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Evolving Environmental Management and Community Engagement at the U.S.-Mexican Border

Paul Ganster*

Abstract

2013 is the 30-year anniversary of the signing of the bilateral U.S.-Mexican La Paz Agreement and the 20-year anniversary of the signing of the North American Free Trade Agreement (NAFTA) by the United States, Mexico, and Canada. These two agreements stimulated the development of new environmental institutions, policies, and actions for the U.S.-Mexican border region. This paper reviews the evolving environmental policies and programs of the shared border region and growing public engagement in environmental management. Border environmental issues include air quality, hazardous waste, solid waste, natural resources, and others that spill across the international boundary. This paper places emphasis on water-related concerns. Treaties of 1906 and 1944 allocated surface waters between the two countries and the 1944 treaty also established an international commission, the International Boundary and Water Commission, in its modern form with the added responsibility to address water sanitation issues. Although the 1983 La Paz Agreement continued the strong central governmental control of border environmental policy and action, it did allow for greater state and local agency participation as well as some non-governmental stakeholder involvement in border environmental policy matters. The process of negotiation and approval of the NAFTA strengthened existing institutions, created new institutions to address border environmental matters, and institutionalized community engagement in border environmental policy development. Although the homeland security imperative created problems for environmental stakeholder cooperation across the border, new and promising initiatives have emerged. This paper analyzes this increasingly collaborative and inclusionary process of environmental management of the U.S.-Mexican border region.

Introduction

The border region between Mexico and the United States is an area of intense development and population growth, especially in the period following the conclusion of World War II.¹ Rapid economic and urban growth accompanied by migration flows produced a very dynamic region. The border was also the interface between a highly developed superpower and an emerging and developing country. Strong cultural and political differences as well as significant economic

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¹ For an overview of the border region see Paul Ganster and David E. Lorey, *The U.S.-Mexican Border into the Twenty-first Century* (Lanham, MD: Rowman & Littlefield, 2008).

asymmetries characterized the U.S.-Mexican border zone. The development of the region was accompanied by many environmental issues that transcended the international boundary and formal mechanisms to manage these growing environmental challenges slowly emerged. The active participation of local stakeholders also emerged slowly and unevenly, but currently there are important opportunities for public engagement in environmental issues of the U.S.-Mexican border.

Mexico and the United States are federal republics and both exhibit historic tensions between regional actors and the central authorities. The United States is more decentralized with many powers vested in state and local governments. Mexico concentrates more powers in the central government, although it has been selectively devolving powers to local and state governments over the past three decades. During this same period since the La Paz Agreement, community engagement has evolved and grown, although the differences in structure and function of government across the boundary and internal bureaucratic differences within Mexico and the United States have sometimes facilitated community involvement and at other times have frustrated local agencies.

While significant U.S. and Mexican federal asymmetries at the border discourage cooperation, the La Paz Agreement of 1983 and its border environmental programs have facilitated significant cross-border environmental cooperation. This trend accelerated with the driving force of economic integration of the North American Free Trade Agreement (NAFTA), which was important even during negotiations for the agreement in the late 1980s. The non-economic effects of economic integration produced a policy parallelism for border environmental matters.

An important component of evolving border environmental matters has been growing participation of border regional stakeholders and emergence of a tradition of civic engagement in border communities. Importantly, public participation on environmental issues has been institutionalized not only through Mexican and U.S. laws, but through the programs that are based on the La Paz Agreement and the new institutions created through NAFTA-related actions. A key assumption of the present study is that enhanced civic engagement produces more effective government functioning and collaboration across the border on environmental issues.²

U.S.-Mexican Border Context

The border between the United States and Mexico extends from the Pacific Ocean at Tijuana and San Diego across the desert to El Paso, Texas, and Ciudad Juárez, Chihuahua, and then along the Rio Grande River, which dips south and empties into the Gulf of Mexico. 1,954 miles (3,145 km) in length, the boundary was defined by the 1848 Treaty of Guadalupe Hidalgo that concluded the war between the two neighbors and by a subsequent purchase of additional territory by the United States with the Gadsden Purchase of 1854. This international boundary established a pattern of U.S. and Mexican twin cities astride traditional trade routes separated by vast areas of arid desert and

² These themes are addressed in the literature on governance of borderlands. See, for example, Emmanuel Brunet-Jailly, "Power, Politics and Governance of Borderlands, the Structure and Power of Agency," in *Theorizing Borders through Analyses of Power Relationships*, eds. Peter Gilles, Harlan Koff, Carmen Maganda, and Christian Schulz (Brussels: P.I.E.-Peter Lang, 2013), 29–45.

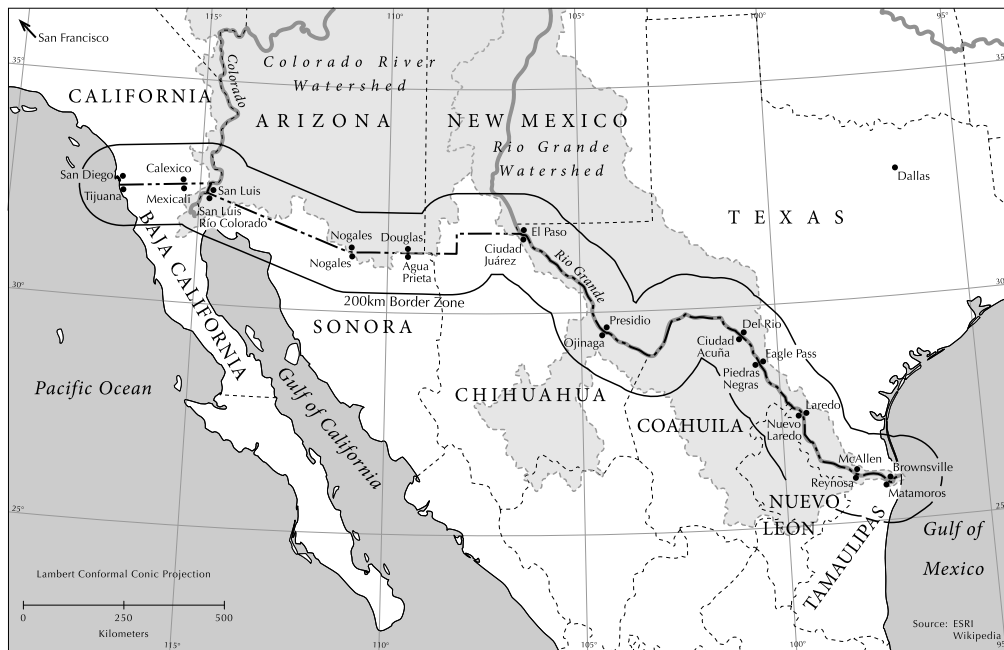


Figure 1: The U.S.-Mexican Border Region, with Twin City Locations, Major Watersheds, and the 200 Kilometer Environmental Zone

mountains. These binational towns grew through economic cycles driven by cattle ranching, mining, irrigated agriculture, and migration north from densely populated central Mexico and westward from the population centers of the United States.

The border region is characterized by aridity, especially on the western and central portions of the border, with increasing rainfall near the coast of the Gulf of Mexico on the east. Intensive agriculture is only possible through large irrigation works that provide water from the Colorado and Rio Grande rivers and their tributaries to regions such as the Imperial-Mexicali valleys on the California-Baja California border and the Lower Rio Grande Valley of Texas and adjacent Mexican states. This aridity has also shaped the pattern of modern human settlement in the border region, with most population concentrated in the binational twin cities that are dispersed along the boundary where adequate water supplies are available. As border cities have expanded, San Diego and Tijuana have had to import water long distances as local sources were insufficient for continued growth. Only in a few border agricultural areas such as the lower Rio Grande Valley and the Imperial-Mexicali valleys is there significant rural populations in small towns and dispersed farms.

Westward migration in the United States in the late nineteenth and early twentieth centuries produced population growth in the towns of the southwest, including those along the border with Mexico. Economic cycles of ranching, mining, farming, and real estate speculation brought significant growth to U.S. border towns, a growth that was also seen in Mexican border towns as migrants flowed north from densely populated central Mexico in search of economic opportunity. Prohibition of alcoholic beverages in the United States from 1920 to 1933 produced an economic boom in Mexican border towns as bars, cabarets, and gambling were established to attract U.S.

customers. This economic activity also drew migrants from throughout Mexico for jobs in the local border economies. World War II also stimulated growth of U.S. and Mexican border cities with military expansion and defense industries north of the border and waves of migrants arriving in Mexican border cities for local jobs and to meet the wartime labor shortage in U.S. agriculture and other sectors. The post-WWII “Sunbelt” migration to the U.S. southwest brought substantial growth to U.S. border cities and northward migration in Mexico had similar effects in Mexican border settlements. The 1960s, 1970s, and 1980s saw rapid urbanization of the binational border cities, fueled by U.S. economic growth, the Mexican demographic explosion, and emergence of assembly plant manufacturing (*maquiladoras*) in Mexican border cities. From 1994, the NAFTA facilitated impressive growth of bilateral trade between the U.S. and Mexico and the movement of goods and services through the border cities further stimulated migration and urbanization. While security concerns after the terrorist attacks of September 11, 2001, drug-related violence in Mexican border cities, and the 2008 economic recession in the United States slowed U.S. and Mexican migration to the border region, by 2010 the population of the border cities and municipalities had reached 14.4 million. The border population was largely concentrated in 14 binational twin city pairs of varying sizes. The largest was the binational metropolitan region of San Diego and Tijuana with nearly 5 million people, followed by the El Paso-Ciudad Juárez region of about 2 million people.³

The economic development and growing populations of the border region brought numerous environmental problems. Mining and smelting of ores contaminated the land, streams, and air in the border. Expanding urban and agriculture uses of water brought water supply issues. Growth of binational urbanized areas was accompanied by numerous environmental spillover effects, where environmental contamination from one side of the border caused effects on the other side of the international line. These growing issues forced the two governments to address shared environmental problems. For more than a century, water supply and water quality have been central environmental issues in the region.

Border Water Treaties, 1906 and 1944

Use of shared surface waters in the binational river systems was the first border environmental issue that the Mexican and U.S. governments addressed as urban and agricultural demands grew in the arid region. The Convention of March 1, 1906, allocated the waters of the Rio Grande for the El Paso-Juárez Valley region of northern Chihuahua in Mexico and western Texas and southern New Mexico in the United States. This led to the construction by the U.S. of the dam at Elephant Butte, New Mexico, to control the natural river flow and to store water in order to assure adequate water availability for treaty allocations. Greater demand for water in both countries led to the 1944 Water Treaty that allocated the surface waters of the Rio Grande River system and those of

³ *Good Neighbor Environmental Board Thirteenth Report, A Blueprint for Action on the U.S.-Mexico Border* (Washington, DC: United States Environmental Protection Agency, June 2010), Publication Number EPA 130-R-07-003.

the Colorado River system. In addition, this treaty established in modern form the International Boundary and Water Commission (IBWC), a bilateral agency with U.S. and Mexican sections, to oversee the water allocation, to construct flood control works along the shared reaches of the rivers, and to address sanitation issues that might occur. While the 1906 and 1944 treaties primarily addressed water quantity, the 1944 treaty also did allow for considering water quality issues and other contingencies through adding addenda, or minutes, to the document.

From the late 1950s, new minutes to the 1944 treaty began to address the problem of untreated wastewater in border twin cities and eventually the IBWC used the minutes to address water quality issues for many of the twin city pairs along the border.⁴ By the 1960s, increasing salinity in the Colorado River from upstream urban uses and return flow from irrigated agriculture in the United States was causing damage to irrigated crops in the Mexicali Valley of Mexico on the lower Colorado River. The IBWC addressed the issue through a series of minutes and also addressed a somewhat similar salinity issue on the eastern end of the border in the Lower Valley of the Rio Grande River.⁵ The IBWC also expanded its purview to include the difficult problem of water supply to protect the riparian habitat and ecosystems of the Colorado Delta in Mexico where the river empties into the Gulf of California. The ecosystems of the delta and upstream riparian areas had deteriorated enormously, particularly after the 1960s with greatly reduced river flow to the delta due to upstream water use by agriculture and growing cities such as Las Vegas and the construction of large dams in the United States. Through Minute 306 in 2000, a framework for analysis of the delta problem was created. Part of Minute 319 in 2012 established a 5-year pilot program to apportion water for a base flow and pulses for the riparian and delta ecosystems. These minutes responded to strong pressure from border environmental groups and formally recognized that an important water user in the border region was nature and ecosystems.

The 1944 treaty led to the first systematic approach to border environmental issues, although limited to water and related aspects. The engagement was at the level of federal governments, although the U.S. and Mexican states and municipal and private water users had varying degrees of input into the process. Public participation was initially absent from the decision making process of the IBWC. While both countries were federal republics, central control was much stronger in Mexico than in the U.S., so the administrative actions of the IBWC and minute process tended to be more consistent with the centrist practices of Mexican governance.⁶

The IBWC slowly included more public participation in its activities, reflecting strong pressure by U.S. and Mexican border communities and greater public engagement in the United

⁴ The border water treaties and activities of the IBWC are summarized on the Commission's website. Accessed on December 9, 2013: <http://www.ibwc.state.gov/>

⁵ Minutes 218, 241, 242, 248, and 284 are for the Colorado River salinity; 196, 238, and 254 are for the Lower Rio Grande River Valley. The minutes are available on the IBWC website. Accessed on December 9, 2013: <http://www.ibwc.state.gov/>

⁶ Stephen P. Mumme, *Apportioning Groundwater beneath the U.S.-Mexico Border: Obstacles and Alternatives* (La Jolla, CA: Center for U.S.-Mexican Studies, 1988); Stephen P. Mumme, "Innovation and Reform in Transboundary Resource Management: A Critical Look at the International Boundary and Water Commission, United States and Mexico," *Natural Resources Journal* 93 (1993).

States. By about 2007, the U.S. section of IBWC had organized Citizens Forums along the border in the major regions such as San Diego in order to engage local community stakeholders in direct dialogue. The membership of the Citizen Forums is inclusive and diverse. In 2013, for example, the San Diego Citizen Forum included members of local environmental organizations, university researchers, local governments, representatives of elected officials, private company representatives, and IBWC staff members. Meetings were attended by community members from San Diego and Tijuana to discuss issues of interest related to the IBWC activities.⁷ The IBWC enabled limited public participation in the process of developing recommendations for individual minutes that were being considered by the Mexican and U.S. sections of the organization. The Binational Work Group that developed Minute 319 included not only the federal governments, but state and local governments along with environmental organizations. IBWC continued this commitment to public participation by inclusion early in 2013 of environmental NGOs and university researchers in the Binational Work Group that is developing recommendations for a new minute for binational management of the Tijuana River Watershed.

1983 La Paz Agreement

By the early 1980s, pollution and environmental effects of growth had exceeded the ability of existing regulations and mechanisms to address many border environmental issues, including those that spilled across the international boundary from one country to the other. By this time, regionally, nationally, and internationally the emergence of the environmental movement had profoundly altered the way environmental issues were defined and resolved. In the United States, the broadly-based environmental movement of the 1960s was reflected in the 1970s with federal environmental legislation and establishment of the U.S. Environmental Protection Agency in 1970. The 1972 Stockholm Conference and its *Report of the United Nations Conference on the Human Environment*⁸ had an impact in both Mexico and in the United States and moved the neighbors toward a more systematic approach to addressing shared environmental issues in the border region.

In 1983, presidents Ronald Reagan of the U.S. and Miguel de la Madrid Hurtado of Mexico met in city of La Paz in Baja California Sur to discuss the bilateral relationship. Difficult agenda items included the Mexican debt crisis, drug trafficking, the flow of undocumented immigrants, and strong differences in policies toward Central America. The only area of agreement was on the need to address environmental problems of the U.S.-Mexican border region, so the two leaders signed the *Agreement between the United States of America and the United Mexican States on Cooperation for the Protection and Improvement of the Environment in the Border Area*, which took effect early in 1984.

The preamble to the La Paz Agreement references the Stockholm Declaration of 1972 that called upon nations to resolve environmental problems of common concern, and then advances a

⁷ For the November 8, 2012, meeting and attendees, accessed on December 9, 2013, see: http://www.ibwc.state.gov/Files/CF_SBIWTP_Minutes_110812.pdf

⁸ For the 1972 Stockholm conference, accessed on December 10, 2013, see: <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=97>

number of objectives.⁹ First, is to establish a basis for cooperation for protection, improvement, and conservation of the border environment; second, is to agree on necessary measures to prevent and control pollution in the border area; and, third, is to provide a framework for development of a system of notification for emergency situations.

The specific provisions of the La Paz Agreement provided an important foundation for future bilateral cooperation on environmental issues and is the framework for current collaborative actions that have evolved over the years. The agreement defined the geographical limits of the border as 100 km on each side of the international boundary. This area encompasses the major cities and towns adjacent to the border and includes the zone where most problems of environmental contaminants and problems that spill across the boundary occur. It does not include the full geographical extent of border watersheds and sub-watersheds. This definition also does not coincide with administrative units of either country along the boundary. Since social and economic data are accumulated according to county or municipal boundaries, for purposes of demographic, social, and economic analysis, the border zone is frequently defined according to the boundaries of these local administrative units along the international boundary.

The La Paz Agreement names as National Coordinators the heads of the U.S. Environmental Protection Agency (EPA) and of the Mexican agency SEDUE [Secretariat for Urban Development and Housing], which is now named SEMARNAT [Secretariat for Environment and Natural Resources].¹⁰ An annual meeting of the National Coordinators is required and this has evolved into a public event that reviews border environmental programs and establishes future actions. The annual meeting has been very important in providing continuity to border environmental cooperation as presidential administrations in both countries change every 4 or 8 years in the United States or every 6 years in Mexico.

Structural differences between U.S. and Mexican governance systems produced some challenges for the La Paz National Coordinators. For example, SEMARNAT includes natural resources and protected areas in its mandate, while that function in the United States is reserved mainly for the U.S. Department of the Interior. Water management resides largely in the United States with the Department of the Interior, while in Mexico, the National Water Commission has that responsibility. Energy and transportation, both important for the border environment, reside in separate agencies not formally incorporated into the La Paz Agreement. Working with these different government agencies provides ongoing challenges for the National Coordinators, who have found that securing the cooperation of domestic agencies sometimes was as complicated as working across the international boundary.¹¹

⁹ The text of the agreement, accessed on December 9, 2013, is available at: <http://www.epa.gov/Border2012/docs/LaPazAgreement.pdf>

¹⁰ SEDUE was the Secretaría de Desarrollo Urbano y Ecología in 1983 and Mexican environmental matters were later reorganized and included under a new ministry, the La Secretaría de Medio Ambiente y Recursos Naturales, or SEMARNAT.

¹¹ Paul Ganster and Kimberly Collins, "White Map, Silo, or Integrated Approaches to Binational Cooperation for Security and Environment in the U.S.-Mexican Border Region?" in *The Governance of Borderland Regions in*

The National Coordinators named groups of experts to advise them on technical matters related to the agreements. These groups evolved into separate workgroups for air; water; hazardous and solid waste; pollution prevention; contingency planning and emergency response; and enforcement. The National Coordinators were empowered to invite participation in all meetings related to the La Paz Agreement of representatives of federal, state, and municipal agencies. The National Coordinators could invite others to participate as stipulated in Article 9: “By mutual agreement they may also invite representatives of international governmental or non-governmental organizations who may be able to contribute some element of expertise on problems to be solved. The National Coordinators will determine by mutual agreement the form and manner of participation of nongovernmental entities.”¹²

Participation in the La Paz workgroups and other meetings for the first ten years was very much controlled by the two federal governments. State and local agency involvement was somewhat limited, as was that of academic experts. Nongovernmental environmental organizations generally were not involved. Centralized traditions of Mexican public administration slowed the process of inclusion of stakeholders considerably, while EPA facilitated increasing public participation on many environmental matters in accord with U.S. federal legislation such as the 1972 Clean Water Act that required citizen participation.¹³

The La Paz Agreement also identifies development of an environmental impact process for the border region as desirable, but this was never implemented, despite ongoing calls by the environmental community. The agreement states that the “Parties shall assess [...] projects that have significant impact on the environment of the border area, that appropriate measures may be considered to avoid or mitigate adverse environmental effects.”¹⁴ This article has largely been ignored and there have been numerous instances of large infrastructure projects on one side of the border that had transborder effects where there were no formal communications or discussions regarding impacts. One example of failure to consult on border projects is the construction by the U.S. Department of Homeland Security (DHS) of a border fence and associated infrastructure of access roads, sensors, and lighting that moved forward rapidly from 2005 onward.¹⁵ Another example is that of two power plants that began operating in 2003 in Mexicali, Baja California, in a shared binational air basin that had such high air contamination levels that the plants would not have been licensed in the U.S. portion of the airshed without very expensive offsets to improve regional air quality.¹⁶

an Era of Security, eds., Emmanuel Brunet-Jailly and Don Alper (Ottawa: University of Ottawa Press, forthcoming).

¹² La Paz Agreement, Article 9, accessed on December 9, 2013: <http://www.epa.gov/Border2012/docs/LaPazAgreement.pdf>

¹³ The Clean Water Act, accessed on December 9, 2013: http://cfpub.epa.gov/npdes/cwa.cfm?program_id=45

¹⁴ La Paz Agreement, Article 7, accessed on December 9, 2013: <http://www.epa.gov/Border2012/docs/LaPazAgreement.pdf>

¹⁵ Ana Córdova and Carlos A. de la Parra, eds., *A Barrier to Our Shared Environment: The Border Fence between the United States and Mexico* (Mexico, DF: Secretaría de Medio Ambiente y Recursos Naturales, 2007).

¹⁶ U.S. Government Accountability Office, *Air Pollution Estimated Emissions from Two New Mexicali Power Plants are Low, but Health Impacts are Unknown* (Washington, DC: GAO-05-823, August 2005).

The La Paz Agreement provided for negotiation of annexes for specific border environmental issues and these greatly facilitated cross-border cooperation. Annex I (1985) addressed the problem of untreated sewage flowing from Tijuana into San Diego through construction of an international wastewater treatment plant; Annex II (1985) facilitated hazardous materials joint response and contingency planning; Annex III (1986) was on transboundary shipment of hazardous materials; Annex IV (1987) reduced air pollution from copper smelters in the Arizona-Sonora border area; and Annex V (1989), with Appendix I (1996), established the Joint Advisory Committee for the Paso del Norte Air Basin for joint management of that binational airshed. These annexes significantly enhanced U.S. and Mexican cooperation on specific environmental issues and also provided an opening for more participation by local actors from government as well as the larger community.

NAFTA and Existing and New Environmental Institutions

In 1986 the United States, Mexico, and Canada began negotiations to establish a free trade area. In 1988, Canada and the United States launched a bilateral free trade agreement while negotiations with Mexico proceeded. In 1992, the leaders from the three countries reached consensus on the trilateral free trade agreement and signed the accord in 1993 and it took effect January 1, 1994. Prior to signing, the agreement had to be approved by both houses of the U.S. Congress.

There was considerable opposition to the free trade agreement within the United States. The loud demands of environmental organizations to the Executive Branch and the Congress expressed concern that free trade would lead to reduced environmental standards in the United States, would cause deterioration of the Mexican environment, and would have a disastrous impact on the environment and quality of life of border communities. The concerns about the border were based on allegations that U.S. and other foreign firms would move to Mexico's northern border due to less stringent environmental regulations and enforcement and that the transportation and urban services infrastructure of U.S. and Mexican border cities would be overwhelmed by huge increases in cross border trade and manufacturing produced by the new free trade regime. The environmental organizations were supported in their critique of the perils of free trade by many labor groups, by representatives in Congress, by border communities, and by some business sectors. The response by Congress and the White House during the period when NAFTA was passed by Congress and undergoing implementation was the creation of new programs and institutions to address aspects of border environmental and related challenges. Some U.S. foundations such as the Ford Foundation and the William and Flora Hewlett Foundation also focused attention on these border issues as did researchers in U.S. and Mexican universities and border environmental organizations and activists. The government of Mexico was a partner in few of these efforts in order to win passage of NAFTA, which was an economic priority at that time.¹⁷

¹⁷ The public participation components of many of these programs were a low priority for the Mexican state and not ingrained yet in the political fabric of Mexico, but were accepted grudgingly to achieve passage of the agreement.

The NAFTA negotiations stimulated changes in existing environmental efforts in the border region. There were also new institutions and programs created. Some were the result of the negotiations of the three governments as part of NAFTA and others were side agreements between Mexico and the United States. Others were programs created by the U.S. Congress to support the passage of NAFTA and the NAFTA regime. These direct and indirect actions of government regarding the environment were due in large part to strong border community response and reaction of national environmental organizations. The NAFTA passage brought significant change to border environmental administration and the role of border communities in the process of environmental policy making.

The La Paz Agreement Border Environmental Program

An early and important response by government to border environmental concerns was under the framework of the 1983 La Paz Agreement, where U.S. and Mexican cooperation on border environmental matters was well established. In 1992, EPA and its Mexican counterpart established the Integrated Border Environmental Plan for the U.S.-Mexico Border (IBEP).¹⁸ This border environmental plan was published in draft form and then a series of public forums were held along the border in Mexican and U.S. cities to generate community input for revisions to the document. This sort of public consultation process was well established in the United States, but Mexican environmental officials from a centrist political tradition were not accustomed to the sometimes confrontational open meetings.

However, by 1992 both governments embraced public participation, at least on paper if not in practice, and the IBEP clearly states that “the Plan must thus reflect the interests and participation of the general public and public officials in Mexico and the United States.”¹⁹ IBEP established Mexican and U.S. public committees to advise EPA and its Mexican counterpart, to serve as a mechanism to interface with the local communities on border environmental issues, and to gather recommendations for implementation actions for IBEP. EPA and SEDUE also agreed to launch a range of outreach activities to Mexican and U.S. industries, governmental agencies, academic entities, and the general public of the border region.

The U.S. and Mexican agencies in charge of IBEP were located far from the border region, in Mexico City for the Mexican border and in EPA Region 6 in Dallas, Texas, and EPA Region 9, in San Francisco, California, for the U.S. border. In October 1994, the Environmental Protection Agency established the Border Liaison Office in San Diego, California, and at about the same time it opened a similar office in El Paso, Texas.²⁰ Although initially established with some resistance on the part of

¹⁸ U.S. Environmental Protection Agency and Secretaría de Desarrollo Urbano y Ecología, *Integrated Environmental Plan for the Mexican-U.S. Border Area (First Stage, 1992-1994)* (Washington, DC: U.S. Government Printing Office A92-171, 1992).

¹⁹ IBEP, V-46.

²⁰ The San Diego border office, accessed on December 9, 2013: <http://www.epa.gov/region9/fieldoffices/sandiegoborder.html>

Regions 6 and 9 of EPA, the mission of these offices in the two largest U.S. border cities was to coordinate implementation of, and support for, the U.S.-Mexican Border Environmental Program, to facilitate dialogue with local communities on environmental issues, and to coordinate various border funding initiatives. These border liaison offices have become important in the border region and have greatly enhanced stakeholder input into the process of developing border environmental policy priorities. They have also supported the development of binational cooperation on environmental issues through organization of binational meetings of workgroups that are facilitated with simultaneous interpretation, through regular liaison with Mexican agencies, and through providing institutional memory for border environmental issues. The presence of the border offices has been critical for development of a binational community of individuals and organizations concerned with border environmental problems and solutions. The border offices have also enabled local stakeholders in the border region to better interact with EPA at regional and national headquarters.

This first formal border environmental program organized under the La Paz Agreement, IBEP, was followed by the successive programs of Border XXI (1996-2000),²¹ Border 2012 (2000-2012),²² and Border 2020 (2012-2020).²³ These programs have become more inclusive through specific incorporation of border American Indian tribes and outreach to business organizations and companies as well as a systematic emphasis on border environmental justice issues. The role of the U.S. and Mexican border states also became more prominent. While each of these border programs has had a slightly different organizational structure and priorities that have evolved, they increasingly have been driven by specific strategies, goals, and measurable outcomes. Through administering a small grants program and leveraging other federal funding, they have been able to bring key funding to U.S. and Mexican border communities for targeted environmental projects to meet specific goals. For example, a composting center was established in Tijuana and community outreach was funded to enhance solid waste collection efforts in Tijuana to reduce land contamination.²⁴ The strong binational commitment of the U.S.-Mexican border environmental programs has been very important for facilitating and institutionalizing binational cooperation on environmental issues. These programs have institutionalized engagement of border communities and the public in environmental policy making. The binational border programs of EPA and the Mexican Environmental Ministry have also been critical for maintaining continuity and U.S. and Mexican federal commitment to the border environmental programs in the face of changes in presidential administrations in both countries.

²¹ *U.S.-Mexico Border XXI Program Framework Document* (Washington, DC: U.S. Environmental Protection Agency, EPA 160-R-96-003, October 1996).

²² *Border 2012: U.S.-Mexico Environmental Program* (Washington, DC: U.S. Environmental Protection Agency, EPA-160-R-03-001, May 2003).

²³ *Border 2020: U.S.-Mexico Environmental Program* (Washington, DC: U.S. Environmental Protection Agency, EPA-160-R-12-001, August 2012).

²⁴ The BECC administers the small grants program for EPA, accessed on December 9, 2013: <http://www.becc.org/projects/border-2012>

North American Development Bank and Border Environment Cooperation Commission

Shortly after the implementation of IBEP, in 1993 the North American Development Bank (NADB) and Border Environment Cooperation Commission (BECC) were created to address the deficit of border environmental infrastructure through a bilateral agreement. These two institutions are binational and were a totally new creation for the border region. The BECC reviews and certifies projects and NADB provides loans for implementation of the projects. For key water and wastewater projects, EPA has provided grant monies through the Border Environmental Infrastructure Fund that have been used strategically in combination with NADB loans to bring loan costs down to levels that border communities can afford. These new binational agencies that function as a team have been very successful in helping local authorities along both sides of the border resolve the chronic water and wastewater infrastructure shortages of the region. As these needs have been addressed, additional areas have been included in the portfolio of projects, including air quality improvement, renewable energy, public transportation, and municipal and hazardous waste.²⁵ BECC also has supported activities related to climate change on the border through funding studies of greenhouse gas inventories for Mexican border states and subsequent climate change action plans. Border 2020 has not addressed these issues directly, so BECC's efforts provide an important component to border environmental policy.

All BECC and NADB funded projects, whether in Mexico or the United States, require an environmental impact statement and public review. Their ability to work on both sides of the border in a seamless fashion and their commitment to transparency and public involvement improved cooperation across the border by government agencies as well as by stakeholders from the environmental community. NADB and BECC have contributed significantly to public involvement and transborder cooperation on environmental decision making.²⁶ Both NADB and BECC have institutionalized public comments as part of the review of projects prior to funding and there is a community member from Mexico and one from the United States on the BECC-NADB Board of Directors.

BECC and NADB have also provided significant assistance to border communities for capacity building for project development, financial management, and operating completed infrastructure projects. NADB, through its Utility Management Institute, builds water utility management capacity in border communities through training of local personnel. BECC also supports project development capacity building as well as community engagement and stakeholder collaboration efforts. Combined, these binational institutions have fostered significant local capacity building related to environmental matters in the border region. They have also raised expectations in border communities for transparency and public engagement, which has carried over to Mexican and U.S. governmental agencies in the border region.

²⁵ For NADB ongoing and completed projects, accessed on December 9, 2013, see: <http://www.nadbank.org/projects/currentprojects.asp>

²⁶ The BECC and NADB websites provide information on these two organizations and how they work together, accessed on December 9, 2013: www.cocof.org; www.nadbank.org

Good Neighbor Environmental Board

In 1992 another institution was created through U.S. Congressional legislation that was part of the NAFTA era to address concerns about the environment of the border region. The Good Neighbor Environmental Board (GNEB) is an independent federal advisory committee consisting of representatives of the appropriate federal agencies, representatives for the U.S. border states, representatives from local government, and representatives from universities, from border environmental organizations, and from border tribes.²⁷ Its duty is to provide an annual report to the President and to Congress on environmental infrastructure and related environmental needs of the border region. It also has the ability to issue comment letters to the President and Congress about border environmental conditions as the need arises. EPA provides administrative support for GNEB. The board has provided border state and local government and community representatives, including academics, a strong voice on environmental matters along the border. The board also forms a successful means of communicating border priorities to federal agencies in Washington, DC, and vice versa. While, the board's charter only includes the U.S. portion of the border, individuals and agencies from Mexico frequently interact at the board's public meetings in border communities and in the national capital. GNEB reflects the values of transparency and community engagement seen in the La Paz Programs and in BECC and NADB.

Commission on Environmental Cooperation

In 1993, the leaders of Canada, the United States, and Mexico signed the North American Agreement on Environmental Cooperation (NAAEC), which led to the creation in 1994 of the Commission on Environmental Cooperation (CEC).²⁸ The CEC is an intergovernmental organization that supports cooperation among the NAFTA partners and addresses environmental issues of continental concern, including the environmental challenges and opportunities presented by continent-wide free trade. The CEC is made up of a Council, a Secretariat, and a Joint Public Advisory Committee and is headquartered in Montreal, Canada. The Council is the governing body and includes the environmental ministers of the three countries. The Secretariat provides technical, administrative, and operational support to the Council. The Joint Public Advisory Committee (JPAC), with five citizens from each country, advises the Council on any matter within the scope of the NAAEC.

Although the U.S.-Mexican border is not a primary focus of the CEC, it has helped harmonize reporting standards for hazardous materials and recently established an on-line training module for shipment of hazardous materials across NAFTA borders.²⁹ CEC has also supported

²⁷ The annual reports and occasional comment letters provide the best information on the GNEB. Accessed on December 9, 2013, these are available on: <http://www.epa.gov/ocempage/gneb/index.html>

²⁸ For details on the structure and work of the CEC, accessed on December 9, 2010, see: <http://www.cec.org/>

²⁹ Hazardous Waste Training: hazardous waste and hazardous recyclable materials regulations in North America, accessed on December 9, 2013: <http://www3.cec.org/hwm/>

conservation efforts and encouraged common air quality standards and actions in the border region. Perhaps most important in terms of engagement of communities, it provides a mechanism to receive complaints from citizens about governments not adequately enforcing their own environmental laws. This mechanism serves to highlight failures of government to properly address environmental problems and has been used effectively to resolve hazardous waste problems in the Tijuana-San Diego area. Tijuana was the site of an abandoned battery lead smelting site, the Metales y Derivados company, that was of great concern to the surrounding poor community, the Colonia Chilpancingo. The Tijuana community partnered with the San Diego community-based Environmental Health Coalition to file a complaint with CEC in 1998. In 2002 CEC issued a factual record stating that the site was a grave risk to human health. Although the CEC is not empowered to act beyond this finding, the resulting public pressure encouraged SEMARNAT and EPA and local government agencies to clean up the site, which was completed in 2008. This was a significant achievement by border community groups.³⁰

Southwest Consortium for Environmental Research and Policy

As part of the heightened attention to border environmental challenges during the time that NAFTA was being considered was the authorization by Congress in 1989 of the Southwest Consortium for Environmental Research and Policy (SCERP).³¹ This group of border universities and their Mexican partners was funded through Congressional appropriations and was managed by EPA through a cooperative agreement to conduct applied research on the critical environmental issues of the border region. Continuing work until 2013, SCERP collaborated closely with the U.S.-Mexico Border Environmental Program of EPA-SEMARNAT, and its applied research regularly involved research partners from Mexican universities as well as local community stakeholders from both sides of the border. SCERP has successfully translated the results of scientific research to community groups for more than two decades.

U.S.-Mexico Border Health Commission

In 1994, the U.S. Congress authorized the President to reach an agreement with Mexico to establish a binational commission to address the unique and severe health problems of the border region. In 1997, Congress approved funding for a commission through the U.S. Department of Health and Human Services and in 2000 the U.S.-Mexico Border Health Commission was created by the signing of an agreement by the U.S. Secretary of Health and Human Services and the Secretary of Health of Mexico.³²

³⁰ A chronology of this case, accessed on December 9, 2013: <http://www.environmentalhealth.org/images/PDF/metaleshistory.pdf>

³¹ Publications, research reports, and other information about this consortium, accessed on December 9, 2013: www.scerp.org

³² For the commission, accessed on December 9, 2013, see: http://borderhealth.org/about_us.php

Other Actors on the Border Environment

During the years prior to the implementation of NAFTA and continuing for a decade or so, other actors contributed to binational cooperation on border environmental issues and empowerment of border communities on environmental issues. The Border Governors Conference (BGC), the organization of the governors of the U.S. and Mexican border states, was able to help focus state and federal attention on the environment of the border. Meeting usually on an annual basis at locations within the member states, the BGC issued joint declarations on topics of importance and these statements almost always included environmental concerns.³³ While the BGC meetings are largely ceremonial and provide the border state governors a chance to engage in private discussions, the environmental components of the joint declarations were actually prepared by the Environmental Work Table, consisting of the state environmental secretaries, high-level staff, and technical experts who met regularly to develop common approaches and identify environmental matters. While this process did not include public participation, it did support local and state government-to-government cooperation across the border on environmental priorities. This interaction also led to a larger role of the border states in the federal U.S.-Mexico Border Environmental Program and provided a strong stimulus to individual state agencies to engage with their counterparts across the border. The direct cooperation of the states along the border and the increased federal involvement encouraged more direct cooperation by U.S. and Mexican local agencies.

The interest in environmental issues of the border region that emerged with the 1983 La Paz Agreement and later NAFTA also attracted the involvement of a number of U.S. private foundations. For example, in the 1980s and 1990s, the Environmental Defense Fund supported a pilot project for low technology wastewater treatment in the Tijuana River Watershed for reclamation purposes, an effort that was binational in scope. The Ford Foundation was active in funding university research and outreach on water and wastewater in low-income border communities. Ford also supported periodic meetings of nongovernmental organizations along the border, collaboration that produced important synergies by U.S. and Mexican nongovernmental organizations on environmental issues. The William and Flora Hewlett Foundation funded a number of efforts based at border universities that involved Mexican and U.S. participants working on key border environmental issues.

The La Paz Agreement and NAFTA stimulated engagement of Mexican and U.S. local governments and environmental organizations to collaborate across the border. The U.S.-Mexico Border Environmental Program – IBEP, Border XXI, Border 2012, and Border 2020 – that grew out of the La Paz Agreement at the time of NAFTA increasingly involved public participation through periodic binational meetings in border communities on environmental issues. Border community involvement was in keeping with EPA's commitment to public participation in environmental policy decision makings. The lessons learned from public engagement requirements of national environmental legislation such as the 1970 National Environmental Policy Act fully emerged and

³³ Joint declarations and other materials of the BGC, accessed on December 9, 2013: <http://www.sos.state.tx.us/border/bmaconf.shtml>

were incorporated into institutions and programs during the unfolding and implementation of NAFTA. As a partner in the La Paz Agreement and NAFTA, Mexican federal environmental agencies embraced more community engagement and local government empowerment, responding to growing demands by the public in Mexico.

The spotlight on the border environment produced by NAFTA stimulated significant involvement of civil society organizations, most locally based in border communities.³⁴ San Diego's Environmental Health Coalition, which works closely with partners in Tijuana, is an outstanding example of a non-profit that embraced binational pollution issues during the NAFTA period. Specializing on environmental justice issues, it led the effort of more than a decade to pressure U.S. and Mexican environmental agencies to clean up a hazardous waste site in Tijuana that was in close proximity to a poor neighbourhood.³⁵ The significant expansion of institutions and formal programs related to NAFTA that address border environmental issues provided mechanisms for community engagement on the environment of the border.

Achievements of the La Paz Agreement and NAFTA

The institutional arrangements for addressing border environmental issues that emerged from the La Paz Agreement and the NAFTA process were well established by the late 1990s. The new bilateral institutions BECC and NADB were functioning and funding through loans and grants critical environmental infrastructure for the region to address unmet needs. The trilateral Commission on Environmental Cooperation had begun to look at border environmental issues as well as its North American wide efforts to harmonize approaches to environmental challenges.

The U.S. Environmental Protection Agency was involved in many of the state, local, federal, and binational efforts to resolve border environmental issues during the 1990s and beyond. As the U.S. National Coordinator for the La Paz Agreement, EPA has provided administrative continuity for addressing binational border environmental issues since 1984. Beginning in 1992 with IBEP, stakeholder participation in the U.S.-Mexico Border Environmental Program was expanded to incorporate the public, the tribes, and more active involvement of state and local authorities. In addition to providing border communities with a mechanism for participating in border environmental decision making, EPA brought considerable management, regulatory, monitoring, and funding resources to bear on a range of border environmental problems. EPA provided significant expertise, continuity, support, and funding to address the problems of the border environment and to incorporate and institutionalize public participation.

Although the U.S.-Mexico Border Environmental Program and NAFTA-related initiatives such as NADB/BECC were binational in scope, public participation was not the same in the border communities on each side of the international boundary. Mexico's strong political centralism tradition

³⁴ Daniel M. Sabet, *Nonprofits and Their Networks: Cleaning the Waters along Mexico's Northern Border* (Tucson: University of Arizona Press, 2008).

³⁵ Environmental Health Coalition, accessed on December 9, 2013: www.environmentalhealth.org

was less open to public participation and direct criticism of government officials than in the United States. As a result, initial public involvement in Mexico in the border environmental programs tended to be constrained and controlled. As the bilateral environmental programs of IBEP, Border XXI, and others developed, U.S. practices of public participation became the norm for these forums. The new binational institutions of BECC and NADB also adopted public participation as a standard practice and the trilateral CEC included public participation as well. Over time, Mexican authorities became more open to public participation as their practices became more similar to those in the United States. Mexican environmentalists became more focused on dialog with the public sector. The collaboration with U.S. environmental groups strengthened the involvement of the Mexican groups.

By the turn of the twenty-first century, management of the border environment had evolved considerably. Formal programs between the two federal governments provided structure and continuity for border environmental management. At the same time, public participation grew and the development of NGOs with binational connections was impressive. NAFTA brought a new level of attention to the border region in the national politics of Mexico and the United States. NGOs, local communities, local governments, and the private sector through its chambers and organizations acquired a sense of empowerment as a result of the NAFTA process. Local border leaders, who traditionally had been marginalized in national and sometimes state politics, expressed a new sense of confidence and purpose within the context of NAFTA and the pivotal role of the border.

Homeland Security and Border Environmental Management

The terrorist attacks of September 11, 2001, in New York City and Washington, DC, and the emergence of homeland security as a national priority in the United States significantly altered the view of the border region in Congress and the administration. Since September 11, homeland security issues have become paramount for all federal agencies, as well as for state and local agencies within the United States.³⁶ When security issues came into conflict with existing practices and policies, security concerns assumed the highest priority. This has become especially clear with respect to the border with Mexico, where the push to harden the border through the construction of fences, barriers, access roads, and other infrastructure components has created tensions and conflict with other agencies, especially those that manage sensitive lands, and with environmentalists and local border communities. The federal preoccupation with border security, for example, reversed the trend of growing local and public participation and cross-border cooperation on environmental and related matters that had unfolded over the years following the 1983 La Paz Agreement on border environmental cooperation. Within a few years after 9/11, the U.S. national perception of the border evolved from being a region of economic promise and the interface with an important NAFTA partner to that of a zone that needed to be controlled closely to protect the nation from foreign threats. The function of the border with Mexico was seen more as a defensive barrier than as an integrative

³⁶ Ganster and Lorey, *The U.S.-Mexican Border*, provides a description of the security focus in the U.S. Also see Ganster and Collins, "White Map, Silo," forthcoming.

interface.³⁷

The Real ID Act of 2005, passed by Congress and signed by the President, enabled the DHS to waive legal requirements of environmental and cultural resource impact reviews for construction of border security infrastructure. In 2005, the provisions of the act were invoked for construction of the remaining parts of border fence infrastructure in the San Diego area. Under the waiver, construction was able to proceed without consideration of environmental protection and other provisions of a long list of federal laws. These included the National Environmental Protection Act (NEPA), Endangered Species Act, Coastal Zone Management Act, Clean Water Act, National Historic Preservation Act, Migratory Bird Treaties Act, Clean Air Act, and Administrative Procedures Act. The Secure Fence Act of 2006 and the Secure Border Initiative of 2006 of the DHS sharpened the focus on border enforcement and increased deployment of resources. All of these pieces of legislation reflected the view in Congress that the border with Mexico was not controlled adequately and that defensive barriers needed to be erected, despite negative environmental impacts.

The increased level of border enforcement that included significant infrastructure and expanded enforcement agencies and personnel was accompanied by conflict in a number of areas. First, tensions emerged between the border security mandate of the DHS and the mandate to manage and protect sensitive federal lands in the border zone by the National Forest Service, the National Park Service, the Bureau of Land Management, the International Boundary and Water Commission, and others.³⁸ Second, community groups, local land owners, local and state governments, environmental groups, and academic researchers raised concerns about environmental and other impacts of border fence construction.³⁹ Finally, these concerns were also strongly articulated by stakeholders in Mexico who were not taken into account by DHS. The disquiet of Mexican researchers, government officials, and others was clearly and forcefully expressed in scientific and professional meetings and in published material.⁴⁰

One result of the security imperative imposed on the border with the Mexico was to make legitimate traffic across the border much more difficult. The time that pedestrians, passenger vehicles, and cargo vehicles were required to wait in line at the border crossings in order to enter the United States increased significantly. In San Diego, pre-9/11 waiting times for passenger vehicles were approximately 30 minutes and after the imposition of new security measures, the waiting times were up to 3 hours. This thickening of the border had a large economic impact as well. A study by the San Diego Association of Governments concluded that delays for cross-border personal trips and freight movement cost the San Diego and Tijuana regional economies an estimated \$7.2 billion in foregone

³⁷ Ganster and Collins, "White Map, Silo," forthcoming.

³⁸ Donna L. Lybecker, "The Policy of Border Fencing between the United States and Mexico: Permeability and Shifting Functions," *Journal of the Southwest* 50:3 (2008): 335–352.

³⁹ Stephen P. Mumme, "The Real ID Act and the Tijuana Border Fencing: The New Politics of Security and Border Environmental Protection" (Paper presented at the Annual Conference of the Association for Borderlands Studies, Phoenix, Arizona, April 19–22, 2006).

⁴⁰ Ana Córdova and Vazquez de la Parra, *A Barrier to Our Shared Environment: The Border Fence between the United States and Mexico* (México, DF: El Colegio de la Frontera Norte, National Institute for Ecology, and Southwest Consortium for Environmental Research and Policy, 2007).

gross output and more than 62,000 jobs in 2007.⁴¹ Similar effects were felt at all the major border crossings along the U.S.-Mexican border. The difficulty of crossing the border and the time lost constituted a serious barrier for local transborder cooperation. Many border environmental stakeholders either reduced the number of trips across the border to collaborate with partners on the other side, or simply cancelled crossing the border.

From 2006 on, growing insecurity in Mexico and especially in border cities that was a product of Mexico's effort to break the power of drug trafficking cartels elevated murder rates and kidnappings as well as highway robberies and carjackings.⁴² The U.S. Department of State issued a travel warning for Mexico, specifically identifying most northern Mexican border cities as restricted for State Department employee travel and not advised for U.S. citizens.⁴³ The State Department travel warning caused local, state, and federal agencies to restrict or prohibit employees from visiting Mexican border locations. Many border universities limited or prohibited faculty and students from traveling to Mexican border cities. The concerns about personal safety and formal travel restrictions became a significant barrier to ongoing cooperation of stakeholders across the border on environmental matters.

Transboundary Watersheds

Despite barriers to public participation and cooperation on border environmental management produced by U.S. security policies, violence in Mexico, and diversion of federal funding away from border environmental needs to security spending, the strong institutional base that emerged from the 1983 La Paz Agreement and the NAFTA process remained as did the desire of the public to be involved in border environmental management. Border 2020 was launched in 2012 and funding was found for its small grant program while BECC and NADB continued to fund border environmental infrastructure projects. Border environmental management was advanced as the International Boundary and Water Commission moved to address complicated issues related to water and conservation in a binational fashion. The difficult issue of managing binational watersheds is a good example of progress on border environment in the face of the many challenges that emerged in the post-9/11 period.

In 2012, the U.S. and Mexican sections of the International Boundary and Water Commission began discussions regarding a new minute to address binational management of border watersheds. This subject was also the subject of a number of panels at the "Binational Border Water

⁴¹ San Diego Association of Governments, *Economic Impacts of Border Wait Times at the San Diego-Baja California Border Region* (2005, updated 2007), accessed on December 9, 2013: www.sandag.org

⁴² For a brief description of violence in Mexico, see Shannon K. O'Neil, *Two Nations Indivisible: Mexico, the United States, and the Road Ahead* (New York: Oxford University Press, 2013), chapter 6.

⁴³ The most recent U.S. Department of State travel warning for Mexico, accessed on December 9, 2013: <http://travel.state.gov/>

Resources Summit” organized by the IBWC in El Paso and Ciudad Juárez in September 2012.⁴⁴ In the spring of 2013, the U.S. and Mexican sections convened separate meetings of U.S. and Mexican stakeholders to discuss a minute to facilitate binational management of the Tijuana River Watershed and then several months later brought both Mexican and U.S. participants together for a combined meeting. Approximately 60 participants assembled for the joint meeting and included the relevant state, local, and federal agencies as well as university researchers and Mexican and U.S. environmental organizations. Although it is clear that developing a new minute for the watershed will take time, the commitment of the Commission to broad community and agency participation in the process is impressive. This is indicative of how much expectations and practice for border environmental management have evolved since 1983 and the signing of the La Paz Agreement.

Concluding Remarks

The thirty years since the La Paz Agreement and the twenty years since the signing of NAFTA have seen considerable evolution in environmental management at the U.S.-Mexican border. The emergence of a formal U.S.-Mexico Border Environmental Program from the La Paz Agreement was significant as were the institutional developments that were produced by the NAFTA process. The acceptance by government agencies of participation by civil society in development of border environmental priorities and policies has been an important outcome of the La Paz and NAFTA processes. While the institutional and participatory progress has not been linear, it has been significant. The broad agreement on border environmental management and commitment of U.S. and Mexican as well as binational agencies to collaboration across the border is a major achievement. Collaboration across the border by stakeholders at all levels has grown and has survived the turbulence of shifting political priorities, the worst economic recession since the Great Depression, and the great security and insecurity problems of the border region.

Results of the institutional evolution and growing collaboration and public participation have also been impressive. Despite dynamic demographic, economic, and urban growth, U.S. and Mexican agencies and the binational agencies have been able to nearly eliminate the deficit of sewage collection and treatment and lack of access to potable water infrastructure. And, considerable progress has been made on other border environmental issues such as air quality, emergency response, and hazardous and solid waste.

This discussion of environmental management of the U.S.-Mexican border region also sheds light on the tension inherent in the federal systems of the United States and Mexico between local control and national imperatives. The implementation of the La Paz Agreement and its specific programs along with the impetus for environmental protection provided by the NAFTA process helped empower local border regions. The institutionalized transparency and public participation in environmental policy formulation – the bottom up approach – energized local communities and local

⁴⁴ Summit program, accessed on December 9, 2013: <http://www.sre.gob.mx/cilanorte/index.php/cumbre-binacional>

governments. U.S. federal agencies, primarily the U.S. Environmental Protection Agency, and to a lesser extent Mexican federal environmental agencies, developed a symbiotic relationship with border communities in terms of public participation. Despite the chilling effect of the border security policies imposed by the DHS and the U.S. Congress on reluctant U.S. border communities and uncomprehending Mexican border communities, community engagement remains ingrained among border stakeholders at the local level. The ongoing discussions in 2013 about binational watershed management illustrate that there has been a permanent shift toward inclusiveness in environmental policy making along the border.