

A Binational Planning Approach for the Development of the Tijuana River Watershed: Policy Options from Rhetoric to Action

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INTRODUCTION

The environmental future of the U.S.-Mexican border is uncertain. On the one hand, the border region continues to exhibit explosive growth, exerting ever increasing and more complex pressure on available resources. On the other hand, despite the numerous efforts from the academic, non-governmental and the government sectors of both the U.S. and Mexico, very little has been accomplished in terms of solid binational policy accords or the development of institutions to deal with the formidable problems facing the region. In this paper, we will examine what needs to be done, using the Tijuana River Watershed (TRW) as a case study. This paper will review and analyze the challenges and obstacles that are hampering or preventing transborder planning from taking place in the TRW. This paper will also consider the steps that are necessary to bring about effective transborder planning.

This work is organized into four sections. The first is a background discussion. The second reviews a sample of the academic evidence on the subject, and its major findings and conclusions. In the third section, we present the methodology and the results of a survey conducted on a sample of selected specialists. Finally, the paper presents analysis and conclusions.

PART ONE: BACKGROUND

In 2002, a binational team of researchers, government officials and agency representatives, and non-governmental and private sector representatives was assembled to develop a mutually acceptable vision for the TRW. One thousand seven hundred and fifty square miles (4,465 km²) in area, the TRW straddles the U.S.-Mexican border, with one-third in California and two-thirds in Baja California. The team, known as the Binational Watershed Advisory Council (BWAC), was convened to address a myriad of environmental challenges facing the TRW, due to uncontrolled urbanization and infrastructure deficits. The BWAC invited a diverse group of binational participants from all sectors of government and private industry to participate. The members of the council were asked to disregard personal goals and instead consider a collective vision for the TRW. The development of an integrated vision for the TRW included not only information and input from the BWAC members, but also engaged the participation of a multitude of stakeholders from the region. That way, the stakeholders' concerns, feedback and insights were addressed. The vision is a snapshot of the current and desired conditions in the TRW. The BWAC process has undoubtedly been an important step, yet there is much to accomplish before it can be considered true binational planning.

The most pressing issue that the BWAC must deal with is the San Diego-Tijuana region's colossal population and urban growth, as this growth contributes to the TRW's deterioration. The watershed is currently home to 1.4 million people and this figure is

expected to double in 15 to 20 years. Experts estimate that 90 percent of the land within the Municipality of Tijuana will eventually be developed. Tecate, a city east of Tijuana and south of the County of San Diego, is expected to see its industrial, commercial and residential sectors grow southward. The City of San Diego is projected to expand southeast. This southward expansion will be facilitated by new proposed border crossings: (from west to east) East Otay Mesa (Otay II), Tecate and Jacumba. There is concern that these three cities will merge into one megalopolis at the Otay corridor and choke off open space and wildlife corridors.

Continued population growth will only worsen existing problems. Among the problems caused by the increasing population and land use changes are:

- Decline in local groundwater quantity and further dependence on imported water
- Decline in quality of surface and groundwater for human use
- Increased erosion and flood dangers
- Increased air pollution
- Reduction in the amount of safe, open and green areas for urban residents
- Decline in ecosystem health
- Increasing numbers of threatened and endangered plants and animals

Water is a major concern for this arid region. Historically, the TRW discharged pristine waters into a healthy ocean and intact wetlands. As well, groundwater was the primary source of potable water for the San Diego-Tijuana region. Today, imported water from the Colorado River serves much of the area, and water demand is increasing with the population. Surface and groundwater are scarce in the TRW and the region only sees an average rainfall of 10 inches per year. Sewage runoff, fertilizers and pesticides also contaminate the TRW aquifers and surface water.

The Tijuana River flows into the Tijuana River Estuary in the United States and then into the Pacific Ocean. The water at the discharge point into the ocean contains some of the highest concentrations of suspended solids measured in Southern California. The water's pathogens, contaminants and pollutants can accumulate in people and animals and cause health problems.

The hilly topography of Tijuana and the unplanned squatter settlements on slopes produce significant erosion and flooding during the rainy season. Flooding will continue to be problematic because of: the expanding impermeable areas that increase the speed and volume of runoff, the lack of vegetation on hillsides that would slow water flow, the trash and sediment that clog stream channels and the inadequate municipal storm drainage system.

The TRW region is known internationally for the quantity and diversity of its flora and fauna species. Many endangered and threatened species live in the region: the bighorn sheep, the Arroyo toad and several avian species. There are also endangered/threatened vegetation communities, including coastal sage scrub and chaparral. Many of these plants

and animal species are migratory and use habitats on both sides of the international boundary.

Municipal waste disposal is inadequate in Baja California, which causes trash accumulations in rivers and creeks that is harmful to wildlife and pollutes surface and groundwater. Hazardous materials can also be found in the TRW, due to inadequate management of industrial waste, commercial waste, household waste and biological waste that are illegally dumped into the sewers or canyons. Proper treatment and disposal facilities for hazardous materials are not readily available in Baja California.

Additionally, vehicular congestion in urban areas and border crossings, heavy commercial trucking, dust from unpaved roads, landfill fires and industrial contamination all pollute the atmosphere.

The TRW enjoys cultural diversity and dynamic economic activity, which unfortunately also contributes to rapid population growth, accelerated industrialization and uncontrolled urbanization. These conditions are most apparent on the Mexican side of the international border, where the government does not have the resources to provide adequate urban infrastructure, affordable housing, parks and green areas, healthcare and education.

On the U.S. side of the border, San Diego's booming population, economic expansion and urbanization have caused habitat loss, fragmentation and a decrease in open space. Urban runoff and a poorly maintained basic sewage infrastructure have impaired the surface groundwater and marine waters of the TRW.

The BWAC vision document for the TRW has a number of recommendations for meeting the goals identified by stakeholders, including:

- Identify important conservation areas for restoration and rehabilitation based on ecosystem functions and threats
- Increase knowledge of the cultural characteristics of indigenous and other peoples of the watershed
- Protect sensitive habitat as well as cultural and historical areas
- Market sustainable tourism opportunities
- Undertake binational planning for floods
- Evaluate and protect groundwater supplies
- Develop and expand existing watershed education programs and products for children and adults
- Connect conservation areas across the border
- Expand water reuse
- Facilitate cross-border vehicular traffic flow and reduce impacts in adjacent communities
- Develop an integrated waste management systems with recycling components
- Implement a binational water quality monitoring system
- Develop point and non-point source water pollution prevention programs
- Create mechanisms for transborder watershed management

Some of the TRW vision document's recommendations require the development or strengthening of policies that address specific issues, others require nonexistent funding, while still others require intergovernmental and transborder coordination, cooperation and agreement unattainable at present. Unilateral policy changes will not protect or restore the watershed. Instead, mechanisms that facilitate cross-border collaboration and the development of binational policy must be created, so that stakeholders are no longer hampered by an international border that arbitrarily slices a watershed in half.

Binational planning can only go from rhetoric to action through an institutional vehicle that enables local governments on both sides of the U.S.-Mexican border to work together to develop solutions. Only the U.S. and Mexican federal governments can develop international agreements. However, it is these same governments that have not demonstrated much interest in binational planning for the U.S.-Mexican border region. Moreover, even if the two governments were to begin to work toward binational planning, their priorities are different. The U.S. focuses on immigration, stopping the flow of drugs from Mexico and terrorism, while Mexico focuses on public safety, unemployment, attracting investment and bringing urban infrastructure to marginalized communities. What, then, will it take for both federal governments to grant the attention and resources that are needed to resolve the environmental problems that affect the quality of life of the border residents?

PART TWO: BINATIONAL COLLABORATION ON THE U.S.-MEXICAN BORDER: THE ACADEMIC EVIDENCE

The academic communities of both the United States and Mexico have produced an inchoate desire for binational cooperation between people and government agencies in the U.S. and Mexico. There is ample data on the region's conditions, and the problems that arise from these conditions, both at the regional and local levels (Ganster and Sánchez, 1999; Ganster et al., 2000; Liverman et al., 2002; Institute for Regional Studies of the Californians [IRSC], 2005). Conditions typical of arid zones, such as limited and rather localized water supplies, characterize the border region. The concentration of urban growth and economic activities along the border has put much pressure on the natural resources base of the region, which has negatively impacted both urban and rural areas. Some of the resultant problems include: water contamination, over drafted groundwater resources, air pollution, unsustainable practices regarding solid and hazardous waste management, impacts on ecosystems, etc.

Other analyses deal with the growing concern over environmental crises in the border region, and methods to cope with them. The signing of the North American Free Trade Agreement (NAFTA) in 1993 sparked a boom of cross-border initiatives in all levels of government that were aimed at mitigating environmental degradation (Clough-Riquelme, 2006). Some works have extensively documented the evolution of these efforts and their impacts as examples of how to approach problems in the border region. One such work deals with governmental initiatives between the U.S. and Mexico. The passage of NAFTA was accompanied by the creation of two agencies, the Border Environment Cooperation Commission (BECC) and the North American Development Bank

(NADBank). Together, they created the platform for a totally new institutional context in which environmental management would proceed (Lara, 2000). A central theme of these institutions is they prioritize regional environmental concerns as well as encourage public participation and local involvement – features not found in existing binational institutions such as the International Boundary & Water Commission (IBWC).

Still another binational initiative was the implementation of the Border XXI/Frontera XXI Plan developed by the U.S. Environmental Protection Agency (EPA) and the Secretaría del Medio Ambiente y Recursos Naturales (SEMARNAT) in 1996, following the La Paz Agreement and the implementation of the Integrated Border Environmental Plan. The main feature of Border XXI/Frontera XXI is its focus on important local issues through the establishment of nine binational working groups: natural resources, information resources, environmental health, water, air, hazardous and solid waste, enforcement, pollution prevention and emergency response (Brown, 2003).

Through this environmental institutional landscape, local participants as well U.S. and Mexican federal government representatives were able to begin working jointly on binational environmental problems. While there has been criticism concerning the reactive rather than proactive nature of these initiatives, and although they have limited funding, they have provided much-needed visibility to binational environmental problems (Spalding, 2000). Border 2012, a modified version of Border XXI, offers a change of focus and more intensive participation of local and regional agencies, state governments and tribal governments (Brown, 2003). Still, the questions of the program's funding capacity persist.

Another dimension of cross-border collaboration is the development of regional initiatives, stemming mainly from non-governmental groups (Brown, 2003; Brown et al., 2003; Clough-Riquelme, 2006; IRSC, 2005; Castro et al., 2006). The emergence of “international environmental nongovernmental organizations” has paralleled the evolution of binational federal institutions (e.g. NAFTA), and has resulted in dialogue between Mexican and U.S. counterparts. This cross-border collaboration is centered mainly on the two largest urban areas in the border region – San Diego-Tijuana and El Paso-Juárez – although other regions are gaining importance. The adoption of transboundary watersheds as the bases for study by many of these efforts extended these initiatives to other regions. Aside from the Tijuana River Watershed, other groups formed in the 1990's, such as the Santa Cruz River Basin in Arizona and the Rio Grande/Río Bravo Basin Coalition (Brown, 2003).

Research done on transboundary cooperation networks found an important inter-organizational network in the San Diego-Tijuana region, including high-profile transboundary partnerships and significant cross-sector interactions (Lara, 2000). However, despite the progress that this binational collaboration has accomplished over the years, there are still challenges to be overcome. First, there is the need for changes in governance, so that the limitations of binational agencies or authorities – whose knowledge, autonomy and decision making powers may be inhibited by mandates or practice – can be transcended. Second, data sharing needs to be enhanced to assure

effective planning. Third, horizontal communication needs to be improved. Fourth, financing capacity must reflect the reality of the border needs (Clough-Riquelme, 2006).

Past research has rightfully focused on the hurdles – both at the conceptual and operative levels – that must be overcome before effective binational mechanisms can be devised, as well as the possible methods of scaling those hurdles. At a very abstract level, some researchers point to the existence of human barriers that need to be transcended before more sustainable development can take place along the border (Herzog, 2006). Such obstacles are: fear images (the international border fence, 9/11, prejudices, etc.); the ideology of consumption; the growth of the maquiladora industry and the effects it produces on the environment; the tourism-oriented business boom and its resulting environmental degradation; the social polarization of city dwellers and the effects on the poor; the “placelessness” of cities, that is, the fallout from the anarchic and chaotic postmodern urban structure; and the nature of the cities’ infrastructure on both sides of the border. Others identify the border region’s jurisdictional fragmentation and uneven development obstacles that stem from the economic, social, cultural and political differences between the two countries. The problems most frequently identified are poverty, social injustice, “growth machine politics,” mass consumption and environmental degradation (Pezzoli, 2006). Only a progressive approach to cross-border regionalism – one that is critical, open-minded and creatively constructive – can overcome these barriers.

Some authors advocate the concept of watershed councils (Consejos de Cuenca) as an innovative and efficient framework for approaching the common problems among binational watersheds (Brown and Mumme, 2000, Brown, 2003). The concept was introduced in Mexico’s Ley de Aguas Nacionales (Law of National Waters –LAN) of 1992 as the operative tool for implementing the precepts of the law within Mexican territory. Some of the binational collaborative experiences laid the ground for promising conceptual scenarios in which the functional reach of Consejos de Cuenca may be enhanced. However, because of the centralized nature of Mexican institutions, Mexico still possesses a number of socio-cultural and political barriers that would prevent binational watershed councils from becoming a reality. Alternative policy frameworks suggest the application of transparency principles for policymaking institutions to ensure community needs are met. Also, major changes to rules at the implementation and operational levels need to be made that would allow a greater number of people to participate in the water resources policy debate and have the opportunity to influence policy (Brown and Mumme, 2000).

The idea of a binational mechanism has been discussed by other researchers at the local/transboundary level (i.e. Ramos, 2006). However, many point to the challenge that a truly intergovernmental agenda imposes on the actors involved on each side of the border, particularly Mexican governmental actors. The Tijuana River Watershed and the processes developed to create the vision for it can be used to explore the barriers to establishing a transboundary mechanism of cooperation (IRSC, 2005; Castro et al., 2006). Some of the critical questions that need to be addressed are: a) How can the management capacity of local Mexican policy be improved? b) How can stakeholders

create interest in the U.S. for developing a transborder management mechanism? c) To what extent do Mexican environmental issues affect the quality of life for San Diego residents, governments and entrepreneurs? d) How can government inertia on both sides of the border be reduced?

The researchers highlight the need for the different levels of government of both countries to recognize the complexity of transboundary issues and their responsibility to find solutions for them. The researchers identify vision, leadership, drive, as well as technical and strategic capacity as the factors required to move forward with transborder planning. Finally, they point to the need to strengthen the management and policy making capabilities of Mexican government agencies at the local and state levels.

In 2006, the eighth Border Institute, an annual binational conference organized by the Southwest Consortium for Environmental Research and Policy (SCERP), convened a group of specialists to discuss methods for enhancing collaborative planning and operation of transboundary watersheds along the U.S.-Mexican border region. Many of the findings from the conference (see www.scerp.org) reflect the views described in this report.

The perspectives of the above researchers, led to the following points:

- Environmental conditions along the U.S.-Mexican border are critical.
- The critical environmental conditions along the U.S.-Mexican border are reflected in the deterioration of available natural resources, and ultimately in the quality of life for residents of the border region.
- While natural and geographical characteristics of the border region along with population growth and urbanization are reasons for the deterioration of the quality of life in the area, this deterioration is also due to the economic, social, cultural and political differences that persist between the U.S. and Mexico.
- In the 1990s, local and regional levels of government significantly increased their involvement in solving the problems affecting their communities.
- The evolution of a binational institutional framework was notable, even though it remained basically reactive rather than proactive in nature, and faced limitations on the areas covered and funding.
- Although the evolution of the binational institutional framework was considerable during this period, it lacked proactive efforts for prevention and planning and only reacted to existing problems. This framework continues to be limited in the scope of issues it covers and in funding, particularly on the Mexican side.
- There are a number of binational collaborative enterprises along the border, stemming mainly from non-governmental and academic groups, but these efforts have not transcended into formal binational organisms or planning efforts with the required involvement of governmental representatives.
- There are still barriers to creating a successful binational collaborative model, due in large part to the many differences that separate the U.S. and Mexico.
- Though the idea of the transboundary watershed is conceptually sound, the asymmetries between the two countries continue to inhibit the likelihood of truly binational collaboration.

Recommended Actions:

- Establish an ad-hoc model of governance, through existing binational authorities with the necessary leadership, autonomy and technical and decision-making capacity.
- Call upon the governmental actors in each country to acknowledge the importance and complexity of transboundary issues and their respective duties to act.
- Increase the dissemination of information and data-sharing to assure coordination and the attainment of goals in a context of binational collaborative planning.
- Strengthen local and regional capacity on the Mexican side of the border.
- Guarantee the availability of appropriate funding to ensure the success of projects undertaken on both sides of the border.

PART THREE: SURVEY AND ITS METHODOLOGY

A survey was developed to determine expert opinions on transborder planning and to determine the status of binational planning efforts that are already under way in the U.S.-Mexican border region. For the survey, a list of questions was developed to determine if formulas or institutions exist that would allow binational planning to take place in the U.S.-Mexican border region. In light of the objectives of this report and given that there is a vision document for the Tijuana River Watershed, the selection of participants for the survey needed to include representatives from the San Diego-Tijuana region, as well as others in the U.S.-Mexican border region with expertise in transboundary issues.

After careful consideration, 30 people from both the U.S. and Mexico were identified as appropriate individuals to respond to the survey. Some were government officials, others were academics and some were activists and representatives from the private sector. All had experience and a working knowledge of the U.S.-Mexican border and could add insight into the research. Of the 30 people contacted, 19 responded (Attachment A), nine were from the U.S. and ten were from Mexico. The interviews were done in person, by phone or by e-mail. The participants were asked the same four open-ended questions, which were designed as a guide to keep the answers focused on the U.S.-Mexican border region. If the interviewee was from the San Diego-Tijuana region, the questions were focused on San Diego and Tijuana and more particularly the Tijuana River Watershed. For participants outside the San Diego-Tijuana area, the questions were focused on the need for binational planning along the U.S.-Mexican border region. The questions were the following:

- 1) Do you think binational planning has advantages for the San Diego/Tijuana (U.S./Mexico) border region? If yes, why?
- 2) Why have we not been able to conduct binational planning up to now? What obstacles impede binational planning?
- 3) What needs to be done or what steps need to be taken for binational planning to take place between the San Diego/Tijuana (U.S./Mexico) border regions? What are the advantages?

4) What area along the U.S./Mexico border is the most suitable to begin a binational planning pilot program?

The responses were processed and analyzed in an effort to capture the varied responses and perspectives. In order to compare the similarities and differences in the responses, a matrix (Attachment B) was developed.

SURVEY RESPONSES

The analysis of the survey responses led to the development of a table that highlights the most important points (Attachment D), which were grouped according to their similarity. A discussion of the answers to the survey occurs below.

1) Do you think binational planning has advantages for the San Diego/Tijuana (U.S./Mexico) border region? If yes, why?

Answers to this question revolved around the concepts of cooperation, sharing and collectiveness and how these concepts could benefit the region. In the first place, the survey respondents inferred that cooperation makes sense. There are benefits attached to cooperation such as: economic advantages (cost effectiveness), capacity and trust building. Also, cooperation enhances strengths, and facilitates the identification of issues and priorities of mutual concern. Sharing plans and information can also collectively benefit the region. Finally, cooperation can allow stakeholders to focus holistically on the problems of the region so that integrated planning may be undertaken.

Another advantage that the respondents see in binational planning is the growth of funding opportunities. There is also the view that binational planning will drive the federal governments to commit to resolving environmental issues.

2) Why have we not been able to conduct binational planning up to now? What obstacles impede binational planning?

The views of the respondents in this section were very similar. Most respondents considered the differences between the U.S. and Mexico, as well as the intergovernmental dissimilarities of each country, as the primary reasons for the lack of binational planning. There was a general consensus that differences in political systems, language and cultural, as well as the stereotypes that U.S. and Mexican populations hold about each other, are major impediments to binational planning. Respondents also pointed to intergovernmental and international sovereignty issues, the lack of binational mechanisms or structures for planning, the absence of a mutual vision or agenda, the lack of political will and leadership, different priorities for each country, the lack of information sharing and a short term planning focus in Mexico. As for the California/Baja California region, the respondents pointed to a widespread, incorrect belief that Baja California is not that important to San Diego's economy.

Regarding intergovernmental differences, the respondents claimed that the U.S. and Mexican federal governments do not stress local border issues and federal funds and authority are deficient at the local levels.

3.) What needs to be done or what steps need to be taken for binational planning to take place between the San Diego/Tijuana (U.S./Mexico) border regions? What are the advantages?

These respondents identified the steps that are necessary to bring about binational planning and they stressed the importance of enhancing the federal governments' participation in binational planning. Mechanisms proposed included the formalization of Consejos de Cuencas for the transborder region. Others suggested building on existing binational models (i.e. BECC, Border XXI, BWAC, etc.) as an initial step. Still others recommended the need to assess the legal, political and institutional factors that limit or slow the creation of binational planning entities and processes. Also, respondents suggested that binational planning should be developed as a separate discipline.

At a more specific level, recommendations included the need to: build binational consensus with all stakeholders, recognizing common priority concerns, interests and benefits; create binational private/public partnerships; identify funding sources, including focusing on projects with funding already available; identify policy gaps; build capacity; and gather all information dispersed throughout universities. Furthermore, other proposals favored the implementation of pilot binational projects.

4.) What area along the U.S/Mexico border is the most suitable to begin a binational planning pilot program?

The consensus of the interviewees was that the San Diego-Tijuana region and more specifically the Tijuana River Watershed is the most suitable spot along the border for a binational planning pilot project. Among the reasons cited are the following: the nature of the TRW as a sub-watershed that is defined and that is at a manageable scale; work has been done on the TRW with emphasis on urban problems for both sides of the border; groups and actors within the region have experience with binational cooperation.

The answers also pointed to a number of advantages for the San Diego-Tijuana area, such as: the dynamics of the two cities, which do not exist anywhere else along the U.S.-Mexico border; its demographics (over 5 million people in the region); its identity as a manufacturing center; its diversity; its strong economy. A few respondents suggested other city-pairs with the potential for the implementation of a pilot project, such as El Paso-Juárez and Ambos Nogales.

Over all, the survey responses paralleled what the research indicates. Both refer to the importance of cooperation as the underlying basis for successful transborder planning. Concerns were voiced about the difficulty of working in different political, language and cultural systems. These are roadblocks that require patience, understanding and special attention to joint planning to move forward. And yet, the federal governments must be

involved from the very beginning of a binational planning project. There was a sense that watershed planning would be an excellent choice for such a project and the survey respondents and research suggest that the TRW is a superior candidate.

PART FOUR: CONCLUSIONS

In this paper, the authors used academic evidence to review the different perspectives on the impediments to implementing a transboundary planning agenda for the TRW. This paper also includes the ideas and recommendations of a select group of experts on U.S.-Mexican border issues for overcoming existing barriers to transboundary planning. Though this exercise is by no means conclusive, it provides a solid basis from which to draw some conclusions.

Both the reviewed literature and the survey responses demonstrate the continuous and impressive efforts of various societal and academia sectors, which should be acknowledged. These sectors have proposed and advanced new methods, both conceptual and operational, that can help create a workable transboundary collaboration framework. These sectors have also sparked exploration of and discussion about innovative solutions to the persistent barriers to binational planning at the border. Perhaps the most interesting similarity between the literature and the interview results (and an important point) was the consensus that transborder planning is vital for the sustainability of the U.S.-Mexican border region.

Furthermore, the work led the researchers to conclude that the differences – which may take many forms within federal, local and operative levels – between the U.S. and Mexico continue to prevent real transborder collaboration from taking place. Jurisdictional fragmentation within each country should be addressed through changes in governance so that the local and international barriers and obstacles that exist among the three levels of both countries' governments can be overcome. These proposed intergovernmental changes will impose great challenges to each country and will require vision, leadership and commitment from their officials. We can begin by:

- Bringing the federal governments into the discussions about what needs to be done to solve the border's environmental problems, especially transboundary problems.
- Building on existing binational models. One of the objectives of the TRW vision project was to assemble local and regional representatives from San Diego and Tijuana in order to increase communication.
- Continuing to reinforce opportunities to link the decision making process to local initiatives.
- Bringing together local and regional representatives who have concerns for the problems of their region.
- Promoting communication and information exchanges among all those involved in transboundary work (not merely academics).
- Raising funding for ongoing projects and related activities so that fundamental progress can take place on binational projects.

Policy will need to be developed or in some cases changed to deal with issues facing border communities, such as the environment, water management and urban development. There is a need for greater public education to make San Diego/Tijuana residents aware of their interdependence. Local governments must enhance their role in convincing and encouraging the federal governments in both Mexico City and Washington, D.C. to create systems that will hasten future agreements or vehicles for conducting transboundary planning.

Both the academic evidence and the survey results point to the need for data sharing. Much research is taking place in universities on transborder planning, but the information is not being sufficiently disseminated nor is it reaching decision makers. This important information needs a wider distribution to border communities to enhance and assure effective planning efforts.

At this time, decision makers move forward with recommendations, policy or projects without the benefit of the ideas and concepts of ongoing academic research on transborder planning. The lack of communication and exchange between researchers and decision makers under serves the regional planning process and creates risks for environmental harm to neighboring jurisdictions. Limited available funds can be used more effectively if decisions are based on regional priorities and not simply on the short-term goals of elected officials.

Lack of funding was an often-repeated concern in the academic publications and in the surveys. Although some might argue that funding is currently being provided through the work of the IBWC, Border 2012 and BECC, that work is not consistent with the long range, transboundary, comprehensive planning that is needed to manage transboundary watersheds in a sustainable manner. In fact, the work of these agencies, project by project, arguably adds to problems associated with piecemeal planning, which can hinder opportunities for broader, long-term planning.

The progress made by BWAC in developing the TRW vision document is far from sufficient. Further research is needed to determine the feasibility of a truly transboundary mechanism that would allow transborder planning with a watershed focus.

ATTACHMENTS

Attachment A-Survey Participants

Pete Silva
Metropolitan Water District

Jesse Hereford
Border Trade Alliance

Ronald Kramer
U.S. Consul General in Tijuana

Hector Vanegas
SANDAG

Mary Kelley

Environmental Defense Fund

Edgar Ruiz
State of California

Christopher Brown
University of New Mexico at Las Cruces

Lina Ojeda
Colegio de la Frontera Norte

Gonzalo Bravo
Border Environmental Cooperation Commission

Carlos Graisbord
Private Land Use Consultant

Carlos de la Parra
Colegio de la Frontera Norte

Carlos Rincón
EPA, Region 6

Mario Díaz
CESPT

Emilio de la Fuente
Environmental Engineer

Ismael Aguilar
Instituto Tecnológico de Monterrey

Virgilio Munoz
Public Policy Consultant

Sergio Pena
University of Texas at El Paso

José Maria Ramos
Colegio de la Frontera Norte

Francisco Lara
Arizona State University

Attachment B-Survey Responses

Question	Main responses
Do you think binational planning represents advantages for the San	<ul style="list-style-type: none">• It creates benefits for both sides of the border and all actors involved• Economic competitiveness requires sister cities to work together

<p>Diego/Tijuana region? If so, why?</p>	<ul style="list-style-type: none"> • Information is not complete when it stops at the border • Binational planning will help identify funds necessary for building infrastructure • It helps eliminate piecemeal planning • Management of shared resources demands cooperation • Progress in cooperation is needed at a regional/watershed level • Binational planning is a matter of economics and quality of life issues • Improving infrastructure and preventing pollution on the border can bring benefits to the region • If we are not planning binationally then we are not accomplishing the things that can be accomplished • Economic and physical issues can be resolved if we look at the S.D/Tijuana area as a single region with a shared vision • Cross-border agreements can be reached between agencies, even if you start the process informally • Joint planning for one region is less expensive than for two separate planning processes and more can be done in a shorter amount of time • If issues and priorities of mutual concern can be identified, then there is a basis for resolving them • Binational planning processes help build capacity and identify strengths, resources and opportunities that would otherwise not be recognized • It helps build trust • Sharing a binational watershed and natural resources requires sharing plans • Hydraulic and hydrological or environmental issues are as worthy of international agreements as trade and immigration issues • SANDAG is moving toward binational planning with the Otay Mesa/Mesa de Otay Corridor plan under way
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<p>Why have we not been able to do binational planning up to now? What obstacles impede binational planning?</p>	<ul style="list-style-type: none"> • Different political systems-Mexico has a centralized form of government • Mexican “municipios” find it difficult to generate the needed revenue • Planning is a local issue for U.S. cities and counties while in Mexico, because it is a border area, the federal government has jurisdiction • Local communities in Mexico cannot interfere in decisions that have an international impact. • Lack of attention from federal governments to local issues • Natural resources issues can bring about sovereignty concerns for Mexico • Neither Washington D.C. nor Mexico City have
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	<p>shown concern for the border region</p> <ul style="list-style-type: none"> • Difficulties of working with the three levels of government from both the U.S. and Mexico • Ongoing political changes make long term planning difficult • Elected officials have a short term approach to decision making • Lack of long term planning or planning in general • Urban planning is new for Tijuana (10 years) while in San Diego it has been in use for many years • There are no formal binational mechanisms and structures available for planning • Lack of initiatives, leadership and political will by public officials for participating in binational meetings • Many public officials do not value or recognize the importance of binational planning • Asymmetry is a challenge and problems and priorities are different, which can polarize interests • Fragmented knowledge about the regions common issues • Language barriers and cultural differences • Lack of funding sources for implementation of a planning processes • Anti-Gringo sentiment in Mexico and negative attitudes against Mexico in San Diego • Mexico does not like to ask for help • San Diego lacks knowledge of Baja California's importance to its economy • Much talk about binational planning but in reality each community is only interested in solving its own concerns • There is no mutual vision or agenda • Lack of coordination between private and public efforts
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<p>What steps need to be taken for binational planning to become a reality along the U.S./Mexico border?</p>	<ul style="list-style-type: none"> • Build consensus for the development of an integrated long-term vision by working with regional planning organizations-SANDAG, IMPLAN and the federal governments through the Border Liaison Mechanisms • Seek federal government participation to ensure buy-in and success • Use existing agencies as examples-BECC, NADBank, IBWC and their sister agencies in Mexico and/or create a new transborder entity if necessary • Include stakeholders from both the U.S. and
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	<p>Mexico from the beginning and use established networks to disseminate information</p> <ul style="list-style-type: none"> • Evaluate the legal, political, institutional and cross-border feasibility of creating a Joint Advisory Committee for Water Management between Tijuana and San Diego under the La Paz Agreement • Establish a conceptual framework for cross-border collaboration • Binational planning should be treated as an issue in itself and not as part of a larger planning processes • Evaluate the political will of the Mexican Federal Government for adopting a binational focus on the issue of water • Formalize a the Consejo de Cuenca, an entity recognized under Mexican Law for the Mexican part of the watershed, and have that be the basis for establishing a binational entity; this would bring to the table federal and state decision makers and government recognition and resources • Seek strong political leadership • Identify issues where both the U.S. and Mexico will benefit, where San Diego and Tijuana have shared problems, such as polluted beaches, Estuary, etc. • Identify a single common priority and conduct a pilot project • Conduct planning issue by issue • Ensure priorities are addressed for all parties and try to find coincidences between the diverse interests so that they can be linked to social priorities. • Focus on issues where funding is available and choose projects that make a difference • Identify policy gaps and develop policy options for both the U.S. and Mexico in relation to the priorities identified • Identify capacity building needs • Identify and gather all available information using universities as partners • Use the vision to develop a business plan that includes strategies that will unite, not polarize, and develop a time table • Use a goal oriented approach, be pragmatic, create private/public partnerships • Increase knowledge and raise awareness among San Diego residents about the importance of Tijuana to the region • Develop a publicity campaign to promote the image of a single region and to encourage a sense of belonging for people on both sides of the border. • Learn how to use Border Security as an advantage and not as an obstacle
	<p>San Diego/Tijuana region and more particularly the</p>

<p>What area along the U.S./Mexico border would be the most suitable for binational planning?</p>	<p>Tijuana River Watershed is the most suitable area along the border for a binational planning pilot project to take place. The major reasons for this are:</p> <ul style="list-style-type: none"> • It is a defined sub-watershed • Its scale is manageable • Work has been done on the watershed with emphasis on urban problems for both sides • There is existing binational cooperation on the TRW <p>Advantages of the San Diego/Tijuana area:</p> <ul style="list-style-type: none"> • Population • Manufacturing center • Diversity • Strong economies • Tourism dollars • Demographics-over 5 million people in the region • Dynamics of the two cities that do not exist anywhere else along the U.S.-Mexican border
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