER 2020 TOOLS

**Border 2020 encourages the use of the following tools to complement and support the goals and objectives. The tools are not intended to be all-inclusive:**

### **Pollution Prevention Techniques**

Pollution prevention should be a key component of all environmental media programs (i.e., air, water, hazardous and solid waste). Pollution prevention techniques can include:

- *Capacity Building:* Identification of training needs and support for training efforts to address these needs. For example, training could be provided to industrial enterprises on efficient and cost-effective methods to reduce volatile organic compound (VOC) emissions from process operations.
- *Technical Assistance:* Site-specific technical assistance could be provided to conduct voluntary multi-media site assessments to identify cost-effective pollution prevention opportunities.
- *Environmental Stewardship:* Projects are encouraged to promote good stewardship and responsibility, such as conducting and promoting Environmental Management Systems (EMS) training for industry, governments, and others.

### **Public Health Interventions**

Infrastructure projects providing safe drinking water and wastewater treatment, as well as reductions of criteria pollutant emissions, appropriate disposal of chemical waste, and enhanced readiness to respond to chemical emergencies, will be implemented to reduce associated health risks and exposures, as well as to contain the potential effects of natural and chemical disasters. Community-based education and training programs will be used as outreach tools to reduce exposure to pesticides and chemicals by promoting safe storage and disposal of pesticides and household chemicals, create awareness of the public health hazards of electronic-waste, and encourage the use of safer/greener products.

Mechanisms to reduce exposure to environmental contaminants and to alert residents to possible exposure will be developed and/or coordinated among federal, state, local and U.S. tribal agencies. Examples of these include developing air quality monitoring networks, providing accurate and timely water quality information such as beach advisories, increasing accessibility to real-time information and facilitating its interpretation, and developing indicators to identify public health problems and/or disparities, as well as to measure progress achieved. Capacity building for health care providers will be used to increase recognition, treatment and reporting of illnesses related to pesticides and chemical poisoning.

### **Sustainable Management of Water Resources**

Given the importance of water in the border region, water resources must be managed in a sustainable



manner. Some tools available to promote this approach include: publication and decrees to forbid, regulate and reserve water use through the councils of river basin and auxiliary entities; analysis of the links between water quality and quantity, studies of groundwater availability, improved measurement of surface flows, removal of invasive species, and increased efficiency measures. In many cases, promotion of this approach requires coordination between organizations having complementary jurisdictions. For example, regulation of water quality is the responsibility of the respective national environmental agencies, EPA and SEMARNAT through the National Water Commission (CONAGUA), while regulation of water quantity (i.e., source development and allocation) in Mexico is CONAGUA's responsibility, whereas in the United States it is the responsibility of state agencies. In the U.S., source development falls under the Department of the Interior and allocation is done within the framework of state law. In Mexico, source development and allocation are overseen by the CONAGUA.

### **Environmental Information**

Collection, management and exchange of environmental data are essential to effective environmental management. Comprehensive examples of tools to promote the sharing of environmental information include harmonizing binational environmental protocols or information management systems (e.g., hazardous waste tracking systems) and developing effective data collection and information exchange mechanisms between Border 2020 partners and border stakeholders. Under Border 2020, gathering and improving accessibility to real-time air quality data, right-to-know tools, and timely and accurate water quality data to beachgoers will be priorities given the value of this information for risk assessment, public health and ultimately enforcement and compliance regarding industrial emissions and/or discharges.

Likewise, implementation of the Binational Consultative Mechanism allows the sharing of information on hazardous waste treatment, storage and disposal facilities. Border 2020 will also create and/or refine indicators to measure environmental pressures, needs, outputs or outcomes related to its goals and objectives. Indicators will be used to identify areas where comparable binational data is missing, foster binational collaboration on data gathering, and develop programs or alternative mechanisms to address environmental and public health priorities.

### **Regulation and Policy Development**

Complex environmental problems sometimes require regulation and/or policy development.



## BORDER 2020 TOOLS

---

Examples include the development of domestic or binational policies to address sustainable utility management practices, reductions in greenhouse gases (GHGs), and the reduction of waste streams through recycling. Border 2020 will encourage water and wastewater infrastructure projects along the border to incorporate sustainable elements (less energy, lower GHG emissions, and increased water use efficiency), annual water and energy audits, and the subsequent implementation of audit recommendations. To further reduce conventional air pollutants and GHG emissions, Border 2020 will aim to establish diesel emission reduction measures, concrete strategies to reduce sales of old polluting cars into the Mexican markets, and the completion of climate change action plans and State Programs for Prevention and Integral Management of Waste for at least six border states.

### **Cooperative Enforcement and Compliance Assistance**

Effective enforcement and compliance assistance requires constant and sustained coordination among governmental agencies on both sides of the border. One important tool is capacity building to establish and implement effective enforcement and compliance programs. Examples include training of Customs officials to spot suspect shipments of transboundary waste, and providing assistance to importers and exporters of hazardous waste to ensure compliance with federal and state waste management regulations.

### **Environmental Education and Training**

Capacity building through environmental education and training is critical to long-term environmental protection. Environmental education programs and training efforts are integrated within the Border 2020 framework to foster greater community awareness and engagement on environmental issues at regional and local levels. Tools to accomplish this include development of pilot programs to adopt Integrated Pest Management (IPM) in homes and schools to reduce exposure to pesticides; training of manufacturers and chemical suppliers on how to adopt clean manufacturing approaches; improving the technical capacity to clean and remediate contaminated sites; and increasing the collection and recycling of materials for targeted waste streams. The ultimate goal of the tools used in environmental education and training is to increase engagement and participation by the community and stakeholders, to better manage the complex environmental and public health issues along the border.

### **Infrastructure Planning and Development**

Important environmental infrastructure projects can be advanced from the planning stages to full implementation by optimizing the use of resources from state, federal, and local agencies, and from the BECC and NADB. More specifically, BECC and NADB support the management, development, and financing of environmental infrastructure projects under their existing programs. The BECC helps facilitate the funding of Border 2020 pilot projects, plays a role in training Border 2020 participants, and supports program implementation.

## V. ORGANIZATIONAL STRUCTURE

The EPA and SEMARNAT National Coordinators provide guidance and oversight to the Border 2020: Policy Fora and Regional Workgroups (coordinating bodies). Each of the coordinating bodies work on border issues bringing to bear their diverse and complementary perspectives. The function and role of the coordinating bodies is further explained in this section.



### National Coordinators

Consistent with the terms of the La Paz Agreement, federal-level National Coordinators from the United States and Mexico, respectively, manage overall program implementation, and ensure cooperation, coordination and communication among all coordinating bodies. Although the coordinating bodies have autonomy, the National Coordinators ensure overall progress toward program goals. They assist the coordinating bodies in maintaining focus on binational and transboundary environmental and public health issues and adherence to the program's mission, fundamental strategies, guiding principles, and tools.

The biennial National Coordinators meeting provides an opportunity for the Policy Fora and Regional Workgroups to present ongoing progress and identify priority projects and efforts with program partners. They also encourage participation from other relevant agencies, as appropriate, and assist in identifying and leveraging funding sources for binational efforts and projects.

## ORGANIZATIONAL STRUCTURE

---

### **Committees on Communication and Environmental Indicators**

Border 2020 will aim to strengthen its ability to communicate program successes, outputs and outcomes while seeking input from stakeholders and communities on pressing issues. To accomplish this, the National Coordinators will seek input and recommendations from two committees: a Committee on Communications and a Committee on Environmental Indicators. The Communication committee is expected to provide input and recommendations to the National Coordinators on the development, implementation, and revision of effective communication strategies and the Environmental Indicators Committee on the selection, refinement and use of environmental and performance indicators that accurately identify program needs, outputs and outcomes for the border region. In order to provide this guidance, the committees are expected to closely collaborate with program partners and coordinating bodies to summarize their recommendations and devise the strategies needed to incorporate them into the program's operations.

The Committees on Environmental Indicators and Communication will be led by representatives designated by the National Coordinators of the Program and will include representatives of the regional offices of SEMARNAT and EPA, as well representatives designated by the co-chairs of each one of the specified goals of Border 2020.

The Environmental Indicators Committee will define in coordination with the policy fora and the regional workgroups a binational set of indicators that measure program progress and assess trends and changes in the border region's environmental conditions. In addition, the committee will develop appropriate protocols for the collection, analysis, and quality control of data necessary to calculate and interpret the environmental indicators. Ongoing review of indicators will provide partners and decision-makers with an informative tool that can help shape research and public health and environmental policy priorities.

The Committee on Communications will devise a communication strategy that assures effective exchange and sharing of information and collaboration among coordinating bodies, and timely requests and feedback to and from the National Coordinators.

### **Regional Workgroups**

Regional Workgroups are *multi-media* and *geographically-focused*, and emphasize regional public health and environmental issues. They plan and coordinate activities at the regional level and support the efforts of local Task Forces. Each Regional Workgroup, at a minimum, should have one state and one federal co-chair from each country.

Regional Workgroups will determine what additional mechanisms will be necessary to coordinate with U.S. tribes and indigenous communities in Mexico within their respective regions. Where adopted binationally, these mechanisms should ensure that interested U.S. tribes and indigenous communities



## ORGANIZATIONAL STRUCTURE

---

in Mexico are fully informed and allowed full participation, including leadership opportunities in Border 2020 efforts within their communities.

Four Regional workgroups have been established in the following regions:

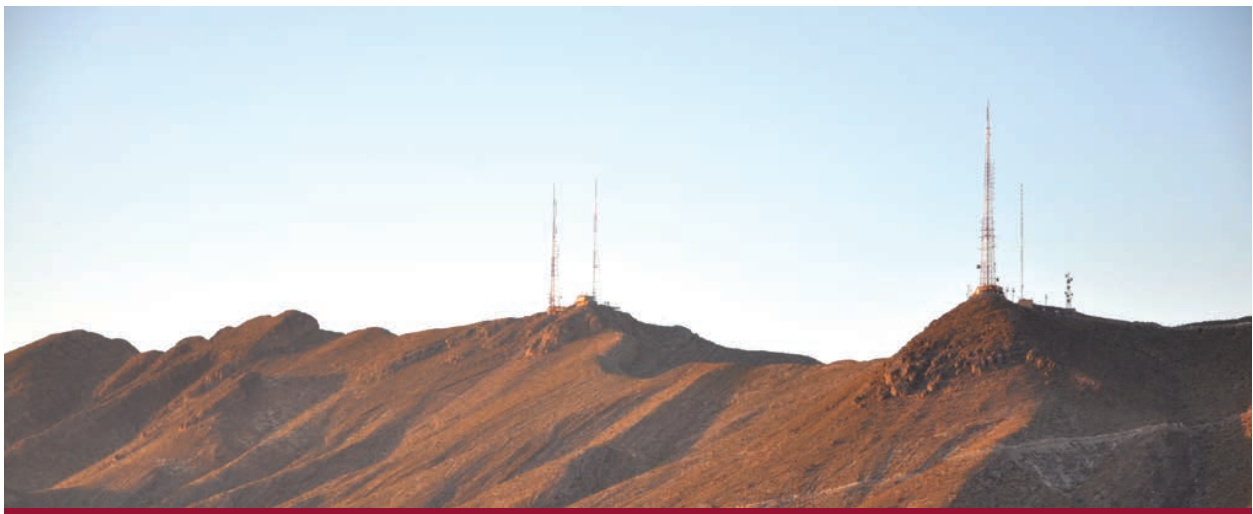
- **California-Baja California**
- **Arizona-Sonora**
- **New Mexico-Texas-Chihuahua**
- **Texas-Coahuila-Nuevo León-Tamaulipas**

In addition to general roles and responsibilities described in the Coordinating Bodies Section, Regional Workgroups:

- Identify and prioritize regional environmental issues and recommend issues beyond regional scope to be addressed by Policy Fora; and
- Develop biennial Action Plans to advance the Goals and Objectives of Border 2020.

The Regional Workgroups should include participation from local representatives of both sides of the border, as well as from binational organizations such as the BECC, the NADB, and the IBWC; community organizations and civil society, academic institutions and the private sector. In addition, the Regional Workgroups should include representatives of federal, state, local and tribal governments, among them representatives of organizations responsible for the environment, health, natural resources and emergency response.

In the case that the regional workgroup is made up of more than one border state, each will be represented in the structure as co-chairs, as in the case of the Three States and the Four States Regional Workgroups, with the possibility of the coordinating leader rotating his function annually.



## ORGANIZATIONAL STRUCTURE

---

### Policy Fora

Policy Fora concentrate on issues that are *border-wide* and *multi-regional* (identified as a priority by two or more regional workgroups), *primarily federal in nature* (requiring direct, high-level, and sustained leadership by federal program partners in the United States and Mexico) and that require broad policy considerations. For example, cross-border emergency response requires the consistent application of a common protocol (the Joint Contingency Plan) to ensure that effective actions are taken.

Policy Fora identify **priority border-wide policy issues and programs** that can most effectively be addressed through a federally-led effort, relying on input from Regional Workgroups. The goal of this dialogue is to ensure that federal policy for the U.S.-Mexico border is implemented or administered with opportunity for review and comment by state and tribal governments, in addition to providing an opportunity for input, advice and support from NGOs and the public.

Policy Fora pursue **consensus** with input provided by federal agencies, state governments, local and tribal governments, NGOs, the private sector, academia and the public. Each coordinating body will strive to have **representation** from a variety of border stakeholders.

Each of the five Policy Fora has a federal co-chair from the United States and Mexico, respectively, and addresses the following topics:

- **Reduce Air Pollution**
- **Improve Access to Clean and Safe Water**
- **Promote Materials Management and Waste Management, and Clean Sites**
- **Enhance Joint Preparedness for Environmental Response**
- **Enhance Compliance Assurance and Environmental Stewardship**

In addition to the general roles and responsibilities described in the Coordinating Bodies Section, Policy Fora will:

- Identify and prioritize policy and technical issues of border-wide/transboundary, binational and federal importance;
- Develop biennial Action Plans to advance the border-wide objectives in their respective goals;
- Address and resolve border-wide policy and technical issues;
- Identify and target resources for regionally-based projects.

Policy Fora meetings will have broad-based stakeholder participation and include non-governmental and community-based organizations, academic institutions, local, state, and tribal representatives, and binational organizations from both countries with expertise in the given subject area.

However, the confidential nature of enforcement investigations may require that some meetings of the **Forum on Compliance Assurance and Environmental Stewardship** shall not be open to the public

### **Task Forces**

The Regional Workgroups may create Task Forces to identify priority issues and help facilitate Pilot Projects by engaging with local, state, and tribal governments; academia; NGOs; and the public. Task forces serve as a mechanism for border stakeholders to collaborate on studies and projects, share information, raise concerns to government officials, and learn about ongoing efforts in the border region. Task Force leaders will be selected by the Regional Workgroups co-chairs and will be as representational as possible, including interested local communities; relevant local, state, federal and tribal governments; binational organizations; non-governmental and community-based organizations; academic institutions; and the private sector as appropriate. However, regional enforcement Task Forces may not be as representative or open in their meetings due to the confidential nature of discussions of enforcement investigations.

### **Responsibilities of the Coordinating Bodies**

In support of the Border 2020 Guiding Principles, the coordinating bodies will:

- Identify and build consensus on respective priorities;
- Identify Task Forces, including leadership through Regional Workgroups;
- Ensure adequate representation of stakeholders in order to plan and implement projects;
- Develop budgets and identify potential funding sources for project efforts;
- Support development of indicators given the availability of adequate resources;
- Collect data to monitor progress of activities;
- Leverage resources to achieve program goals;
- Meet a minimum of once per calendar year;
- Manage organizational and logistical aspects of meetings (e.g., develop agendas and schedules, secure meeting venues, provide translation services, etc.);
- Facilitate communication among coordinating bodies to avoid duplication of efforts;
- Develop respective Action Plans every two (2) years; and
- Report on progress to the National Coordinators.

### **Communication**

Strategic communication is an essential element of past and present U.S.-Mexico Border Environmental Programs. In order to ensure effective and timely communication, and engagement with the public, program partners and stakeholders, a communication strategy will be developed and updated regularly to ensure that efforts are streamlined and effective. Staff from EPA and SEMARNAT will organize these efforts, taking into consideration input from Border partners.

The National Coordinators from EPA and SEMARNAT will play a prominent role, ensuring that communication among partners is sustained and promoted throughout the duration of the Border 2020 Program.

## ORGANIZATIONAL STRUCTURE

---

At a minimum, communication efforts will support:

- Developing and implementing a detailed communication strategy with guidelines that are evaluated and revised as needed.
- Identifying dedicated team members within the lead agencies that will guide communication and ensure that the communication strategy is implemented, including, but not limited to, the following:
  - Establishing and maintaining a border-wide electronic communication database/listserv service as an outreach resource;
  - Developing Border 2020 Program report(s) on achievements and accomplishments on a triennial basis (i.e. Highlight Report); and
  - Maintaining regular communication with program partners to identify unmet communication needs, and identifying next steps.

Border 2020 is committed to promote the program's achievements and progress and will ensure that communication is binational, consistent and uniform.

### Operational Guidelines

The following Operational Guidelines designate minimum standard operating and reporting procedures for coordinating bodies under Border 2020 to ensure maximum transparency and accountability. **In addition to these minimum operational guidelines, more detailed procedures may be created by Regional Workgroups to specify guidelines pertaining to Regional and Task Force operations.**

The mechanisms identified in the Operational Guidelines are intended to optimize the use of limited resources, promote and enhance information-sharing, and improve overall coordination and teamwork among the federal governments, the border states, U.S. tribes and Mexican indigenous communities, and other border stakeholders.

To ensure transparency and foster information exchange, the coordinating bodies disseminate information regarding their activities and progress on specific projects by posting information to websites and listservs, through print media and public meetings, as well as by participating in environmental fairs and environmental education programs, as appropriate.

All Coordinating Bodies should conform to the following Operational Guidelines to maximize public participation, public access to information, and to strengthen the overall program. Regional Workgroups and Policy Fora facilitate participation of all interested border stakeholders. EPA and SEMARNAT work with program partners to extend the use of existing information tools, including regional newsletters and bulletins, the Border 2020 website, the e-mail information service BECCNET, key project databases, and other means of disseminating information on Border 2020



progress to the public and border stakeholders.

### **Stakeholder Engagement and Participation**

**Meetings** of coordinating bodies are held as often as necessary to meet their respective objectives, but no less than once per calendar year. Meetings are held in communities within the U.S.-Mexico border region, alternating as much as possible between the U.S. and Mexico and including simultaneous interpretation services. All meetings are open, providing the public an opportunity to listen and comment. However, the confidential nature of enforcement issues may require the Compliance Assurance and Environmental Stewardship Forum and Task Forces to conduct additional sessions that are closed to the public.

**Public notice** of these meetings, including agendas in both English and Spanish, will be widely disseminated at least 15 calendar days prior to the meetings. Notification of meetings should be comprehensive and could include, as resources allow, posting on the BECCNET listserv, written notices (flyers, letters, etc.), radio announcements, newspapers and other publications, public service announcements, community calendars, and press announcements.

**Meeting agendas** may include presentations on border-wide and regional efforts including status of ongoing projects (as appropriate), identification of priorities, and leveraging of internal and external resources to implement priorities.

**Meeting minutes** (summaries of key points) will be made available in English and Spanish for review and approval by the co-chairs. Minutes in both languages will be made available on EPA and SEMARNAT Border 2020 websites and the BECCNET (as appropriate).



## ORGANIZATIONAL STRUCTURE

---

### Planning and Accountability

Every two years, the National Coordinators will work with the Border 2020 Coordinating Bodies and program partners to develop a **biennial action plan** that will outline respective priorities and implementation strategy to accomplish the various goals and objectives of Border 2020. In addition, EPA Regions 6 and 9 will work with their respective Regional Workgroups to advance completion of the goals and objectives of Border 2020 via projects that include measurable results and that leverage external resources.

In addition, each year, the National Coordinators will work with the Communications and Indicators Committees to identify, document, and report on project results and outcomes.

### Partnerships and Cooperation

Although Border 2020 is overseen and administered by EPA and SEMARNAT, all program activities are selected and implemented by coordinating bodies with full consideration of relevant activities implemented by other institutions (i.e. BECC and NADBank) and the advice provided by the Good Neighbor Environmental Board (GNEB), SEMARNAT's Advisory Council for Sustainable Development (CCDS) and many other organizations. These organizations represent a broad spectrum of programs and perspectives from governmental, non-governmental, academic, and private sectors. Representatives of these organizations participate actively in the work of Border 2020 coordinating bodies, and they provide valuable context for Border 2020 activities.

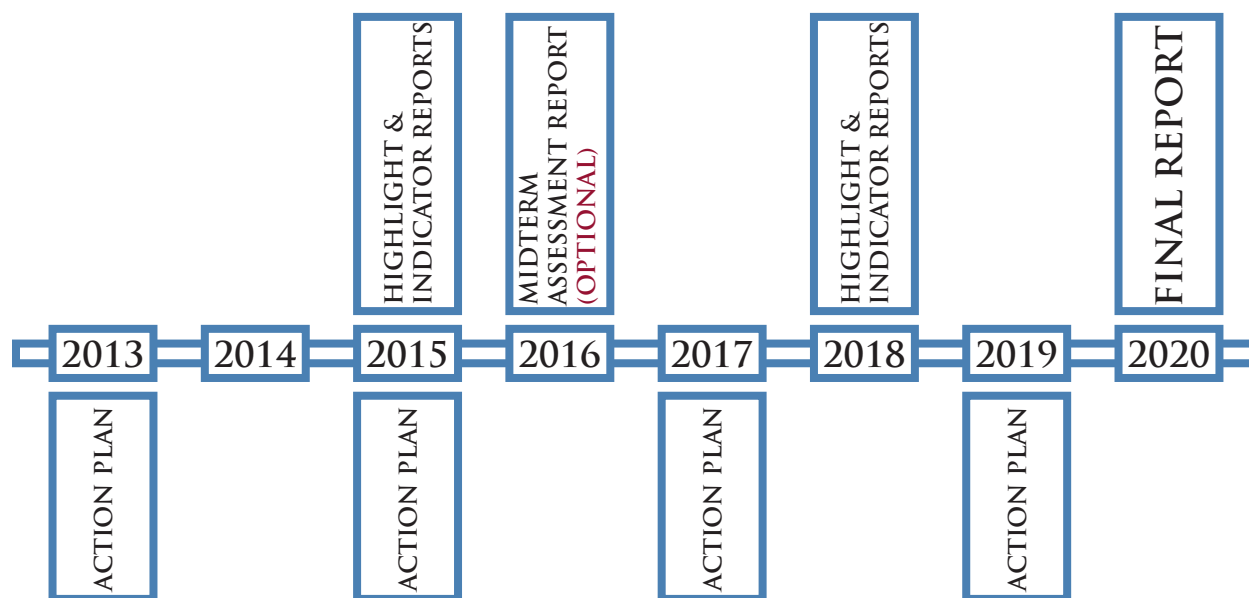
In addition, Border 2020 aims to maintain a close partnership with institutions such as BECC and NADBank to more effectively maximize and leverage technical and institutional expertise towards supporting the Border 2020 goals and objectives. Border 2020 Program partners may seek BECC/NADBank project assistance covering a wide range of areas which may include: technical, programmatic and implementation assistance.

### Funding Sources

Achievement of the goals of Border 2020 will depend on continued availability and efficient use of funding. Border 2020 coordinating bodies estimate on an ongoing basis the resources required and all potential sources of funding needed to meet program objectives. In addition, it is essential that all parties participate in leveraging resources to develop the projects, policies and programs required to meet the objectives.

Federal resources and strategic investments from state and local governments and from the private sector, as well as bilateral financing from the NADBank, will be necessary to support binational environmental efforts. Together, these organizations will collaborate to identify a variety of grant and program funding and lending sources to support Border 2020 activities.

## VI. ACCOUNTABILITY/ REPORTING RESULTS



### Highlight Reports

A report highlighting accomplishments and successes under Border 2020 will be prepared once every three years (in 2015 and 2018). These reports will be available to the public through Internet postings and/or other available media. The final report in 2020 will capture program accomplishments and will be used as a basis for future development of environmental programs in the U.S.-Mexico border region.

### Midterm Assessment Report (Optional)

A mid-term assessment report may be considered in order to update and/or refine the program's objectives to account for changing priorities and resource constraints. Should a midterm assessment be necessary, based on consultation with program partners, it will be prepared in 2016.

### Biennial Action Plans

Coordinating Bodies will develop action plans aligned with the program's strategic goals and objectives on a biennial basis (2013, 2015, 2017, and 2019). Action plans should summarize the accomplishments of the previous two years, and consequently serve as a resource to evaluate program effectiveness, and to identify priority projects and efforts. Action plans should provide concrete activities, timeframes, outputs and outcomes that support and measure progress towards achieving the program's goals and objectives.



## ACCOUNTABILITY/ REPORTING RESULTS

---

### Environmental Indicators

To achieve Border 2020 goals and objectives, it is essential that all actions taken by the United States, Mexico, their respective border states, U.S. tribes and residents have real, meaningful and measurable results. Indicators of environmental progress will be developed and used to measure these results.

Based on the work done under prior binational programs, environment and health indicators will measure progress being made toward Border 2020 goals and objectives. These indicators will have specific definitions and protocols for collection, analysis, interpretation and quality control. Border 2020 coordinating bodies will participate in the development of these indicators with anticipated support from key border partners and stakeholders. Two indicator reports will be developed on the third and sixth year of Border 2020 (in 2015 and 2018), respectively. The National Coordinators will review the indicators and report the results to the Policy Fora, Regional Workgroups, and the public. The results will help guide future decisions on program accountability and effectiveness.





# LIST OF ACRONYMS

|                 |   |
|-----------------|---|
| <b>BECC</b>     | <b>Border Environment Cooperation Commission</b>                                    |
| <b>CCDS</b>     | <b>SEMARNAT's Advisory Council for Sustainable Development</b>                      |
| <b>CGPC</b>     | <b>Office of General Coordination of Civil Protection (Mexico)</b>                  |
| <b>CONAGUA</b>  | <b>Water National Commission (Mexico)</b>   |
| <b>DGPC</b>     | <b>General Direction of Civil Protection (Mexico)</b>                               |
| <b>EPA</b>      | <b>United States Environmental Protection Agency</b>                                |
| <b>GNEB</b>     | <b>Good Neighbor Environmental Board</b>  |
| <b>IBWC</b>     | <b>International Boundary and Water Commission</b>                                  |
| <b>NADB</b>     | <b>North American Development Bank</b>  |
| <b>NAFTA</b>    | <b>North American Free Trade Agreement</b>  |
| <b>PROFEPA</b>  | <b>Office of the Federal Attorney General for Environmental Protection (Mexico)</b> |
| <b>SEGOB</b>    | <b>Secretariat of Government (Mexico)</b>   |
| <b>SEMARNAT</b> | <b>Secretariat for the Environment and Natural Resources (Mexico)</b>               |
| <b>UN</b>       | <b>United Nations</b>   |

# CONTACTS

For additional information on the Border 2020 Program please go to [www.epa.gov/Border2020](http://www.epa.gov/Border2020) and/or [www.semarnat.gob.mx/](http://www.semarnat.gob.mx/) or contact one of the following offices:

## UNITED STATES

### EPA OFFICE OF INTERNATIONAL AND TRIBAL AFFAIRS

#### U.S. National Coordinator

1200 Pennsylvania Avenue N.W.

Washington, D.C.

Telephone: (202) 564-6600

Fax: (202) 565-2411 or (202) 565-2408

Internet: <http://www.epa.gov/international>

## MEXICO

### SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES

#### Unidad Coordinadora de Asuntos Internacionales

#### *Oficina del Coordinador Nacional de Mexico*

Blvd. Adolfo Ruiz Cortines 4209, piso 1, ala A

Fracc. Jardines en la Montaña, Del. Tlalpan, C.P. 14210, Mexico, D.F.

Telephone: +52 (55) 5628 3907

Fax: +52 (55) 5628 0694

Internet: [www.semarnat.gob.mx/](http://www.semarnat.gob.mx/)

Email: [ucaai@semarnat.gob.mx](mailto:ucaai@semarnat.gob.mx)

## ADVISORY COMMITTEE MEMBERSHIP

**United States:** Lisa Almodovar, Gina Weber, Tomas Torres, Thomas Ruiz, William Luthans, Paula Flores, Nate Lau, Michelle Cuero, Marlaine Bojorquez

**Mexico:** Armando Yáñez, Paloma Sánchez, Tadzio Clavel, Saúl Guzmán, Ignacio Legarreta, Norma Rangel, Mónica González