

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

For immediate release October 20, 2023

#### USIBWC Southeast Arizona Citizens Forum to Welcome New Board at Public Meeting in Douglas on October 26

The United States Section of the International Boundary and Water Commission (USIBWC) Southeast Arizona Citizens Forum board is pleased to announce that it will host an in-person and virtual public meeting on Thursday, October 26, from 2–4 p.m. MST.

Leslie Grijalva, Public Affairs Specialist for the USIBWC, will provide new board members and the public an overview of the agency and its history. She will also give a presentation about the Citizens Forum program.

The second presentation will focus on the Nogales International Wastewater Treatment Plant. The plant treats wastewater from Nogales, Sonora and Nogales, Arizona before being discharged into the Santa Cruz River. John Light, Area Operations Manager for the Nogales Field Office, will provide an overview of the plant process.

The public meeting will be held in person at:

Cochise College 4190 AZ-80, Building 100 Douglas, AZ 85607

The public meeting will also be held virtually. <u>Click here to join the meeting</u>. If possible, it may be helpful for you to test connectivity on your own prior to the meeting by clicking on the "Join" link and ensuring your camera and microphone are functioning. Or join by phone: Call-in number +1 (872) 240-1286 | Conference ID: 287846474#

For those connecting via phone, the presentations will be available before the start of the meeting. Go to the Southeast Arizona Citizens Forum page <a href="https://www.ibwc.gov/meetings/category/southeast-arizona/">https://www.ibwc.gov/meetings/category/southeast-arizona/</a>, and look for the links for the 10/26/2023 meeting.

If you would like to speak during the public comment period, please sign up ahead of time by contacting Leslie Grijalva at leslie.grijalva@ibwc.gov or 915-832-4770 by noon on October 25, 2023.

News Media Contact:

Leslie Grijalva <u>leslie.grijalva@ibwc.gov</u> 915-832-4770

#### SOUTHEAST ARIZONA CITIZENS FORUM

Thursday, October 26, 2023, 2:00 – 4:00 p.m. MST
Cochise College
4190 AZ-80, Building 100
Douglas, AZ 85607
And via Teams Webinar

#### **Agenda**

- Welcome and Introductions Ben Lomeli, Citizens Forum Co-Chair
- Opening Remarks Frank Fisher, Director of Public Affairs, USIBWC
- IBWC & Citizens Forum Program Overview & History Leslie Grijalva, Public Affairs Specialist, USIBWC
- Nogales International Wastewater Treatment Plant John Light, Area Operations Manager for the Nogales Field Office, USIBWC
- Public Comment
- Board Discussion
- Suggested Future Agenda Items

If you have a disability that you wish to self-identify confidentially that requires accommodation, please advise us ahead of time. For more information call 915-832-4770 or email <a href="leslie.grijalva@ibwc.gov">leslie.grijalva@ibwc.gov</a>.

#### **Microsoft Teams meeting**

Join on your computer, mobile app or room device: Click here to join the meeting

Meeting ID: 256 532 887 215
Passcode: gCUNWi
Download Teams | Join on the web

Or call in (audio only)

<u>+1 872-240-1286, 287846474#</u> United States, Chicago Phone Conference ID: 287 846 474#



#### INTERNATIONAL BOUNDARY AND WATER COMMISSION

UNITED STATES SECTION

#### **IBWC History and Activities**

Leslie Grijalva Public Affairs Specialist

October 26, 2023



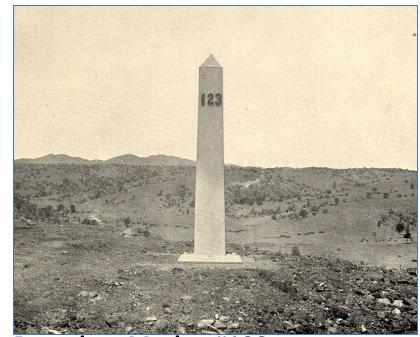
#### **IBWC Mission**

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.



### EARLY HISTORY OF THE IBWC

- Convention of Nov. 12, 1884- Adopted rules about the location of the boundary when the rivers changed course.
- Convention of March 1, 1889- Established the International Boundary Commission
- Focus on Maintaining the international boundary



**Boundary Marker #123** 



#### Convention of 1906

- Distribution between Mexico and the U.S. of the waters of the Rio Grande in El Paso- Cd. Juarez
- U.S. to deliver 60K AF/Yr
- Proportional reduction in deliveries in case of extraordinary drought
- Water stored in Elephant Butte Dam, NM
- Water diverted by Mexico at International Dam

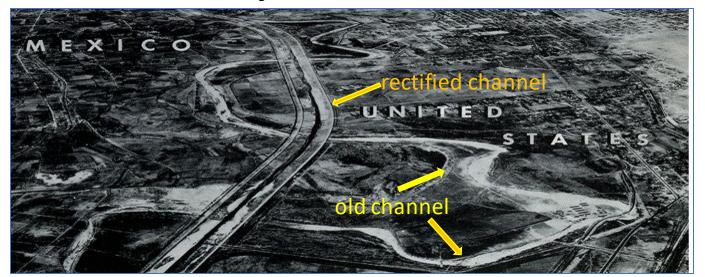


**International Dam** 



## CONVENTION OF 1933

- Stabilized the boundary in the El Paso- Cd. Juarez Valley
- Straightened the river channel
- Flood control levees in both countries
- Rio Grande Rectification Project



The meandering river channel was straightened.



## 1944 WATER TREATY- RIO GRANDE

- Mexico delivers water to the U.S. from Ft.
   Quitman to Gulf of Mexico
- U.S. received 1/3 of the waters arriving in the Rio Grande from 6 Mexican tributaries
- Minimum annual average of 350k AF/yr in cycles of 5 years
- Treat authorized construction of up to three storage dams on the Rio Grande; only 2 were built



Rio Grande at Fabens Port of Entry, Fabens, TX



## 1944 Water Treaty- Colorado River

- U.S. to deliver to Mexico a volume of 1.5 MAF/yr
- When there are surplus waters, U.S. to deliver to Mexico a total volume of up to 1.7 MAF/yr
- In extraordinary drought, Mexico reduced in proportion to U.S.



Colorado River at NIB



## CHAMIZAL CONVENTION OF 1963

- Relocated the Rio Grande in a concrete-lined channel through central El Paso- Cd. Juarez
- Resolved a century-long boundary dispute



**President Adolfo Lopez Mateos Channel** 



## 1970 BOUNDARY TREATY

- IBWC to maintain the Rio Grande and Colorado Rivers as the international boundary
- Boundary is middle of the channel occupied by normal flow or middle of the channel which in normal flows has the greatest average width over its length
- IBWC to delineate the boundary on maps
- IBWC may stabilize or rectify the channel ( numerous rectifications carried out)
- Prohibits construction of works that would obstruct or deflect normal or flood flows



# IBWC STRUCTURE

#### TREATY OFFICERS

#### **U.S. SECTION**

- Commissioner
- Secretary
- •2 Principal Engineers
- Legal Advisor

#### **MEXICAN SECTION**

- Commissioner
- Secretary
- •2 Principal Engineers
- Legal Advisor



#### **IBWC MINUTES**

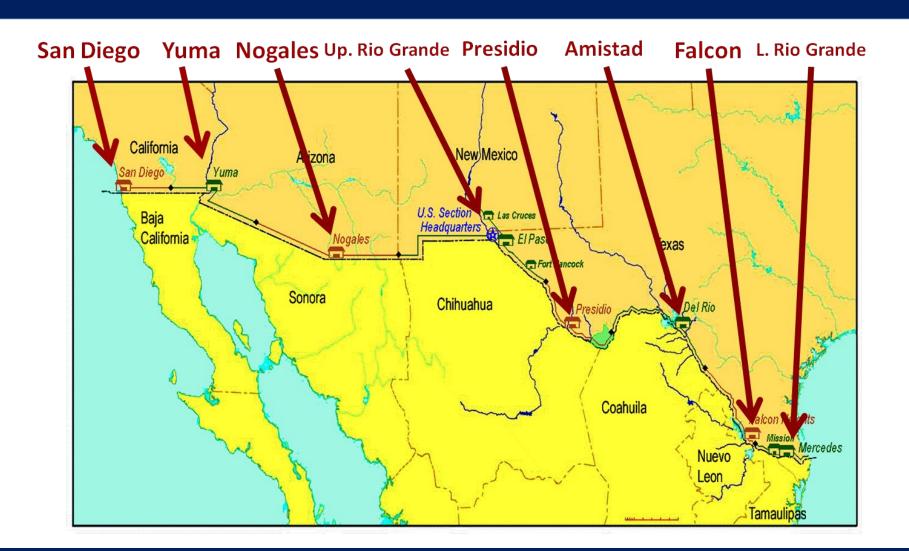
- Decisions of the Commission are recorded in the form of Minutes.
- Minutes are binding agreements of the IBWC intended to implement Treaty.
- They take effect once approved by the U.S. Department of State and Mexico's Foreign Affairs ministry



IBWC Commissioners and Secretaries sign Min. 327 Jan. 28, 2022 in Sonora, Mexico



# FIELD OFFICES





## BOUNDARY DEMARCATION

- U.S. and Mexican Sections of IBWC jointly determine location of the boundary and demarcate the boundary
- 258 principal monuments between along the U.S.- MX border from California to the Gulf of Mexico
- Hundreds of intermediate boundary markers
- Boundary demarcation plaques at Ports of Entry/International Bridges
- IBWC responsible for maintaining the monuments



# BOUNDARY DEMARCATION



Monument No. 123, Nogales



Boundary demarcation at Tecate Port of Entry



### International Bridges

- IBWC maintains 2 international bridges
  - Cordova International- Bridge of the Americas (El Paso- Juarez)
  - Ft. Hancock TX- El Porvenir, Chih.



Bridge of the Americas, El Paso-Juarez



#### SANITATION

- 1944 Treaty authorizes Commission to give "preferential attention to the solution of all border sanitation problems"
- 2 international wastewater treatment plants
  - South Bay
  - Nogales
  - Nuevo Laredo



**Nogales IWTP** 



#### AMISTAD DAM

- Located at Del Rio, TX- Cd. Acuña, Coahuila
- Built in 1969
- Impounded Rio Grande extends for 75 miles, covers 65,000 acres
- Normal conservation a capacity of over 3 million acre-feet



Amistad Dam



### FALCON DAM

- Located at Falcon Heights, TX- Nueva Cd. Guerrero, Coahuila
- Built in 1954
- Reservoir covers 78,300 acres at conservation capacity
- Normal conservation capacity of 2.6 million acre-feet



Falcon Dam



#### FLOOD CONTROL



Presidio levee during 2008 flood

- 4 USIBWC Flood Control Projects
  - Tijuana River- San Diego, CA
  - Upper Rio Grande- Southern New Mexico and West Texas
  - Presidio- Big Bend Area of Texas
  - Lower Rio Grande- Near McAllen, Harlingen, Brownsville, TX
- USIBWC maintains flood control levees, tracks flow, operates diversion dams in coordination with Mexico



# Lower Rio Grande Flood Contol



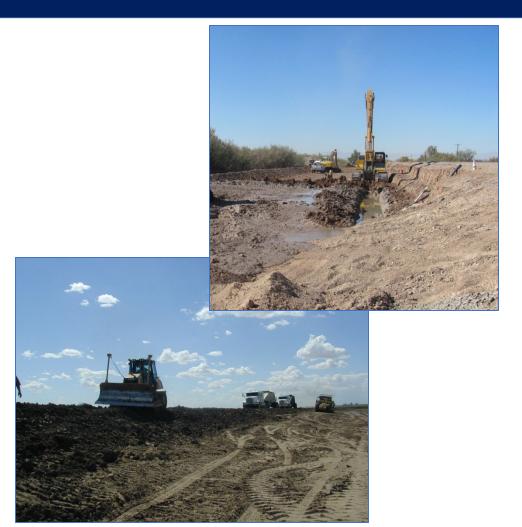
Anzalduas Dam in 2007



Retamal Dam on July 18, 2010



# LEVEE CONSTRUCTION







# Questions?

Leslie Grijalva
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#### INTERNATIONAL BOUNDARY AND WATER COMMISSION

**UNITED STATES SECTION** 

#### **USIBWC CITIZEN FORUM PROGRAM**

Leslie Grijalva Public Affairs Specialist

October 26, 2023



#### CITIZEN 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 Citizen 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.



#### CITIZEN FORUM LOCATIONS

- San Diego
- Colorado River
- Southeast Arizona
- Upper Rio Grande
- Lower Rio Grande

- San Diego Field Office
- Yuma Field Office
- Nogales Field Office
- HQ, American Dam Field Office, Las
- Cruces Field Office, Fort Hancock Field Office
- Mercedes Field Office



#### San Diego

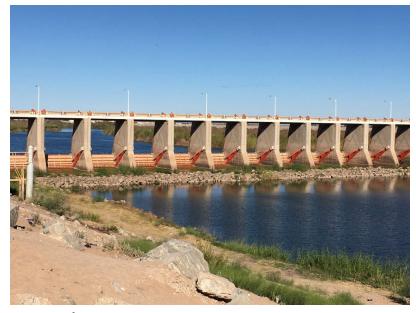
- San Diego Field Office Updates
- Transboundary Flows
- USMCA Projects
- Water Quality Testing
- San Diego Beach Water Quality Monitoring and Testing





#### Colorado River

- Colorado River Basin System Status and Outlook
- New River
- Mexicali Sanitation
- Minute 323 Implementation
- Drought Contingency
- The Salton Sea
- IBWC Salinity Control



**Morelos Dam** 



#### Southeast Arizona

- International Outfall Interceptor (IOI)
- Closed Circuit TV (CCTV) and Cure in Place Pipe
- PFAs in the Environment
- Nogales International Wastewater Treatment Plant



**NIWTP** 



- Upper Rio Grande
  - Water Deliveries/Convention of 1906
  - Rio Grande Levee Rehabilitation
  - Sediment Removal





#### Lower Rio Grande

- Arroyo Colorado Vegetation Removal Project
- Safety of Dams
- Morillo Drain/Salinity
- Levees/Flood Control
- Border Fencing
- Mexico's Rio Grande Water Deliveries to the U.S.
- Water Quality



Anzalduas Dam



#### BOARD MEMBER DUTIES

- Each region has 3 meetings per year (every 4 months)
- Meetings will be held in a hybrid format
- Board term is for two years
- CF is not a federal advisory board; goal is to exchange information and to receive feedback from a diversity of viewpoints
- 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
- Board Members will not serve as spokespeople for the IBWC
- Members serve as volunteers. There is no reimbursement for expenses
- Meeting videos and presentations on the web
- Notices go out 2 weeks prior to meeting via email
- Reminder phone call the day prior
- Board Member tours can be scheduled



### CITIZEN FORUM BOARD TERM END DATES

San Diego

Colorado River

Southeast Arizona

Upper Rio Grande

• Lower Rio Grande

March 2025

January 2024

June 2025

October 2023 (open now)

July 2025



# CITIZEN FORUM MEETING DATES

• November 8, 2023

• December 6, 2023

• January 11, 2024

• January 18, 2024

• February 15, 2024

San Diego (hybrid)

Lower Rio Grande (hybrid)

Colorado River (hybrid)

Upper Rio Grande (hybrid)

Southeast Arizona (hybrid)



#### Point of Contact:

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Or

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915-317-5915



#### INTERNATIONAL BOUNDARY AND WATER COMMISSION

UNITED STATES SECTION

#### Nogales International Wastewater Treatment Plant History and Process

John Light
Area Operations Manager



### NIWTP HISTORY

1951: Nogales Sanitation Project in operation — *trickling filter system*Capacity = 1.6 MGD

Construction cost = \$560,000 shared equally by US and MX

Relocated and expanded NIWTP in operation -5 cell aerated lagoon system Capacity = 8.2 MGD - 3.25 US / 4.95 MX Construction cost = \$900,000 plant + \$2.165M IOI = \$3.065M total US - \$1.386M / MX - \$887,000 / Nogales, AZ - \$792,000 (EPA grant)



### NIWTP HISTORY

1992: NIWTP expansion in operation – 2 complete mix and 8 partial mix lagoon system

Capacity = 15.75 MGD - 5.85 US / 9.9 MX

Construction cost = \$1.7M

US - \$700,000 / MX - \$1M (\$100k for 10 years)

2009: Upgraded NIWTP in operation – new biological nutrient removal system

Capacity = 14.74 MGD - 4.8 US / 9.9 MX

Construction cost = \$64M from Nogales, AZ (EPA grant)



## NIWTP SITE LAYOUT





## **HEADWORKS**

- Normal Inflows= 13 to 15 MGD
- 1 coarse bar screen
- 2 fine screens
- 2 grit pumps









### BIOREACTORS

 Biological nutrient removal system Modified Ludzack-Ettinger process



- 3 Aeration Basins
- Capacity ≈ 4.9 MGD each basin
- Total capacity ≈ 14.74 MGD





## SECONDARY CLARIFIERS



Liquid is pumped to sand filters

#### • 3 Clarifiers:

- Work in tandem with 3 aeration basins
- Solids settle and:
  - Return Activated Sludge returned to aeration basins
  - Waste Activated Sludge pumped to aerobic digestion pond





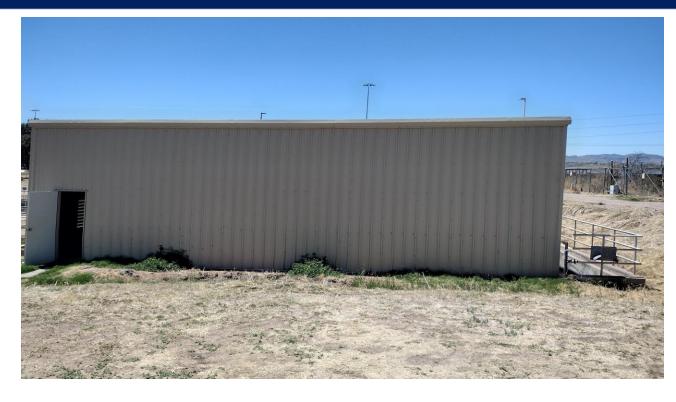
### SAND FILTERS



- Liquid is processed through sand filters
- Sand is regularly backwashed
- Backwashed water is pumped to aeration basins or aerobic digestion pond



# Ultraviolet Disinfection and Discharge



 Liquid is disinfected by ultraviolet light before being discharged





# AEROBIC DIGESTION POND

• Sludge undergoes aerobic digestion through aeration





# SLUDGE STORAGE POND



 Sludge is pumped from aerobic digestion pond to sludge storage pond





# BELT FILTER PRESSES



- Liquids are removed from sludge through belt filter press
- Remaining sludge contains 20% dry solids
- Sludge is properly disposed in landfill



## QUESTIONS

**Contact:** 

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