



International Boundary and Water Commission United States Section



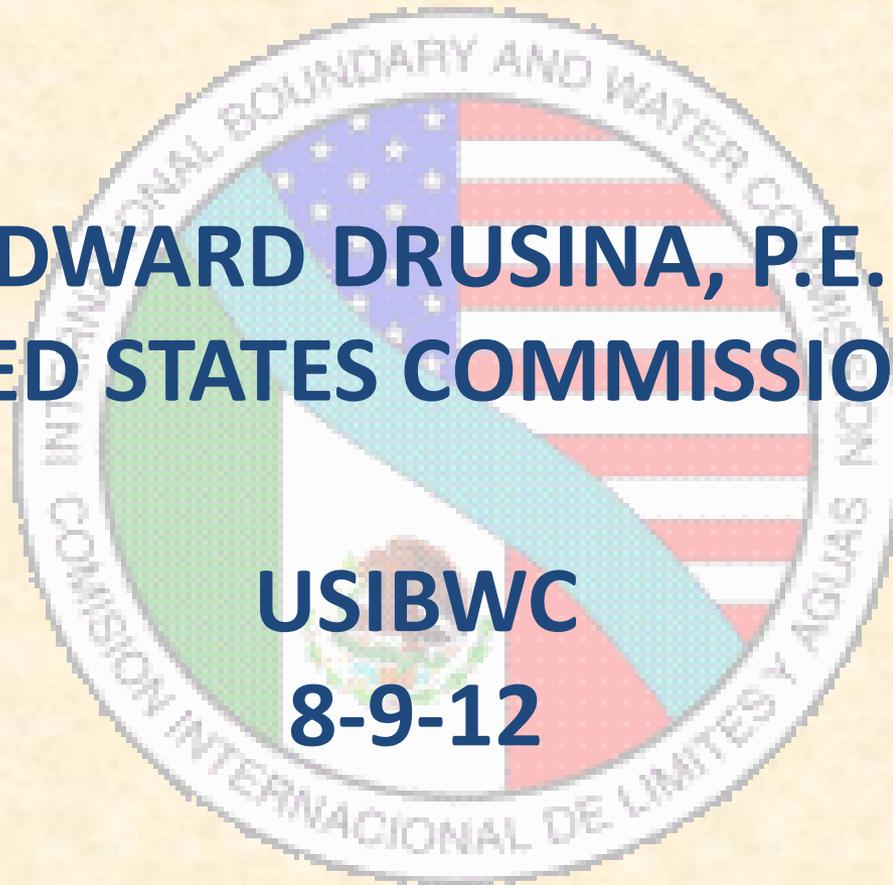


Tijuana International Watershed Initiative

EDWARD DRUSINA, P.E.
UNITED STATES COMMISSIONER

USIBWC

8-9-12





USIBWC Mission

*The International Boundary and Water Commission,
United States and Mexico,
is responsible for applying
the boundary and water treaties
between the two countries
and settling differences
that arise in their application.*





Watershed Initiative

View of the Tijuana Watershed

- IBWC is instituting an International Watershed Initiative along the length of the international boundary from San Diego to Brownsville. Each basin is unique dependent upon local needs and circumstances
- It is Desirable to anticipate or resolve issues at the local or basin level
- It is desirable to find more effective ways to engage the public and involve other partners
- IBWC is Focusing on the Tijuana Watershed as a priority project because of the initial work completed by the Stakeholders on both sides of the border



**Tijuana
Bi-National
Watershed
Meeting
6/19/2012**

**Tijuana Watershed
1750 sq miles
75% Mexico
25% U.S.
1312 sq miles Mex.
438 sq miles U.S.**

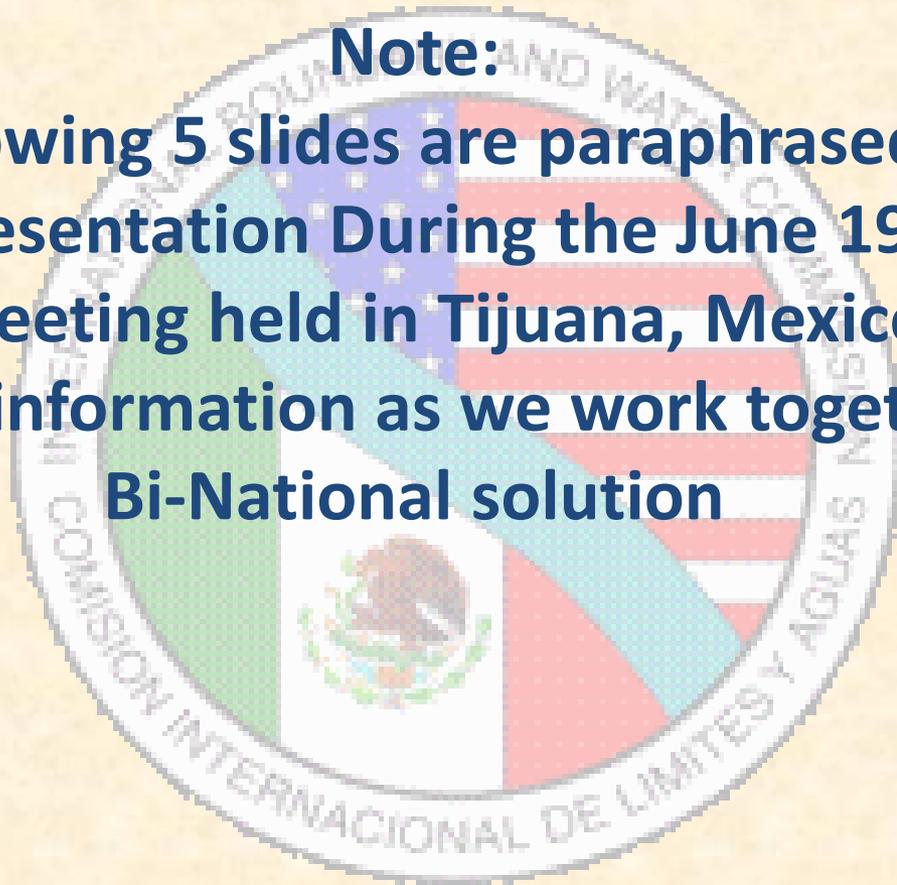




Tijuana International Watershed Initiative

Note:

The following 5 slides are paraphrased from Mexico's Presentation During the June 19, 2012 Bi-National Meeting held in Tijuana, Mexico and are shared for information as we work together for a **Bi-National solution**





Mexico Efforts to Maintain the Tijuana Basin

CESPT (Comisión Estatal de Servicios Públicos de Tijuana)

Zero Discharge Program

- **CESPT = State Public Service Commission of Tijuana**
 - Zero Discharges Program is designed to eliminate wastewater discharges into rivers and beaches by 2013
 - Infrastructure accounts for 60-70% of program budget
 - By the end of 2013 CESPT's will reach their goal of zero discharges
 - 30 pumping stations located throughout the City operate 24 hours per day to meet treatment needs
 - 90% of Tijuana's wastewater is being treated

**Arturo
Herrera
Wastewater
Treatment
Plant**



**Punta
Bandera
Wastewater
Treatment
Plant**



Mexico Efforts to Maintain the Tijuana Basin CONAGUA Projects

CONAGUA- NATIONAL WATER COMMISSION

Works in Tijuana River Channels -
Lining of the Rio Alamar

- Pressure from Neighbors prompted improvements for a realignment and for building a park
- The Project Will Contain a Green Zone which will include the Planting of 4000 Trees
- Restoration and re-vegetation along the Rio Alamar is a top Priority

Work in Rio Alamar, Tijuana, Approx. 6.3 miles concrete lining



Proposed Green Zone
Rio Alamar





Mexico Efforts to Maintain the Tijuana Basin SEMARNAT - Temporary Employment Program (PET)

SEMARNAT - SECRETARY OF ENVIRONMENT AND NATURAL RESOURCES

- SEMARNAT presented the PET (Temporary Employment Program) The project is aimed at restoring deteriorated environments
- PET projects were executed in Rio Alamar and Los Laureles Canyon
- Between 2010 and 2012 the program has benefited 665 local residents
- There is uncertainty that the program may continue pending the new Administration

Removal of used tires



Cleaning of solid waste



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Mexico Efforts to Maintain the Tijuana Basin SPA (State Environmental Protection Agency)

**SPA = Secretaria de Protección
al Ambiente**

- Has jurisdiction over the Rio Alamar Within the Basin
- Industry Environmental Compliance in on the rise and surveillance and restrictions are in place
- SPA has planted many trees and will use grey water for irrigation
- SPA collected 1.5 million used tires, 500,000 tires from empty lots

**Tree
Planting in
Tijuana,
Mexico**



**Collected
Tires
Tijuana Basin
Mexico**

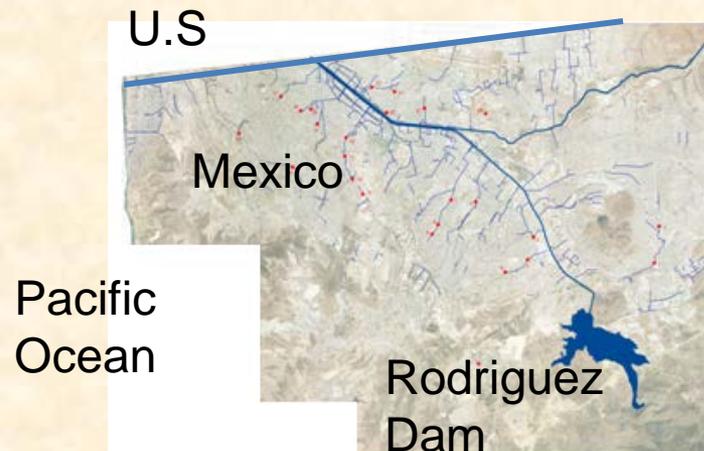


Mexico Efforts to Maintain the Tijuana Basin City of Tijuana

City of Tijuana

- The City has 24 basins that can capture 75, 000 cubic meters of sediment
- There is an active program to de-silt basins
- In 2012 - 18,840 cubic meters of sediment was removed from the Tijuana Basin
- As Tijuana has expanded so has the silt retaining basin infrastructure

Removing
Silt from
Drainage
Basin in
Tijuana,
Mexico



Tijuana
Drainage
System



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Steps Forward

Path Forward

Principal's Engineers Bi-national Meeting(s) will take place in October 2012

Collaborative Bi-National Process to integrate scientific, environmental and regulatory stakeholders to solve basin problems

Identify work

Identify short and long term goals to address sediment and trash issues cost effectively

Determine the Division of Work Between United States and Mexico

Data Collection

Integrate existing data and studies from United States and Mexico that include:

Watershed hydrology and hydraulics studies

Sediment and trash load studies to determine the Total Maximum Daily Load (TMDL) being transported in the Tijuana Valley

Determine if additional studies are required

Goals

Source Reduction

United States and Mexico in a collaborative effort will determine methods to control the transport of sediment and trash at their sources

Flood Control

Identify short and long term goals to reduce flood risk in the Tijuana Valley

Improve understanding of sediment transport the through out the valley

Ecosystem

USIBWC will seek jurisdictional authority to create sustainable natural habitats that supports native species as well as recreational opportunities for the community

Protection of Cultural and Natural Resources

USIBWC will seek jurisdictional authority Preserve the region's cultural heritage and value existing land uses



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Steps Forward

Proposed Projects

Bi-National Projects

Understand How Low Water, Sediment and Trash Flow

Watershed Hydrology and Hydraulic Modeling Sediment and Trash Load Calibration Study
Bi-National Sediment and Trash Control Plan

Reduce Sources of Sediment and Trash

Sediment Source Control Implementation Program
Trash Source Control Implementation Program – U.S.
Trash Removal Programs – Mexico

Implementation Sediment and Trash Capture In Watershed

Design and Implementation of Sediment Basin in Smugglers Gulch
Sediment Capture Implementation – Mexico
Design and Implementation of Floatable Trash Capture Devices(s) in Goat Canyon, Smugglers
Gulch, and Tijuana River
Storm Drain System Trash Capture Devices(s) Implementation Assessment – U.S.
Trash Capture Implementation - Mexico



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1944 Water Treaty

Treaty of February 3, 1944 –

Article 16 of the treaty specifically addresses the Tijuana River Entrusted the IBWC to give preferential attention to the solution of all border sanitation problems

- Treaty Minute is preceded by a Joint Engineer's Report
- The Report is a Collaborative Effort between the United States and Mexico
- The Report List Objectives and solutions for Treaty Compliance
- Both Current Commissioners Have Agreed That Pollution Concerns in the Tijuana Basin can be addressed by the IBWC



SIGNING OF THE 1944 WATER TREATY at Washington, D.C. on February 3, 1944. At end of table, seated, is United States Secretary of State Cordell Hull signing the document, and to his right, also seated, is Mexican Foreign Relations Secretary F. Castillo Najera. Seated to Secretary Hull's left are United States Ambassador George S. Messersmith (nearest Hull) and United States Commissioner, IBWC, Lawrence M. Lawson. To Secretary Najera's right is Rafael Fernandez McGregor, Mexican Commissioner, IBWC. Standing to the left at the door is the U.S. Section Legal Counsel Frank B. Clayton.



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