International Boundary and Water Commission
United States Section

For immediate release
February 5, 2025

USIBWC San Diego Citizens Forum Public Meeting in San Ysidro on February 13

The U.S. Section of the International Boundary and Water Commission (USIBWC) San Diego Citizens Forum board will host an in-person and virtual public meeting on **Thursday**, **February 13, 2025, from 6-8 p.m. PST.**

- **USIBWC Commissioner Dr. Maria-Elena Giner and staff** will present updates on the South Bay International Wastewater Treatment Plant and its compliance, Minute 328, and transboundary flows.

- **Brian McNeece, San Diego Citizens Forum Co-Chair,** will share a presentation on a recent tour the USIBWC Citizens Forum Board took of the City of San Diego's Ocean Monitoring Lab.

- **Dr. Ryan Kempster, Ocean Monitoring Program Manager, City of San Diego,** will provide an overview of the city's Ocean Monitoring Program. Dr. Kempster will also provide updates on recent data collection efforts and the current state of local coastal waters as it relates to the impact of wastewater discharge.

The public meeting will be held in person at:

San Ysidro Civic Center
212 W. Park Ave.
San Ysidro, CA 92173

The public meeting will also be held virtually. Click here to join the meeting. 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:
+1 915-320-4718,,691623832# Phone conference ID: 691 623 832#

For those connecting via phone, the presentations will be available before the start of the meeting. Go to the USIBWC Citizens Forum page at https://www.ibwc.gov/citizens-forums-past-meetings/ and look for the links for the San Diego Citizens Forum meeting.

If you would like to speak during the public comment period, please sign up ahead of time by contacting Frankie Pinon at frankie.pinon@ibwc.gov or 915-832-4716 by noon on February 12, 2025.

Media Contact :
Frankie Pinon
frankie.pinon@ibwc.gov
915-832-4716

SAN DIEGO CITIZENS FORUM
Thursday, February 13, 2025, from 6-8 p.m. PST

San Ysidro Civic Center
212 W. Park Ave.
San Ysidro, CA 92173

And Via Teams

Agenda

- **Welcome and Introductions** – USIBWC Citizens Forum Board
- **USIBWC Commissioner Dr. Maria-Elena Giner and staff:** South Bay International Wastewater Treatment Plant updates, including plant compliance, Minute 328, and transboundary flows.
- **Brain McNeece, San Diego Citizens Forum Co-Chair:** Presentation on a recent tour the USIBWC Citizens Forum Board took of the City of San Diego's Ocean Monitoring Lab.
- **Dr. Ryan Kempster, Ocean Monitoring Program Manager, City of San Diego:** Overview of the City of San Diego's Ocean Monitoring Program, updates on recent reported data collection efforts, and the current state of local coastal waters as it relates to the impact of wastewater discharge.
- **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 915-832-4716 or email frankie.pinon@ibwc.gov

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Microsoft Teams meeting

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

Meeting ID: 281 557 629 735
Passcode: JQ7WX3Nm

Download Teams | Join on the web

Or call in (audio only)

+1 915-320-4718,,691623832#

Phone conference ID: 691 623 832#

South Bay International Wastewater Treatment Plant Updates

"4 Key Fronts Approach to Addressing Transboundary Flows & Water Quality In South Bay"

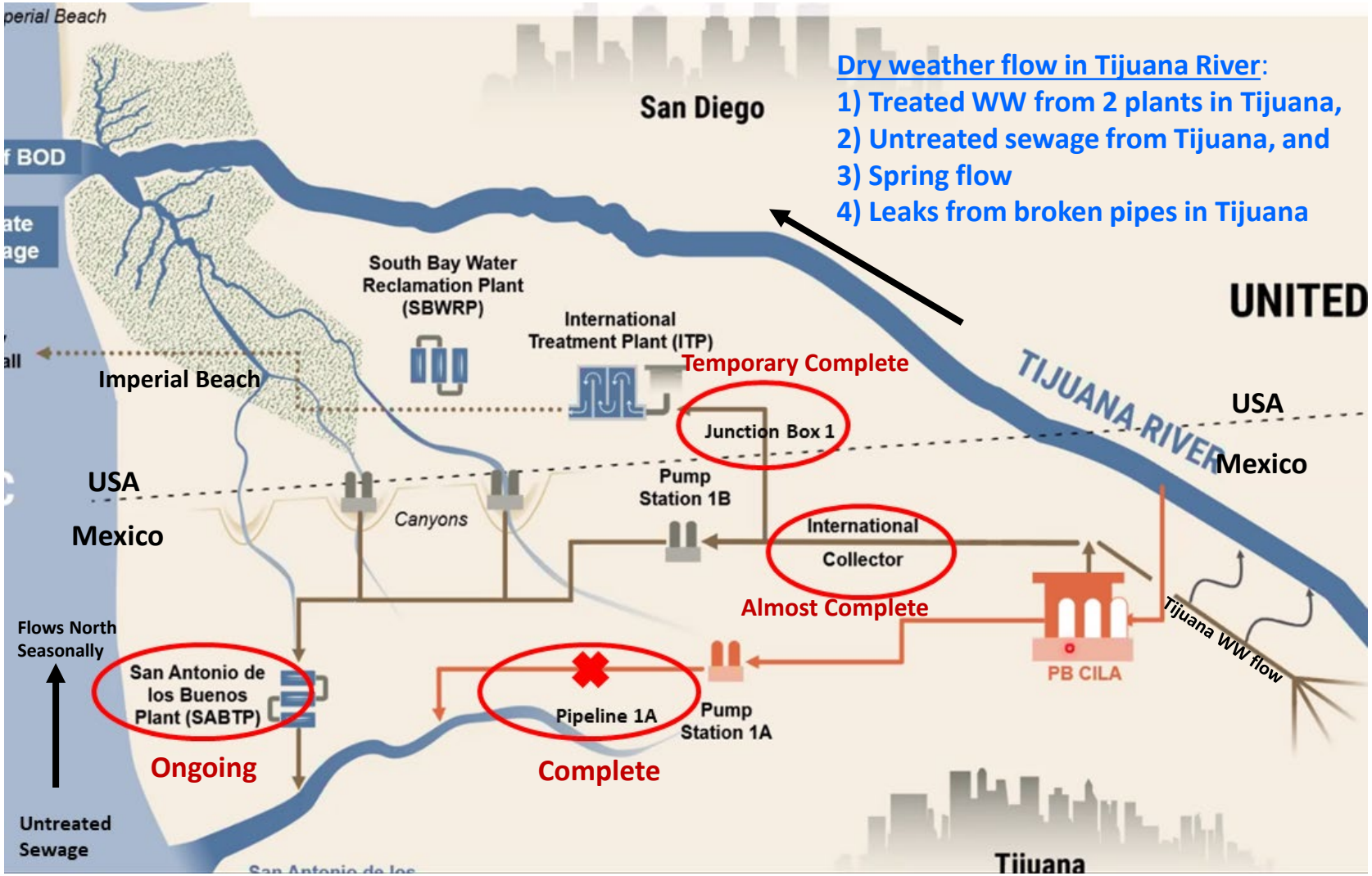
San Diego's Citizens Forum

Commissioner, Maria-Elena Giner

San Diego Field Office

Area Operations Manager, Emily Allen P.E.

February 13, 2025



What is the Problem?

Infrastructure Weak Points

Issues:

- JB1- inoperable
- Weak International Collector
- Pipeline 1A collapse
- SAB wastewater treatment plant is inoperable

Operational Limitations:

- Cannot throttle back flow, leads to excess flows
- Limited capacity in conveyance to SAB
- U.S. ITP Plant: Limited capacity and treatment
- Mexico SAB Plant: No wastewater treatment

Impact:

- Increased dry weather flows in Tijuana River to San Diego beaches
- Untreated flows to Tijuana beaches that seasonally flow north reach San Diego beaches

IBWC is working on **4 key fronts** to address transboundary flows & wastewater quality affecting the coast.

Repairs & Compliance

- Redirected $25 million to South Bay Plant (SBIWTP) to address damage.
- Recurring communication on repair progress with the State Regional Water Quality Control Board ensures transparency.

Rehabilitation & Expansion

- Plant expansion to 50 MGD with 75 MGD peak.
- Progressive design-build: design and construction can be concurrent. Schedule could be decreased by as much as 18 months.
- Design completed: May 2026
- Construction est. 5-yrs

Minute 328 – Mexico

- USIBWC – EPA monthly meetings.
- Key projects under Minute 328 underway;
  - ❑ International bypass collector
  - ❑ Rehabilitation of pump station PB1
  - ❑ New San Antonio de los Buenos WWTP
  - ❑ Rehabilitation of Pump Station
  - ❑ Tijuana River Gates

Transboundary Flows

- Accelerated Commissioner-level meetings.
- Water data from Tijuana Utility
- Review of satellite imagery.
- Binational river inspections
- U.S.-Mexico technical collaboration

REPAIRS & COMPLIANCE

Repairs & Compliance

- **Compliance obtained November 2024**
  - Continued December 2024
  - Trending well in January 2025

- **Water quality compliance** is dependent upon **volume of flow** and **# of PSTs online**
  - All 5 PSTs had been rehabilitated, cleaned and operational in January 2025
  - 3 PSTs minimum required by permit
  - Currently 3 PSTs online with 2 PST on standby in preparation for the rain
  - During dry weather, managing volume of flow by adjusting PBCILA pumps

Maintain Compliance

- **Actions to maintain compliance**
  - Adjusting # of PSTs to balance the sediment/grit impacts in the primary treatment and water quality into the secondary treatment
  - Proactive maintenance on PSTs in preparation for rain events

- **Early work stop-gap prior to Rehabilitation and Expansion Project**
  - Working with Progressive Design Build team and SBIWTP operators
  - Identify critical and essential equipment replacement to maintain permit compliance
  - Modify existing O&M contract to expedite in-kind replacements as needed
    - Pump stations
    - Belt Filter press

Maintain Compliance

Junction Box 1 (JB-1)

Status of Repairs – Estimated Schedule

- Contract Awarded December 2023
- Construction Start September 2024
- 100% Design February 2025
- Construction Completed August 2025

❖ Delays due to long lead time on the gate deliver
❖ Temporary plate installed with adjustments to manage peak flow

Repairs & Compliance

Hollister Pump Stations Timeline

6/17/24
Spill at Hollister Pump Station

7/1/24
Pump station inspection

8/2/24
Emergency contract for temp repairs

9/16/24
Hollister pump station restored Back in service

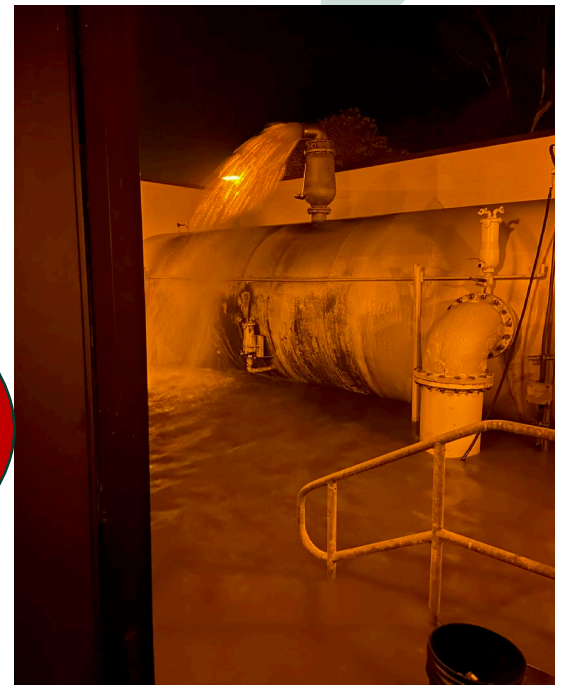
1/1/25
Spill at Hollister Pump

1/23/25
Hollister Pump Station back in service

February 25
Modify O&M contract in-kind replacement

Goats Pump Station experiences the same concerns

Exploring alternatives to address issues at both pump stations



Repairs & Compliance

Plan of actions on Sediment Concerns

- Sediment solutions in MX
- USIBWC sediment solution at old Smugglers Gulch Collector
- Initiated discussion to leverage partnership with CBP to increase sediment cleaning

Goats Canyon Collector 1/23/25

Goats Canyon Collector 1/26/25

Smugglers Gulch Canyon Collector 1/26/25

Smugglers Gulch Canyon Collector 1/23/25

REHABILITATION & EXPANSION

CONSTRUCTION MANAGEMENT DEPARTMENT

PROJECT UPDATES

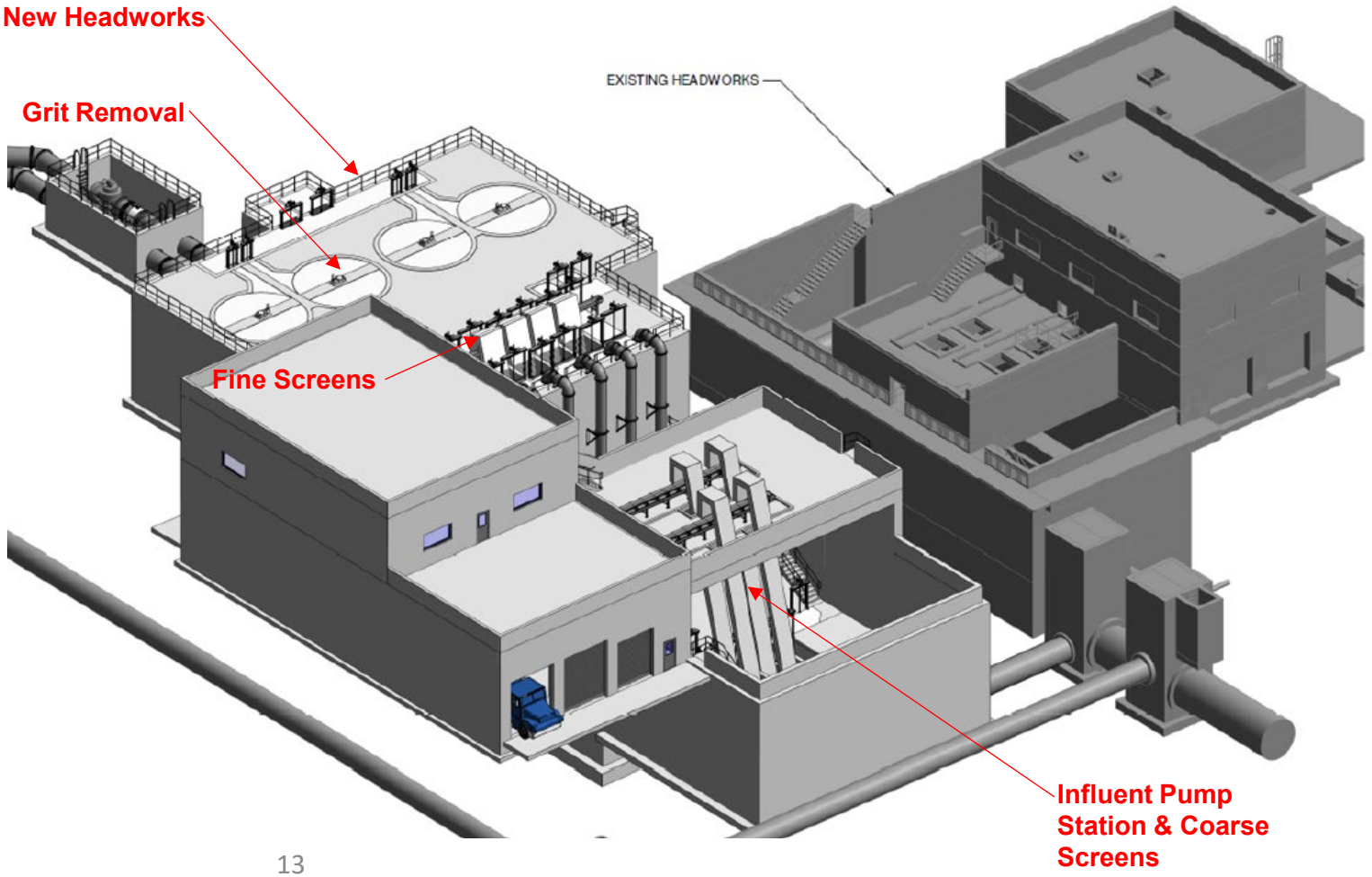
- **Full project funding approved for $600 million** for design, construction, contingencies, project management, and other support services estimated.
- Design Progress
  - Scoping meetings held in December 2024; design workshops ongoing
  - Site assessment completed; final structural assessment in February 2025
  - Alternatives to treatment technologies under review
  - **10% Conceptual Design in February 2025; 30% Design expected May 2025**
  - **60% Design Sep 2025; 90% Design Mar 2026; Obligate May 2026**
  - Initial discussions with **San Diego Regional Water Quality Board**
- Ongoing planning for **early work to maintain plant functionality** until construction completion
  - **Grit facility repairs** expedited to provide reliable grit removal sooner through plant
  - **Replace aged equipment** in-kind to prolong plant reliability
  - Concrete rehabilitation to prolong the life of existing structures until new facilities are commissioned

Benefits of Full Funding Approval

- Provides a **definitive budget**
  - Able to **confirm the expansion approach** with more confidence
  - Does not eliminate scope to meet budget
- **Eliminates potential delays**
  - Budget constraints create risk of prolonged schedule
  - Allows deliberate decisions to be made early during design
  - **No construction delays** due to incremental funding
- Provides more **resiliency** to the plant
  - Bottlenecks due to **degraded headworks, managing grit**, lack of redundancy, and wet weather flows limit plant capacity
  - Funding certainty helps **eliminate bottlenecks**
    - New headworks with redundancy and robust grit fine screening and removal
    - Approval to integrate a new influent pump station and coarse screens at new headworks
    - Improvements for increased **primary treatment capacity above average 75mgd**
    - Reviewing possible bypass of primary treatment during high flows with blending of secondary treatment
    - Consideration for **incremental capacity increases of 5-10 MGD through primary treatment**

ANTICIPATED UPDATES IN JUNE

- Design progress through 30%
- Project **Ceiling Pricing**
- Updates to early work
- Updated approach to plant expansion and treatment
- Plan for incremental increases to **primary capacity 5-10MGD**



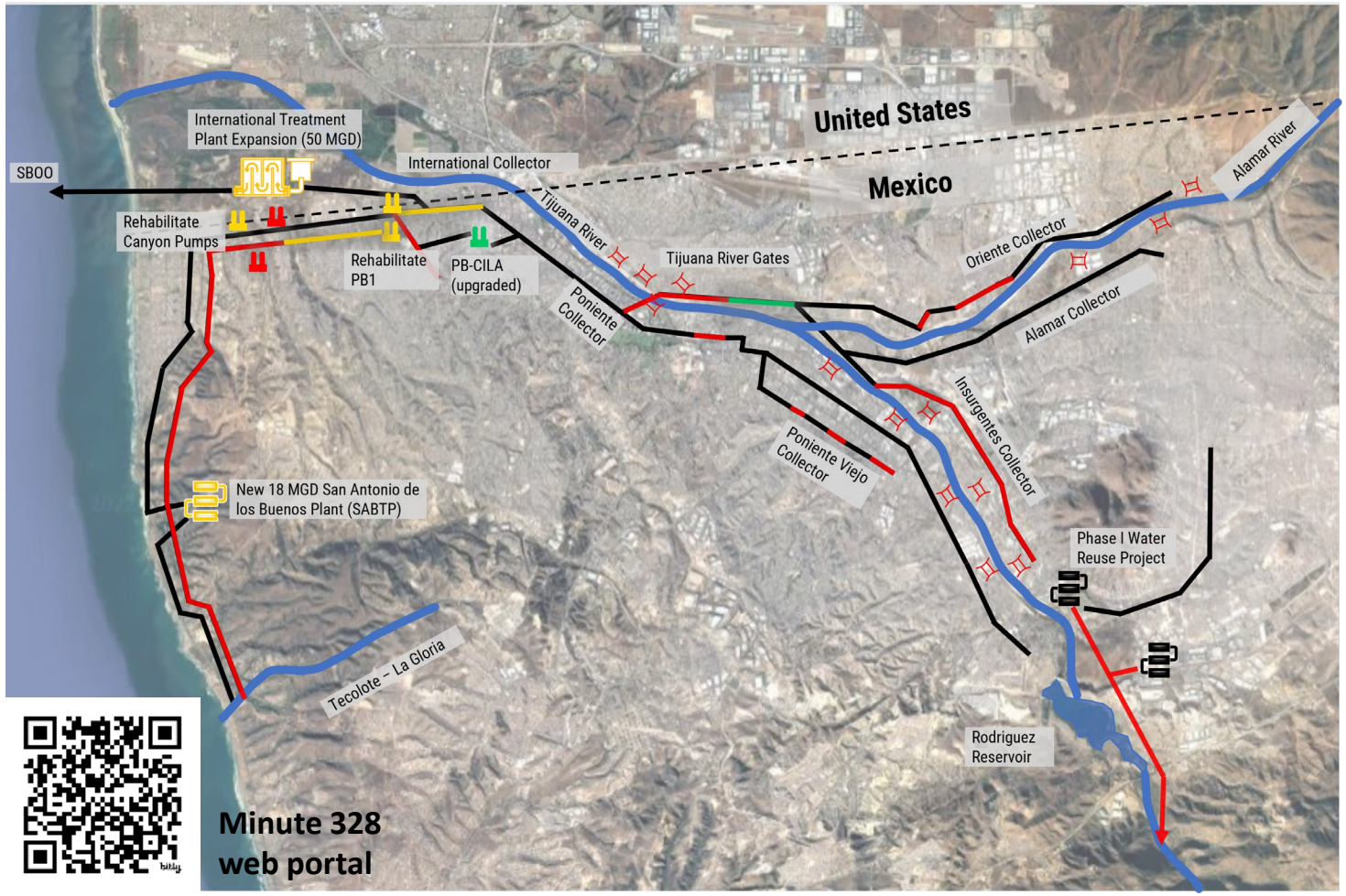
MINUTE 328 – MEXICO

Minute 328 – Mexico

IBWC Monthly follow-up

Projects in Mexico:

- Completed (**green**)
  - PBCILA – **Oct 2021**
  - Oriente collector – **Jul 2023**
  - Rehabilitation of Pumping Plant Los Laureles I (Goat Canyon) – **Jan 2025**
- Under construction (**yellow**)
  - International bypass collector – **Mar 2025**
  - New San Antonio de los Buenos WWTP – **Apr 2025**
  - Rehabilitation of PB1 – Under procurement
  - Tijuana River gates – Under procurement
- Project Planning (**red**)
  - Reuse of effluent in Mexico



TRANSBOUNDARY FLOWS

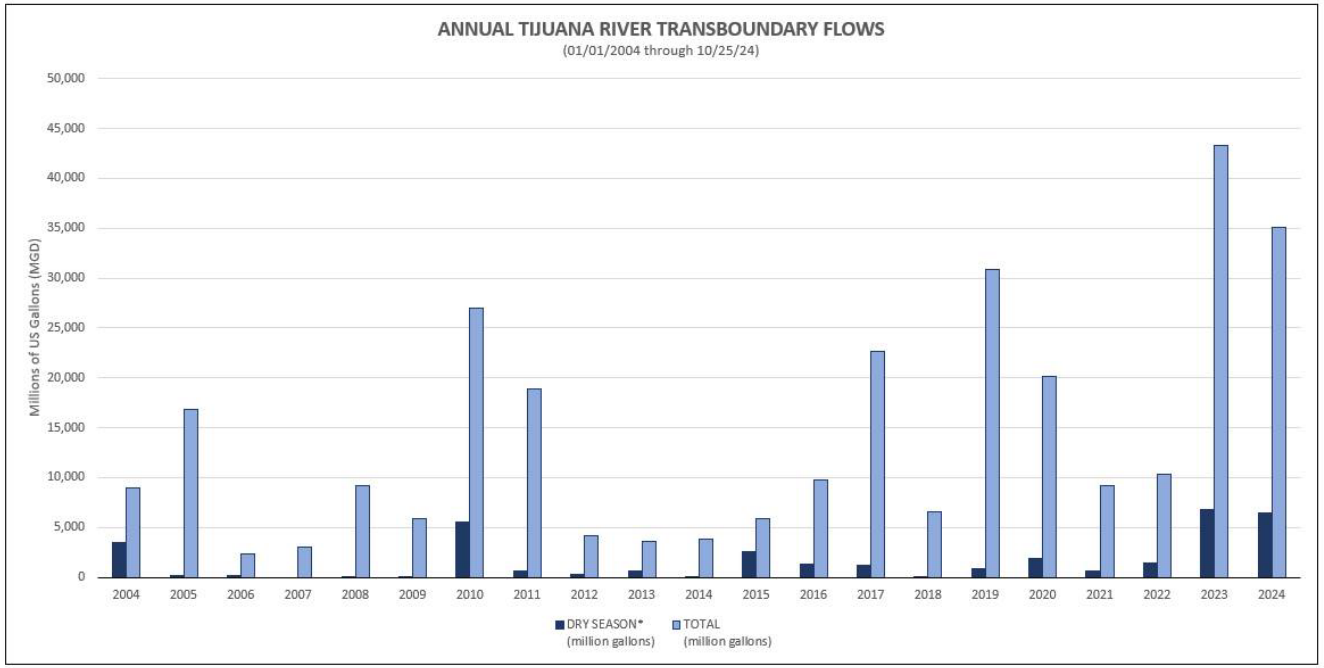
Transboundary Flows

High dry-season flows compared to past years

Tijuana River Total Mohthly Flow, MG

Month	2019	2020	2021	2022	2023	2024
January	2,371	2,185	2,179	1,006	14,449	6,586
Febuary	8,297	1,883	889	1,377	3,608	12,703
March	2,080	4,328	2,049	1,921	12,828	5,996
April	125	9,193	463	462	2,562	2,882
May	552	793	8	-	1,039	1,743
June	21	565	-	13	346	1,617
July	28	372	-	32	126	1,456
August	-	113	18	423	3,011	1,476
September	285	5	4	826	1,282	533
October	21	-	649	126	959	207
November	5,189	229	-	2,307	1,192	416
December	11,939	425	2,896	1,873	1,887	540
Total Annual Flow	30,908	20,091	9,155	10,366	43,289	36,154
Dry Weather Total	907	1,848	679	1,420	6,763	7,031

DRY SEASON



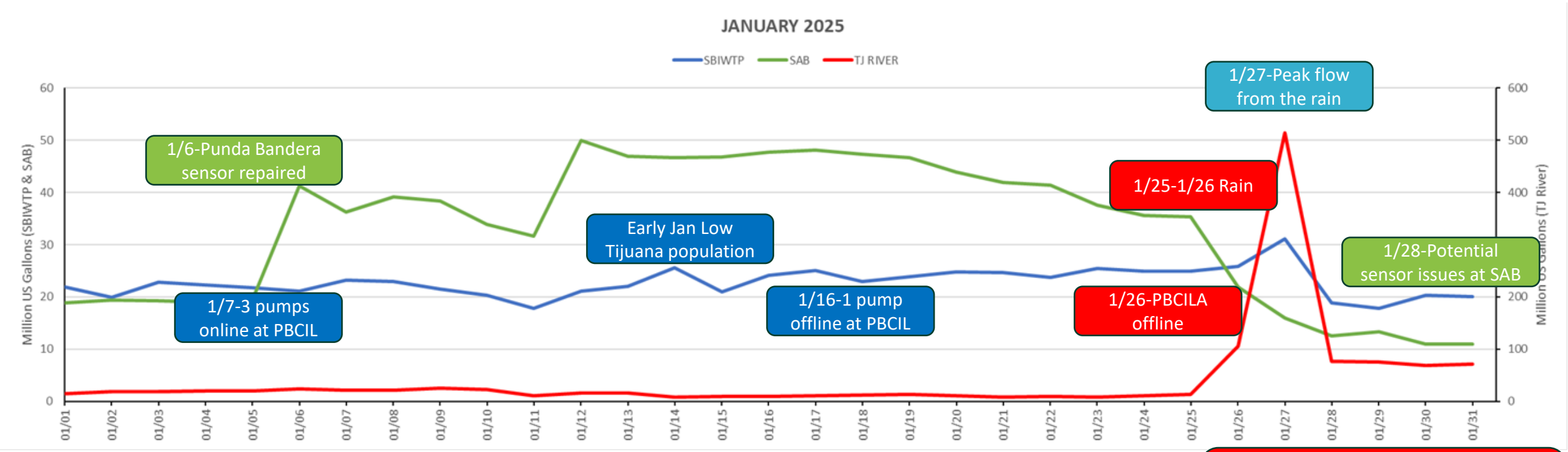
* May 1st to November 1st.

*January 2025 total monthly flow of **1,280 MG**

Initiatives

- Daily review of flows
- Weekly Mass Balance Data Collection – Analyze trends and identify patterns, review daily
- Biweekly Local Binational Meetings – Discuss and coordinate actions, ongoing projects and issues related to Tijuana River
- Monthly Binational River Inspections

Transboundary Flows



January 2025 Mass Balance Flow Analysis

Rain event: 1/25 – 1/26

PBCILA offline: 1/26

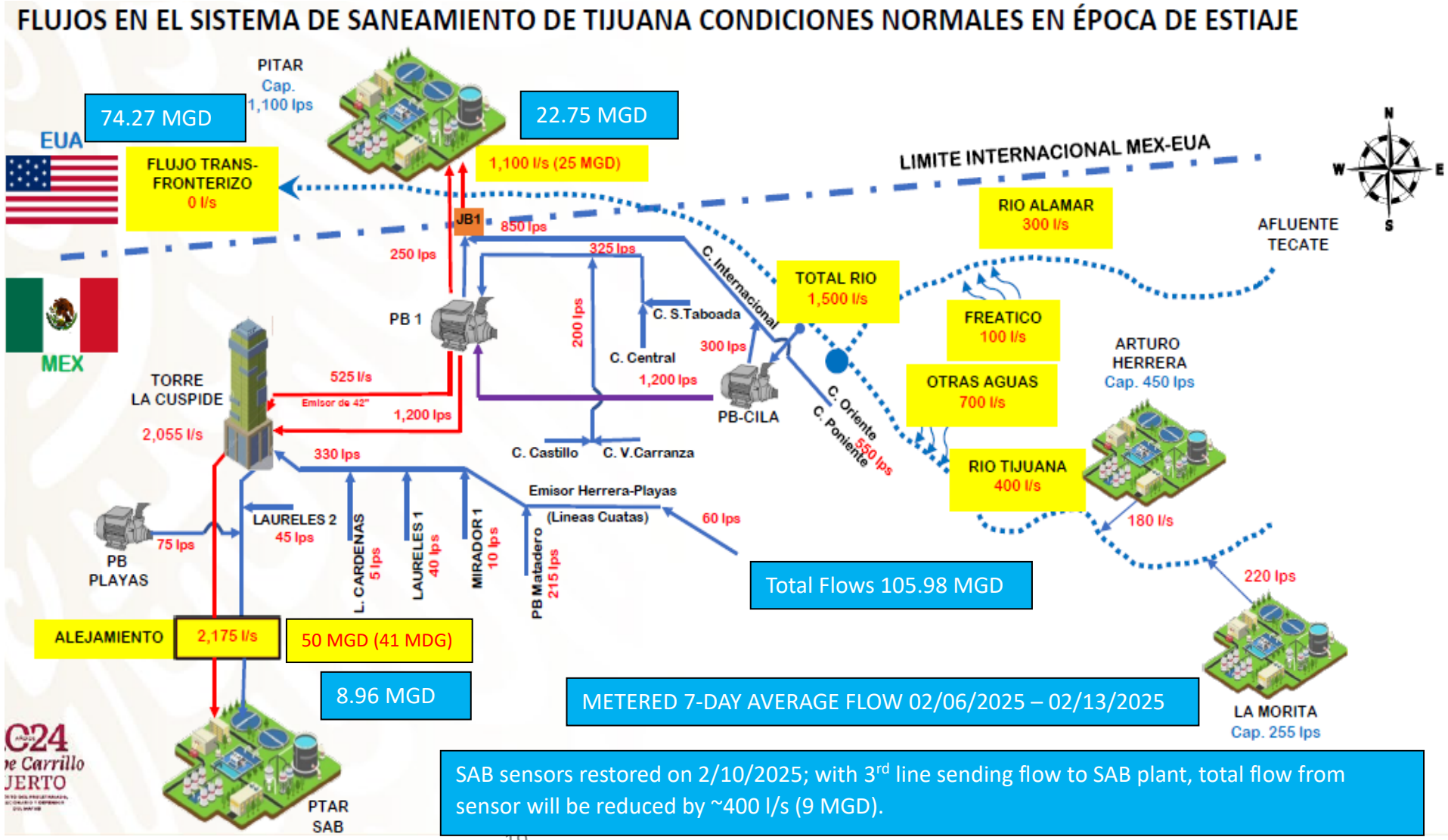
Flow reduced at SBIWTP and SAB

PBCILA Standard Operating Procedure
- 2,500 l/sec start sediment clening
- 2,000 l/sec pumps can start operation

While PBCILA is offline
- Flow at SAB reduces by 34 MGD
- PB1 requires to shutdown 40mins every 2-3 hours between 2:00am – 6:00am

Transboundary Flows

- Typical 7-Day Average
- SBIWTP permit capacity 25 MGD
- SAB at infrastructure capacity 50 MGD
- TJ River dry weather flows continue
- Approximately 10 MGD higher flow in 2024 as compared to same period in 2021
- MX completed TJ River flow investigation; working on a summery to share



QUESTIONS

Public Utilities Department

Scan for more info

Ocean Monitoring Program

2022-2023 Report

Ryan M. Kempster, Ph.D.
Senior Environmental Scientist
Environmental Monitoring and Technical Services
Public Utilities Department

The City of SAN DIEGO

Speaker Introduction

Ryan Kempster

Senior Environmental Scientist

PhD, MSc, BSc Marine Biology

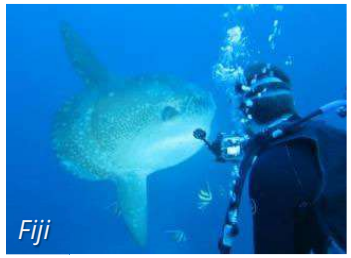
South Africa


England


Australia


Costa Rica


Thailand

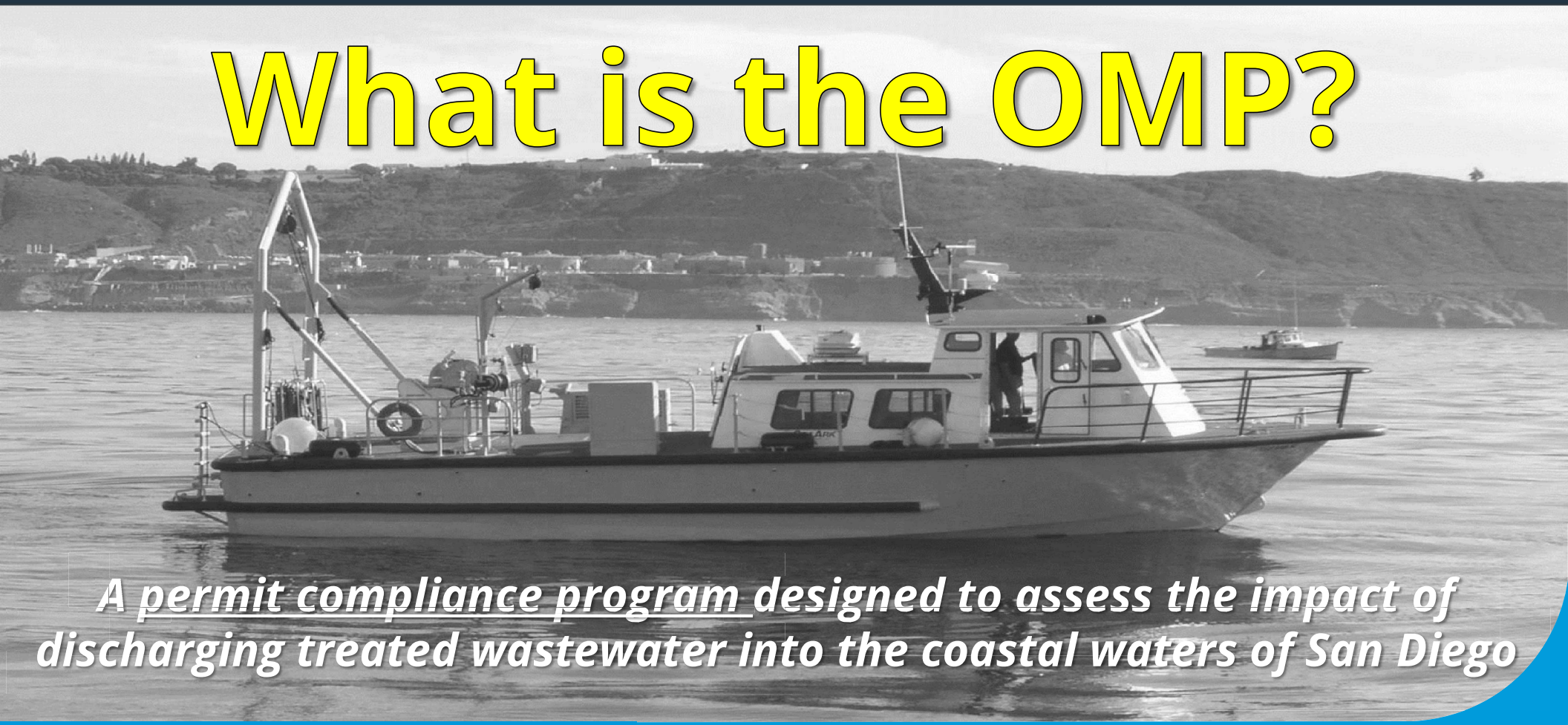

Fiji


The Bahamas

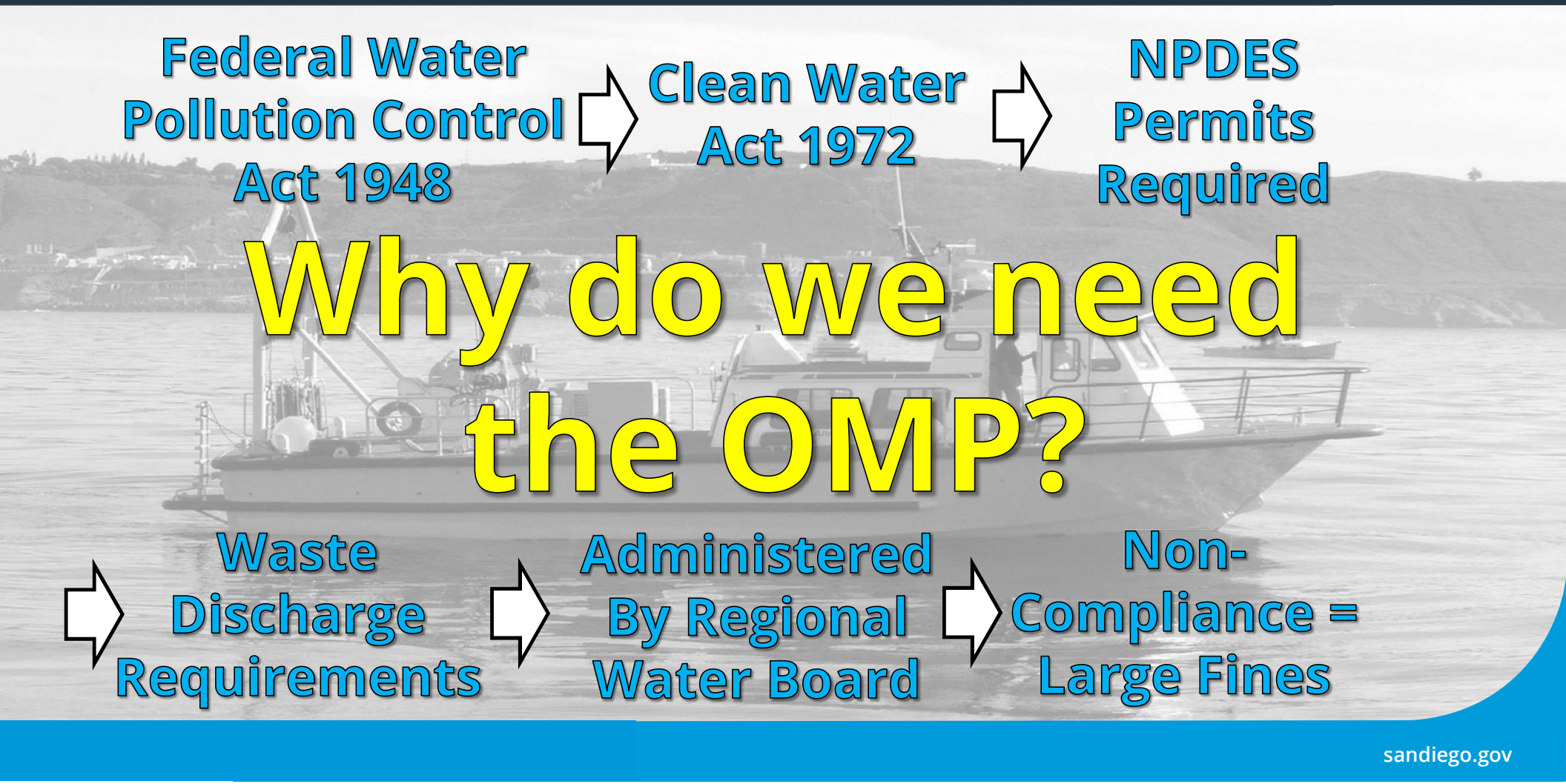
Marine Biology and Ocean Operations Team

Environmental Monitoring and Technical Services Division

What is the OMP?



A permit compliance program designed to assess the impact of discharging treated wastewater into the coastal waters of San Diego

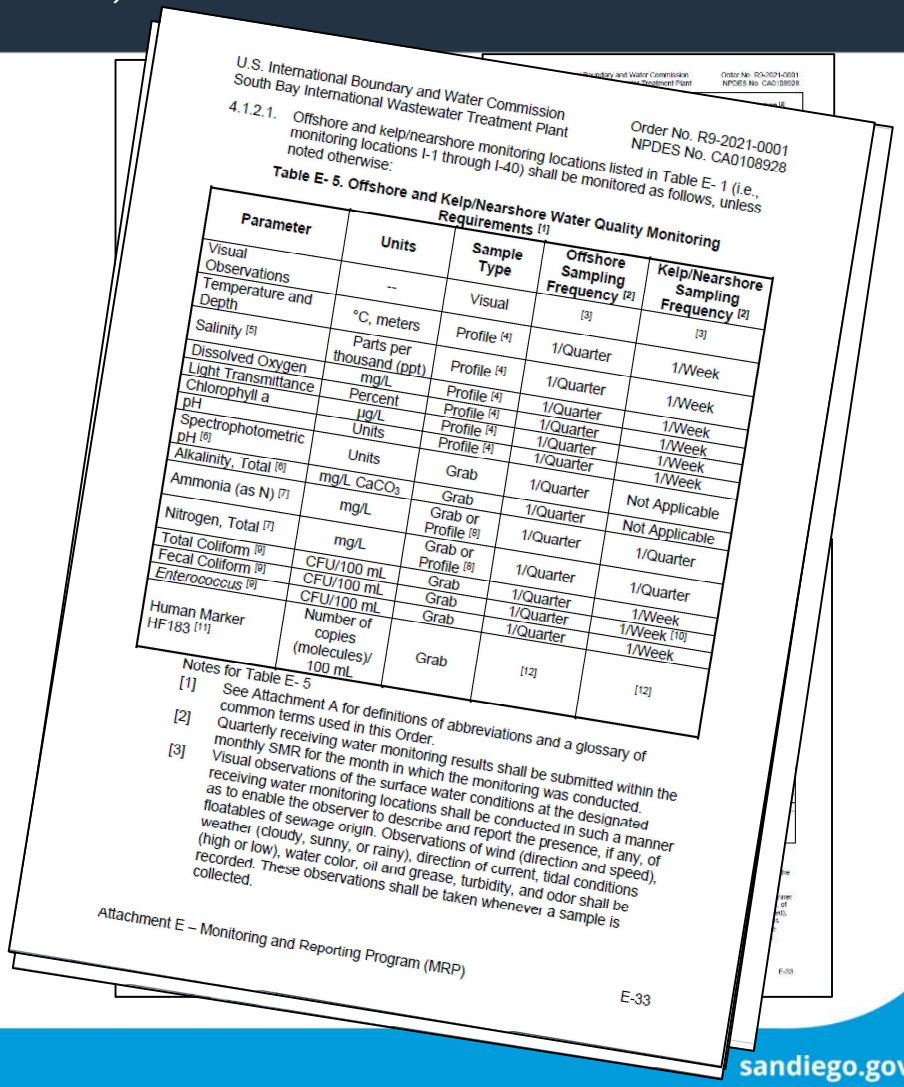

Federal Water Pollution Control Act 1948
Clean Water Act 1972
NPDES Permits Required
Why do we need the OMP?
Waste Discharge Requirements
Administered By Regional Water Board
Non-Compliance = Large Fines

Example NPDES Permit:

South Bay International Wastewater Treatment Plant
Order No. R9-2021-0001
NPDES No. CA108928

How to Find:

Search: "NPDES SBIWTP"
Or go to
www.waterboards.ca.gov/sandiego/board_decisions/adopted_orders/2021/R9-2021-0001.pdf



U.S. International Boundary and Water Commission
South Bay International Wastewater Treatment Plant
Order No. R9-2021-0001
NPDES No. CA0108928

4.1.2.1. Offshore and kelp/nearshore monitoring locations listed in Table E- 1 (i.e., monitoring locations I-1 through I-40) shall be monitored as follows, unless noted otherwise:

Table E- 5. Offshore and Kelp/Nearshore Water Quality Monitoring Requirements [1]

Parameter	Units	Sample Type	Offshore Sampling Frequency [2]	Kelp/Nearshore Sampling Frequency [2]
Visual Observations	--	Visual	[3]	[3]
Temperature and Depth	°C, meters	Profile [4]	1/Quarter	1/Week
Salinity [5]	Parts per thousand (ppt)	Profile [4]	1/Quarter	1/Week
Dissolved Oxygen	mg/L	Profile [4]	1/Quarter	1/Week
Light Transmittance	Percent	Profile [4]	1/Quarter	1/Week
Chlorophyll a	µg/L	Profile [4]	1/Quarter	1/Week
pH	Units	Profile [4]	1/Quarter	1/Week
Spectrophotometric pH [6]	Units	Grab	1/Quarter	1/Week
Alkalinity, Total [6]	mg/L $CaCO_3$	Grab	1/Quarter	Not Applicable
Ammonia (as N) [7]	mg/L	Grab or Profile [8]	1/Quarter	Not Applicable
Nitrogen, Total [7]	mg/L	Grab or Profile [8]	1/Quarter	1/Quarter
Total Coliform [9]	CFU/100 mL	Grab	1/Quarter	1/Quarter
Fecal Coliform [9]	CFU/100 mL	Grab	1/Quarter	1/Week
Enterococcus [9]	CFU/100 mL	Grab	1/Quarter	1/Week [10]
Human Marker HF183 [11]	Number of copies (molecules)/ 100 mL	Grab	[12]	1/Week [12]

Notes for Table E- 5

[1] See Attachment A for definitions of abbreviations and a glossary of common terms used in this Order.

[2] Quarterly receiving water monitoring results shall be submitted within the monthly SMR for the month in which the monitoring was conducted.

[3] Visual observations of the surface water conditions at the designated receiving water monitoring locations shall be conducted in such a manner as to enable the observer to describe and report the presence, if any, of floatables of sewage origin. Observations of wind (direction and speed), weather (cloudy, sunny, or rainy), direction of current, tidal conditions (high or low), water color, oil and grease, turbidity, and odor shall be recorded. These observations shall be taken whenever a sample is collected.

Attachment E – Monitoring and Reporting Program (MRP)

E-33

History

1963 OMP Began in PL Region
Discharge Began (PLWTP)

1991 OMP Expanded

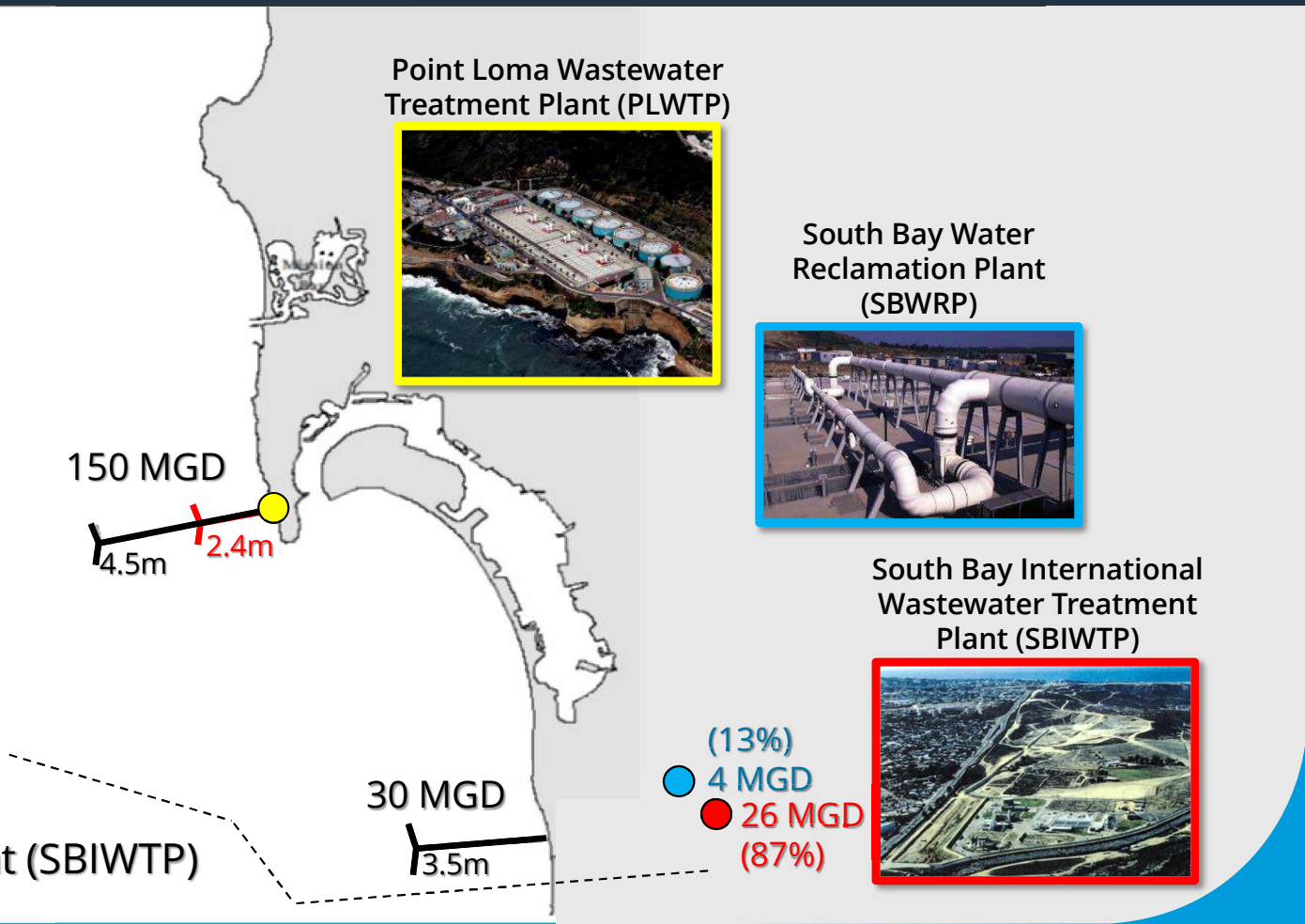
1993 Outfall Extended

1995 OMP Began in SB Region

1999 Discharge Began (SBIWTP)

2002 Discharge Began (SBWRP)

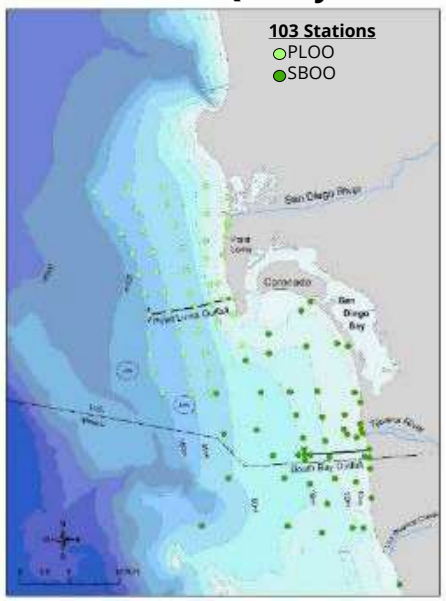
2011 Began Secondary Treatment (SBIWTP)



- *One of largest, most comprehensive monitoring programs of its kind*
  - *Total area ~340 mi^2 from northern San Diego to Baja California*
  - *Sampling ~200 days/year, beaches to offshore depths ≥500 m*

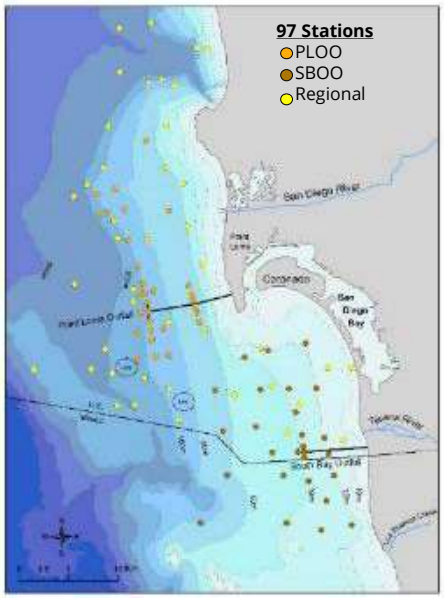
Core Monitoring

Water Quality



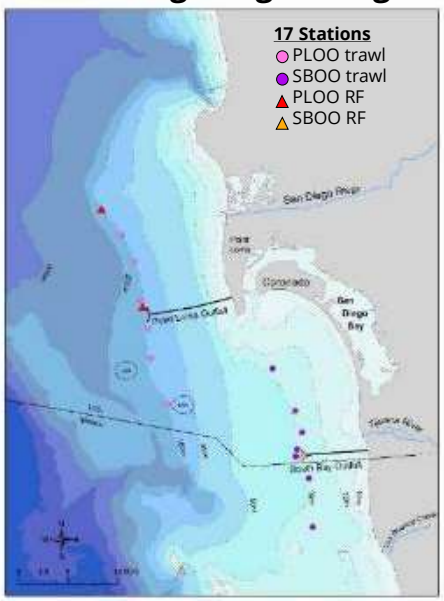
Fecal Indicator Bacteria
Oceanographic Conditions

Benthic Habitats



Sediment Quality
Macrobenthic Communities

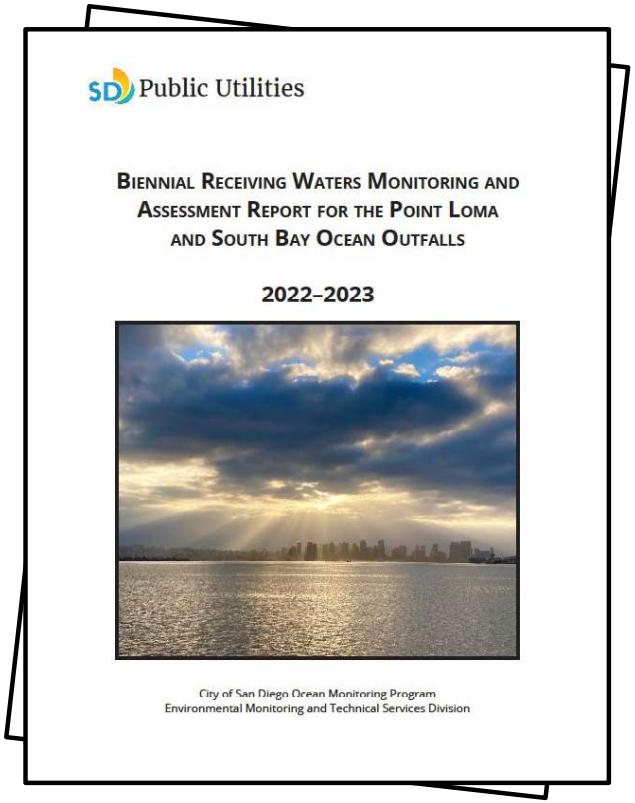
Trawling & Rig Fishing



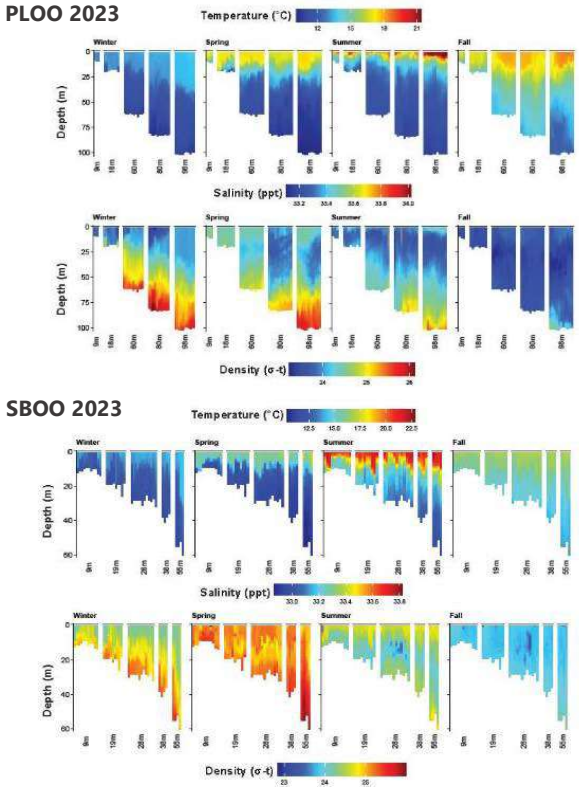
Fish & Invertebrate Communities
Contaminants in Marine Fishes

Biennial Report *(submitted every 2 years)*

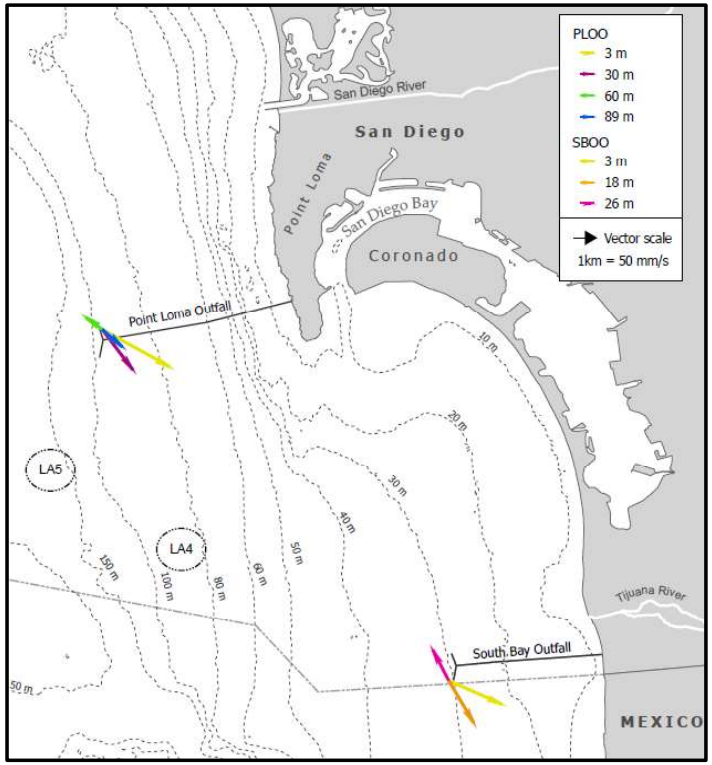
- Coastal Ocean Conditions
- Water Quality
- Plume Dispersion
- Benthic Conditions
- Fish and Invert Communities
- Contaminants in Fishes
- Kelp Ecosystem Health



Coastal Ocean Conditions

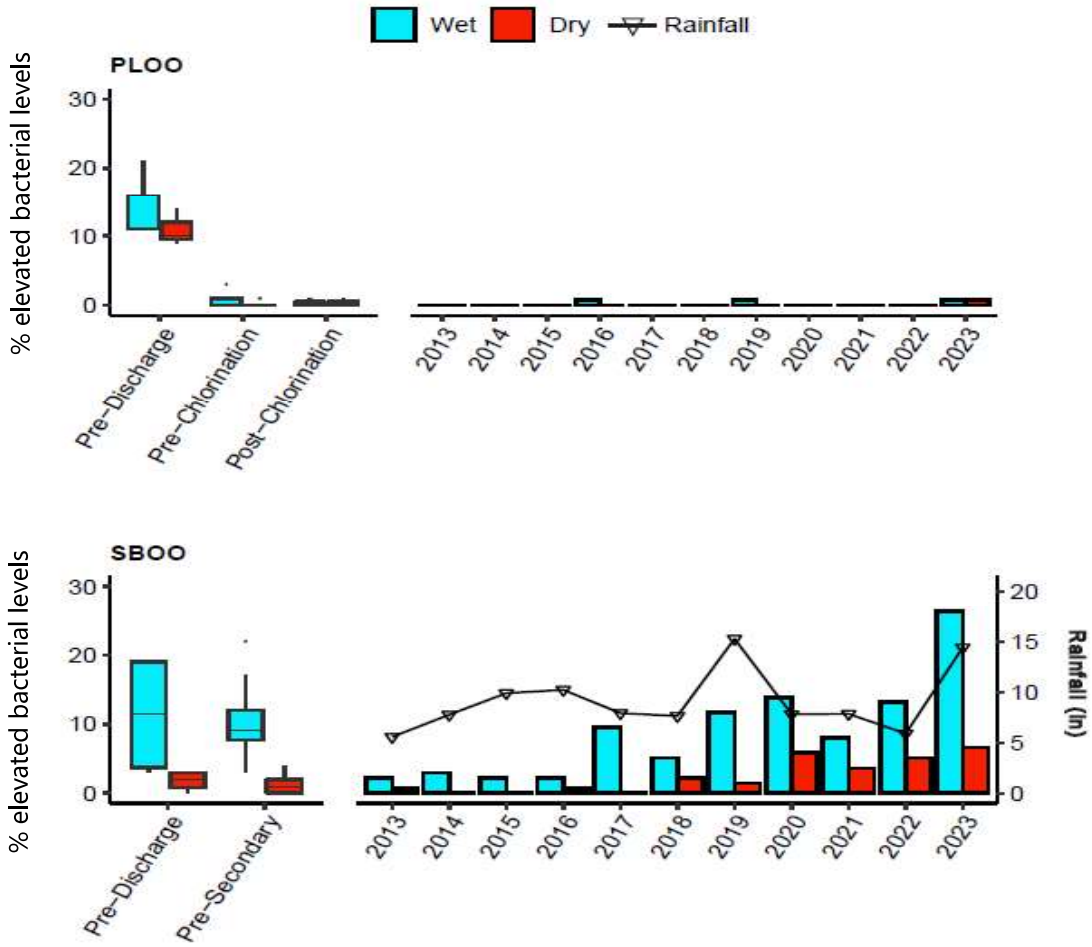


- **Typical seasonal patterns** in ocean conditions.
- Coastal upwelling was strongest in the spring.
- Maximum stratification during spring and summer.
- Waters were well mixed in the fall and winter.
- **Natural factors explain conditions.**

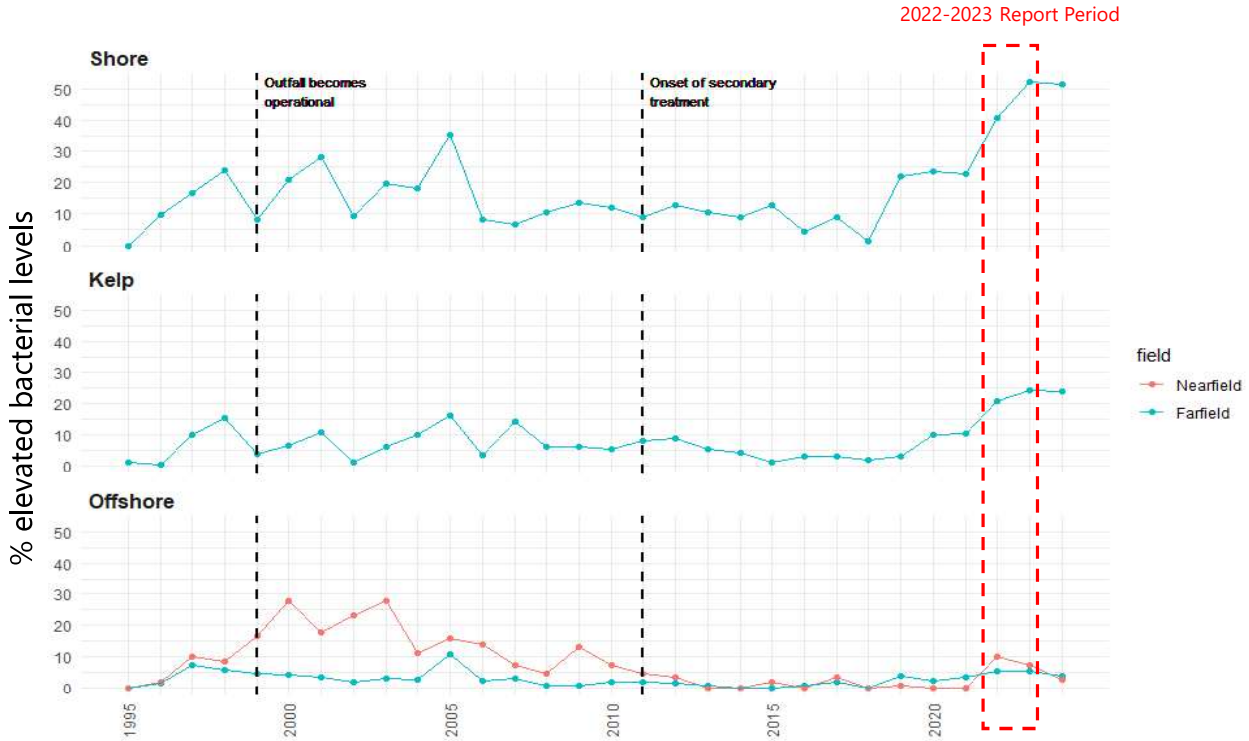


Water Quality

- Annual rainfall notably higher this report (20.3 in) vs. previous 2020-2021 report (15.7 in).
- Wet season driving most elevated bacterial levels.
- South Bay shore major area of poor water quality due to transborder contamination.

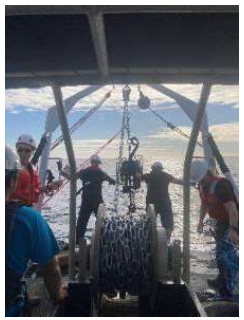


Water Quality



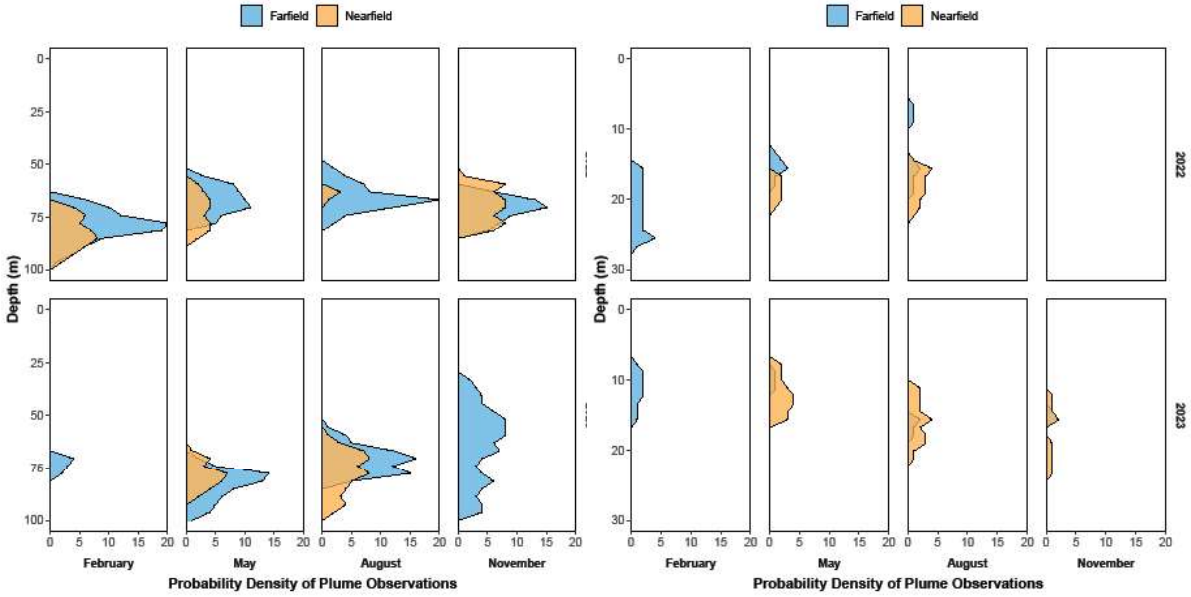
- At shore and nearshore stations, **water quality has been worsening gradually since in 2017.**
- A heavy rain year in 2023 is partially to blame, but transboundary flows are also significant drivers.
- Treated wastewater is **NOT** considered a primary driver of Water quality non-compliance.

Wastewater Plume Tracking



Plume Dispersion

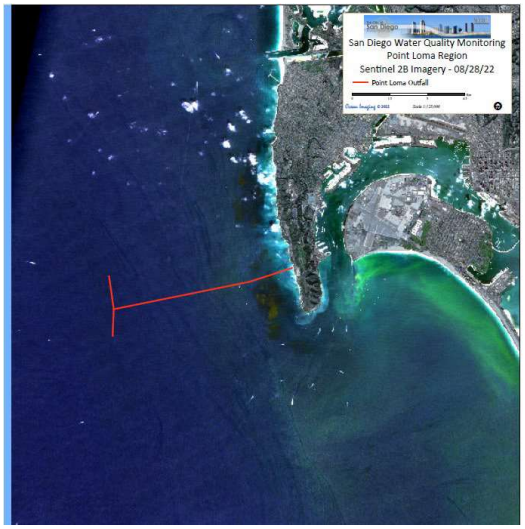
CTD-based plume observations generally in deeper waters below the seasonal thermocline



- PLOO plume detections remained deep (>34 m water depth) with **no evidence of surfacing.**
- SBOO plume typically >10m but **does surface on occasion in winter** and is detected 19-20 days each year by satellite imagery.

Satellite Imagery

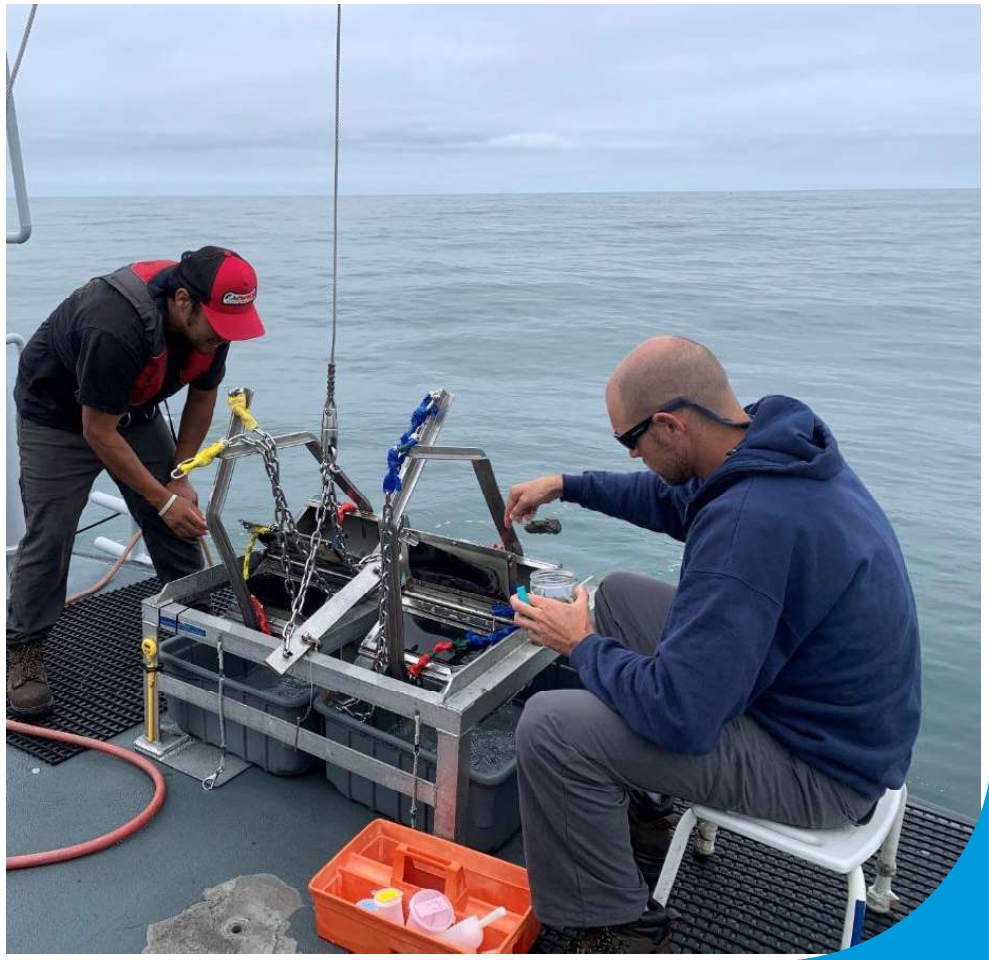
PLOO



- Long term monitoring via satellite imagery has been fundamental to understanding regional water quality conditions off San Diego.
- There is **no evidence that effluent discharged from the PLOO reaches the surface.**
- Effluent discharged from the SBOO typically disperses to the south.
- **Neither discharge has been observed moving inshore** into recreational waters.

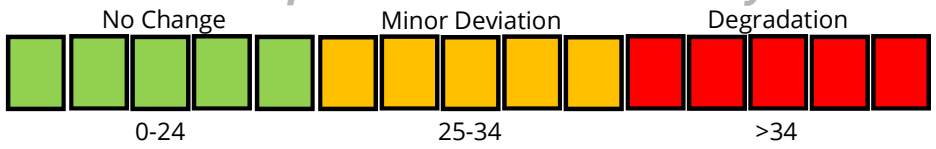
SBOO

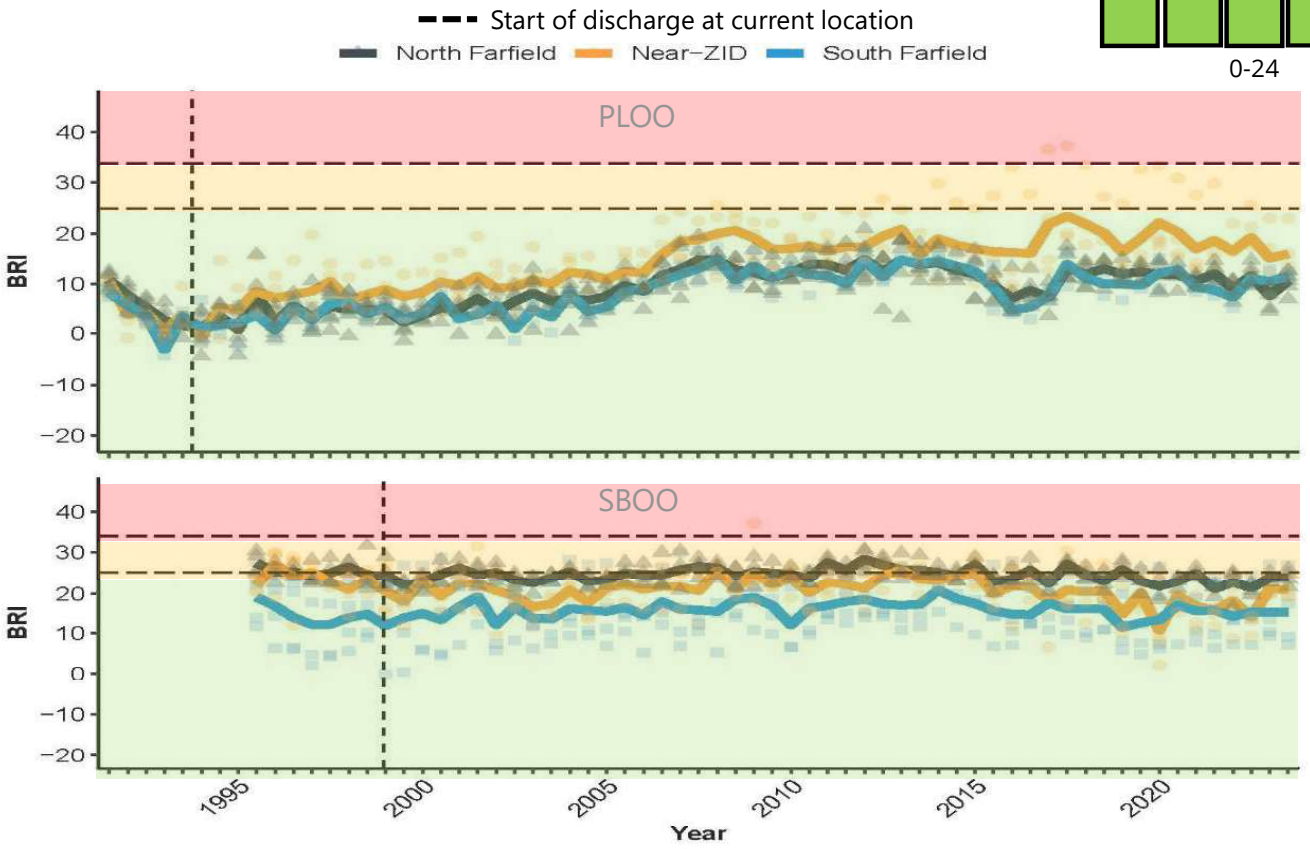
Benthic Conditions



Benthic Conditions

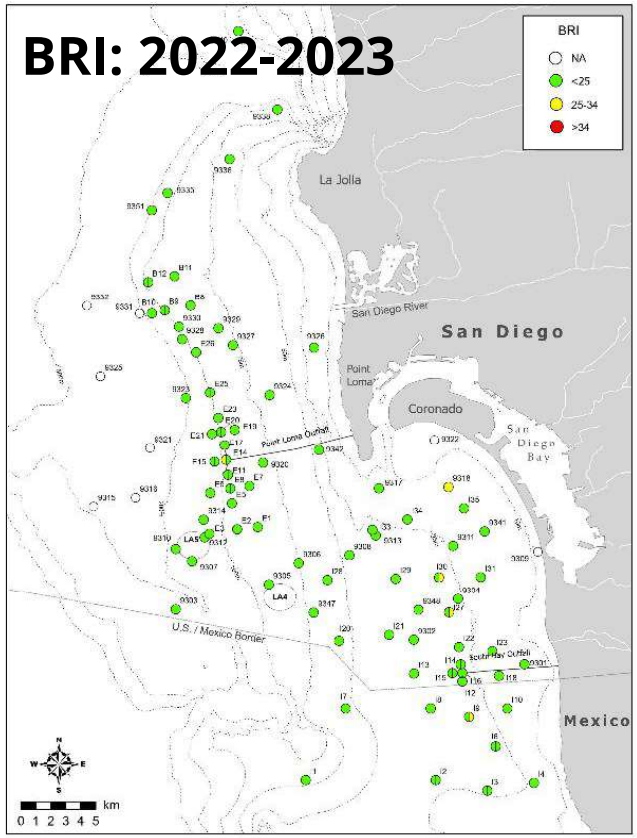
BRI – Benthic Response Index = community condition.



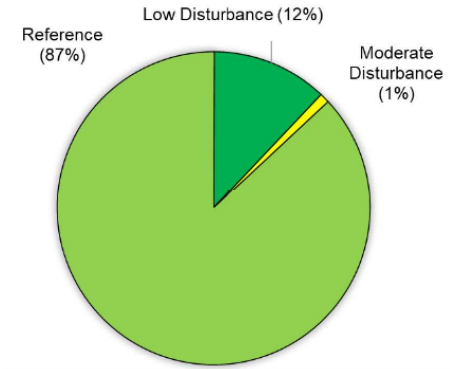


- **No evidence of benthic community degradation** during 2022 and 2023.

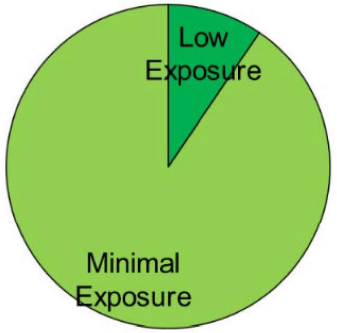
Benthic Conditions



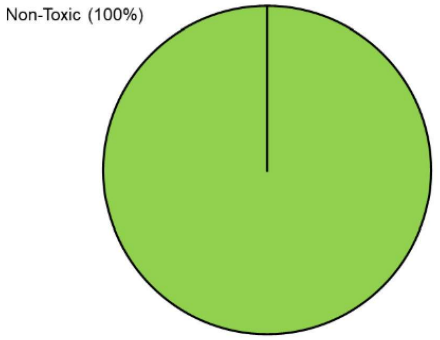
BRI



Sediment Quality



Sediment Toxicity



- **100%** of the benthic sites assessed from 2016 to 2022 were categorized as **healthy based on the benthic response index, sediment quality and sediment toxicity results**

Kelp Forest Monitoring

- Scripps Institution of Oceanography researchers have spent **over five decades monitoring the kelp** forests off San Diego County

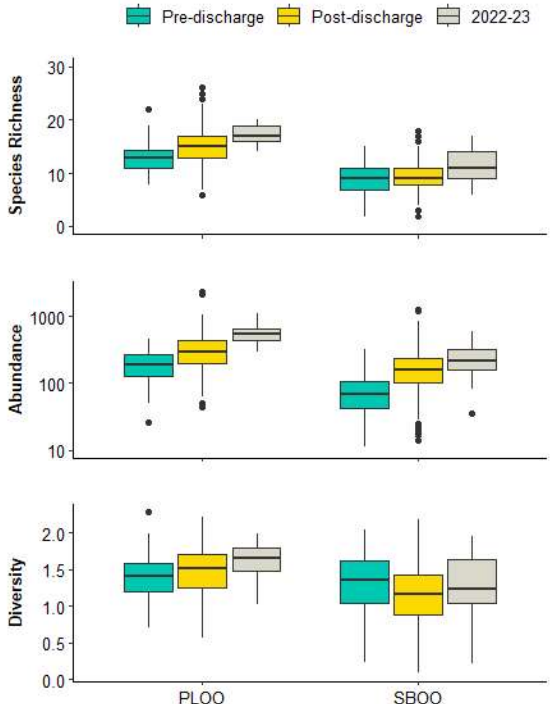
- There is **no evidence that discharge of wastewater through the Point Loma Ocean Outfall has negatively affected** San Diego's kelp forests

Fish and Invertebrate Health

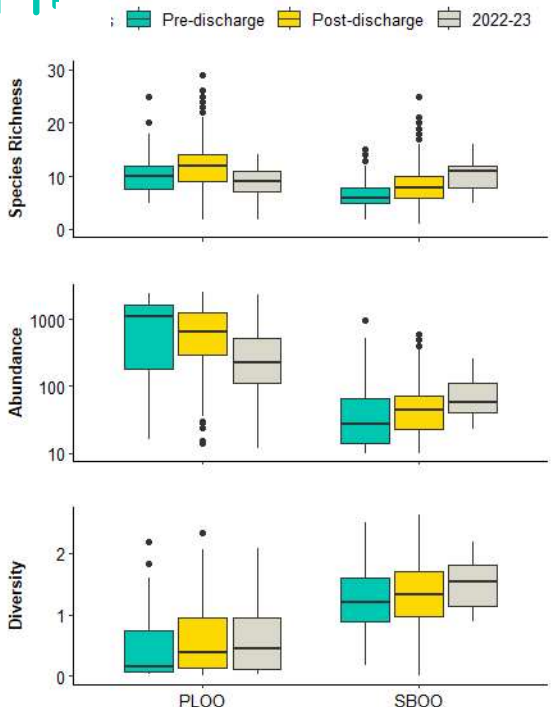
Fish and Invertebrate Communities

- Species Richness, Abundance, and Diversity are **within historical ranges** for both demersal fish and megabenthic invertebrates.
- Fish **populations are healthy**, with 99.6% showing no parasites or abnormalities.
- There are **no notable patterns** in demersal fish or megabenthic invertebrate populations **relative to proximity to the PLOO or SBOO.**

Demersal Fishes

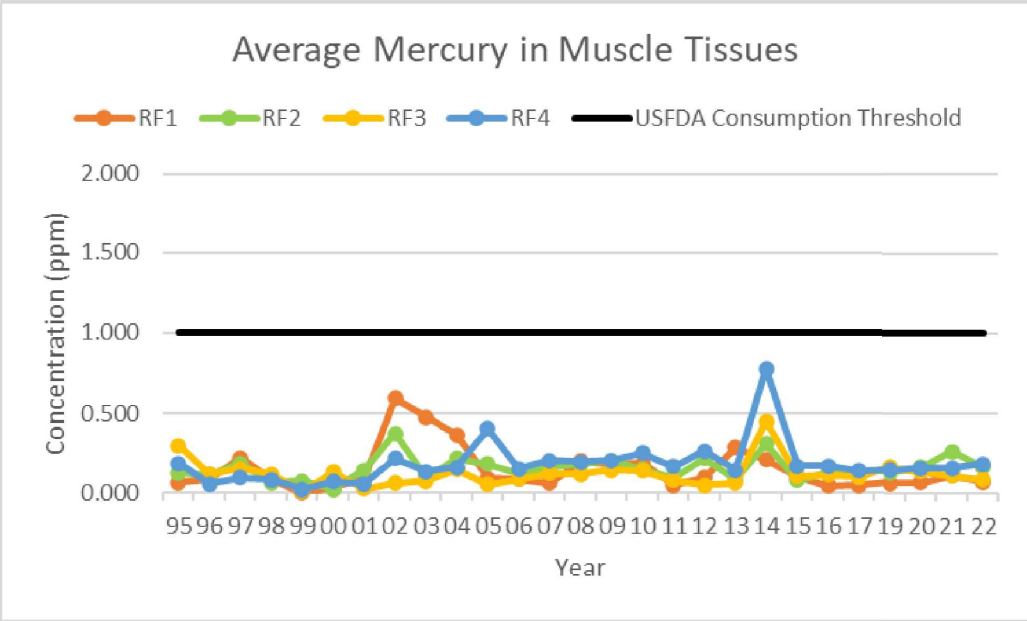


Megabenthic Invertebrates



Contaminants in Fishes

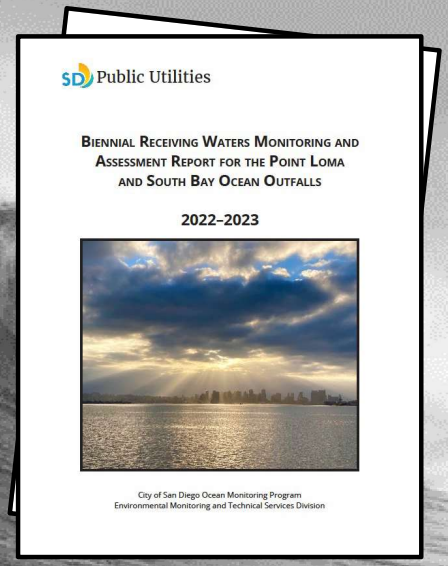
- There is **no evidence of contaminant accumulation** in fishes that is associated with wastewater discharge.



Thank You

For more information, go to:

Scan for more info



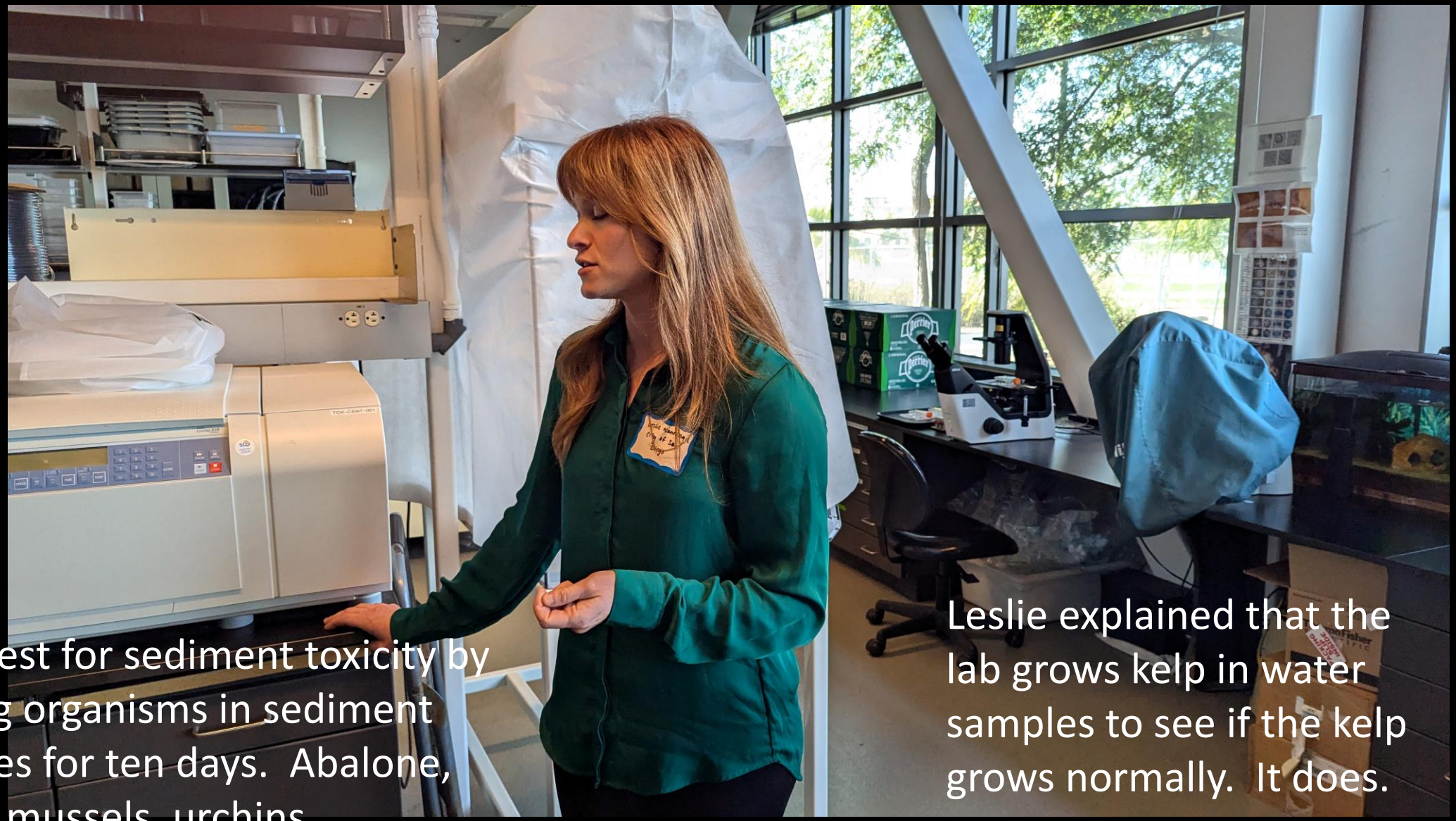
sandiego.gov/oceanmonitoring

Tour of San Diego Ocean Monitoring Program Lab

February 11, 2025

by Brian McNeece

IBWC Citizens Forum, Co-Chair



They test for sediment toxicity by leaving organisms in sediment samples for ten days. Abalone, smelt, mussels, urchins.

Leslie explained that the lab grows kelp in water samples to see if the kelp grows normally. It does.

Stephanie Jaeger

A CTD probe.

Conductivity, Temperature, Depth. This collects water samples and other data.

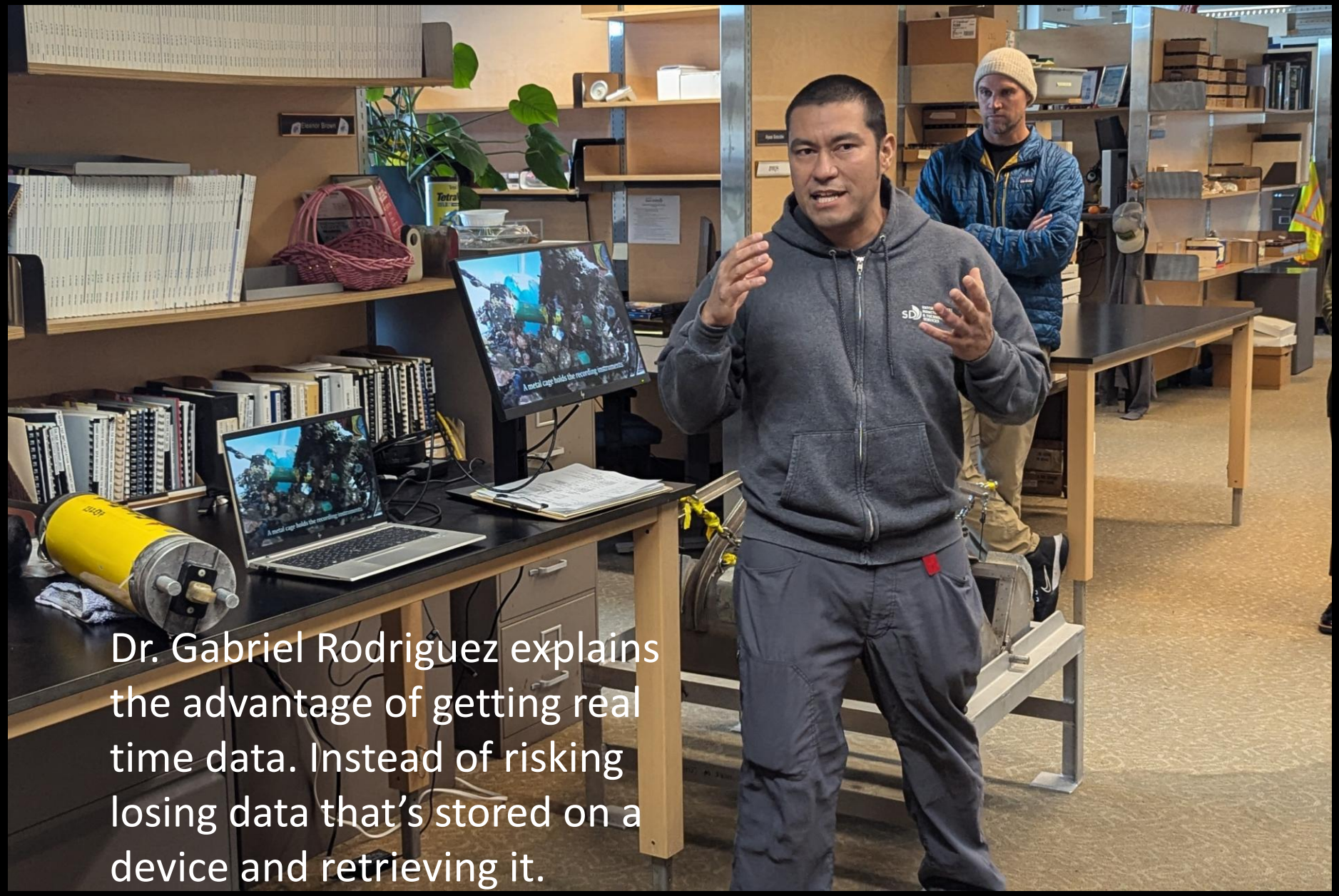
Remotely Operated Tow Vehicle

The “ScanFish” wing gets pulled behind a boat and travels up and down in the water column up for oceanographic surveys.

Real time oceanographic mooring.

A sunfish came by to explore.

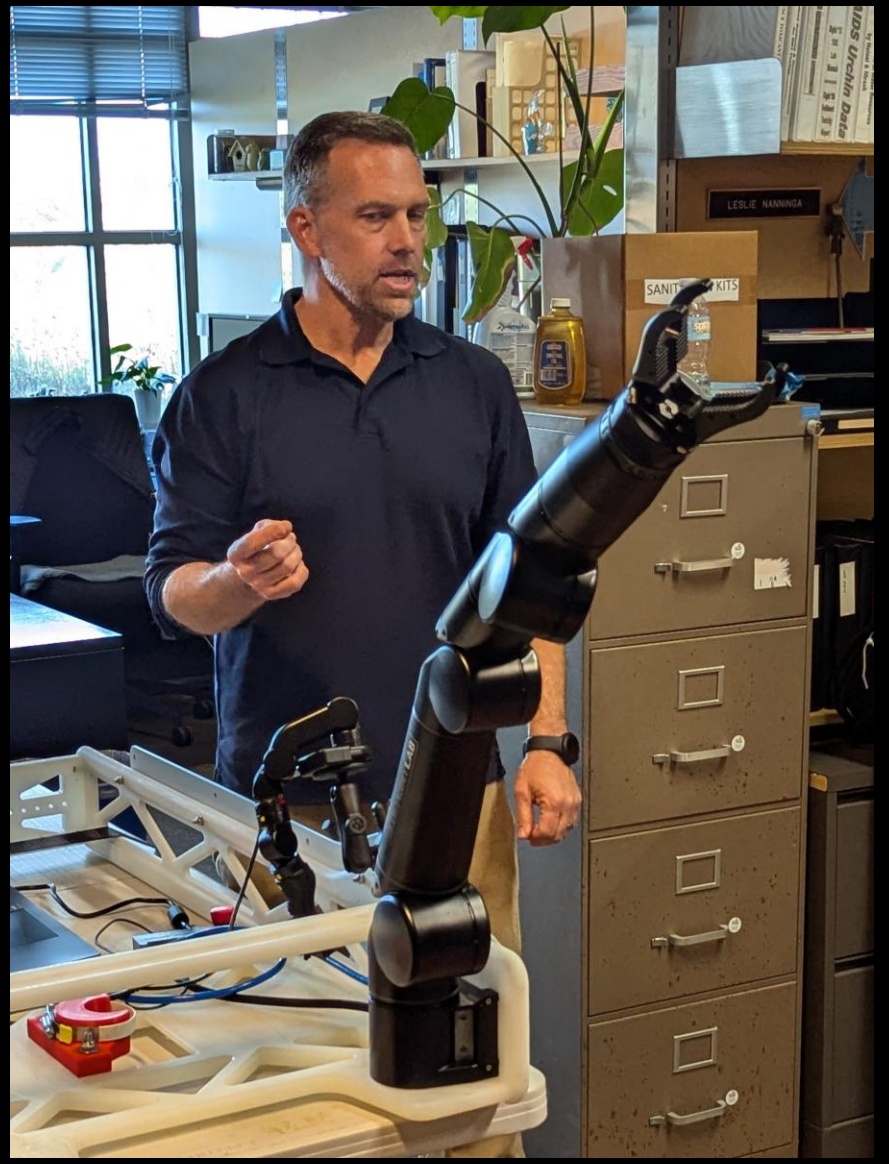
Screen shows the ocean outfall.



Dr. Gabriel Rodriguez explains the advantage of getting real time data. Instead of risking losing data that’s stored on a device and retrieving it.

Mary Powell Photo

A remote control arm for retrieving equipment from the ocean floor.



Greg demonstrates the arm

Veen grab. This spring-loaded device captures sediment samples for analysis.

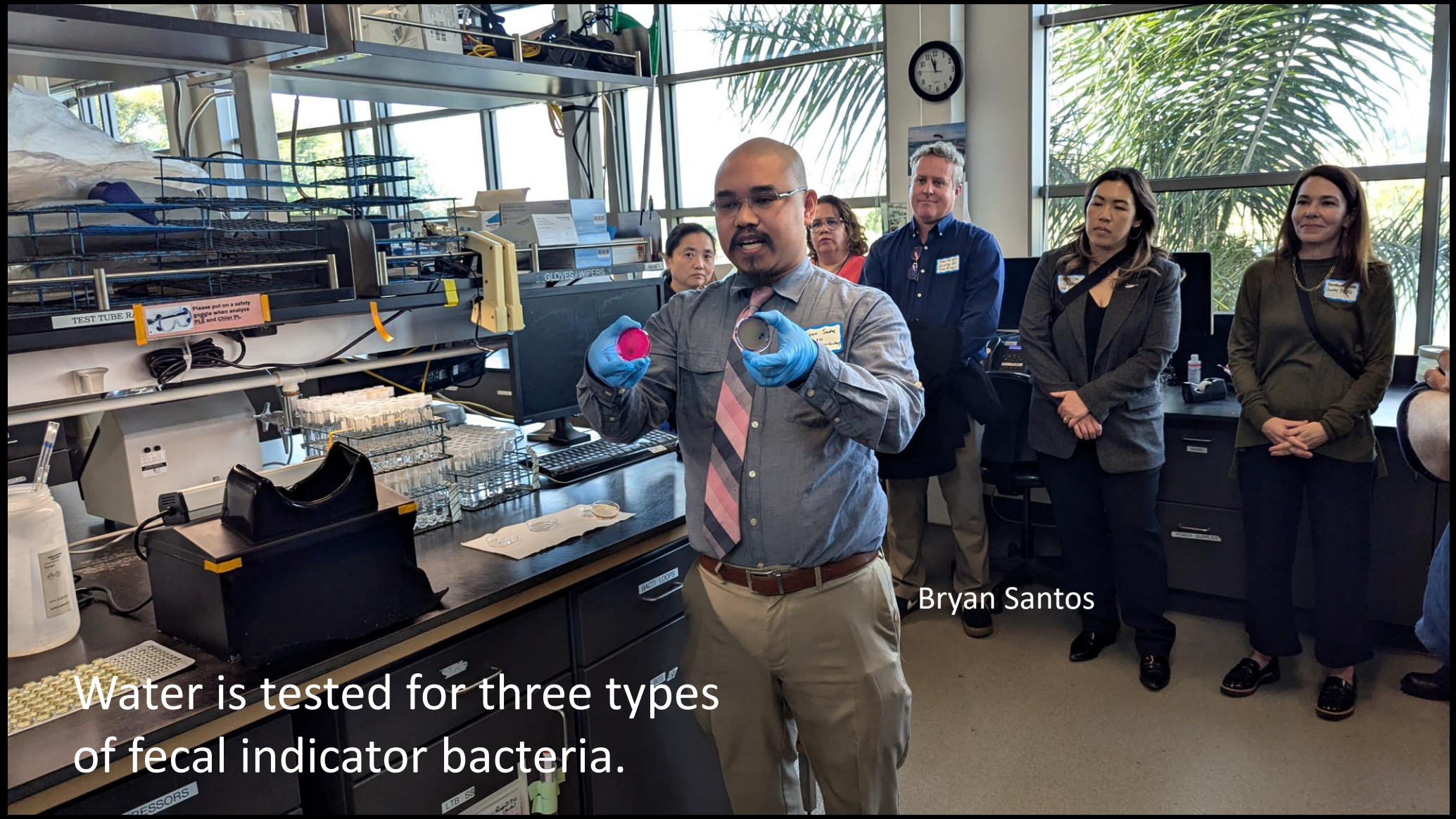
Dr. Coulson Lantz

Andrew Davenport

Benthic comes from “Benthos,” Greek for both the life and the sediment at the bottom of the sea.

By studying the life in the sediment, one can assess the effects of human actions on the ecology.

Ricardo, “It takes five years to train a worm taxonomist.”


Bryan Santos
Water is tested for three types of fecal indicator bacteria.

Fecal Indicator Bacteria in culture

Still counted manually because of optical interference for computer counting.