



USIBWC CITIZENS' FORUM ORIENTATION

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Imperial Beach, CA
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PRESENTATION OUTLINE

- IBWC Mission, History, and Structure
- IBWC Projects
- Citizens' Forum Responsibilities



IBWC 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.



USIBWC MISSION STATEMENT

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.



BOUNDARY TREATIES

- **Convention of 1889** - Permanent commission established to resolve boundary disputes arising from shifts in the channel of the Colorado River and Rio Grande
- **Convention of 1933/Rio Grande Rectification Project** – Stabilize the international boundary in the El Paso-Juarez Valley
- **Chamizal Convention (1963)** – Relocate the Rio Grande in a new channel in El Paso-Juarez
- **Treaty of 1970** – Maintain the Rio Grande and Colorado River as the international boundary





RIO GRANDE RECTIFICATION PROJECT IN THE EL PASO-JUAREZ VALLEY



RIVER BED AND RECTIFIED CHANNEL

CONVENTION OF 1906

- Distribution between Mexico and the U.S. of the waters of the Rio Grande in the El Paso-Juarez region
- U.S. to deliver 60,000 acre-feet per year



**International Dam diverts
Mexico's allotment**



STRUCTURE PER 1944 TREATY

INTERNATIONAL BOUNDARY AND WATER COMMISSION (IBWC)

MEXICAN SECTION

- Mexican Commissioner
- Secretary
- Two Principal Engineers
- Legal Adviser

US SECTION

- US Commissioner
- Secretary
- Two Principal Engineers
- Legal Adviser

1944 WATER TREATY

- Rio Grande

- Mexico delivers water from Mexican tributaries to the U.S. between Ft. Quitman and the Gulf, annual average of 350,000 acre-feet
- Mexico incurred a deficit in deliveries in the 1990s but has since paid off the deficit
- Authorized construction of up to 3 storage dams; only 2 were built

- Colorado River

- U.S. delivers 1.5 maf/year to Mexico



1944 WATER TREATY— TIJUANA RIVER

- Commission shall study and make recommendations for:
 - equitable distribution of the waters of the Tijuana River
 - plans for storage and flood control
- No agreement ever concluded for water distribution
- International flood control project was developed

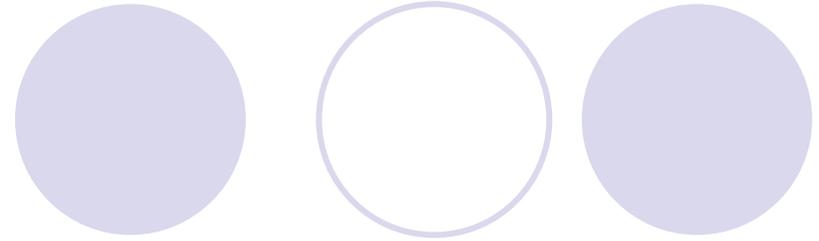


1944 WATER TREATY

- Authorized Commission to give “preferential attention to the solution of all border sanitation problems”
- 3 international wastewater treatment plants were subsequently constructed:
 - South Bay International Wastewater Treatment Plant - Located in San Diego; treats sewage from Tijuana
 - Nuevo Laredo International Wastewater Treatment plant - Located in Nuevo Laredo, Mexico; treats Mexican sewage
 - Nogales International Wastewater Treatment Plant (NIWTP) - Located in Rio Rico, AZ; treats sewage from the U.S. and Mexico



IBWC MINUTES



- Decisions of the Commission are recorded in the form of Minutes
- Minutes are binding agreements of the IBWC intended to implement treaty.
- They take effect once approved by the U.S. Department of State and Mexico's Foreign Affairs Ministry
- Over 300 minutes approved



PROJECTS

IBWC OFFICES ON THE BORDER



LOWER RIO GRANDE FLOOD CONTROL PROJECT

- 180 river miles from Peñitas, TX to Gulf of Mexico
- 270 miles of U.S. levees
- 30,000 acres of interior floodway in U.S.
- 2 diversion dams
- Region affected by hurricanes



Anzalduas Dam



INTERNATIONAL STORAGE DAMS

- Rio Grande storage dams:

- Falcon Dam
- Amistad Dam

- Purposes

- Water Storage
- Flood Control
- Hydropower



Amistad Dam (Del Rio, TX-Acuña, Coah.)

PRESIDIO PROJECT - TEXAS

- Small Rio Grande Flood Control Project – 13 river miles



UPPER RIO GRANDE PROJECTS

- Flood control, boundary stabilization, and water delivery projects along 200 river miles
- Two diversion dams
- Offices in Las Cruces, NM; El Paso, TX; Ft. Hancock, TX



LEVEE REHABILITATION

- FEMA requires levees to contain the 100-year flood with 3 feet of freeboard
- USIBWC studies detected significant structural and height deficiencies for Rio Grande levees
- Work underway to raise and rehabilitate Upper and Lower Rio Grande levees using \$220 M in Recovery Act funds



BORDER FENCING ISSUES

- U.S. border fencing must be located in the U.S. (at least 2 feet north of boundary)
- IBWC requires access for monument maintenance
- Fencing should not obstruct storm water flows



Vehicle barrier near Yuma



SAN DIEGO OFFICE ACTIVITIES

- Boundary demarcation
 - Demarcation at ports of entry
 - Repair or replacement of monuments
 - Address boundary encroachments
- IBWC is the official agency that determines location of the boundary

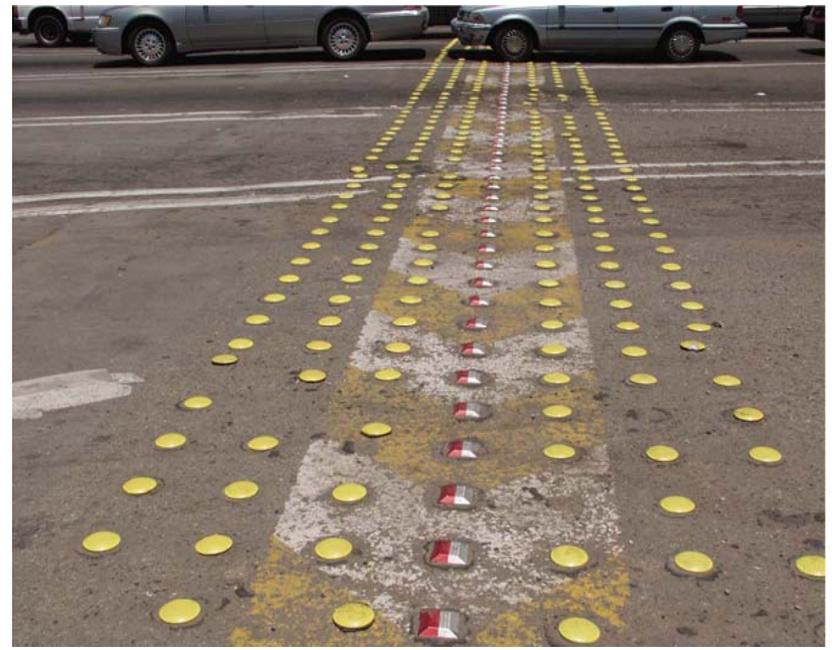


Boundary Monument

SAN DIEGO OFFICE ACTIVITIES



**Boundary Demarcation
San Ysidro, CA**



**Port-of-Entry Markings
Otay Mesa, CA**

TIJUANA RIVER WATERSHED

- 1,725 square miles, 2/3 in Mexico
- River flows north into ocean at Imperial Beach
- Morena and Barrett Dams in the U.S. operated by City of San Diego for water conservation
- Carrizo and Rodriguez Dams in Mexico operated by National Water Commission for water conservation and flood control



TIJUANA RIVER WATERSHED



Barrett Dam
San Diego, California



Rodriguez Dam
Tijuana, Mexico

TIJUANA RIVER FLOOD CONTROL PROJECT

- International flood control project; constructed in 1970s per Minutes 225, 236, and 258
- Design flood of 135,000 cfs, “the maximum flood that can reasonably be expected”
- Mexico has a 2.7-mile concrete-lined channel
- Original plan for 5.3 mile concrete-lined channel in U.S. scaled back at request of City of San Diego
- U.S. constructed a 1200-ft. concrete-lined channel connected to 3700-ft. long velocity reduction structure; levees extend to Dairy Mart Road
- U.S. levee height of 12-23 feet
- USIBWC responsible for maintenance of U.S. portion

TIJUANA RIVER FLOOD CONTROL PROJECT



Channel at international boundary



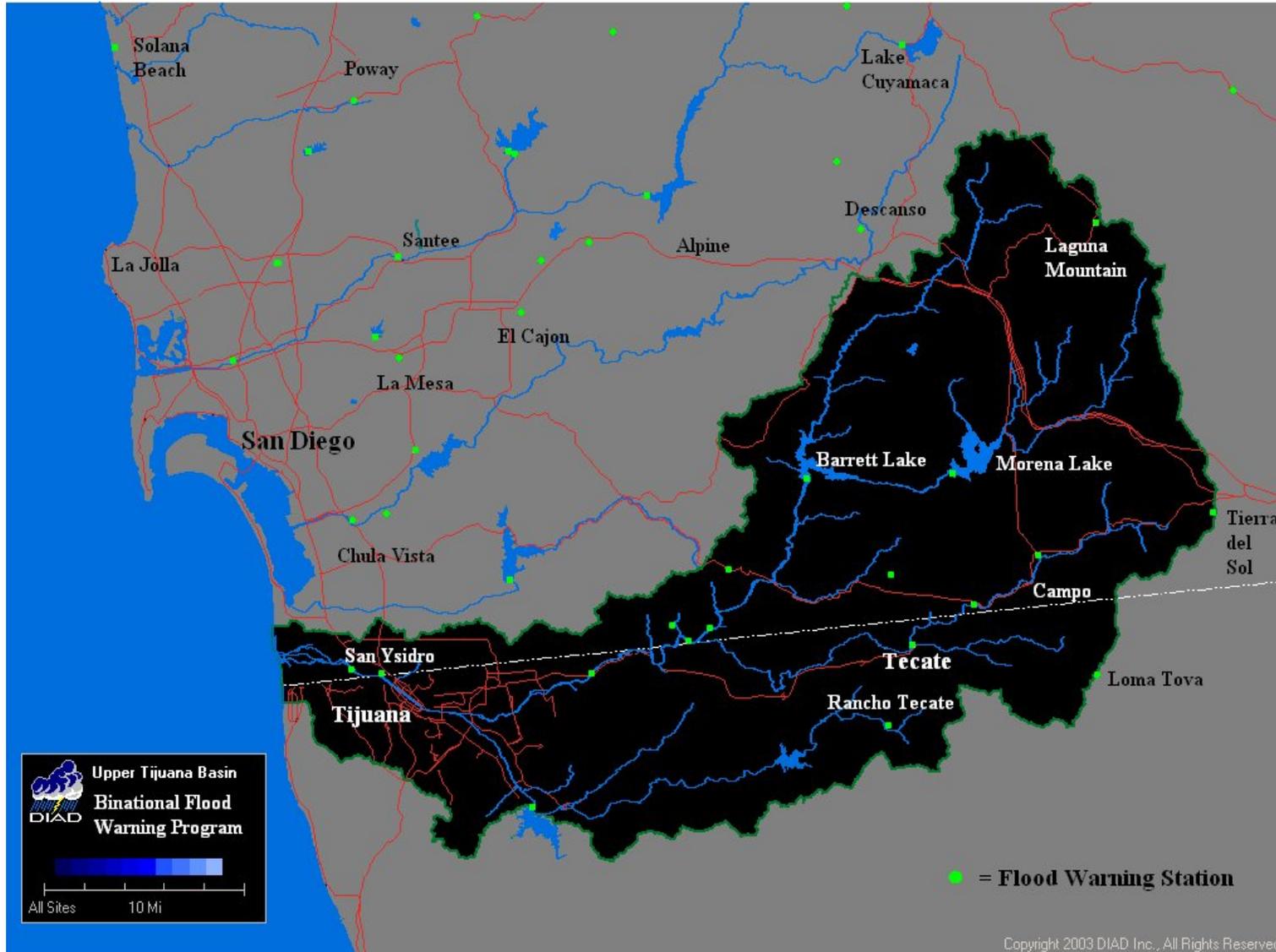
**During Dec. 2008 storm.
Flooding occurred downstream
from IBWC project.**

FLOOD WARNING SYSTEM

- Binational flood warning system for Tijuana River established per 2003 agreement
- System of rain gages and stream gages provides real-time data accessible to emergency managers in both countries
- Encompasses Morena Lake, points east to Tecate, and west to the coast
- Automatic Local Evaluation in Real Time (ALERT) system maintained by San Diego County in U.S. and IBWC in Mexico



FLOOD WARNING SYSTEM



SANITATION - MINUTE NO. 283 (1990)

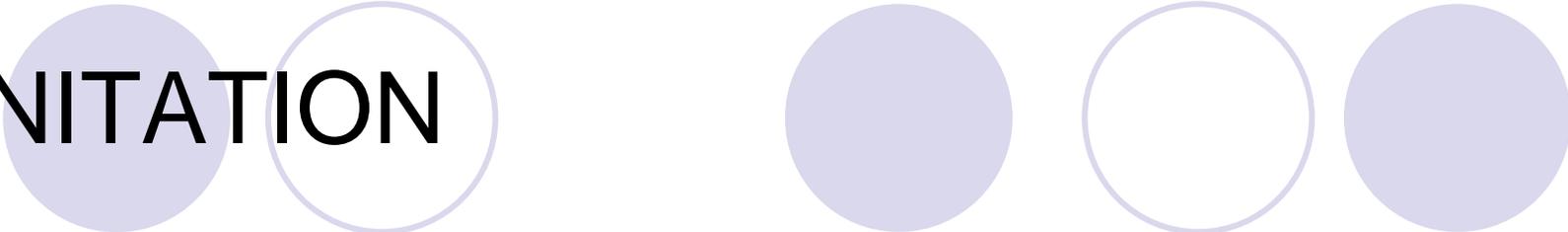
- To address flow of sewage into the U.S. via the Tijuana River
- Mexico to help fund a wastewater treatment plant in San Diego in lieu of a planned plant in Tijuana
- Secondary treatment level in accordance with more stringent U.S. standards
- Construction of an ocean outfall by the U.S.

SANITATION

- 1994 – USIBWC completed Environmental Impact Statement, selected secondary treatment via activated sludge
- Sierra Club lawsuit challenged selection of activated sludge
- 1996 – Decision to proceed with construction of advanced primary plant as an interim solution until legal issues resolved for secondary treatment



SANITATION



- 1994-2008 – Litigation, funding constraints, and Congressional action led USIBWC to consider secondary treatment ponds in U.S. and construction of the secondary component in Tijuana via a private-public partnership (Bajagua Project)
- January 1999 – Advanced primary plant begins operation with discharge to Pacific Ocean
- April 2008 – GAO report finds secondary treatment in U.S. to be more cost-effective and with a more certain timeline than constructing secondary in Tijuana
- November 2008 – USIBWC awards contract for construction of activated sludge secondary treatment facilities in U.S.

SOUTH BAY INTERNATIONAL WASTEWATER TREATMENT PLANT

- Located on Dairy Mart Road
- Provides advanced primary treatment to sewage emanating from Tijuana
- Mexico paid a portion of capital costs, continues to contribute to O & M
- Plant capacity of 25 mgd
- Treated effluent discharged 3.5 miles offshore via South Bay Ocean Outfall
- Secondary treatment facilities currently under construction
- When completed by Jan. 2011 will treat 25 mgd to Clean Water Act standards



SOUTH BAY INTERNATIONAL WTP



SOUTH BAY INTERNATIONAL WTP



Deep Dynamic Compaction at construction site



SOUTH BAY INTERNATIONAL WTP



Advanced Primary Plant



OTHER SANITATION INFRASTRUCTURE

- Water quality monitoring program for influent, effluent, ocean
- Ongoing effort to address solid waste
- Canyon collectors divert renegade wastewater flows for treatment at SBIWTP
 - Goat Canyon
 - Smugglers Gulch

**Smugglers Gulch
diversion structure**



MINUTE 314 (2008)

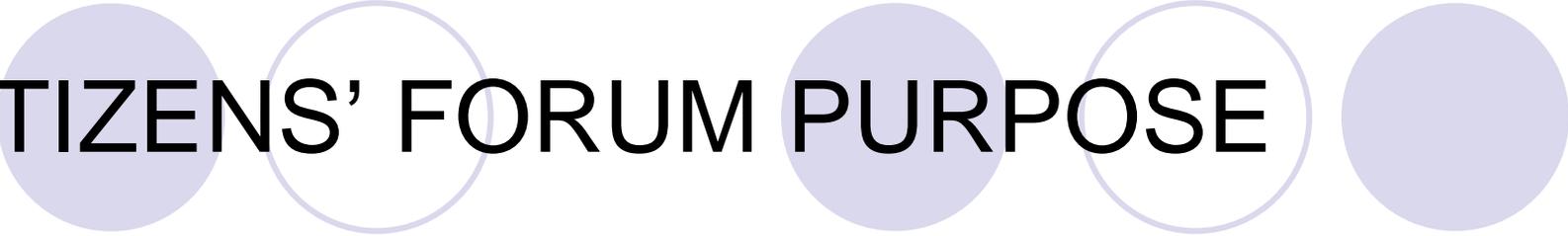
- Provides for emergency delivery of a portion of Mexico's allotment of Colorado River water through California conveyance system
- Various U.S. entities cooperated:
 - SDCWA
 - MWD
 - Otay Water District
- Mexico pays all costs



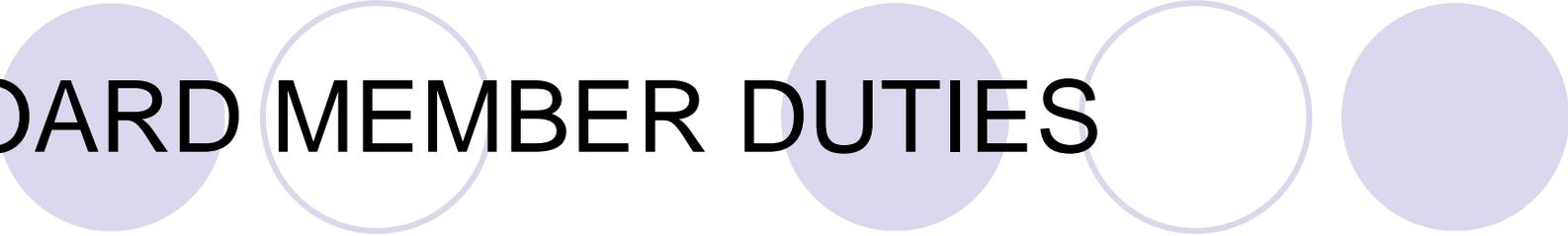
Connection at Otay Mesa



CITIZENS' FORUM PURPOSE



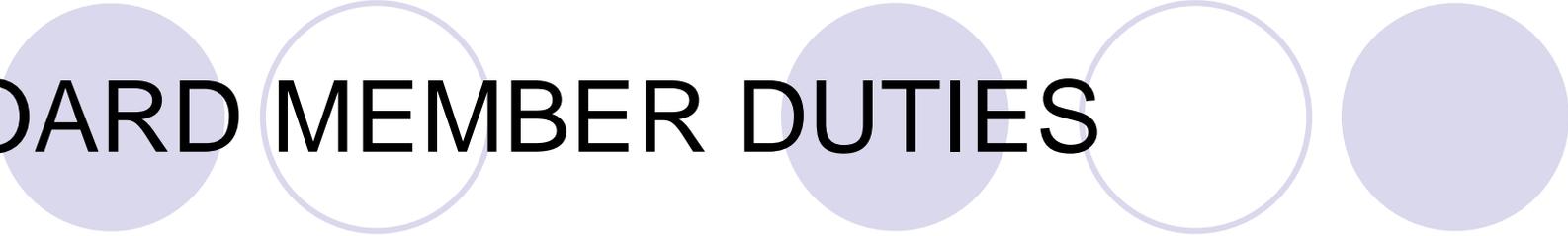
- To facilitate the exchange of information between the USIBWC and the local community regarding ongoing and future USIBWC projects in the area
- The Citizens' Forum is intended to bring together community members enabling the early and continued two-way flow of information, concerns, values, and needs between the USIBWC and the general public, environmentalists, water managers, government agencies, etc.



BOARD MEMBER DUTIES

- Attend public meetings four times per year
- Meetings in San Diego County (probably Imperial Beach and San Ysidro)
- Board term is for two years
- Board members are expected to be available to the public to facilitate the exchange of information

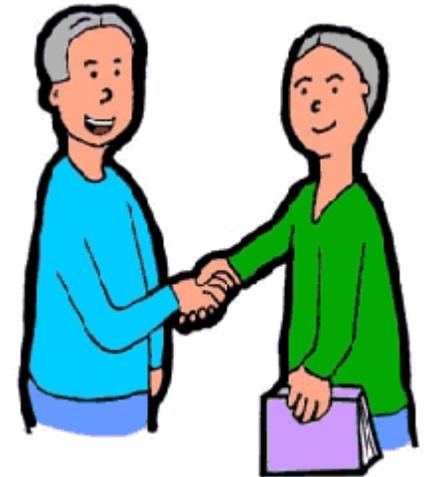
BOARD MEMBER DUTIES



- Review and comment on technical documents and activities associated with USIBWC projects in the area
- Discuss plans and issues related to ongoing and future USIBWC projects
- CF is not a federal advisory board; goal is to exchange information and to receive feedback from a diversity of viewpoints
- Members serve as volunteers. There is no reimbursement for expenses.

CITIZENS' FORUM LEADERSHIP

- Two Co-Chairs
- USIBWC Co-Chair
 - Area Operations Manager Steve Smullen
- Community Co-Chair
 - Selected by the board



INTERNATIONAL BOUNDARY AND WATER COMMISSION,
UNITED STATES AND MEXICO
UNITED STATES SECTION



http://www.ibwc.gov/Citizens_Forum/CF_SBIWTP.html

www.ibwc.gov

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