

International Boundary and Water Commission United States Section

For immediate release November 2, 2023

USIBWC San Diego Citizens Forum Public Meeting on November 8

The United States Section of the International Boundary and Water Commission (USIBWC) San Diego Citizens Forum board is pleased to announce that it will host an in-person and virtual public meeting on Wednesday, November 8, from 5:30 – 7:30 p.m. PDT.

Dr. David Sodeman, Chief of the Monitoring and Technical Services Division for the San Diego County Air Pollution Control District, will give a presentation on the installation of AQMesh sensors near the Tijuana River Valley and in the surrounding community. The collected data will be shared with the public and other agencies as another tool to address ongoing issues in the area.

Morgan Rogers, Area Operations Manager of the USIBWC San Diego Field Office, will present an overview of Commission activities in the San Diego region. The presentation will include an update on the South Bay International Wastewater Treatment Plant and San Diego—Tijuana wastewater infrastructure improvement projects.

The public meeting will be held in person at:

Coronado Public Library Winn Room, 640 Orange Ave., Coronado, CA 92118

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 <u>+1 872-240-1286, 230947729#</u> | Conference ID: 230 947 729#

For those connecting via phone, the presentations will be available before the start of the meeting. Go to the San Diego Citizens Forum page https://bit.ly/4604RpM or scan the QR Code at the bottom of this release.

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 November 6, 2023.

News Media Contact:

Leslie Grijalva

Email: leslie.grijalva@ibwc.gov Phone: 915-832-4770

SAN DIEGO CITIZENS FORUM

Wednesday, November 8, 2023, 5:30 – 7:30 p.m. PDT

Coronado Public Library Winn Room, 640 Orange Ave., Coronado, CA 92118 And via Teams Webinar

Agenda

- Welcome and Introductions Leslie Grijalva, Public Affairs Specialist, USIBWC
- **Air Monitoring of Tijuana River Odors** Dr. David Sodeman, Chief of Monitoring and Technical Services Division, San Diego County Air Pollution Control District
- Update of IBWC Activities in San Diego Region Morgan Rogers, P.E., Area Operations Manager, USIBWC San Diego Field Office
- Public Comment
- Board Discussion and Formal Vote on a Co-Chair
- 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 leslie.grijalva@ibwc.gov.

Microsoft Teams meeting

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

Meeting ID: 274 285 898 555
Passcode: J7WAv8
Download Teams | Join on the web

Or call in (audio only)

<u>+1 872-240-1286,,230947729#</u> United States, Chicago Phone Conference ID: 230 947 729#





San Diego County Air Pollution Control District

Air Monitoring of Tijuana River Odors

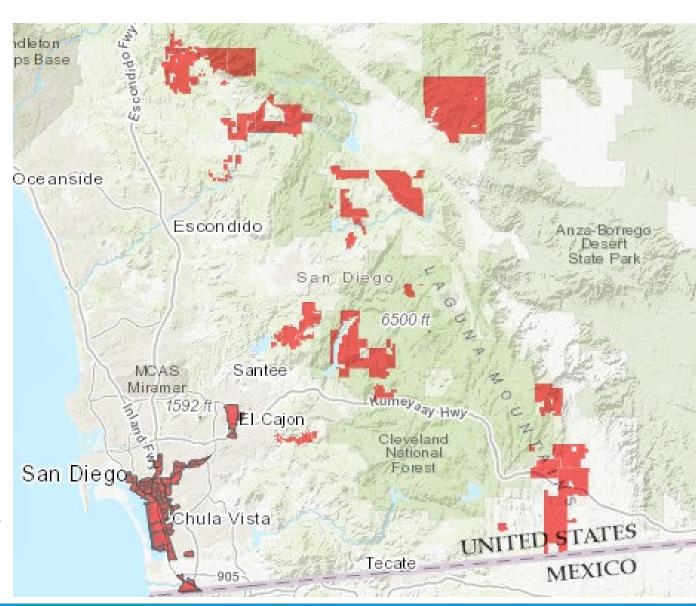
2023



Assembly Bill 617 (2017)

Proyecto de Ley de la Asamblea 617 (2017)

- Purpose of bill is to identify and reduce air pollution in communities experiencing environmental injustices.
- El propósito del proyecto de ley es identificar y reducir la contaminación del aire en las comunidades que experimentan injusticias ambientales.
- A key component to the bill is community engagement in the development of programs.
- Un componente clave del proyecto de ley es la participación de la comunidad en el desarrollo de programas.



AB617 Communities AB617 Comunidades





International Border Community Steering Committee

Comité Directivo Comunitario de la Comunidad Fronteriza Internacional







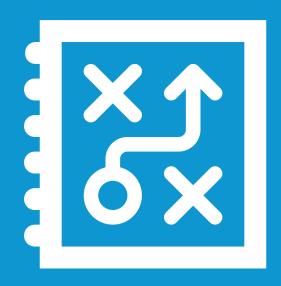








Community Air Protection Program Programa de Protección del Aire Comunitario



Community Emissions Reduction Program (CERP)

Programa Comunitario de Reducción de Emisiones

Community Air Monitoring Plan (CAMP)

Plan de Monitoreo del Aire Comunitario



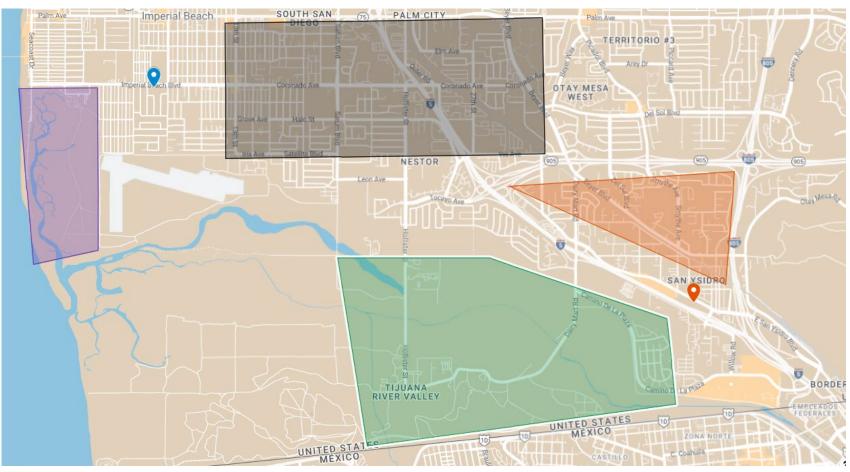
Monitoring Equipment – AQMesh Equipo de Monitoreo - AQMesh

- Funded by a U.S. EPA Border 2025 Grant
- Solar-powered
- Data transmission via cellular network
- Sensors for:
 - Hydrogen sulfide
 - Sulfur dioxide
 - Total volatile organic compounds
 - Carbon monoxide
 - Nitrogen dioxide
 - Wind speed and direction
 - Temperature, pressure, and humidity
- Capable of measuring levels below hydrogen sulfide odor limit (10 ppb)

- Financiados por una subvención la EPA a través del Programa Frontera 2025
- Utiliza energía solar
- Transmite datos a través de red celular
- Identifica niveles de:
 - Sulfuro de Hidrógeno
 - Dióxido de Azufre
 - Compuestos Orgánicos Volátiles Totales
 - Monóxido de Carbono
 - Dióxido de Nitrógeno
 - · Dirección y velocidad del viento
 - Temperatura, presión y humedad atmosféricas
- Capaz de medir niveles de sulfuro de hidrógeno por debajo del límite de olor (10ppb)

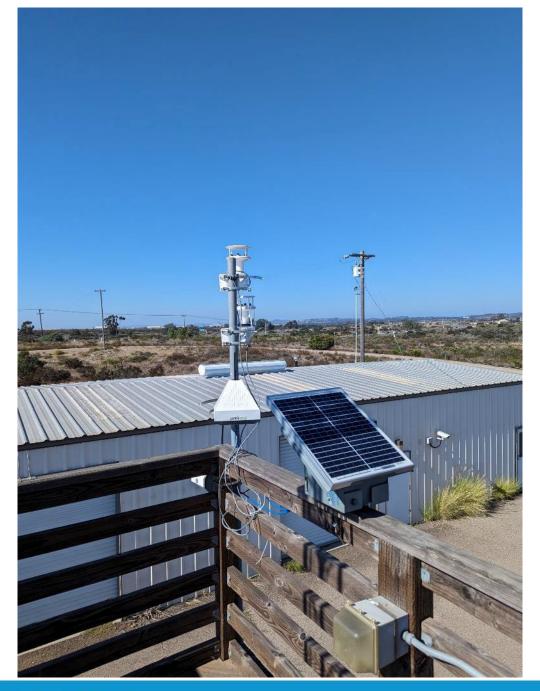


Monitoring Locations Ubicaciones de Monitoreo



- San Diego Fire Station 29
- City Hall Imperial Beach
- Tijuana River Valley Estuary
- San Ysidro Residential
- Tijuana River Valley East
- 🥭 South San Diego Residential



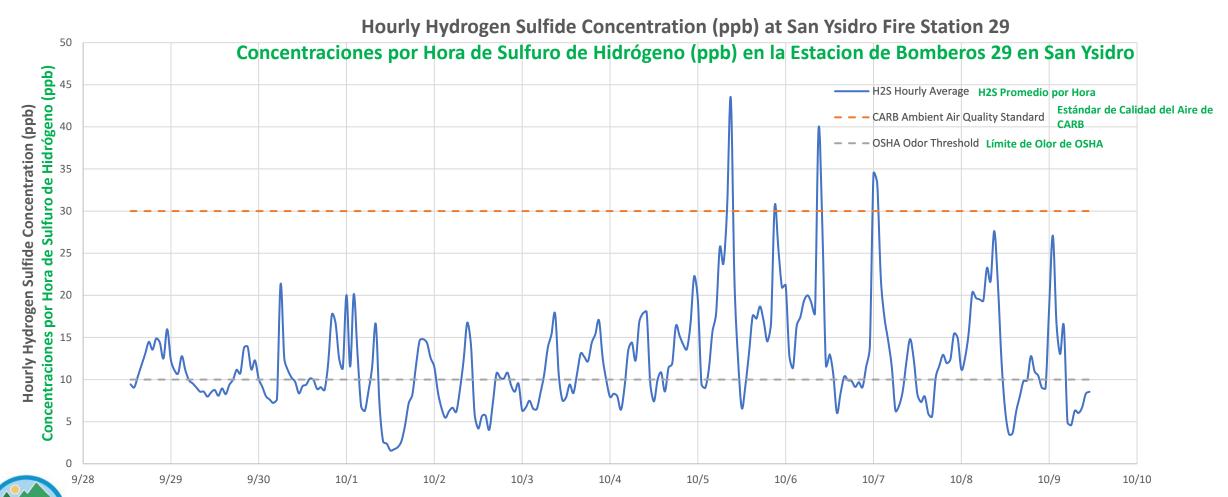




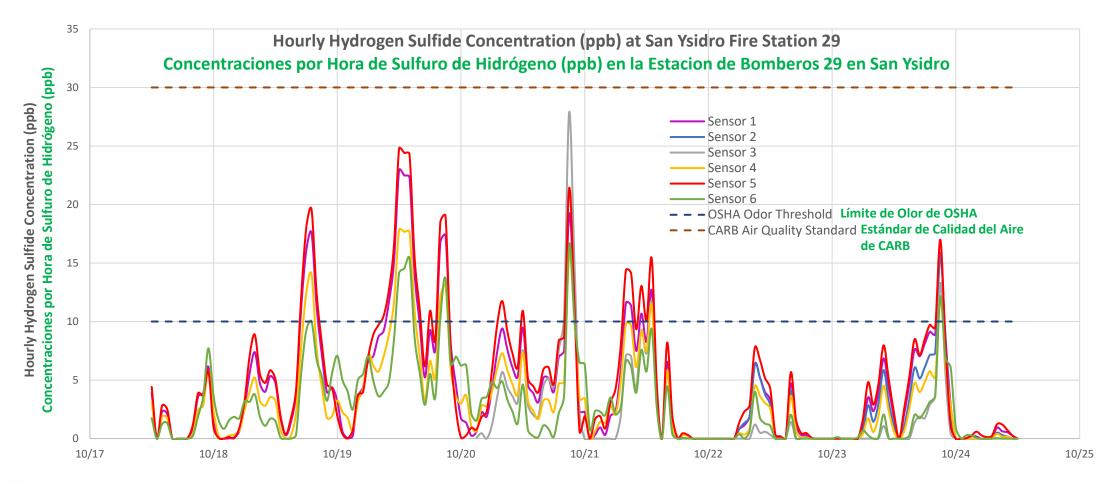




Monitoring Data – First Sensor Datos de Monitoreo – Sensor primero



Monitoring Data – All Sensors Datos de Monitoreo – Todos los Sensores





Next Steps

Próximos Pasos

- Data issues
 - Transmission and publication to sdapcd.org
- Quality assurance and control
 - All six sensors collocated currently
 - Procuring reference grade analyzer for San Ysidro monitoring site
- Other locations for sensors
 - Imperial Beach City Hall
 - South Bay Water Reclamation Plant
 - More tbd
- Collaboration on analysis and research

- Problemas de datos
 - Transmisión y publicación a sdapcd.org
- Seguro y control de calidad
 - Todos de los seis sensors están colocados ahora
 - Comprar monitor "reference grade" por sitio monitoreo en San Ysidro
- Otras ubicaciones por sensores
 - Ayuntamiento de Imperial Beach
 - South Bay Water Reclamation Plant
 - Y más
- Colaboración en análisis y investigación



Contact Information Información de Contacto

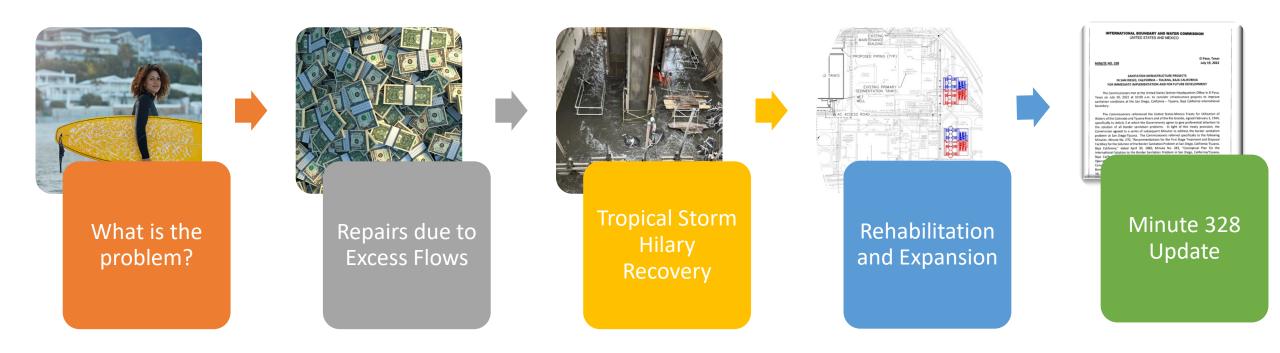
- Kevin Bradley
 - Senior Chemist Community Air Monitoring Program
 - Kevin.Bradley@sdapcd.org
- David Sodeman
 - Chief Monitoring and Technical Services
 - David.Sodeman@sdapcd.org
- Domingo Vigil
 - Deputy Director
 - Domingo.Vigil@sdapcd.org

Thank you! ¡Gracias!





Where are we now?



What is the problem?

Excess Flows - PB1A 42" Pipeline Rupture at Matadero Canyon

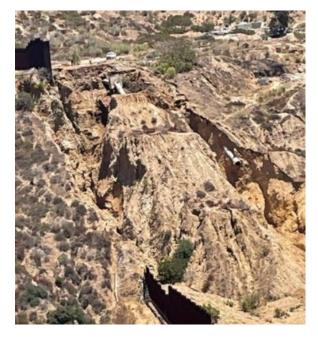
- Rupture July 2022
- Loss of 25 MGD wastewater system capacity
- Flows diverted to the SBIWTP as excess flows
- Flows diverted to the Tijuana River as transboundary flows



July 30, 2022



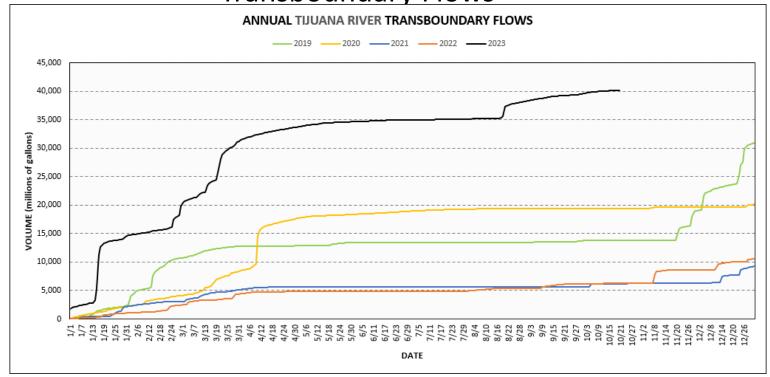
August 15, 2022



July 31, 2022

Tijuana River - Current Challenges

Transboundary Flows



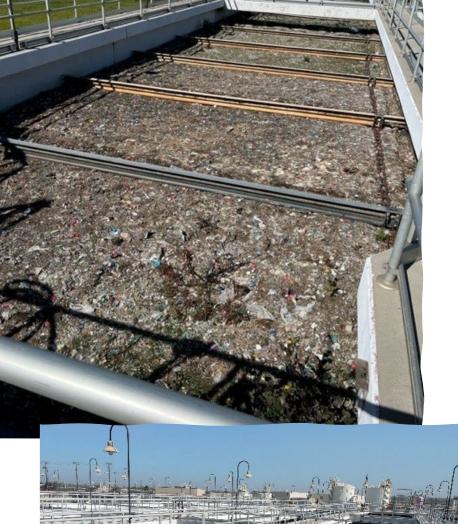
Funding Challenges

- Little investment in WWTP
- ~\$100 to \$150 M in urgent rehabilitation needs
- Expansion cost greatly exceeded original estimates
- (\$910M +/- 30% vs \$300M +50%/-25%)

Excess Flows to Plant

	Monthly Average Effluent Flow (MGD)	Water Quality Permit Exceedances
July 2022	23.6	0
August 2022	<mark>31.4</mark>	8
September 2022	<mark>33.7</mark>	10
October 2022	<mark>32.5</mark>	12
November 2022	<mark>31.5</mark>	12
December 2022	<mark>28.6</mark>	14
January 2023	<mark>27.5</mark>	13
February 2023	<mark>29.2</mark>	14
March 2023	24.9	13
April 2023	21.2	15
May 2023	<mark>26.8</mark>	14
June 2023	<mark>29.4</mark>	17
July 2023	<mark>33.1</mark>	15
August 2023	<mark>27.6</mark>	15
September 2023	23.8	10
October 2023	25.5	10

35 Permit parameters regulated



Excess Flows - Challenges

- Clogging of bar screens with trash & sediment
- Excessive wear and tear of influent pumps 3/6 pumps operational
- Overloaded grit chambers
- Overloaded primary sedimentation tanks no solids removal
- Solids carryover into the secondary treatment
- Permit exceedances in effluent volume quality



Steps forward for SBIWTP Compliance

- Outcome: Achieve a permit compliant SBIWTP by August 15, 2024. Incremental improvements expected.
- IBWC has **awarded \$10M in FY 2023** in improvements for:
 - ✓ Replacing Junction Box 1 as a design build
 - ✓ Rehabilitation of all the **mechanical parts** for primary sedimentation tanks which have long lead times
 - ✓ Cleaning out the **primary sedimentation tanks**
 - ✓ Replacement of influent pumps #1 and # 5
- Mexico is replacing the 42-inch wastewater line to SAB
 - ✓ Estimated completion of **November 2023**
 - ✓ Will reduce transboundary flows
 - ✓ Will reduce **excess flows** to plant



October 26, 2023

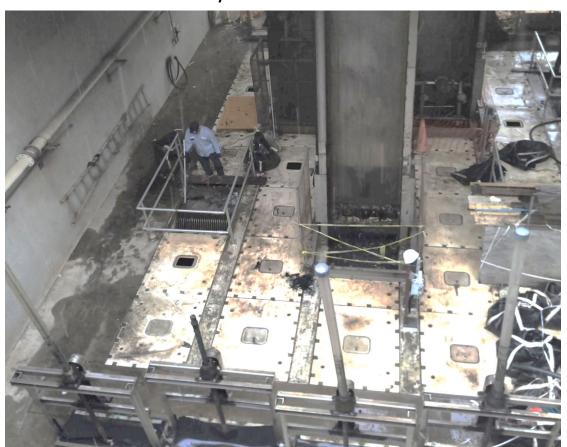


Tropical Storm Hilary Impacts

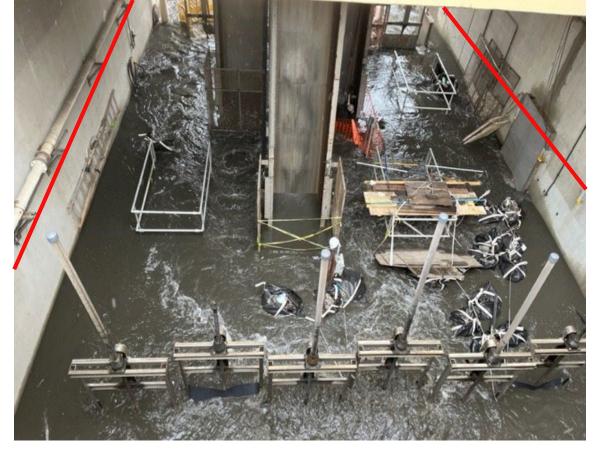
- Exacerbated vulnerabilities primarily through excessive flows and influx of debris:
- Excessive Inflows
 - Exceeded the design flow capacity of the plant by 100% for 6 hours (25 vs 50+ MGD) and by 320% for 6 hours (80 MGD) on Sunday August 20, 2023 to Monday, August 21, 2023.
 - Filled the equalization tanks within the first hour of storm
 - Secondary treatment was bypassed at 5pm Sunday for 10 hours and flow discharged through outfall
 - Flooding of headworks- pump and electrical issues
- Trash, Sediment, and Debris
 - Excess build-up in wet wells, tanks, and basins
 - Carried by flow into pumps (influent, WAS, USST, non-potable water)
 - Entanglement of trash in impellers and check valves pump failures

Bar Screens

Dry Conditions



Beginning of Storm

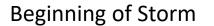


Waterline at peak storm, approx. 8 ft.

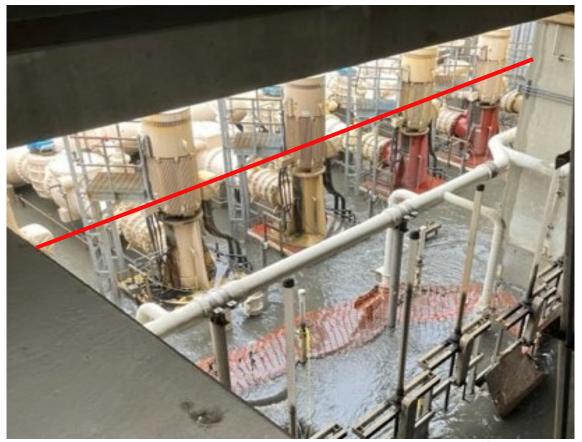
Tropical Storm Hilary Recovery

Influent Pumps

Dry Conditions

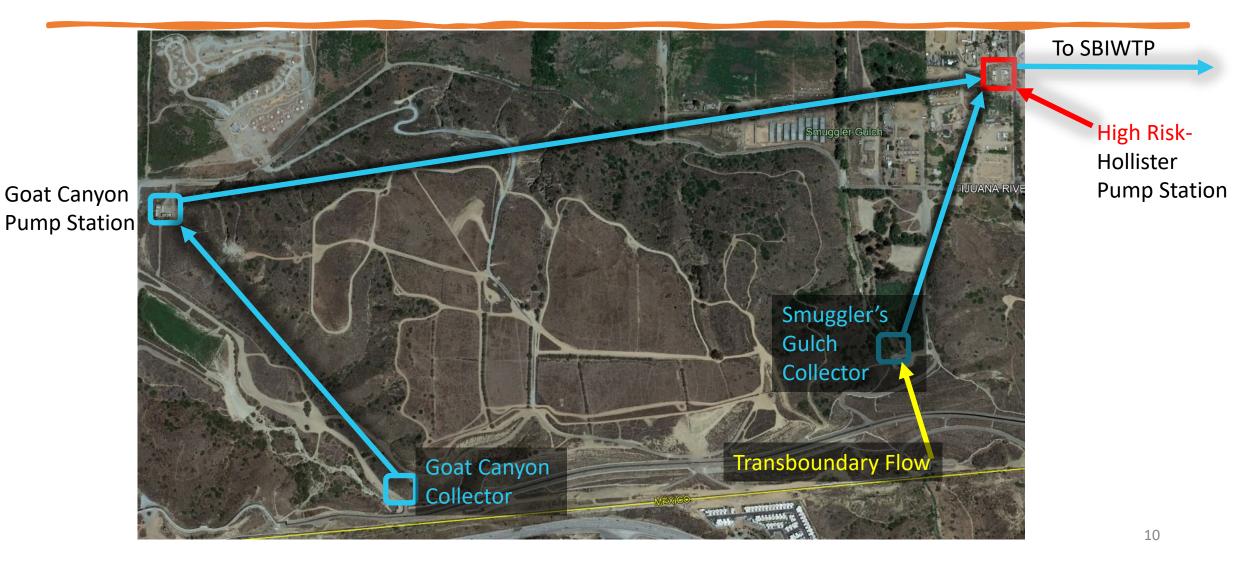








Canyon Collectors Pump Stations





Tropical Storm Hilary Recovery Plan

Recovery: Estimated Cost of \$8,000,000

- Funding has been redirected from IBWC's budget to the recovery
- Repairs will be done in parallel with WWTP Plant compliance
- Incremental improvement should be seen within 30 days
- Recovery elements
 - 1. Emergency pump and electrical repairs at headworks
 - 2. Replace influent pumps: Install 2 pumps previously ordered and arriving Nov-Dec 2023. Order 4 additional pumps
 - 3. Replace all inoperable pumps throughout (WAS, AST, non-potable water, Hollister pump station)
 - 4. Rehabilitate USST #1 pumps, and piping

Preparedness: Estimated Cost of \$32,000,000

Elements are included in the essential rehabilitation budget for expansion

What is our priority for the SBIWTP Expansion Project?

- Reduce transboundary flows 90%
- Expand Capacity to 50 MGD- From 25 MGD to 50 MGD
- Rehabilitation of Existing Plant rehabilitate essential processes and infrastructure needed for expansion
- Add Peaking Factor- additional capacity to treat temporary flows up to 75 MGD reliably and still meet permit requirements
- Total Cost: \$600M +/- 30%





Next Steps

- It is estimated that this **project has exceeded** its USMCA funding availability by \$310 M +/- 30%.
- Construction will be phased, based on availability of funds.
- Finalizing procurement documents
- Pre-Solicitation Notice issued on October 20, 2023
- Solicit bids in the fall of 2023 for design and construction
- Construction schedule to be developed by Design Firm and Construction Contractor.
- Opportunities will be identified to **initiate operations incrementally** to allow for gradual and earlier increase of treatment capacity.
- IBWC and EPA is working with NADB on a funding strategy for the **anaerobic digesters** and energy recovery.

SBIWTP Permit

- Alleged violations being addressed by USIBWC as follows:
 - Self-Reporting
 - Realignment of funds and plan in progress to address work required due to impact of excess flows from pipeline breaks in July 2022 and Tropical Cyclone Hilary in August 2023
 - Tijuana River Valley Monitoring Work Plan is being addressed through Minute 320.
 USIBWC contracted a Secretary to oversee the Minute 320 binational activities
 - Binational meetings held and correspondence sent to Mexico to urge repair of pipeline PB1A to reduce excess flows
- NOVs received on September 5 and October 27, 2023 for effluent exceedances and reports' submission
- Draft Time Schedule Order issued by the San Diego Regional Water Quality Board issued for public comment on October 31, 2023

SBIWTP Permit – Update on Work to Achieve Complaince



Junction Box 1 (JB1) Rehabilitation

• JB1 restoration of flow control into the Plant.

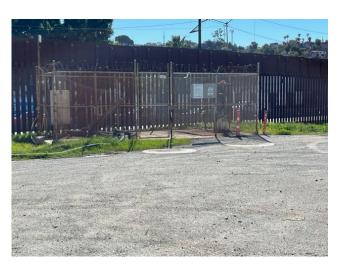
Rehabilitation by replacement of inoperable JB1

• Current Status:

Contract Award: August 2023

○ Cost: \$5.8M

Schedule: 12-18 months, completion by early 2025







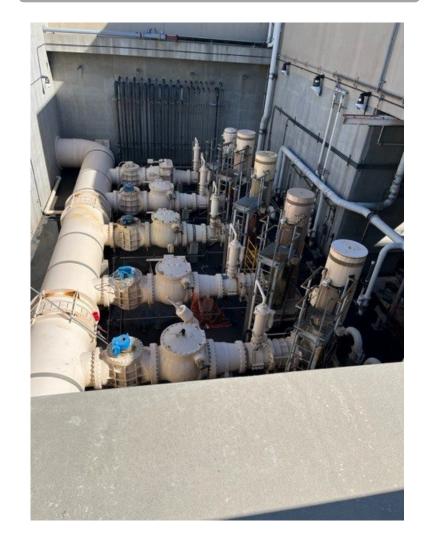


Repairs due to Excess Flows

Influent Pumps – Replacement

- Six influent pumps at the headworks
- Two minimum for normal operations
- Current status:
 - Three pumps operational
 - Two new pumps scheduled for delivery Nov & Dec 2023
 - Repair and/or replace inoperable pumps
- Increase reliability and redundancy of influent pumps





Primary Sedimentation Tanks (PSTs) - Rehabilitation

- Primary treatment currently inoperable since early 2023
- Five PSTs total, all inoperable
- Need minimum 3 PSTs for normal operation
- Current Status:
 - PST #5 parts available Oct 2023, rehab in progress, online Jan 2024
 - PSTs #1 & #2 start cleaning/rehab Jan 2024, online Apr 2024
 - Plant permit compliance summer 2024
 - PSTs #3 & #4 to follow
- Restore Primary Treatment and permit compliance



- Diverts flows from Goat Canyon & Smuggler's Gulch canyon collectors to the SBIWTP
- Typical flows less than 1 MGD and 4% of total flows to the SBIWTP
- Four pumps total, all were inoperable after Tropical Storm Hilary in August 2023
- Current Status:
 - One existing pump restored on Sept 19
 - One new pump installed on Sept 29. Pump station operational.
 - One new pump received Oct 10 and awaiting installation
 - Additional pumps being ordered for fourth pump and redundancy
- Increase reliability and redundancy of Hollister pump station.







Minute 328 – Participants

August 7 Meeting in Mexico City

High-level US and Mx government participation

- US Ambassador, Tijuana Consul General
- Chief of N. America for Mexico's Ministry of Foreign Relations, SD Consul General
- IBWC Commissioners
- EPA Regional Administrator, Deputy Assistant Administrator for international affairs
- CONAGUA Director General
- Head of Baja California water agency
- Mexico's treasury (Hacienda) and public works funding agencies
- Head of Tijuana utility





Smugglers Gulch/Matadero Canyon

Minute 328 – Mexico's Project Status

- San Antonio de los Buenos Wastewater
 Treatment Plant goes out to bid late 2023.
- Repair of ruptured pipeline at Smugglers Gulch-Nov 2023
- Work underway on International Collector (BWIP) along border
- Work underway on Antiguo Forcemain
- Oriente Collector (BWIP) Completed
- Pumping Plant projects PB CILA completed, PB Laureles 1 in procurement process
- Other Mx projects pending NADB certification, CONAGUA review and funding

Administration Support

- October 11, 2023: Visit by Assistant Secretary of State for Western Hemisphere Affairs Brian Nichols to South Bay International Wastewater Treatment Plant
 - USIBWC briefed him on rehabilitation and expansion needs of the plant
 - Assistant Secretary toured the plant
- Late October 2023: \$310 million supplemental budget request from President Biden to complete 50 mgd plant with peaking factor
- Department of State engages regularly with Mexican officials to support continued progress on Minute 328 project implementation



Assistant Secretary Nichols toured the SBIWTP.

Conclusion

Complying with our discharge permit is a priority

- Self-Reporting
- Realigned \$18M to address work required due excess flows from Pipeline 1A break in July 2022 and Tropical Storm Hilary in August 2023.
- These improvements will achieve compliance of the plant <u>independent</u> of the expansion project.
- Weekly meetings with San Diego Regional Water Quality Control Board

Activities with Mexico

- Binational meetings to identify solutions are held regularly at field office and HQ level.
- USIBWC-CILA Rapid Response notification for local officials.
- High-level communication was held with to Mexico to urge repair of pipeline PB1A to reduce excess flows. **Dry weather transboundary flows should decrease starting November.**
- Minute 328 regular meetings held to ensure advancement of projects.

Conclusion

Communication with stakeholders

- Frequently brief legislative and executive branch of the federal government
- Three citizens forum meetings per year
- Periodic public meetings through USMCA process
- Twitter and email communication

Other Funded Infrastructure Activities

- Manpower Study
- Asset Management System
- Capital Plan

