



## **International Boundary and Water Commission United States and Mexico United States Section**

### A Message to Stakeholders:

I am pleased to share with you the Strategic Plan of the United States Section, International Boundary and Water Commission (U.S. Section). The Plan will serve as a blueprint to be followed in developing a vital, highly competent organization dedicated to achieving its challenging mission. The U.S. Section Strategic Plan is in consonance with the results-oriented government accountability efforts of the Administration and Congress, to include provisions of the Government Performance and Results Act of 1993. Our commitment through strategic planning is not only to conform with the law but also to the spirit of improving program performance and being accountable to our stakeholders.

Significant effort has been invested in developing the Strategic Plan. However, the document presented in the following pages merely represents one major phase of a continuous circular process of program evaluation, adjustments, and reporting. Of utmost importance is the vital relationship between the Strategic Plan and all substantive decisions made by the U.S. Section staff. The underlying goal is to align our strategic planning efforts with the budget process and performance-oriented measures. We will measure our success in achieving accountability through the development and implementation of performance plans and reports.

The U.S. Section's Strategic Plan reflects a practical emphasis on issues and opportunities that are aligned directly with our unique mission. I am confident that our Strategic Plan provides the necessary framework not only for planning our future, but creating our future.

C. W. "Bill" Ruth  
U.S. Commissioner

**International Boundary and Water Commission  
United States and Mexico  
United States Section**



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**Strategic Plan  
FY 2008 - FY 2013**

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**Boundary  
Preservation**



**Water  
Conveyance**



**Water  
Quality**



**Resource  
and Asset  
Management**

Initial Approval: April 2008  
Revised: December 2008

## ***Vision***

Through binational partnerships with Mexico, preserve the international boundary and improve the quality, conservation, and utilization of transboundary water resources in the border region.

## ***Mission***

Provide binational solutions to issues that arise during the application of United States – Mexico treaties regarding boundary demarcation, national ownership of waters, sanitation, water quality, and flood control in the border region.



## ***Strategic Goals:***

Strategic Goal 1: Boundary Preservation

Strategic Goal 2: Water Conveyance

Strategic Goal 3: Water Quality

Strategic Goal 4: Resource & Asset Management

# **TABLE OF CONTENTS**

ABOUT THE INTERNATIONAL BOUNDARY AND WATER COMMISSION .....	1
History .....	1
Organizational Values .....	10
Stakeholders .....	11
THE STRATEGIC PLANNING PROCESS .....	12
Internal Assessment.....	12
External Forces.....	13
Distinctive Competencies.....	14
Strategic Planning Execution .....	15
STRATEGIC GOALS AND OBJECTIVES .....	16
Strategic Goal 1 – Boundary Preservation.....	16
Strategic Objective 1.1: Boundary Demarcation .....	17
Strategic Objective 1.2: River Boundary Preservation.....	18
Strategic Objective 1.3: River Boundary Mapping .....	19
Strategic Goal 2 – Water Conveyance.....	20
Strategic Objective 2.1: Accounting of Rio Grande and Colorado River Waters.....	21
Strategic Objective 2.2: Flood Control .....	22
Strategic Objective 2.3: Safe Operation of Dams .....	23
Strategic Objective 2.4: Hydroelectric Power Generation.....	25
Strategic Objective 2.5: Drainage & Irrigation Structures .....	26
Strategic Objective 2.6: Water Conveyance Support and Facilities .....	27
Strategic Goal 3 – Water Quality Management.....	28
Strategic Objective 3.1: Water Quality of Boundary and Transboundary Rivers.....	30
Strategic Objective 3.2: Wastewater Treatment .....	32
Strategic Objective 3.3: Water Quality Support and Facilities .....	33
Strategic Goal 4 – Resource and Asset Management.....	34
Strategic Objective 4.1: President’s Management Agenda .....	36
Strategic Objective 4.2: General and Administrative Requirements.....	37
Strategic Objective 4.3: Diplomatic Affairs.....	38
Strategic Objective 4.4: Compliance and Legal Requirements .....	39
APPENDIX.....	40
Organizational Structure .....	40
Description of Abbreviations and Acronyms .....	41

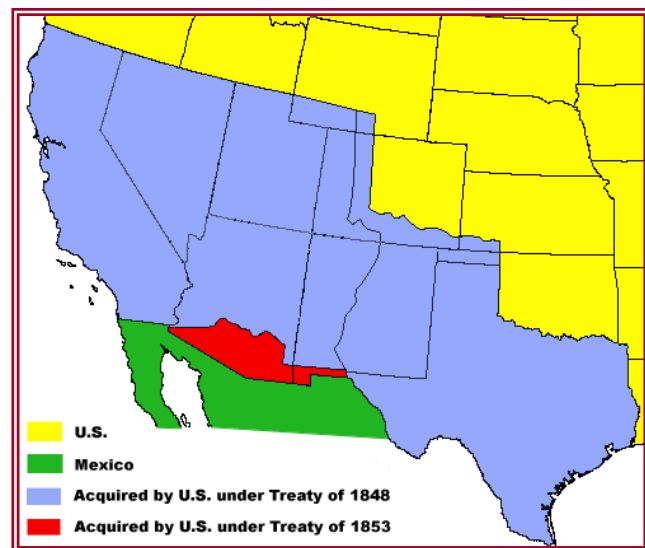
## ABOUT THE INTERNATIONAL BOUNDARY AND WATER COMMISSION

The International Boundary and Water Commission (IBWC) is a binational organization, established to apply boundary and water treaties and agreements between the United States (U.S.) and Mexico. The IBWC consists of a U.S. Section and a Mexican Section. Each Section is administered independently of the other, and is headed by an Engineer Commissioner, who is appointed by his respective President. The U.S. Section receives foreign policy guidance from the U.S. Department of State, while the Mexican Section is administratively linked to the Secretariat of Foreign Relations of Mexico.

The U.S. and Mexican Sections maintain their respective headquarters in the adjoining cities of El Paso, Texas and Ciudad Juárez, Chihuahua. Each Section is responsible for maintaining its own legal counsel, engineering staff, and administrative staff, and has field offices situated along the border to operate and maintain joint works. The Commissioner, two principal engineers, a legal adviser, and a secretary, designated by each Government as members of its Section, are entitled to the privileges and immunities appertaining to diplomatic officers. The Commission meets on a regular basis, alternating the place of meetings, and the staffs of the two Sections are in frequent contact. Pursuant to the 1944 Treaty, decisions of the IBWC are recorded in the form of Minutes that, following approval by the U.S. and Mexican governments, enter into force as binding international agreements of the U.S and Mexico.

## HISTORY

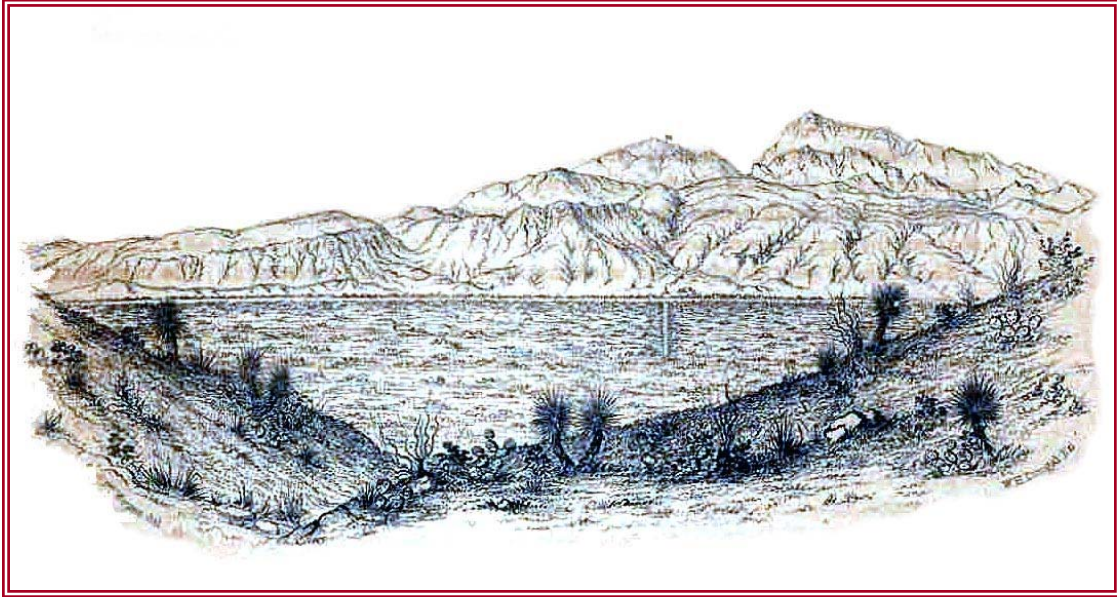
The IBWC traces its roots to the Guadalupe Hidalgo Treaty of 1848 and the Gadsden Treaty of 1853. The *Guadalupe Hidalgo Treaty of February 2, 1848* ended the Mexican-American War and provided for a new international boundary. The resulting boundary extended east in a straight line from the California coast, south of the port of San Diego, to and along the Gila River, and east along the Rio Grande to the Gulf of Mexico. However, disputes over the boundary lingered and a proposal for a southern railroad south of the Gila River added to the turmoil. Therefore, in 1853 the U.S., represented by James Gadsden, negotiated and acquired the necessary land from Mexico for \$10 million U.S. dollars. Known as the Gadsden Purchase, the *Treaty of December 30, 1853* redefined the U.S. – Mexico boundary further south along New Mexico and Arizona to current location.



### Historic U.S. – Mexico Boundaries

*This map illustrates the land that the U.S. acquired from Mexico as a result of the Guadalupe Hidalgo Treaty of 1848 (blue), and the Gadsden Treaty of 1853 (red).*

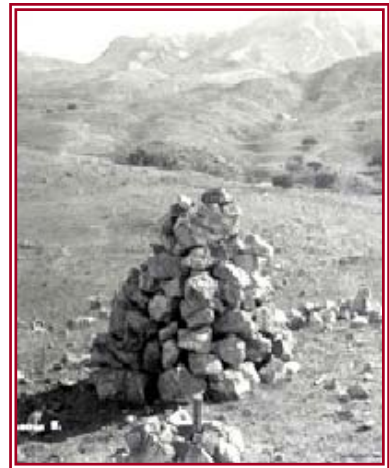
Joint Commissions, which were precursors of the IBWC, were temporarily established by the U.S. and Mexico between 1849 and 1857 to survey, map, and demarcate with ground landmarks the new boundary concluded under the 1948 and 1853 Treaties. Under the direction of U.S. Commissioners John Bartlett and William Emory, borderline surveys and demarcation efforts were initiated in 1849 and concluded in 1855. The resulting set of boundary survey maps were completed in 1857.



**Sketch of Territory acquired by the Treaty of 1853**

*View of the initial point on the Rio Grande, looking west along the boundary line on parallel 31° 47' N latitude. The flag on the mountain and the boundary monument, situated on the west bank of the Rio Grande, indicate the boundary line west of the Rio Grande.*

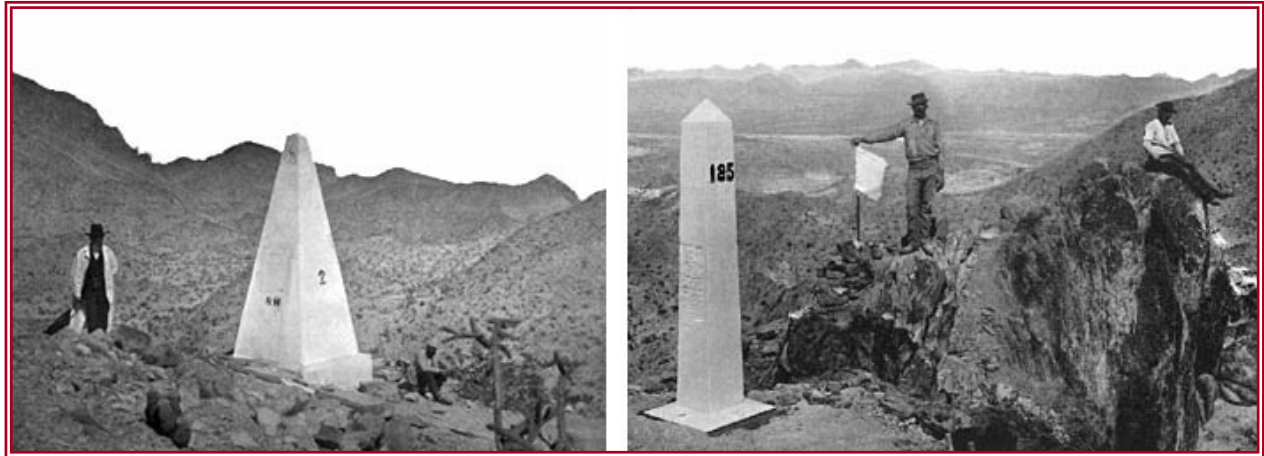
As the settlements grew along the Rio Grande and Colorado River in the late 1800's, settlers began developing adjoining lands for agriculture. In the late Nineteenth Century, questions arose as to the location of the boundary and the jurisdiction of lands when the boundary rivers changed their course and transferred land from one side of the river to the other. Therefore the U.S. and Mexico adopted certain rules designated to deal with these river boundary issues during the Convention of November 12, 1884. To apply the rules of this 1884 Convention, the two countries formed a temporary joint commission. An interim International Boundary Commission (IBC), consisting of a U.S. Section and a Mexican Section, was created by the Convention of March 1, 1889.



**Old Monument No. 16**

*Stone Monument built in the early 1850's to mark the U.S. – Mexico border.*

between the boundary monuments coupled with the occasional destruction of a monument made it difficult to determine the physical location of the international border. To resolve this problem, U.S. Commissioner John W. Barlow and Mexican Commissioner Jacobo Blanco embarked on a quest to resurvey and demarcate the western boundary. The survey started at the El Paso, Texas – Ciudad Juárez, Chihuahua border in 1891 and concluded at the San Diego, California – Tijuana, Baja California border in 1894. During this survey, IBC crews reconstructed old monuments and erected new ones; thus increasing the number of monuments from 52 to 258.



#### **Western Land Boundary Monuments**

*Stone and iron monuments were erected during the resurvey expedition in the early 1890's to demarcate the international boundary. Monument No. 2 (left), composed of stone, was set at the summit of the Muler Mountains known today as Mount Christo Rey, in Sunland Park, New Mexico adjacent to El Paso, Texas. Monument No. 185, made of iron, was placed on a high, rough peak of the Tule Mountains in southwestern Arizona.*

As border populations increased between the years of 1906 and 1968, the Commission constructed 18 additional boundary monuments for a total of 276. The IBWC later erected 442 smaller concrete markers to enhance demarcation along the western boundary from 1976 to 1986.

In the year 1900, both Governments agreed to make the interim IBC a permanent binational entity by indefinitely extending its existence under the Convention of November 21, 1900. It is this 1889 IBC that is considered to be the direct predecessor to the modern day IBWC. The International Boundary Commission was renamed to the International Boundary and Water Commission in 1944

During the early to mid 1900's as border populations increased, the IBC was faced with more challenges. These challenges included the equitable and efficient distribution of Rio Grande and Colorado River waters between the U.S. and Mexico, Rio Grande flood control and channel stabilization, and border sanitation.

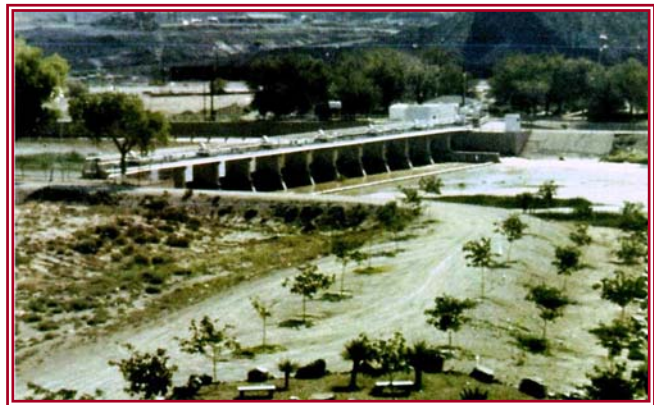
Historically, the Rio Grande was a meandering stream carrying heavy sediment loads through and below the El Paso – Juárez Valley. Channel aggrading occurred due to the flat gradient and low flow velocities, and during flood flows a new channel often formed on lower ground. In the late 1920's, the IBC formulated plans to rectify the Rio Grande and stabilize the boundary line between El Paso, Texas and Little Box Canyon in such a manner that the total areas to be cut from each country were equal. The IBC constructed the rectified Rio Grande channel with necessary grade control works and within a leveed floodway from 1934 to 1938. Thirty years later, the IBWC relocated and concrete-lined 4.35 miles of the Rio Grande channel to resolve a century old boundary dispute, known as the Chamizal Dispute, at El Paso, Texas - Ciudad Juárez, Chihuahua.



#### **Rio Grande Rectification**

*Photo showing the rectification of the Rio Grande along the El Paso – Ciudad Juárez Valley in 1938 for the purpose of stabilizing the U.S. – Mexico boundary.*

The U.S. Section of the IBC built the American Diversion Dam and Canal immediately upstream of the Rio Grande boundary in El Paso, Texas from 1937 to 1938. The purpose of this project was to separate Rio Grande waters allocated to the U.S. from those allocated to Mexico in the El Paso – Juárez Valley. To convey these waters more efficiently and protect U.S. lands from Rio Grande floods, the U.S. Section constructed the Rio Grande Canalization Project. This project provided for a normal-flow, rectified river channel within a leveed floodway from Percha Diversion Dam, located two miles downstream of Caballo Storage Dam, to American Diversion Dam during 1938 to 1943.



#### **American Diversion Dam**

*View of American Diversion Dam in El Paso, Texas, which diverts Rio Grande waters allocated to the U.S. under the Convention of 1906.*

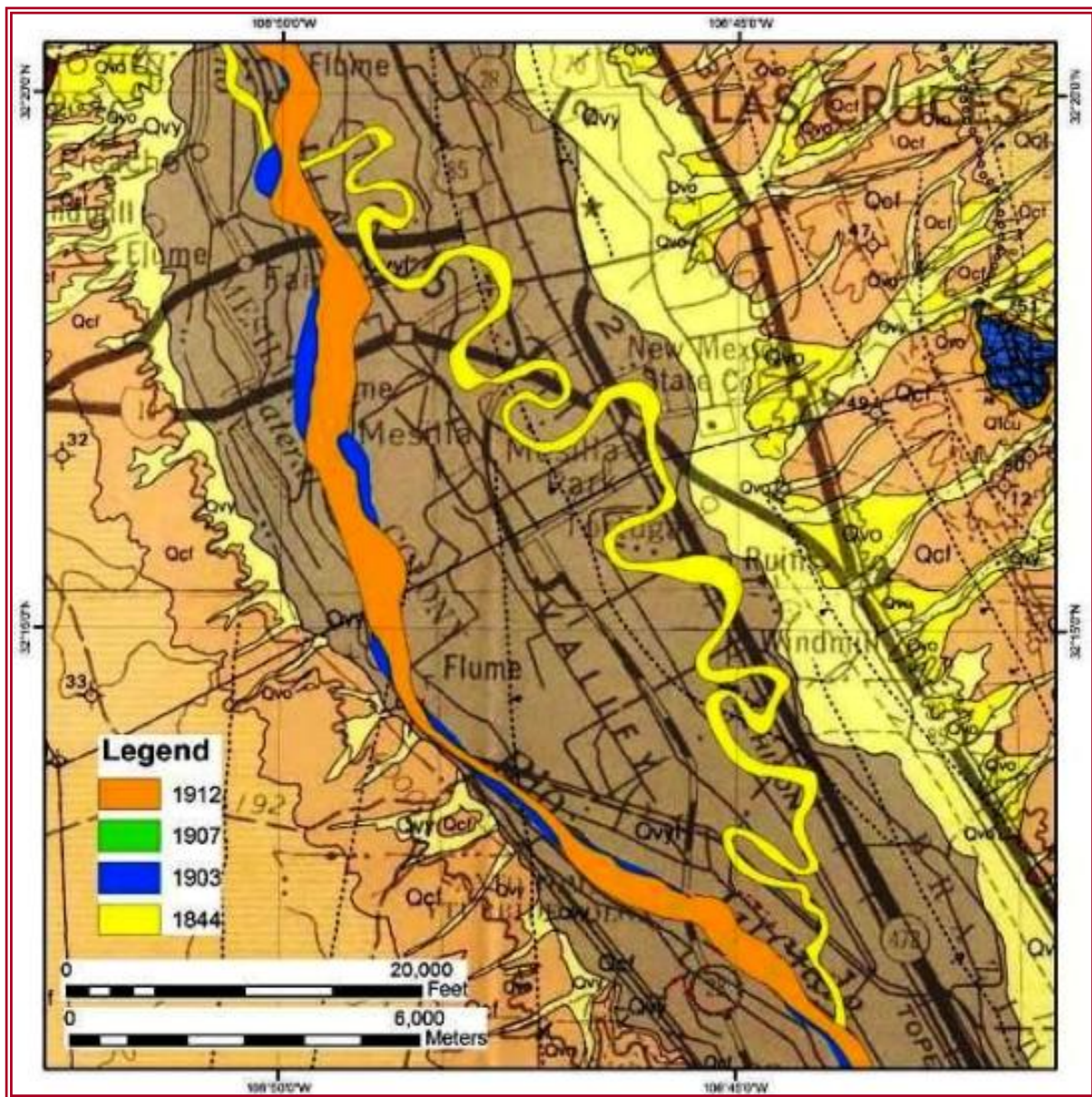




**Resolution of the Chamizal Boundary Dispute**

*Territory returned to Mexico, in accordance with the Convention of 1963, by relocation of the Rio Grande was relocated northward.*

Two decades later, the IBWC relocated a section of the Rio Grande in El Paso, Texas – Ciudad Juárez, Chihuahua to resolve a century old boundary dispute with Mexico. This dispute, known as the Chamizal Dispute, arose when the Rio Grande moved southward, causing Mexico to lose territory in the 1860's. To resolve this issue, the IBWC constructed the Chamizal Project from 1966 to 1969 and returned 437 acres of territory to Mexico. Through this project, the agency relocated and stabilized 4.35 miles of the Rio Grande channel near Cordova Island. It also extended the flood control levees upstream from Cordova Island to immediately below American Dam to protect U.S. lands from river floods.



***Historical courses of the Rio Grande in the Mesilla Valley***

The historical courses of the Rio Grande, prior to its “straightening” during the Canalization Project from 1938 to 1943, are shown on this geology map. Note the smaller size of river channel between the 1844 course and later channels.

The U.S. and Mexican Governments directed the IBC in 1930 to address the flood control problems in the Lower Rio Grande Valley located in far south Texas. As a result, the IBC extended, raised, and straightened levees of the Rio Grande and its interior floodways in 1933. The IBWC later constructed Anzalduas Diversion Dam between 1956 and 1960 to allow for controlled diversion of floodwaters into the U.S. interior floodway. However, the 1958 flood demonstrated that certain improvements to the system were needed, so the IBWC raised some levee reaches and extended the river levee eight miles upstream to Peñitas, Texas from 1958 to 1961. Unfortunately, Hurricane Beulah struck the region in 1967, devastating the Lower Rio Grande watershed with up to 35 inches of rain and causing major damage in both the U.S. and Mexico. The IBWC quickly responded by performing emergency repairs to the flood control system in 1968 and 1969. Soon thereafter in September 1970, the two Governments agreed to further increase the flood conveyance capacity of the system from 187,000 cfs to 250,000 cfs at the head of the valley. Beginning in 1970, the IBWC completed all the necessary flood control improvements by 1977; including levee raising, interior floodway modifications, and construction of Retamal Diversion Dam.

During the 1940's, the Commission conducted joint studies and investigations to determine the most feasible sites for the construction of major international reservoirs and hydroelectric power plants on the Rio Grande. Construction of international storage dams and power plants would provide flood control, water conservation, recreational, and electrical power benefits to both countries. Since the U.S. and Mexico concluded that two such combinations on the Rio Grande would be feasible, the IBWC proceeded with the construction of the Falcon and Amistad International Storage Dams and Power Plants. The Falcon International Storage Dam and Power Plant was built in 1950 to 1954. Unlike Falcon, the Amistad project was constructed in two separate phases. The storage dam and reservoir was built in 1963 to 1969, and the U.S. and Mexican power plant facilities were constructed from 1980 and 1987.



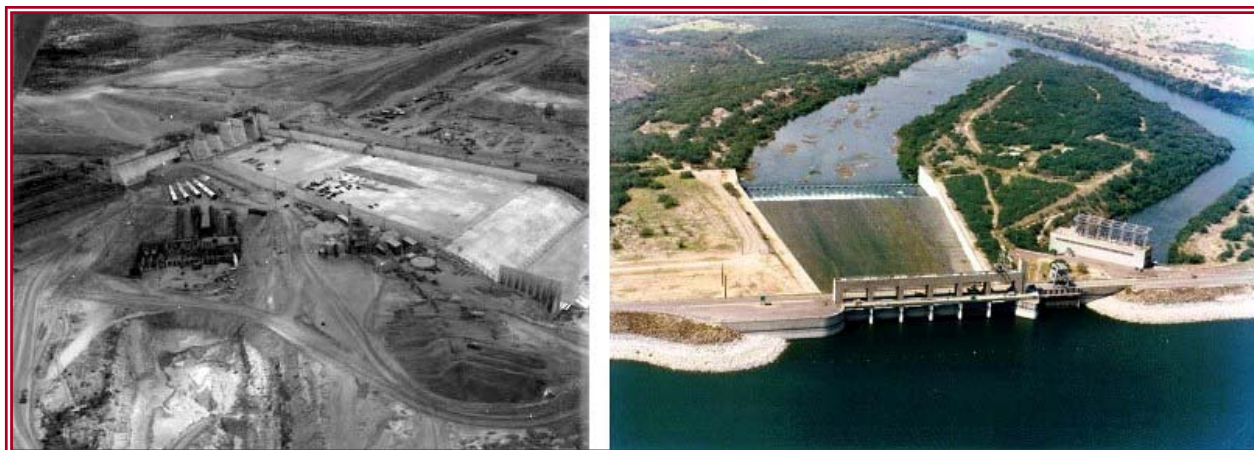
**Lower Rio Grande U.S. Main Floodway**

*Construction of the south levee along the Main Floodway in the Lower Rio Grande Valley of south Texas during 1934*



**Hurricane Beulah Flooding**

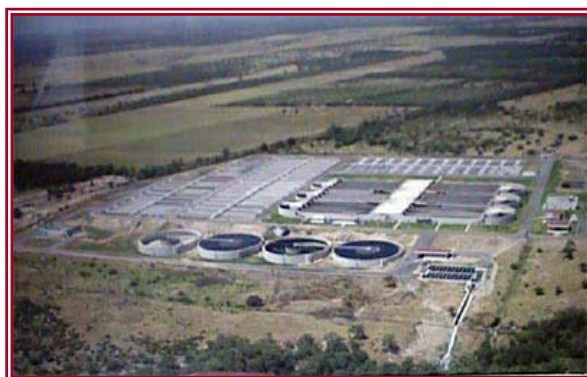
*Aerial photograph of a flooded community in Harlingen, Texas after Hurricane Beulah hit the Lower Rio Grande Valley in 1967. Note that only the rooftops were visible.*



**Falcon International Storage Dam and Hydroelectric Power Plant**

*Falcon International Dam and the U.S. power plant during construction in 1952 (left), and in operation thirty-nine years later in 1993 (right). The storage dam and power plants provide water conservation, flood protection, power production, and recreational benefits to both the U.S. and Mexico. (Mexican power plant is not shown.)*

The U.S. and Mexico, through the IBWC, have worked together to address sanitation issues and improve the environment along the international boundary. Since the 1930's, the IBWC has jointly developed and implemented defensive sanitary works at various locations along the border. The most notable IBWC accomplishments include the construction and operation of three international wastewater treatment plants and related infrastructure on the border region to treat sewage from Mexico. The IBWC built the original Nogales International Wastewater Treatment Plant (NIWTP) at Nogales, Arizona in 1951. The IBWC operated this facility until it constructed, jointly with the City of Nogales, a larger secondary sewage treatment plant outside of the city limits in 1972, to treat both U.S. and Mexican wastewater. Also during the 1990's, the IBWC constructed the Nuevo Laredo International Wastewater Treatment Plant (NLIWTP) at Nuevo Laredo, Tamaulipas, Mexico, and the South Bay International Wastewater Treatment Plant (SBIWTP) at San Diego, California. Construction of the NLIWTP, which began in 1992, was substantially completed and placed into operation 1996. The IBWC started construction of the SBIWTP in 1993, and completed the advanced primary wastewater treatment facilities in 1997. However, wastewater treatment and effluent discharge operations did not commence until completion of the South Bay Ocean Outfall (SBOO) in 1999.



**Nuevo Laredo Int'l Wastewater Treatment Plant**

*This plant, with a capacity of 31 million gallons per day, treats Mexican sewage that would otherwise pollute the Rio Grande to U.S. secondary standards.*

The IBWC is charged with applying the rights and obligations that the Governments of the U.S. and Mexico assume under various boundary and water treaties and agreements, and to settle disputes that arise in the application of these agreements. The IBWC is committed to exercising this authority in an environmentally sound manner that benefits the social and economic welfare of both countries, and improves U.S. – Mexico relations. The IBWC is entrusted with the responsibility of diplomatically addressing boundary preservation, accounting of the national ownership of transboundary surface waters, border sanitation and water quality problems, and affording flood control protection to millions of people on both sides of the 1,952-mile U.S. – Mexico border. This is accomplished through the joint construction, operation, and maintenance of four flood control systems (Tijuana River, Upper Rio Grande, Presidio Valley, and Lower Rio Grande) with approximately 500 miles of levees in the U.S. alone, five diversion dams (Morelos, International, American, Anzalduas, and Retamal), two international storage dams and hydroelectric power plants (Amistad and Falcon), three international wastewater treatment plants (South Bay, Nogales, and Nuevo Laredo), and over 700 monuments and markers to demarcate the land boundary.



**1944 Treaty Signing**

*Signing of the 1944 Treaty in Washington, DC on February 3, 1944. U.S. Secretary of State Cordell Hull, seated at the center, is signing the Treaty. Mexican Foreign Relations Secretary F. Castillo Najera is seated to his right.*



**1970 Treaty Signing**

*Signing of the 1970 Treaty in Mexico City on November 23, 1970. Signing the Treaty are U.S. Ambassador Robert H. McBride (left) and Mexican Secretary of Foreign Affairs Antonio Carrillo Flores (right).*

## ORGANIZATIONAL VALUES

The following organizational values represent what the U.S. Section will strive for as an operating philosophy. All personnel, regardless of position, share these values. All decisions rendered to achieve the agency's mission will be in consonance with these values identified below.

### **People**

- Respect individuals and appreciate their contributions.
- Understand and embrace cultural diversity.
- Encourage employee innovation and expression of ideas.
- Maintain open communication channels.
- Demonstrate concern for individuals and their equitable treatment.
- Provide equal opportunities to each employee to achieve his or her potential.

### **Performance**

- Use human, physical, and financial resources efficiently.
- Balance and evaluate the needs of all stakeholders.
- Take innovative approaches to anticipating, investigating, and resolving binational technical issues.

### **Process**

- Encourage teamwork and nurture interdependency.
- Encourage participation, innovation, creativity, and responsible risk-taking.
- Ensure actions are consistent with the agency vision and mission.
- Ensure actions are consistent with applicable laws and regulations.
- Recognize quality achievements.

## STAKEHOLDERS

Identification of the U.S. Section's stakeholders represents the agency's recognition of their interests, expectations, and role in the mission. Those individuals and entities having a vested interest in the U.S. Section's mission include the following:

- **Border residents** and property owners are the ultimate beneficiary of the agency's boundary demarcation and water resource operations, projects and initiatives.
- **Water utilities**, municipal and industrial water users.
- **Farmers and irrigators**, who utilize river waters for agricultural uses.
- **Congress** provides legislation and financial resources for the U.S. Section to carry out its mission.
- **The Executive Administration and Department of State** provide policy guidance, and budgetary and diplomatic support for U.S. Section to carry out its mission.
- **The Mexican Section** is the Mexican component of the IBWC, which jointly addresses binational water, sanitation, and boundary issues.
- **U.S. Section employees** carry out mission activities and participate in resolution of technical transboundary problems.
- **State and local agencies** mutually interested in transboundary resource management issues.
- **Other federal agencies** with a mutual interest in border sanitation, water resource management, and other border related issues with whom the U.S. Section forms beneficial partnerships.
- **Business groups** interested in promoting trade, infrastructure and projects that benefit the border region.
- **Academic, environmental**, and other nongovernmental organizations interested in transboundary resource management issues.

## THE STRATEGIC PLANNING PROCESS

### INTERNAL ASSESSMENT

The U.S. Section has undergone a self-assessment of its organizational structure, including policies and responsibilities, as a result of new leadership and policy guidance from the White House and the Department of State. The agency is currently modifying and adapting new policies and procedures to improve employee motivation and production. This is a necessary component of strategic planning. The agency's goal is to achieve a culture that has the following characteristics:

- Employees recognize that they are making meaningful contributions to the agency's mission.
- Management encourages and provides assignments that enable employees to interact with co-workers, partners, and stakeholders.
- Employees are allowed to plan and carry out their work independently and in interdependent work teams, with managers available to provide support and technical assistance as necessary.
- Lines of communication are channeled upward, downward, and laterally.
- Opportunities are created for personnel to learn and grow on the job and advance to positions of higher authority.

In FY 2004, the U.S. Section underwent a major reorganization. The intent of the reorganization was to increase the organizational efficiency of the agency by combining functions and reducing staff. Although the move resulted in reduced costs, the new organizational structure and staffing levels diminished the agency's overall effectiveness. In addition, implementation of new policies adversely impacted employee morale, and further diminished productivity and work quality. The U.S. Section was unable to address all of its requirements and obligations in an effective and timely manner.

Under the direction of newly appointed Commissioner Carlos Marin and support from the U.S. Department of State and the White House, the U.S. Section conducted a preliminary self-evaluation of its organizational structure in late FY 2005. As a result, the U.S. Section revised policies, reorganized its structure and staffing priorities, and reestablished key functions, roles, and responsibilities to better enable it to fulfill its mission. To properly address compelling requirements, the agency competitively filled vacancies of key positions on a one-year term with existing staff in FY 2006. The following year, the U.S. Section externally advertised and filled all key positions on a permanent basis. In late FY 2007, the Commissioner Marin and executive management conducted a follow-up evaluation to identify agency weaknesses and deficiencies. As a result, the Commissioner modified the organizational structure to improve agency performance and effectiveness toward meeting mission goals and obligations.



## EXTERNAL FORCES

The U.S. Section must recognize and evaluate political, economic, societal, and technological forces and trends that may affect agency operations. An effective monitoring of external forces and trends should help identify not only emerging opportunities and threats, but also the organization's strengths and weaknesses for meeting these opportunities and threats. The following major forces have a potential or real impact on the agency's mission:

- Transformation of the border economy from an agricultural to a mixed economy consisting of agriculture, industry, and tourism.
- Increased border region populations contribute to additional challenges to resolve:
- Increased water pollution and a lack of necessary transboundary wastewater treatment infrastructure.
- Increased utilization and depletion of scarce transboundary water resources (surface water and groundwater) and its implications for the bilateral relationship with Mexico.
- Redistribution of water resources from agricultural uses to municipal and industrial uses.
- Aging flood control infrastructure(s) that help secure the health, safety and well being of border communities.
- Increased border traffic due to the North American Free Trade Agreement.
- Increased security of IBWC critical infrastructure (storage dams, treatment plants, etc.) in a post 9-11 world.
- Advancement of Homeland Security initiatives, including border fencing, lighting, and other improved border security and surveillance measures.
- Safety and welfare of field employees as a result of more aggressive contraband trafficking.
- Establishment of innovative partnerships with other federal, state, or local entities with similar goals and objectives.
- Prioritization and utilization of limited financial resources to address mission goals.

## DISTINCTIVE COMPETENCIES

Distinctive competencies are those qualities or attributes possessed by the U.S. Section and its personnel that distinguish it from other agencies. The following distinctive competencies give the U.S. Section its strategic advantage.

**History:** The agency enjoys a long and proud tradition of effectively combining skillful diplomatic practice with sound science-based engineering solutions to resolve highly sensitive binational boundary and water issues and to develop, construct and operate joint projects on the U.S. – Mexico border.

**Treaty-based Authorities:** For over a hundred years, the U.S. and Mexico have relied on the IBWC to develop and apply various boundary and water treaties along the 1,952-mile border, and to settle differences arising from their application. Through the “Minute” mechanism, the U.S. Section and Mexican Section have the ability to develop international agreements that, following the approval of the two governments, become legally binding agreements between the U.S. and Mexico. In addition, the two Sections have the authority to apply treaty provisions under the general policy guidance of their respective Foreign Ministries – the U.S. Department of State and the Mexican Secretariat of Foreign Relations. The Commissioner, Principal Engineers, Secretary, and Legal Advisor of each Section are accorded diplomatic status. IBWC personnel involved in the construction, operation or maintenance of works provided for by treaty are permitted to pass freely between countries to gain access to the works without any immigration restrictions, passports or labor requirements. In addition, all materials, implements, equipment and repair parts intended for such works shall be exempt from taxes relating to imports and exports.

**Status:** The U.S. and Mexican Sections of the IBWC are federal agencies of their respective governments; when acting jointly they form an international organization as recognized by the International Organizational Immunities Act (22 USC 288).

**Skilled Workforce:** The U.S. Section is staffed with professional, technical, and support personnel possessing specialized knowledge and skills including, but not limited to, civil and electrical engineering, environmental science, hydrology, information technology, foreign affairs, international law, procurement, human capital, logistics, financial management, and operations and maintenance. The U.S. Section is a small agency with a diplomatic mission possessing many of the professional skills of most large entities. Such knowledge and skills are required to develop binational technical solutions to unique transboundary resource problems.

## STRATEGIC PLANNING EXECUTION

The strategic goals and objectives were developed through an implementation process involving agency supervisory and non-supervisory personnel at all levels. The designated strategic planning analyst researched and coordinated with staff and managers to draft specific strategic tactics for achieving mission goals and objectives. Once draft goals and objectives were developed, they were provided to the Commissioner, executive staff, and employees for review and discussion.

A basic approach was utilized to update the agency's vision, mission, strategic goals, and strategic objectives. First, all U.S. Section authorities, responsibilities, and requirements were identified and evaluated. Goals and objectives were then developed based on current and projected priorities, and the direction the agency intends to take over the next 5 to 6 years. The Commissioner and executive staff provided their recommended revisions to the draft set of goals and objectives, and recommendations for development of the Strategic Plan. The revised plan then was made available to U.S. Section employees for their review. All comments were considered, and valid input was incorporated into the final draft. Thereafter, Commissioner Marin performed a final review and granted approval of the strategic plan. Subsequent reviews and updates of the strategic plan will be coordinated through management on an annual basis.

The strategic plan will explain the agency's history, purpose, underlying authorities, and requirements. It provides an updated set of goals and objectives, as well as related performance goals to measure achievement of the objective.

At least one performance goal is required to measure the achievement of a strategic objective. Performance goals and measures are outcome-oriented to the greatest extent possible. Accomplishment of the four strategic goals is predicated on the following factors, some of which may be outside of the U.S. Section's control: adequate funding of projects through direct congressional appropriations and/or grants from other sources such as the Environmental Protection Agency, the State of Texas, and local governments; consistency with foreign policy guidance of the Department of State; support from the Mexican Section, and the ability to garner support from other federal, state, and local governments and organizations in addressing transboundary technical issues.

The Strategic Plan is closely linked to the agency's budget process, as required by Office of Management and Budget (OMB) Circular A-11, Preparation, Submission and Execution of the Budget. It is of critical importance in the agency's effort to become a performance-based organization that is accountable to its stakeholders. As such, operational tactics will continue to be developed for each of the strategic objectives and incorporated directly into each fiscal year's performance plan along with outcome-oriented performance measures.

The agency's progress in meeting its performance measures will be documented in annual performance reports in compliance with the Government Performance and Results Act of 1993. Changes in the agency's budget structure will be in consonance with the Strategic Plan in order to achieve an eventual Strategic Plan/budget alignment. The annual performance plan will reflect a course of action designed to close the gap. Factors beyond the agency's span of control, including external driving factors (political, economic, societal, technological, industrial, or competitive influences), will be taken into consideration when reporting progress in meeting performance measures.

## STRATEGIC GOALS AND OBJECTIVES

### STRATEGIC GOAL 1 – BOUNDARY PRESERVATION

**Preserve the U.S. – Mexico boundary, through binational cooperation, in accordance with international agreements.**

The 1848 Treaty of Guadalupe Hidalgo, which ended the Mexican – American War, and the 1853 Gadsden Treaty established the international boundary between the U.S. and Mexico. In addition, both Conventions established temporary joint Commissions to designate and demarcate the boundary line with ground landmarks. A binational survey and demarcation effort undertaken from 1849 to 1855 established the land boundary with 52 obelisk and stone mound monuments between the Pacific Ocean and the Rio Grande. The International Boundary Commission was established under the Convention of 1889 to apply the rules adopted under an 1884 Convention for resolving boundary issues resulting from the meandering of the Rio Grande and the Colorado River. It was made a permanent body in 1900. Pursuant to the 1882 Convention that addressed the land boundary, the Barlow – Blanco Survey resurveyed the borderline from 1891 to 1894 and increased the number of boundary monuments from 52 to 258. Later, as border populations increased during the 1900's, the Commission installed 18 additional boundary monuments for a total of 276.

The 1944 Treaty expanded the jurisdiction and responsibilities of the Commission and allocated the waters of the Rio Grande from Fort Quitman, Texas to the Gulf of Mexico and the Colorado River. The Convention of 1933 rectified the Rio Grande channel and provided a new river boundary between El Paso, Texas and Fort Quitman, Texas. The Chamizal Convention of 1963 relocated approximately 4.35 miles of the Rio Grande boundary to resolve boundary issues resulting from the southward movement of the river in the El Paso, Texas – Ciudad Juárez, Chihuahua Valley from 1852 to 1895. The 1970 Treaty, which superseded the 1884 Convention, resolved all pending boundary differences between the two countries, and provided for maintaining the Rio Grande and the Colorado River as the international boundary by authorizing works to protect against bank erosion. The 1970 Treaty also provided procedures to avoid the loss of territory by either country incident to future changes in a river's course.

IBWC Minute No. 244, signed in December 1973, provided for a permanent maintenance program for boundary monuments. Later in July 1975, IBWC Minute No. 249 concluded the boundary monumentation program by providing for smaller, intermediate concrete markers to be placed to better demarcate the international boundary. Records indicate that 442 markers were erected, mostly around areas experiencing population growth. IBWC Minute No. 302 in December 1999 provided for enhanced boundary demarcation at border ports of entry.

The 1970 Treaty mandated the delineation of the international boundary on maps or aerial mosaic photos for the Rio Grande and Colorado River Boundary. It also established the frequency to update these maps at intervals not greater than 10 years. IBWC Minute No. 278, dated March 1989, jointly approved the current boundary maps developed from photographic surveys conducted in 1982 and 1983.

## Strategic Objective 1.1: Boundary Demarcation

Maintain and restore monuments, markers, plaques, and buoys that demarcate the U.S. – Mexico boundary at border ports of entry, international reservoirs, and on the land boundary in accordance with international agreements.



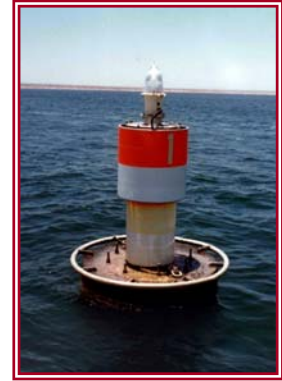
### **Monument Restoration**

*U.S. Section employee is preparing Land Boundary Monument No. 117 for repainting.*



### **Boundary Demarcation**

*The IBWC maintains all demarcation plaques and markers to identify the international boundary at all U.S. – Mexico ports of entry.*



### **Amistad Buoy No. 1**

*IBWC uses buoys to identify the jurisdictional borderline at Amistad International Reservoir.*

### **Strategy for Objective 1.1**

The U.S. Section will conduct inspections to identify deficiencies and provide corrective measures for each boundary monument and marker in accordance with IBWC Minutes No. 244 and 249. The agency will develop and implement restoration plans for all U.S. – maintained land boundary monuments and markers every ten years. The U.S. Section, together with the Mexican Section, will resurvey all boundary monuments and intermediate markers to establish their precise geographic coordinates. The U.S. Section will perform the necessary maintenance on all boundary demarcation plaques and replace missing pavement markers at all border ports of entry where it is responsible for this maintenance in accordance with IBWC Minute No. 302. The U.S. Section will continue to inspect and maintain the buoys and markers, which identify the jurisdictional line at Amistad and Falcon international reservoirs, in accordance with IBWC Minutes Nos. 202 and 235. The Commission will also determine the precise geographic coordinates of these the buoys and markers.

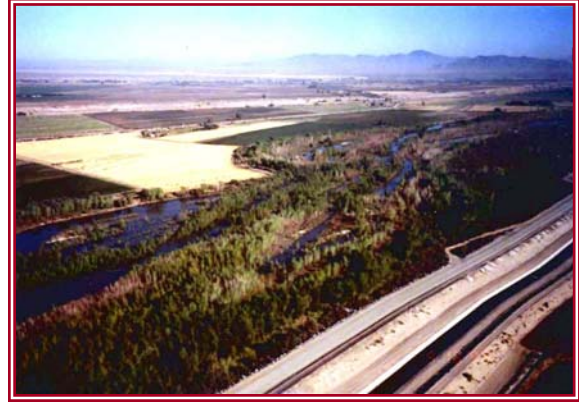
## Strategic Objective 1.2: River Boundary Preservation

Maintain and preserve the Rio Grande and Colorado River as the international boundary in accordance with the 1970 Treaty between the U.S. and Mexico.



**Rio Grande Boundary**

*View of the Rio Grande Boundary at Big Bend National Park in west Texas.*



**Colorado River Boundary**

*View of the Colorado River Boundary down-stream of Morelos Diversion Dam in Arizona.*

### Strategy for Objective 1.2

The U.S. Section will work with the Mexican Section to minimize and resolve problems brought about by changes in the course of the Rio Grande and/or Colorado River. The Colorado River boundary is 24 miles long, while the Rio Grande boundary is 1254 miles in length. In an effort to prevent shifting of the river boundary, the Commission will prohibit construction of works that may obstruct or deflect river flows. The U.S. Section will carry out the required channel and floodway maintenance, such as sediment removal and vegetation clearing, to sustain the course of the boundary rivers. The agency may also build and maintain works to stabilize and preserve the character of the limitrophe channel and protect the riverbank against erosion.

In the event the Rio Grande or the Colorado River changes course and/or separates a tract of land from its territory, the IBWC will apply the 1970 Treaty. Under the provisions of this Treaty, the Commission has the right to restore or rectify a boundary channel that has changed course, if it so desires. Thus, the U.S. Section will work closely with the Mexican Section to resolve all river boundary issues in an effective and timely manner.

## Strategic Objective 1.3: River Boundary Mapping

Develop and produce updated mosaic maps that delineate the Rio Grande and Colorado River boundaries in accordance with treaty provisions and minutes.



### **Boundary Mosaic Map No. 1 of 111**

*Map delineating the Rio Grande boundary, produced from aerial photographs in 1983 and 1984, approved by the U.S. and Mexican Commissioners in March 1989.*

### **Strategy for Objective 1.3**

The U.S. Section, in close consultation with the Mexican Section, will develop updated mosaic maps for approval by both Commissioners as stipulated in the 1970 Treaty. The agency will utilize Geographic Information System (GIS) technology to develop these maps, which will delineate the Rio Grande and Colorado River boundary and include key landmark features. The U.S. Section will plan and execute the necessary efforts to update the boundary maps as required by the 1970 Treaty. IBWC Minute No. 278, dated March 1989, jointly approved the current boundary maps developed from photographic surveys conducted in 1982 and 1983.

## STRATEGIC GOAL 2 – WATER CONVEYANCE

**Provide flood protection to U.S. residents and ensure the efficient conveyance, utilization, and accurate accounting of boundary and transboundary river waters through the operation and maintenance of flood control structures, dams, reservoirs, power plants, and gaging stations in accordance with domestic law and international agreements.**

The Convention of 1906 provided for the distribution of Rio Grande waters between the U.S. and Mexico in the international segment of the river from El Paso to Fort Quitman, Texas. Barring extraordinary drought or serious accident to the U.S. irrigation system, the U.S. agreed to deliver 60,000 acre-feet of water annually to Mexico at the Acequia Madre head works, adjacent to the International Dam in El Paso, Texas. To facilitate compliance with the 1906 Convention, the U.S. Congress passed the Acts of August 29, 1935 and June 4, 1936. The 1935 Act provided for the construction and operation of the American Dam and Canal for the purpose of diverting U.S. waters and releasing Mexican waters. The 1936 Act shortened the Rio Grande to reduce the conveyance losses of irrigation waters by straightening the channel between Caballo Storage Dam and American Dam.

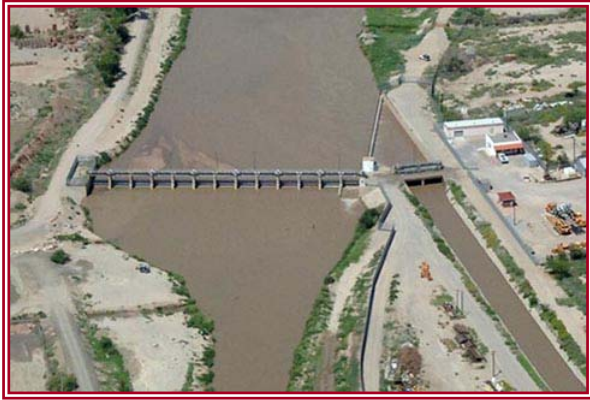
The 1944 Treaty distributed the waters of the Colorado River, and the Rio Grande from Fort Quitman to the Gulf of Mexico. Under this Treaty, the U.S. was allotted all waters from the Pecos River, Devils River, and five other U.S. tributaries reaching the Rio Grande, as well as one-third of the flow reaching the Rio Grande from the Conchos River and five other named Mexican tributaries, provided that this third is not less than 1,750,000 acre-feet over a 5-year cycle (annual average of 350,000 acre-feet). The Treaty further provided one-half of the flows of the Rio Grande below the lowest storage dam, and one-half of the flows from the unmeasured tributaries to the U.S. In regards to the Colorado River, the U.S. agreed to provide an annual volume of 1,500,000 acre-feet to Mexico, unless extraordinary drought or accident to the irrigation system in the U.S. make it difficult to deliver the guaranteed quantity. In years of surplus waters in excess of the amount necessary to supply uses in the U.S., the Treaty guarantees up to an additional 200,000 acre-feet to Mexico. The distribution of Tijuana River waters was not concluded between the two countries in the 1944 Treaty, but was to be subject to the study and investigation of the IBWC.

The Convention of 1933 not only provided for rectification of the Rio Grande, but also entrusted the IBWC with the construction, operation, and maintenance of river structures and flood control levees between El Paso and Fort Quitman. The 1944 Treaty and subsequent IBWC Minutes authorized the U.S. and Mexico to construct, operate and maintain works for storage and conveyance of water, flood control, and stream gaging on the Tijuana and Colorado Rivers, and on the Rio Grande from Fort Quitman to the Gulf of Mexico. In addition, the treaty authorized the joint construction, operation, and maintenance of up to three large storage dams and hydroelectric power plants on the Rio Grande, two of which have been built. The 1970 Treaty requires the IBWC to maintain the conveyance of established normal flows and design flood flows by prohibiting obstructions within the international segments of the Rio Grande and Colorado River.



## Strategic Objective 2.1: Accounting of Rio Grande and Colorado River Waters

Ensure the allocation of Rio Grande and Colorado River waters, including the accurate measurement and accounting of these waters, in accordance with the 1906 Convention and the 1944 Treaty.



### **American Diversion Dam**

*American Diversion Dam and Canal, completed in 1938, divert and convey Rio Grande waters allocated to the U.S. under the Convention of 1906.*



### **Rio Grande Gaging Station**

*Gaging station below American Dam that monitors Rio Grande waters delivered to Mexico under the Convention of 1906.*

### **Strategy for Objective 2.1**

The U.S. Section will work diligently with the Mexican Section and U.S. Bureau of Reclamation to ensure that Rio Grande and Colorado River waters are allocated and delivered between both countries in accordance with the Convention of 1906 and the 1944 Treaty. The agency will also strive to resolve any issues in a fair and diplomatic manner.

The U.S. Section will regularly operate and maintain all hydrologic gaging stations and telemetry system equipment used to collect, measure, transmit, compile, and account for the allocation of Rio Grande and Colorado River waters between the U.S. and Mexico. Both Sections will continue to exchange hydrologic data and computations with each other to verify and ensure accuracy. The U.S. Section will coordinate regularly with the Mexican Section to review basin conditions and determine strategies for treaty compliance.

## Strategic Objective 2.2: Flood Control

Improve and maintain the capacity and structural integrity of U.S. Section flood control systems to ensure the conveyance of design flood flows in accordance with the domestic law, treaties, and applicable IBWC minutes.



**Upper Rio Grande Levee Improvements**

*Raising of the U.S. Rio Grande levee in El Paso, Texas by U.S. Section personnel in July 2007.*



**Lower Rio Grande Levee Improvements**

*Raising of the U.S. Rio Grande levee upstream of Brownsville, Texas by U.S. Section personnel in March 2008.*

### Strategy for Objective 2.2

The U.S. Section will maintain its flood control levees, floodplains, and channels to ensure proper conveyance of river waters within the established flood control parameters. Levee maintenance will consist of grading, spot repairs, and resurfacing. The U.S. Section will maintain its floodplains and channels through mowing and sediment removal activities. The agency will acquire the necessary permits and environmental documentation prior to commencing any of the silt removal activities. Targeted silt removal areas include: upstream and downstream of Morelos Dam in the Colorado River, upstream of Retamal Dam in the Lower Rio Grande, and areas with heavy sedimentation in the Upper Rio Grande, including the Chamizal concrete-lined segment and at arroyo confluences.

The U.S. Section has conducted a preliminary economic benefits analysis and a condition assessment of its three Rio Grande Flood Control Systems – Upper Rio Grande, Presidio Valley, and Lower Rio Grande. Flood control studies identified levee segments having structurally deficient embankments and/or foundations, as well as segments with inadequate capacity to convey established flood flows. Deficient levee segments, which warrant improvement, will be improved in order of priority. A long-range plan for design and construction of the necessary flood control improvements along the Rio Grande, including environmental enhancements, will be prepared and implemented. Construction of these improvements and environmental enhancements will be staggered among the out-years to accommodate annual resource levels.

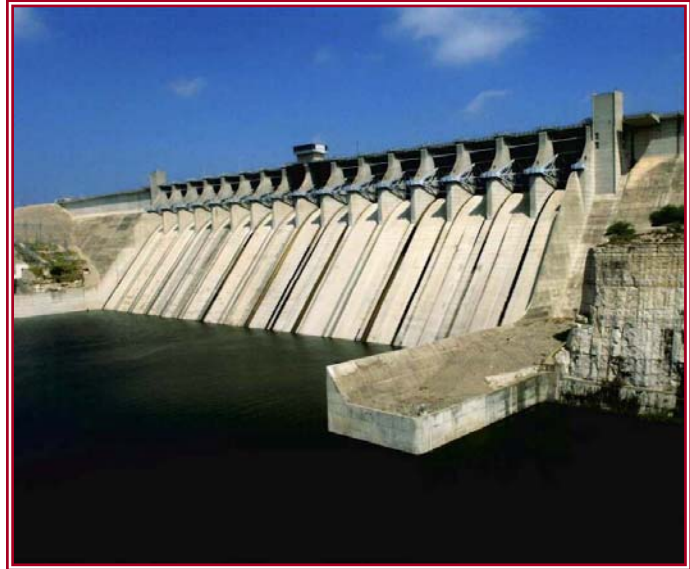
## Strategic Objective 2.3: Safe Operation of Dams

Operate and maintain IBWC dams in a safe and efficient manner for compliance with the Federal Guidelines for Dam Safety, and enhance security for protection of the international dams in accordance with the Critical Infrastructure Protection Framework Agreement between the U.S. and Mexico.



**Falcon Storage Dam**

*IBWC staff conducting maintenance activities. Spillway gates are being sandblasted prior to painting.*



**Amistad Storage Dam**

*View of the spillway of Amistad International Storage Dam, located on the Rio Grande in Del Rio, Texas.*

### Strategy for Objective 2.3

To sustain a safe operating environment, the agency will conduct regular mechanical, electrical, and structural inspections of its dams and related structures. Some parameters will be inspected on a weekly basis, while others on a monthly basis. The U.S. Section will produce annual safety inspection reports to document and summarize inspection findings and corrective actions.

In accordance with the Federal Guidelines for Dam Safety, the U.S. Section will also conduct five-year inspections of all its dams with a binational panel of experts, the Joint Technical Advisors, to identify structural and safety deficiencies. Inspections of five international dams are performed jointly with Mexico, whereas the inspection of American Dam is conducted solely by the U.S. After each five-year safety inspection, the U.S. Section will develop a plan to correct deficiencies identified on the Joint Inspection Report. Corrective actions for deficiencies related to international dams will be administered in accordance with the 1944 Treaty and IBWC Minutes specific to the deficient structures. The agency will assess the potential risk factors and correct noted deficiencies in risk-based priority order.

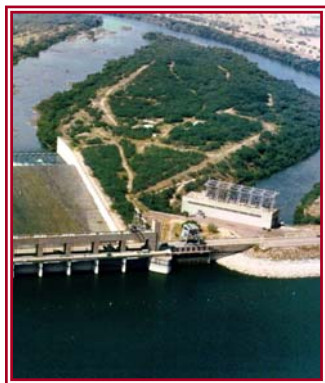
The U.S. Section will collaborate with the Mexican Section to comply with the Critical Infrastructure Protection Framework Agreement between the U.S. and Mexico. Both Sections

will work together to protect their shared critical infrastructure against terror attacks. This will be accomplished by conducting joint annual security assessments and developing strategies to secure all international diversion and storage dams. Given that American Dam is entirely in the U.S., the security inspection of American Dam will be conducted by the U.S. Section only.

In addition, the IBWC will conduct silt surveys every ten years to determine the reservoir capacities at Amistad and Falcon International Storage Dams. The Mexican Section will perform the survey at one reservoir, and the U.S. Section at the other. Both countries alternate reservoirs for each subsequent survey.

## Strategic Objective 2.4: Hydroelectric Power Generation

Operate and maintain IBWC hydroelectric power plants in a safe and efficient manner, and improve security at the power plants in accordance with the Critical Infrastructure Protection Framework Agreement between the U.S. and Mexico.



**Falcon Power Plant**

*View of Falcon International Dam and the U.S. Power House.*



**U.S. Powerhouse**

*Falcon power station that houses the turbines and generators.*



**Turbines and Generators**

*Three vertical-shaft turbines, each directly connected to synchronous generators inside the powerhouse.*

### Strategy for Objective 2.4

The U.S. Section will operate the U.S. power plants at Amistad and Falcon International Storage Dams in accordance with IBWC Minute Nos. 202 and 210. The agency will regularly inspect and maintain these power plants to sustain reliable operations. Maintenance and repairs will be performed on a timely basis. The U.S. Section will also closely coordinate operations with the Mexican Section to ensure equal power generation by both countries each year.

To ensure fair and equitable power utilization between both countries, the Commission will develop a new IBWC Minute for equal generation and distribution of power during peak demand periods. In an effort to improve power efficiency, the agency will regularly conduct evaluations of its power plant equipment and operations. The agency will strive to develop and implement strategies that can improve power efficiency and output at the power plants.

The U.S. Section has an obligation to protect its critical infrastructure against vandalism or terrorist attacks. The agency will also conduct security assessments to identify vulnerabilities at the power plants. The U.S. Section will address these vulnerabilities by implementing countermeasures at the plants to improve security.

## Strategic Objective 2.5: Drainage & Irrigation Structures

Operate, maintain, and improve drainage and irrigation structures to ensure control and conveyance of water for irrigation and flood control purposes.



**American Canal**

*The American Canal conveys the Rio Grande waters allocated to the U.S. under the 1906 Convention for agricultural and municipal uses.*



**Rio Grande Wasteway at Mesilla**

*Gated structure operated to release surplus irrigation waters and contain Rio Grande flood flows within the flood control system.*

### Strategy for Objective 2.5

The U.S. Section will maintain and improve its irrigation and drainage structures to ensure reliable operations for the conveyance of Rio Grande waters. Irrigation structures will be operated to convey Rio Grande waters, allotted to the U.S. in the 1906 and 1944 Treaties, to U.S. stakeholders for agricultural, industrial, and municipal uses. Drainage structures will be operated to convey unused irrigation waters and runoff to the river. However, drainage structures will be closed off during Rio Grande flood events to prevent flooding along adjacent lands and contain the floodwaters within the flood control system.

## Strategic Objective 2.6: Water Conveyance Support and Facilities

Manage, secure, operate, and maintain all administrative and indirect field office resources and assets utilized to support water conveyance operations and initiatives in an efficient and effective manner.



**Heavy Mobile Equipment**

*Repair & maintenance of heavy equipment used in support of water conveyance operations.*



**Anzalduas Administration & Maintenance Building**

*Building replacing old, unsafe, dilapidated facilities, to sustain the administrative & maintenance functions of the field office in support of water conveyance activities & initiatives.*

### Strategy for Objective 2.6

The U.S. Section will maintain its field office facilities and other assets in optimal condition by performing inspections, repairs, maintenance, and improvements in support of water conveyance activities. This will increase the life and reliability of field office assets, and avoid adverse operational issues. The agency will also conduct annual security assessments and develop strategies to address security vulnerabilities and secure critical infrastructure. The U.S. Section will furnish its field office personnel with protective gear and safety equipment, as required, to perform required tasks. Field office personnel will also assist the Asset Management Office to maintain inventories of agency property at field office locations.

Administrative staff will assist the field office managers in performing the administrative duties at field offices. To maximize performance, the agency will properly train and equip its personnel with the necessary tools to accomplish all administrative functions in support of agency operations. Administrative staff will perform the following functions:

- Preparation, distribution and filing of documents and other correspondence;
- Preparation of purchase requests and processing of receiving reports for ordering of supplies, equipment, and other services;
- Entry of employees' time and attendance data in the payroll system;
- Preparation and amendment of travel arrangements for offsite conferences, training, or meetings;
- Coordination and dissemination of messages, appointments, and interoffice information.

## STRATEGIC GOAL 3 – WATER QUALITY MANAGEMENT

**Improve the quality of boundary and transboundary waters, in concert with Mexico, to address salinity and border sanitation problems pursuant to international agreements and applicable U.S. Law.**

The 1944 Treaty directed the IBWC to give preferential attention to the solution of all border sanitation problems concerning boundary and transboundary waters, and granted authority to provide any necessary sanitary measures or works to satisfy that requirement. Under IBWC Minute No. 261, dated September 1979, both governments agreed to identify border sanitation problems and solutions. This applied to waters crossing the border, including coastal waters, as well as those flowing along the Rio Grande and Colorado River boundary. Subsequent IBWC Minutes individually addressed specific border sanitation issues at many border communities including: San Diego/Tijuana, Calexico/Mexicali, Naco/Naco, Nogales/Nogales, Del Rio/Ciudad Acuña, Eagle Pass/Piedras Negras, Laredo/Nuevo Laredo, Hidalgo/Reynosa, and Brownsville/Matamoros.

In an effort to resolve the border sanitation problems in San Diego, California and Tijuana, Baja California, the IBWC concluded IBWC Minutes No. 270, 283 and 311. These Minutes provide the framework for treatment of sewage inflows from Tijuana, Mexico to U.S. secondary standards. The *Tijuana River Valley Estuary and Beach Cleanup Act of 2000*, further authorized the U.S. Section to provide secondary treatment of Tijuana sewage. The U.S. Section has constructed and is operating the advanced primary treatment facilities at the South Bay International Wastewater Treatment Plant (SBIWTP), and is currently developing options for secondary treatment of the advanced primary effluent.

By authority of the 1944 Treaty, the IBWC constructed the Nogales International Wastewater Treatment Plant (NIWTP) in 1951 at Nogales, Arizona to address sewage treatment needs on both sides of border. The Commission jointly operates and maintains this plant in accordance with IBWC Minute No. 206. The IBWC later relocated the NIWTP to Rio Rico, Arizona as agreed upon under IBWC Minute No. 227. The NIWTP is co-owned by the City of Nogales, Arizona and IBWC.

The Commission agreed under IBWC Minute No. 279 to improve the quality of the Rio Grande waters at the sister cities of Laredo, Texas and Nuevo Laredo, Tamaulipas. This was accomplished through the joint construction of the Nuevo Laredo International Wastewater Treatment Plant (NLIWTP) at Nuevo Laredo, Tamaulipas, Mexico. IBWC Minute No. 297 provides the operation and maintenance obligations of both Sections.

In 1993, the U.S. and Mexico established the Border Environment Cooperation Commission (BECC) and the North American Development Bank to assist states, localities, and private entities in development of border environmental infrastructure projects. The IBWC agreed in IBWC Minute No. 299 to provide support to BECC for development of projects to resolve border sanitation issues.

The 1944 Treaty is the primary authority that grants the IBWC the right to address and resolve water quality issues at boundary and transboundary rivers and streams. IBWC Minutes No. 241 and 242 provided for measures to improve the quality of Colorado River water made available to Mexico at the Northerly International Boundary. Furthermore, the U.S. agreed in



IBWC Minute No. 242 to deliver flows to Mexico upstream of Morelos Dam having an annual average salinity of no more than 115+/-30 parts per million U.S. count over the flow-weighted annual average salinity of Colorado River waters that arrive at Imperial Dam.

In an effort to address growing water quality issues along the border, the IBWC concluded Minutes No. 279 and No. 289. The adoption of these Minutes facilitated the development of binational multi-phase and multi-agency efforts to characterize the extent of contamination within both countries' shared water resources. The following studies were conducted in the Rio Grande, Colorado River, and New River to identify the level of contamination in areas of concern such as expanding urban areas that depend on these water resources for multiple uses such as a domestic water supply, agriculture, and recreation.

- Binational Study Regarding the Intensive Monitoring of the Rio Grande Waters in the vicinity of Laredo/Nuevo Laredo Along the Boundary Portion Between the United States and Mexico (July 1997). A follow-up study was conducted after the completion of the Nuevo Laredo International Wastewater Treatment Plant in November 2000.
- Binational Study Regarding the Presence of Toxic Substances in the Rio Grande/Rio Bravo and its Tributaries Along the Boundary Portion Between the United States and Mexico (1992), Second Phase (1997), Third Phase (1998).
- Binational Study Regarding the Presence of Toxic Substances in the Lower Colorado and New Rivers (1995).

The Texas Legislature passed the Texas Clean Rivers Act and established the Texas Clean Rivers Program in 1991. The goal of the program is to maintain and improve the quality of water within each river basin in Texas through an ongoing partnership involving the Texas Commission on Environmental Quality, river authorities (program partners), other agencies, regional entities, local and state governments, industry, and citizens. The program uses a watershed management approach to identify and evaluate water quality issues, establish priorities for corrective actions, and work to implement those actions. Due to the international nature of the Rio Grande, the State of Texas contracted with the U.S. Section in October 1998 to administer the Texas Clean Rivers Program for the Rio Grande Basin.

### Strategic Objective 3.1: Water Quality of Boundary and Transboundary Rivers

Improve the quality of boundary and transboundary river waters in accordance with domestic law and international agreements.



**Rio Grande Water Quality**

*U.S. Section employee obtaining water quality samples of the Rio Grande below its confluence with the Conchos River at Presidio, Texas.*



**Rio Grande Water Quality**

*U.S. Section employee preparing soil samples of the riverbed immediately downstream of American Diversion Dam in El Paso, Texas.*

#### Strategy for Objective 3.1

The agency will work together with stakeholders to develop and implement solutions to reduce solid waste in the New River, thus improving water quality. The U.S. Section will also monitor the condition of the Wellton-Mohawk Bypass Drain, which is located in Mexico, and coordinate its maintenance with the Mexican Section. To improve the evaluation and exchange of water quality data on the Colorado River, the IBWC will jointly establish binational sampling protocols and conduct binational technical meetings to address issues. In addition, the agency will continue sampling and monitoring Colorado River and Rio Grande waters to identify water quality issues and develop binational solutions. The U.S. Section will prepare water quality reports to provide information to interested stakeholders along the border.

The U.S. Section will also continue to provide oversight and support to the Mexican Section for the operation and maintenance of the Morillo Diversion System, which is located in Mexico and sustains the freshwater quality of Rio Grande waters for agricultural and municipal uses by both countries. The Morillo Diversion System consists of a pumping plant, a weir, and the Morillo Drain, which is a diversion canal that parallels the Rio Grande. This system diverts highly saline waters, which would otherwise enter the Rio Grande, and conveys them through the diversion canal for discharge into the Gulf of Mexico.

The U.S. Section will continue to monitor the water quality of the Rio Grande under its Texas Clean Rivers Program. The agency will work with its program partners to collect water quality data and provide information about water quality in the Rio Grande disseminated through public outreach initiatives. These initiatives include providing water quality data to the state of Texas for compliance with the Clean Water Act and making it available on the agency's website, supporting schools on related research projects, introducing new monitoring stations, increasing water quality sampling partnerships, and information sharing.

## Strategic Objective 3.2: Wastewater Treatment

Improve and sustain the quality of effluent from IBWC international wastewater treatment plants in accordance with international agreements and applicable domestic law.



***South Bay Int'l Wastewater Treatment Plant***

*This plant in San Diego County, California, treats an average of 25 million gallons per day of wastewater from Tijuana, Mexico.*



***Nogales Int'l Wastewater Treatment Plant***

*This plant, in Rio Rico, Arizona, treats a daily average of 14 million gallons of sewage from both Nogales, Arizona and Nogales, Sonora.*

### Strategy for Objective 3.2

The U.S. Section will test and implement cost-effective strategies, which were recommended in an optimization study to increase the rate of Total Suspended Solids removal and improve the quality of the advanced primary effluent discharged into the Pacific Ocean from the South Bay International Wastewater Treatment Plant (SBIWTP). In addition, the agency will develop and implement a solution, to achieve secondary treatment of the SBIWTP effluent. The U.S. Section will also work with the Mexican Section to improve the pretreatment program in Tijuana, Baja California, Mexico.

The U.S. Section will provide technical support to the City of Nogales, Arizona on a BECC-Certified project to upgrade the Nogales International Wastewater Treatment Plant to improve the effluent quality for compliance with State of Arizona discharge standards. The U.S. Section and the U.S. Environmental Protection Agency will work together with Mexico to improve the pretreatment program to reduce the discharge of chemicals and other pollutants into the sewage collection systems of Nogales, Arizona and Nogales, Sonora.

The U.S. Section will continue to provide technical assistance and financial support to the Mexican Section to ensure proper operation and maintenance of the Nuevo Laredo International Wastewater Treatment Plant (NLIWTP). The NLIWTP treats raw wastewater from Nuevo Laredo, Tamaulipas, Mexico and discharges the treated effluent into the Rio Grande. This facility helps sustain the water quality of the Rio Grande by reducing sewage discharges into the river.

### Strategic Objective 3.3: Water Quality Support and Facilities

Manage, secure, operate, and maintain all administrative and indirect field office resources and assets utilized to support water quality operations and initiatives in an efficient and effective manner.



#### **Administrative Support**

*U.S. Section personnel performing administrative duties in support of water quality operations and initiatives at the San Diego Field Office.*



#### **Maintenance of Field Office Facilities**

*Staff performing maintenance and repairs to field office facilities (personnel buildings, sheds, etc.), which support water quality functions.*

#### **Strategy for Objective 3.3**

The U.S. Section will maintain its field office facilities and other assets in optimal condition by performing inspections, repairs, maintenance, and improvements in support of water quality activities. This will increase the life and reliability of field office assets, and avoid adverse operational issues. The agency will also conduct annual security assessments and develop strategies to address security vulnerabilities and secure critical infrastructure. The U.S. Section will furnish its field office personnel with protective gear and safety equipment, if deemed necessary, to perform required tasks. Field office personnel will also assist the Asset Management Office to maintain inventories of agency property at field office locations.

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- Entry of employees' time and attendance data in the payroll system;
- Preparation and amendment of travel arrangements for offsite conferences, training, or meetings;
- Coordination and dissemination of messages, appointments, and interoffice information.

## STRATEGIC GOAL 4 – RESOURCE AND ASSET MANAGEMENT

### **Maximize organizational effectiveness through innovative management and accountability of human, physical, and fiscal resources.**

To ensure that scarce public resources are wisely invested, federal agencies must manage their allocated resources and portfolio of capital assets in the most effective and efficient manner possible. Agencies must follow a capital programming process that integrates the planning, acquisition, and management of capital assets into the budget decision-making process. Capital programming is intended to assist agencies in improving asset management and in complying with all mandatory and regulatory requirements.

In today's world, agencies must abide by many results-oriented Acts. Some of the most commonly referenced include:

- The Government Performance and Results Act of 1993
- The Federal Managers Financial Integrity Act of 1982
- Chief Financial Officers Act of 1990
- Federal Financial Management Improvement Act of 1996
- The Energy Policy Act of 1992
- The Paperwork Reduction Act of 1995
- The Clinger-Cohen Act of 1996
- The Federal Acquisition Streamlining Act of 1994, Title V (FASA V)
- The Federal Information Security Management Act
- The E-Government Act of 2002 (P.L. 107-347)

For example, the Government Performance and Results Act establishes the foundation for federal agencies to be successful, by creating a performance planning and accountability process in which agencies clarify their mission, develop goals, measure performance, and submit annual progress reports. The Federal Managers Financial Integrity Act, Chief Financial Officers Act, and the Federal Financial Management Improvement Act require accountability of financial and program managers for financial results of actions taken, control over the Federal Government's financial resources, and protection of Federal assets. The Energy Policy Act requires each federal agency to reduce its dependence on petroleum products and install, to the maximum extent practicable, all energy and water conservation measures with payback periods of less than 10 years in U.S. government owned buildings. The Paperwork Reduction Act directs agencies to perform their information resource management activities in an efficient, effective, and economical manner. The Clinger-Cohen Act mandates agencies to use a disciplined capital planning and investment control process to acquire, use, maintain and dispose of information technology. The Federal Acquisition Streamlining Act, Title V requires agencies to establish cost, schedule and measurable performance goals for all major acquisition programs, and achieve on average 90 percent of those goals. The Federal Information Security Management Act directs agencies to integrate IT security into their capital planning and enterprise architecture processes, conduct annual IT security reviews of all programs and systems, and report the results of those reviews to OMB. The E-Government Act mandates agencies to develop performance measures and implement initiatives utilizing Internet-based

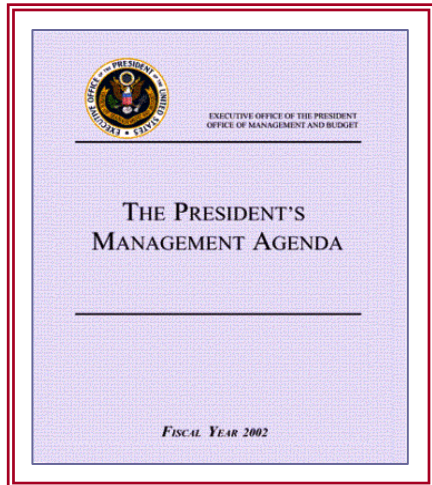
technology to improve customer service, save taxpayer dollars, and streamline citizen-to-government communications. The Act also requires agencies to support government-wide E-Gov initiatives and to leverage cross-agency opportunities to further E-Gov.

Federal agencies are obligated to comply with the President's Management Agenda (PMA). The PMA, which was initially announced in the summer of 2001, is an aggressive strategy for improving the management of the Federal government. The President has envisioned an active, but limited, government that focuses on priorities, and the PMA is the starting point for management reform. It focuses on five areas of management weakness across the government where improvements and the most progress can be made. These five major areas focus on Strategic Management of Human Capital, Competitive Sourcing, Improved Financial Performance, Expanded Electronic Government, and Budget and Performance Integration.

There are also numerous laws, regulations, executive orders, and other mandates with which federal agencies must comply. Many requirements are direct, while others indirect. For instance, agencies must ensure that their employees, as well as contractors, follow Occupational Safety and Health Administration regulations. Agencies are also obligated to operate in an environmentally friendly manner, and must apply the requirements set forth in the National Environmental Policy Act of 1969 to any action involving federal resources or assets. The U.S. Section will comply with all applicable requirements, and keep the public and its stakeholders informed of its intentions and progress.

## Strategic Objective 4.1: President's Management Agenda

Ensure compliance with the President's Management Agenda by developing and implementing strategies to address deficiencies and improve agency performance in the areas of Strategic Management of Human Capital, Competitive Sourcing, Improved Financial Performance, Expanded Electronic Government, and Budget and Performance Integration.



### ***President's Management Agenda***

*Establishes five government-wide initiatives to improve performance & address apparent deficiencies.*



### ***The President and President's Management Council***

*President Bush meeting with his Management Council in October 2006 to discuss the PMA.*

### **Strategy for Objective 4.1**

The U.S. Section will comprehensively review and evaluate its current organization and functional requirements, and identify areas for improvement in human capital, competitive sourcing, financial performance, electronic government, and budget and performance integration. It will produce a strategic human capital management plan to attract, develop, and retain an efficient and effective workforce for achievement of mission objectives in accordance with the U.S. Office of Personnel Management's Human Capital Assessment and Accountability Framework (HCAAF). The agency will also create and sustain a cost account system to track all financial data against associated project phases and strategic goals.

The U.S. Section will develop and implement the necessary Information Technology (IT) measures to meet requirements mandated by Federal Information Security Management Act (FISMA) and the National Institute of Standards and Technology. The agency will acquire and install the required software and hardware, modify IT system configurations, and implement policies to achieve system certification and accreditation with FISMA requirements. To improve efficiency and meet E-Government initiatives, the U.S. Section will develop and implement electronic processing systems for records management, travel, and vendor payments. The U.S. Section will also migrate to the Department of State's Global Financial System. This will enable the agency to meet all mandatory federal financial system requirements, while standardizing its financial, budgetary, and acquisition functions and improving financial performance.



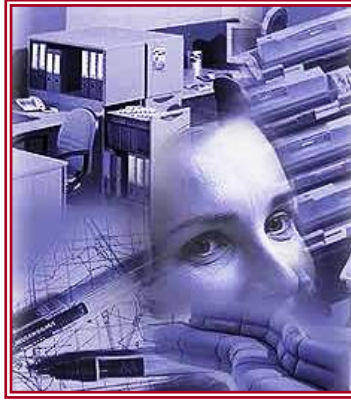
## Strategic Objective 4.2: General and Administrative Requirements

Properly manage, secure, improve, utilize, and maintain resources and assets to sustain all general and administrative functions at headquarters in an effective and efficient manner.



### ***Admin. Support***

*Admin. Assistant arranging business travel for agency personnel.*



### ***Supplies and Equipment***

*Sustaining inventories of supplies, materials, & equipment will enable staff to perform more efficiently.*



### ***Shipping & Receiving***

*Shipping, receiving, and distribution of supplies, documents, & other items.*

### **Strategy for Objective 4.2**

The U.S. Section will manage and account for all agency supplies, materials, and capital assets, such as heavy mobile equipment, vehicles, furniture, etc., through the Asset Management Office. This office will order, stock, and replenish all supplies and materials needed to sustain an efficient work environment. The Asset Management Office will assist with packing, shipping, and distribution of items. It will also work closely with all divisions and offices to update and maintain inventories of agency property. Agency property will be marked with barcodes for simple and accurate identification. Each barcode will correspond to a unique record in an electronic database, which will provide a clear description and location of the item.

Administrative staff provides a critical role in the U.S. Section's operations. To maximize performance, the agency will properly train and equip its personnel with the necessary tools to accomplish all administrative functions in support of agency operations. They perform many duties including, but not limited to:

- Preparation, distribution and filing of documents and other correspondence;
- Preparation of purchase requests and processing of receiving reports for ordering of supplies, equipment, and other services;
- Entry of employees' time and attendance data in the payroll system;
- Preparation and amendment of travel arrangements for offsite conferences, training, or meetings;
- Coordination and dissemination of messages, appointments, and interoffice information.

### Strategic Objective 4.3: Diplomatic Affairs

Improve the disclosure and exchange of information with Mexico and U.S. stakeholders through community outreach programs and proactive communication.



#### ***Binational Cooperation and Solutions***

*The underlying mission of the U.S. Section is to diplomatically resolve all boundary and water issues with Mexico in a cooperative manner, while protecting the interests of U.S. border residents.*

#### **Strategy for Objective 4.3**

The U.S. Section will strive to keep the general public and its stakeholders informed of all its plans and on-going activities. The U.S. Section will continue to update and post IBWC news, press releases and other public information on its official website ([www.ibwc.gov](http://www.ibwc.gov)). The agency will also correct website design problems to ensure accessibility of current and reliable information. The agency will also hold periodic Citizens' Forums, which are public meetings, with its stakeholders and interested parties at each of five regional project areas (San Diego, Lower Colorado River, Southeastern Arizona, El Paso/Las Cruces, Lower Rio Grande Valley). The purpose of these meetings will be to brief the public and stakeholders, exchange information, and address issues.

The agency will also strive to improve diplomatic ties with Mexico. The U.S. Section will work cooperatively with the Mexican Section to resolve problems in a manner that can benefit both countries, yet support the interests of the U.S. The U.S. Section will hold Commission meetings with the Mexican Section on a recurring basis (usually every 4 to 8 weeks) to surface binational concerns, address issues, and resolve problems. Commission meetings are formal meetings between the Mexican Section and U.S. Section that involve the Commissioner, Secretary, and Principal Engineers of each Section. In addition, to effectively coordinate all diplomatic efforts, the U.S. Section will send regular reports (typically every 2 to 8 weeks) to the U.S. Department of State.

## Strategic Objective 4.4: Compliance and Legal Requirements

Ensure full adherence of U.S. Section actions with applicable laws and regulations by training employees, requiring compliance, and documenting infractions and corrective actions.



### **Compliance and Legal Requirements**

*Compliance programs have been established to implement and monitor agency processes, controls, and requirements to ensure compliance with all applicable laws, regulations, and executive orders.*

### **Strategy for Objective 4.4**

The U.S. Section will research and prepare an inventory list of all applicable requirements (laws, regulations, mandates, etc.), which the agency must consider on a recurring or per action basis. The U.S. Section will also provide training to its employees and will operate in a manner to ensure full compliance with all known requirements. The agency will continue to update this inventory on a regular basis, and document all incidences of non-compliance and the corrective actions taken.

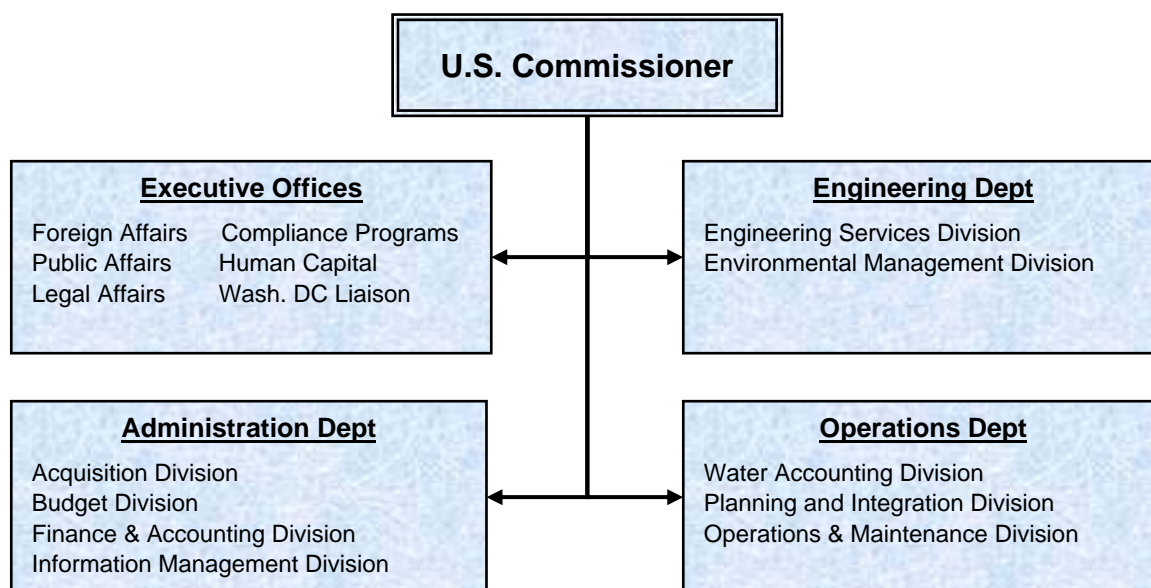
The U.S. Section will implement an Environmental Management System (EMS) to ensure compliance with Executive Order 13148, titled “Greening the Government through Leadership in Environmental Management”, and that conforms to the International Organization for Standardization EMS standard ISO14001: 2004. The agency will utilize the framework developed under ISO14001 to incorporate an EMS at all U.S. Section facilities. The U.S. Section will consider environmentally-friendly “green” specifications during the preparation of project designs and will implement “green” alternatives whenever practical.

In addition to responding to external audit findings, the U.S. Section will conduct internal audits of its operational processes and controls for optimal effectiveness. Performance audits will focus on compliance and resource accountability requirements. The agency will utilize the audit findings to develop improvement strategies and plans of action for areas with deficiencies.

## APPENDIX

### ORGANIZATIONAL STRUCTURE

The core organizational structure of the U.S. Section includes six executive offices and three departments. The executive offices are comprised of the Foreign Affairs, Public Affairs, Washington DC Liaison, Legal Affairs, Human Capital, and Compliance Programs Offices. These offices provide the expertise and guidance needed to address diplomatic matters and internal issues. The Administration Department performs the necessary support functions for the agency, while the Operations and Engineering Departments address the core mission requirements. The heads of the executive offices and departments comprise the U.S. Section's executive staff.



## DESCRIPTION OF ABBREVIATIONS AND ACRONYMS

**BECC:** Border Environment Cooperation Commission.

**Commission:** See *IBWC*.

**E-Government:** Electronic Government.

**IBWC:** International Boundary and Water Commission. In this document, *IBWC* refers to the international body comprised of both Sections, a U.S. Section and a Mexican Section, as a whole. *IBWC* is used interchangeably with *Commission*.

**IT:** Information Technology.

**Mexican Section:** Refers only to the Mexican Section of the International Boundary and Water Commission.

**NIWTP:** Nogales International Wastewater Treatment Plant (located in Rio Rico, Arizona).

**NLIWTP:** Nuevo Laredo International Wastewater Treatment Plant (located opposite of Laredo, Texas in Nuevo Laredo, Tamaulipas, Mexico).

**OMB:** Office of Management and Budget.

**PMA:** President's Management Agenda.

**SBIWTP:** South Bay International Wastewater Treatment Plant (located in San Diego County, California).

**U.S.:** United States of America.

**U.S. Section:** Refers only to the United States Section of the International Boundary and Water Commission.







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