
USMCA Tijuana River Watershed

Public Information Meeting

Date & Time: November 20, 1:00 -2:30 pm Eastern (10:00 a.m. – 11:30 a.m. Pacific)

Virtual Meeting Link: [Click here to join the meeting](#)

Meeting Goal: The goal of this meeting is to provide information to the public about the technical analysis process, the long-term projects to be evaluated, and the high-level criteria to be used in the evaluation. The EPA will also provide an update on the short-term impact projects.

	Agenda Topic	Lead
10 min	Welcome and Overview	Andrew Sawyers, Director of the EPA Office of Wastewater Management Tomás Torres, Water Division Director, EPA Region 9
10 mins	Update on Short Term Impact Projects Objective: Report out on developments on short-term impact projects.	David Smith, Water Division Assistant Director, EPA Region 9
45 mins	Technical Analysis Overview: Long Term Projects & Evaluation Approach Objective: Review the technical analysis approach and the projects identified for inclusion in the evaluation. <ul style="list-style-type: none">• Overview of project evaluation criteria• Projects for technical analysis• Scripps study overview	Doug Liden, Environmental Engineer, EPA Region 9
15 mins	Question and Answer Session	Jake Strickler, EPA Office of General Counsel's Conflict Prevention and Resolution Center
10 mins	EPA Closing Remarks	Andrew Sawyers, Director of the EPA Office of Wastewater Management Tomás Torres, Water Division Director, EPA Region 9

USMCA Tijuana River Watershed Public Information Meeting

November 20, 2020

Agenda

- Update on Short Term Impact Projects
- Technical Analysis Overview: Long Term Projects & Evaluation Approach
 - Overview of project evaluation criteria
 - Projects for technical analysis
 - Scripps study overview
- Question and Answer Session
- EPA Closing Remarks



Background

- The USMCA Section 821 mandates EPA, in coordination with eligible public entities, to carry out the planning, design, construction, and operation and maintenance of high priority treatment works in the covered area to treat wastewater (including stormwater), nonpoint sources of pollution, and related matters resulting from international transboundary water flows originating in Mexico.
- The USMCA has appropriated \$300 million to support border water infrastructure projects along the US-Mexico Border.
- EPA is assessing technical options to address the transboundary wastewater flows and has convened an Eligible Public Entities Coordinating Group (formerly Interagency Consultation Group) to provide strategic perspectives on the planning process.



Update on Short-Term Impact Projects

David Smith, Water Division Assistant Director, EPA
Region 9

Short Term Options Considered

- **Temporary river diversion to:**
 - International Treatment Plant (ITP)
 - San Diego South Bay Water Reclamation Plant (WRP)
 - Point Loma Wastewater Treatment Plant (WTP)
- **Increase treatment of sewage from Tijuana** at ITP, WRP, WTP
- **Sediment/Trash Control Basin** in Smugglers Gulch
- City of San Diego options found to be infeasible in the short term
- Uncertain if treating more Tijuana sewage would reduce River flows



Short-Term Project #1: Temporary River Diversion To ITP

- Divert up to 10 mgd of dry weather river flows to ITP for treatment and discharge through ocean outfall.
- San Diego County tentatively agreed to construct, to be reimbursed by Water Board.
- Still discussing how to obtain resources needed for IBWC to operate/maintain.
- Dry weather transboundary flows ceased in August.
- ITP now treating up to 10 mgd extra flows from MX.
- Several collection system repairs completed in Tijuana in mid 2020.
- If needed, temporary diversion could occur late winter/early spring 2021.

River Diversion to ITP: Conceptual Rendering





Short-Term Project #2: Smugglers Gulch Trash and Sediment Basin

- Sediment capture basin and trash boom in Smugglers Gulch.
- Partnership with San Diego County, City of San Diego, Regional Water Board.
- Applied for design/construction funding from CA Coastal Conservancy.
- If successful, to be funded by CCC Spring 2021.
- EPA sharing contractor technical analysis for Smugglers Gulch in US.
- Coordinating with Border Patrol.
- Would be designed/built in late ~2021-2022.

Tijuana River ↑

Smuggler's Gulch Border Pollution Control Basin

Sediment Basin

Passive Trash Boom

IBWC Canyon Collector (Existing)

Operations Pad

Forebay

Google

Border ↓

A close-up photograph of numerous small, blue-tinted bubbles rising through clear water. The bubbles vary in size and are scattered across the frame, creating a sense of movement and depth.

Technical Analysis Overview: Long Term Projects & Evaluation Approach

Doug Liden, Environmental Engineer, EPA Region 9



Background

- Three types of pollution: sewage, trash (marine debris), and sediment.
- #1 priority is to reduce impacts of sewage on beaches.
- Multiple entry points of pollution into U.S.: Tijuana River (TR), 3 canyons, and coast (when currents move northward).
- TR flows are a combination of treated wastewater, untreated wastewater, groundwater, and stormwater
- Suite of 10 projects cover range of pollution types and entry points into U.S.
- Multiple projects may be combined to form the “preferred alternative.”

Overview of Project Evaluation Criteria

- Effectiveness in reducing U.S.-side environmental and human health impacts (40%)
- Technical feasibility (10%)
- Financial feasibility (5%)
- Regulatory feasibility (10%)
- Implementation Timeline (15%)
- Operations & Maintenance (20%)

Projects for Feasibility Analysis

- **Project 1:** Divert, treat, and discharge TR in U.S. to reduce wet-weather TR flows
- **Project 2:** Divert TR in Mexico; treat and discharge in U.S. to eliminate dry-weather TR flows
- **Project 3:** Shift more wastewater treatment to U.S. (via ITP) to reduce flows in TR and SAB
- **Project 4:** Shift wastewater treatment of canyon flows to U.S. (via expanded ITP) to reduce flows in TR and SAB (complements Project 3)
- **Project 5:** Enhance Mexico wastewater collection system to reduce flows into TR
- **Project 6:** Divert or reuse treated wastewater from existing WWTPs in Mexico to reduce flows into TR
- **Project 7:** Construct new infrastructure to address trash and sediment in U.S. during wet-weather flows
- **Project 8:** Upgrade SAB to reduce untreated wastewater to coast
- **Project 9:** Shift more wastewater treatment to U.S. (via SBWRP) to reduce flows in TR and SAB
- **Project 10:** Reduce trash and sediment in TR and Goat Canyon via source control projects in Mexico

TR: Tijuana River

SAB: San Antonio de Los Buenos Wastewater

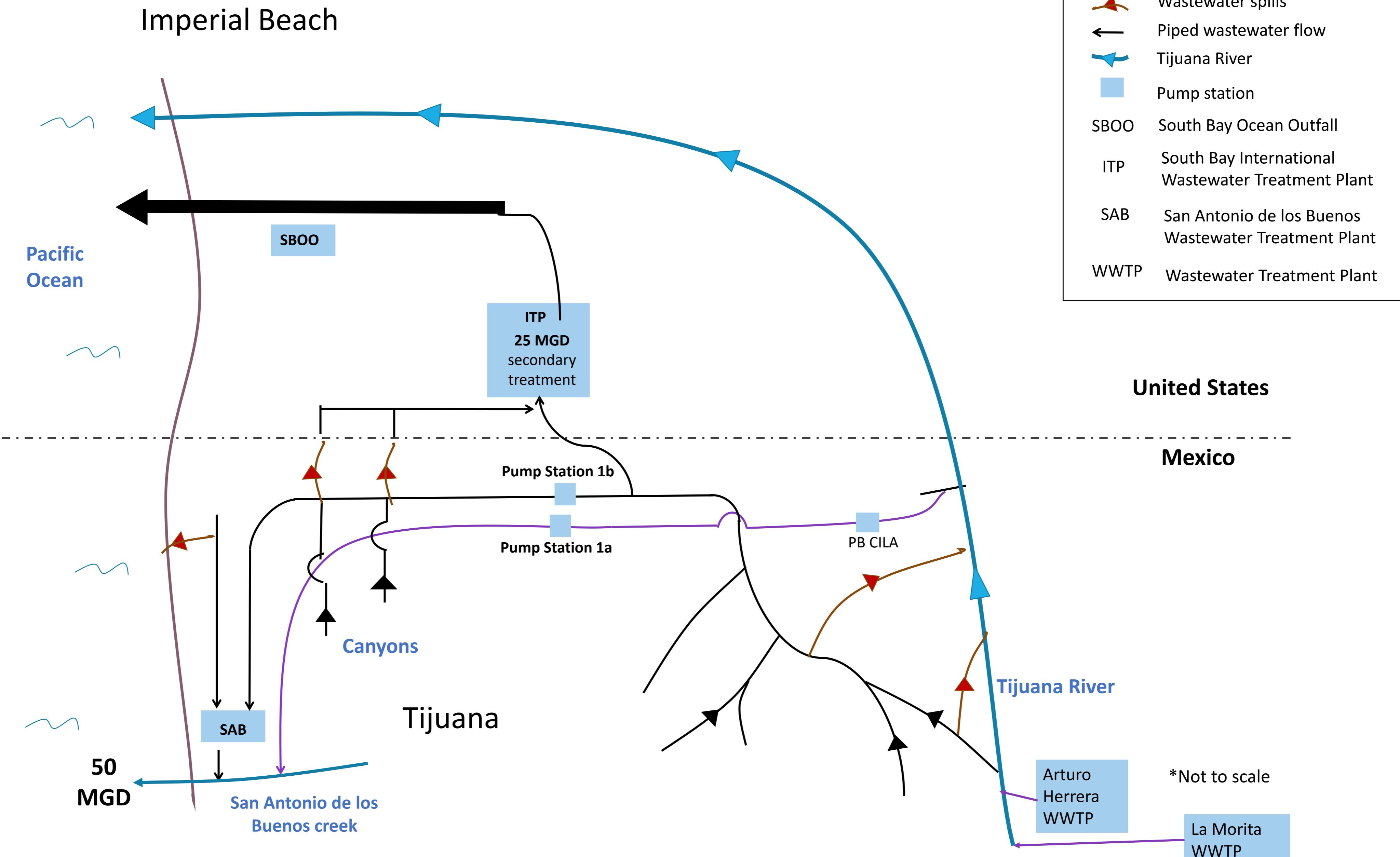
Treatment Plant

ITP: South Bay International Wastewater Treatment Plant

WWTP: Wastewater Treatment Plant

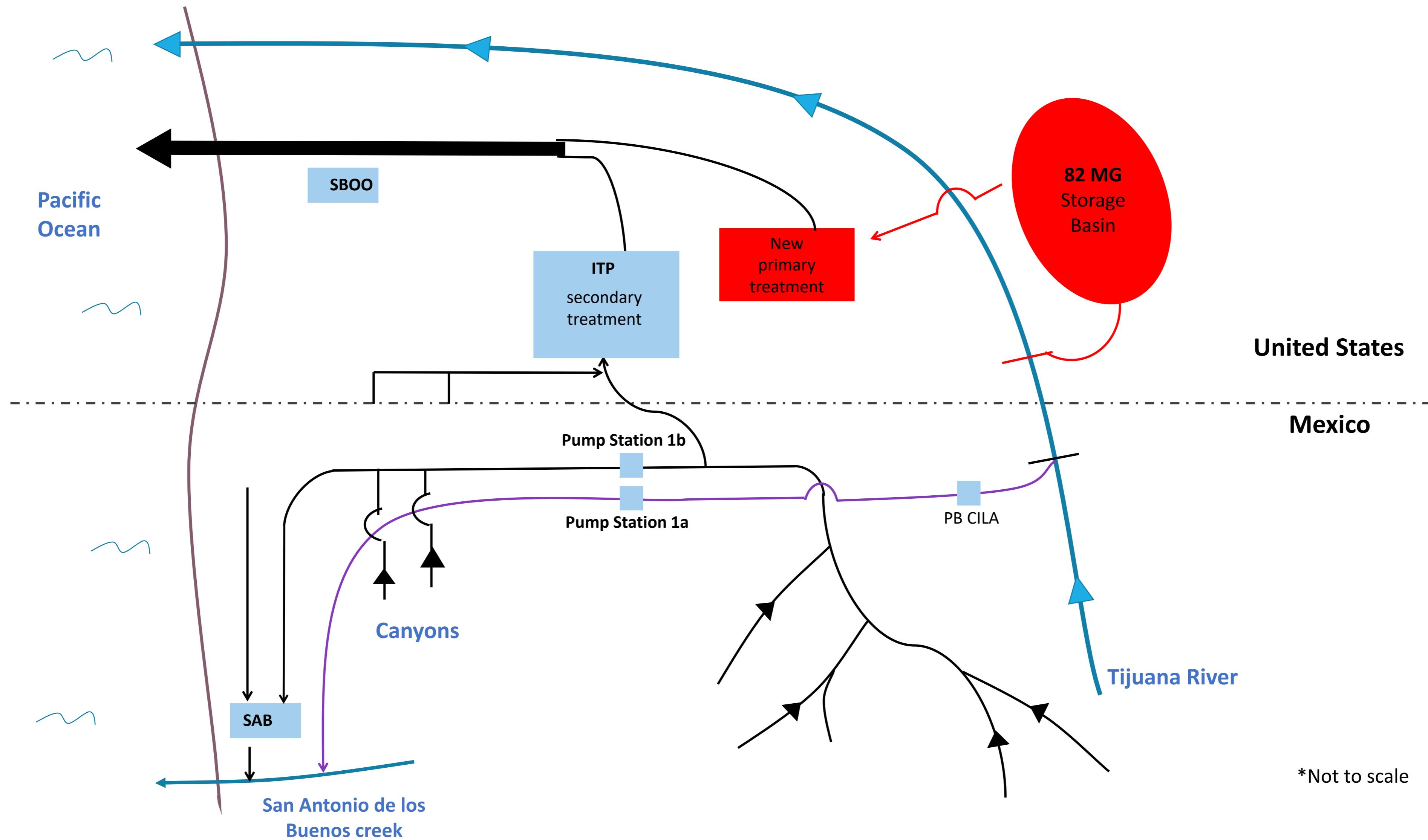
SBWRP: San Diego's South Bay Water Reclamation Plant

Existing System



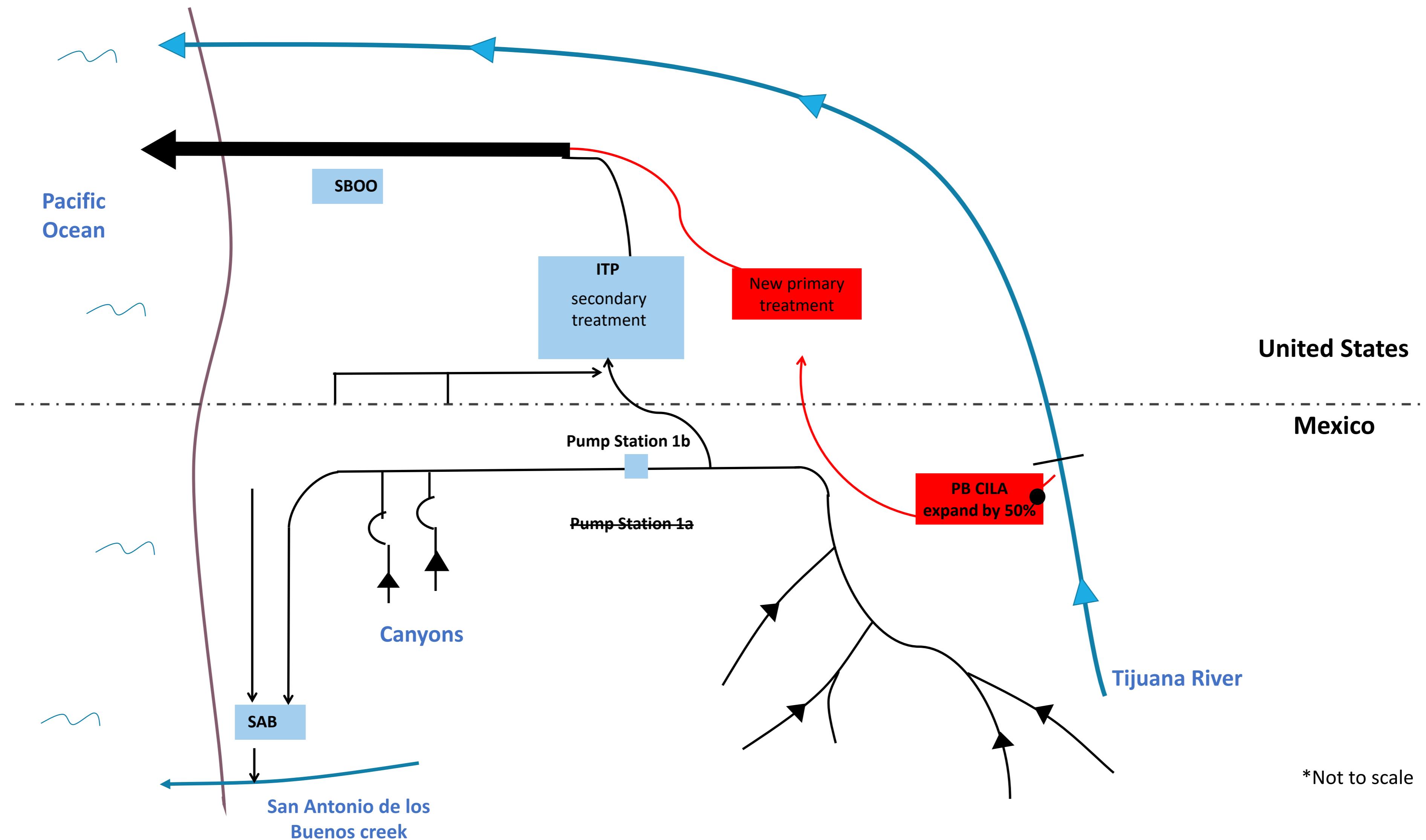
Project 1: Divert, treat, and discharge TR in U.S. to reduce wet-weather TR flows

Location	U.S.
Pollutant addressed	Sewage
Benefited area in U.S.	Tijuana River/ocean



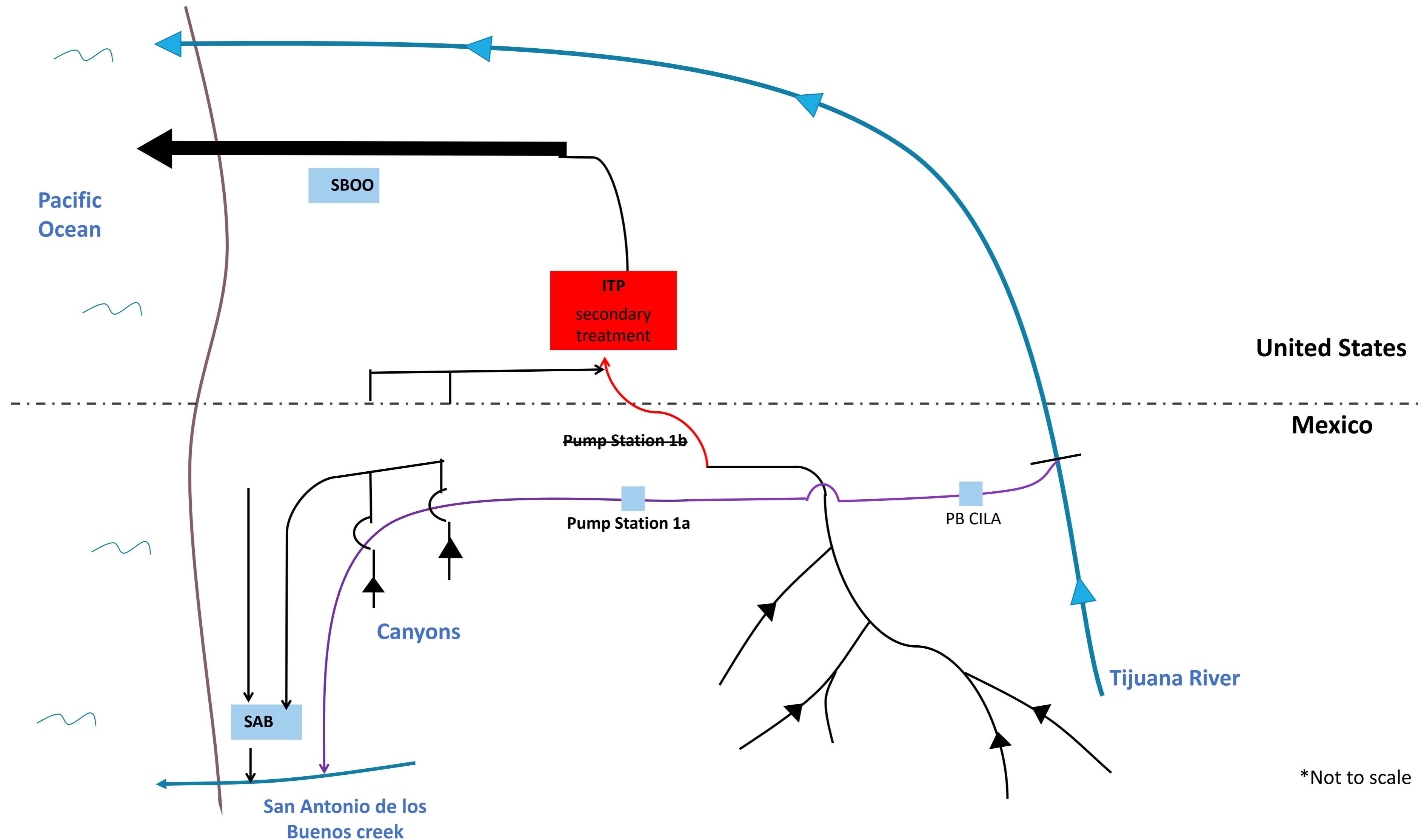
Project 2: Divert TR in Mexico; treat and discharge in U.S. to eliminate dry-weather TR flows

Location	Mostly U.S.
Pollutant addressed	Sewage
Benefited area in U.S.	Tijuana River/ocean



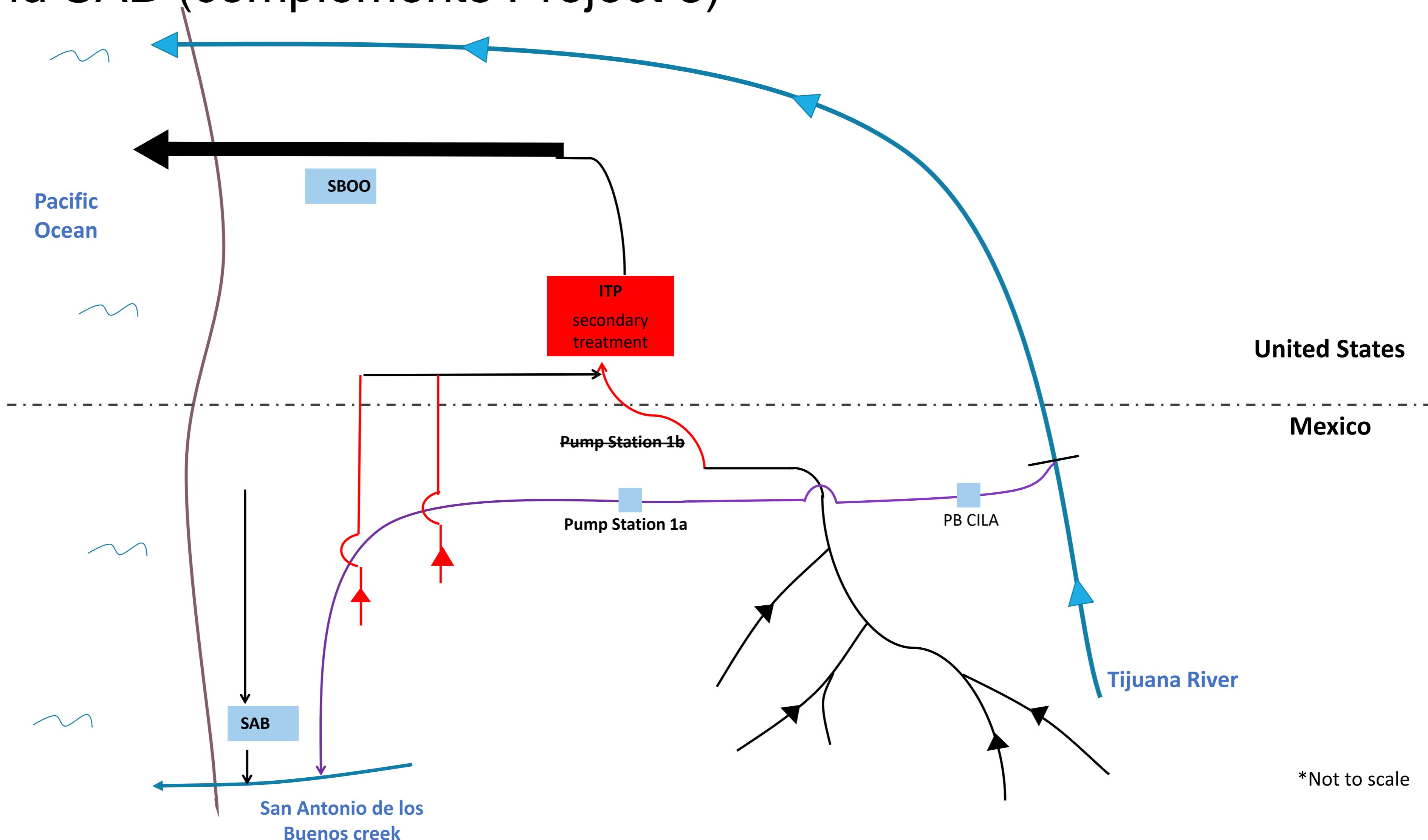
Project 3: Shift more wastewater treatment to U.S. (via ITP) to reduce flows in TR and SAB

Location	U.S.
Pollutant addressed	Sewage
Benefited area in U.S.	Tijuana River/ocean



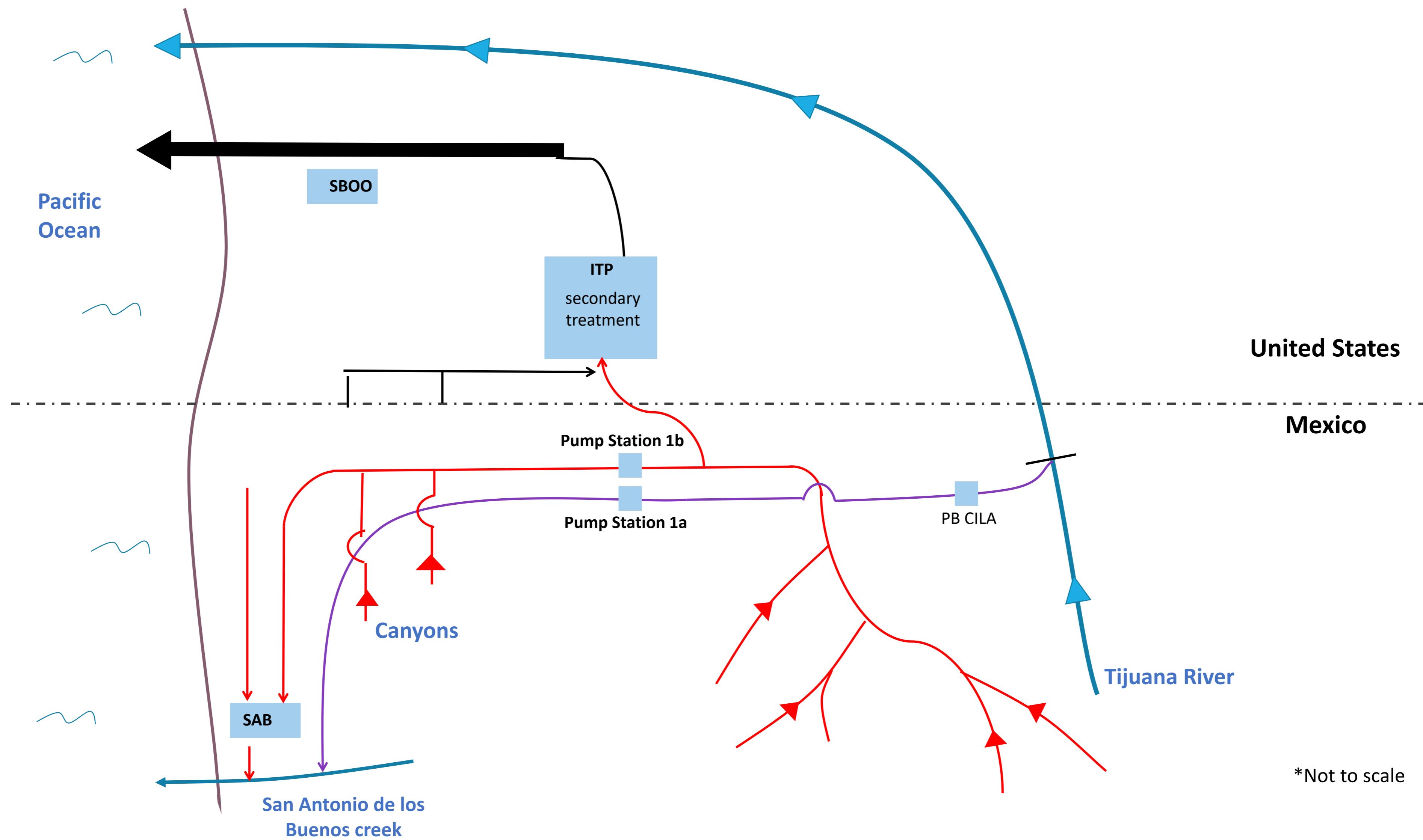
Project 4: Shift wastewater treatment of canyon flows to U.S. (via expanded ITP) to reduce flows in TR and SAB (complements Project 3)

Location	Mexico and U.S.
Pollutant addressed	Sewage
Benefited area in U.S.	Tijuana River/ocean



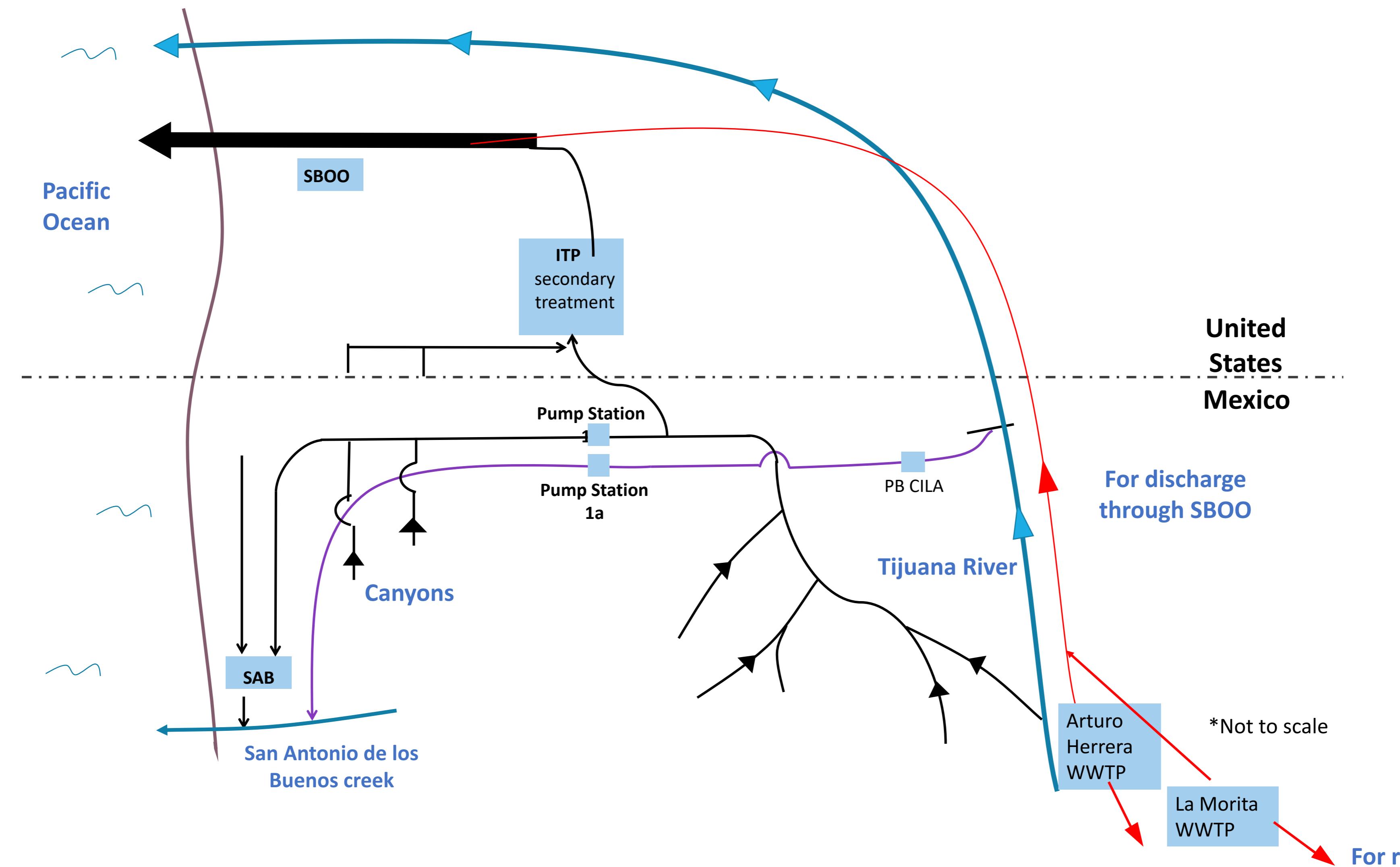
Project 5: Enhance Mexico wastewater collection system to reduce flows into TR

Location	Mexico
Pollutant addressed	Sewage
Benefited area in U.S.	Tijuana River/ocean



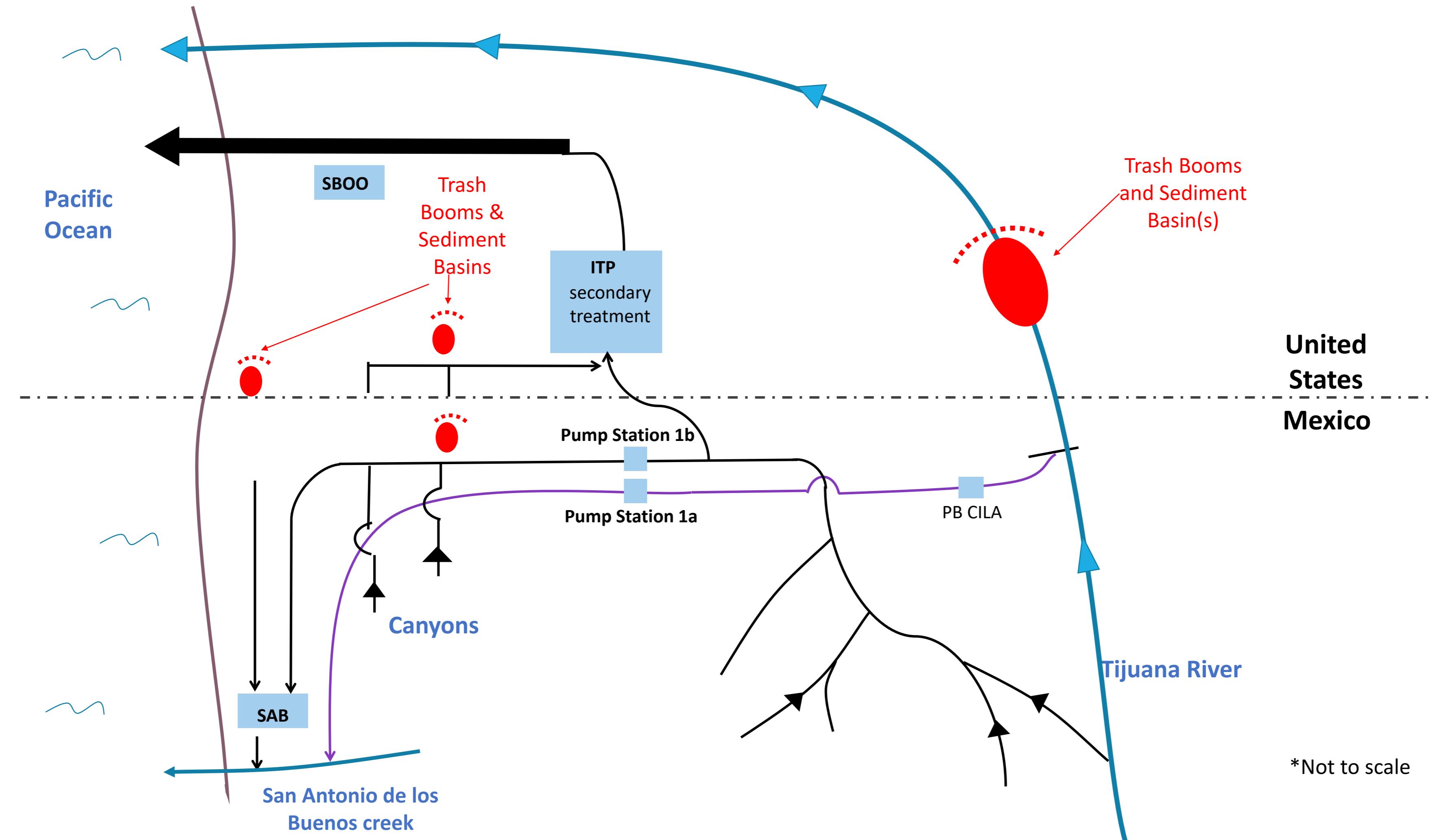
Project 6: Divert or reuse treated wastewater from existing WWTPs in Mexico to reduce flows into TR

Location	Mexico and possibly U.S.
Pollutant addressed	Sewage
Benefited area in U.S.	Tijuana River/ocean



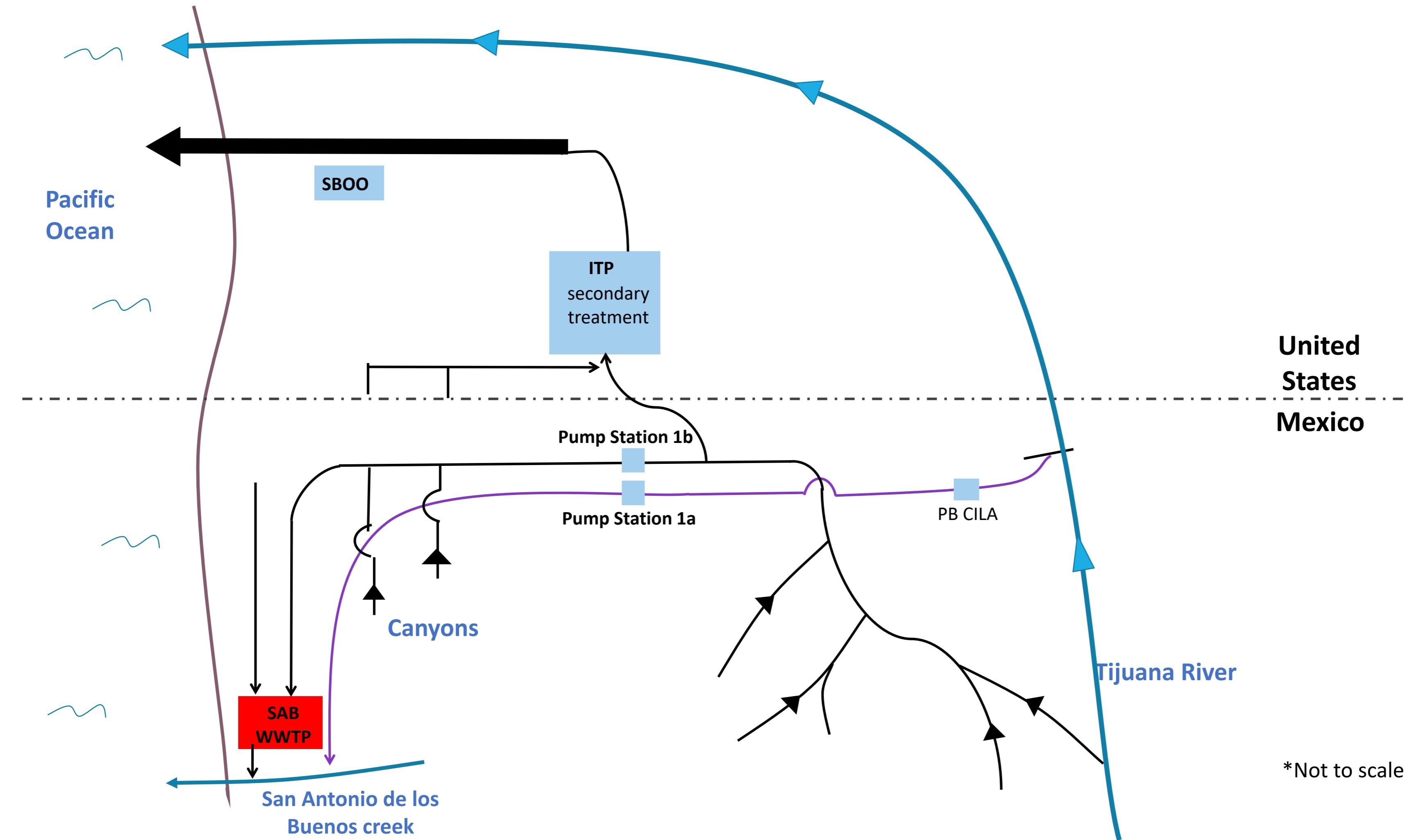
Project 7: Construct new infrastructure to address trash and sediment in U.S. during wet-weather flows

Location	U.S. and possibly Mexico
Pollutant addressed	Trash, marine debris, sediment
Benefited area in U.S.	Tijuana River/ocean



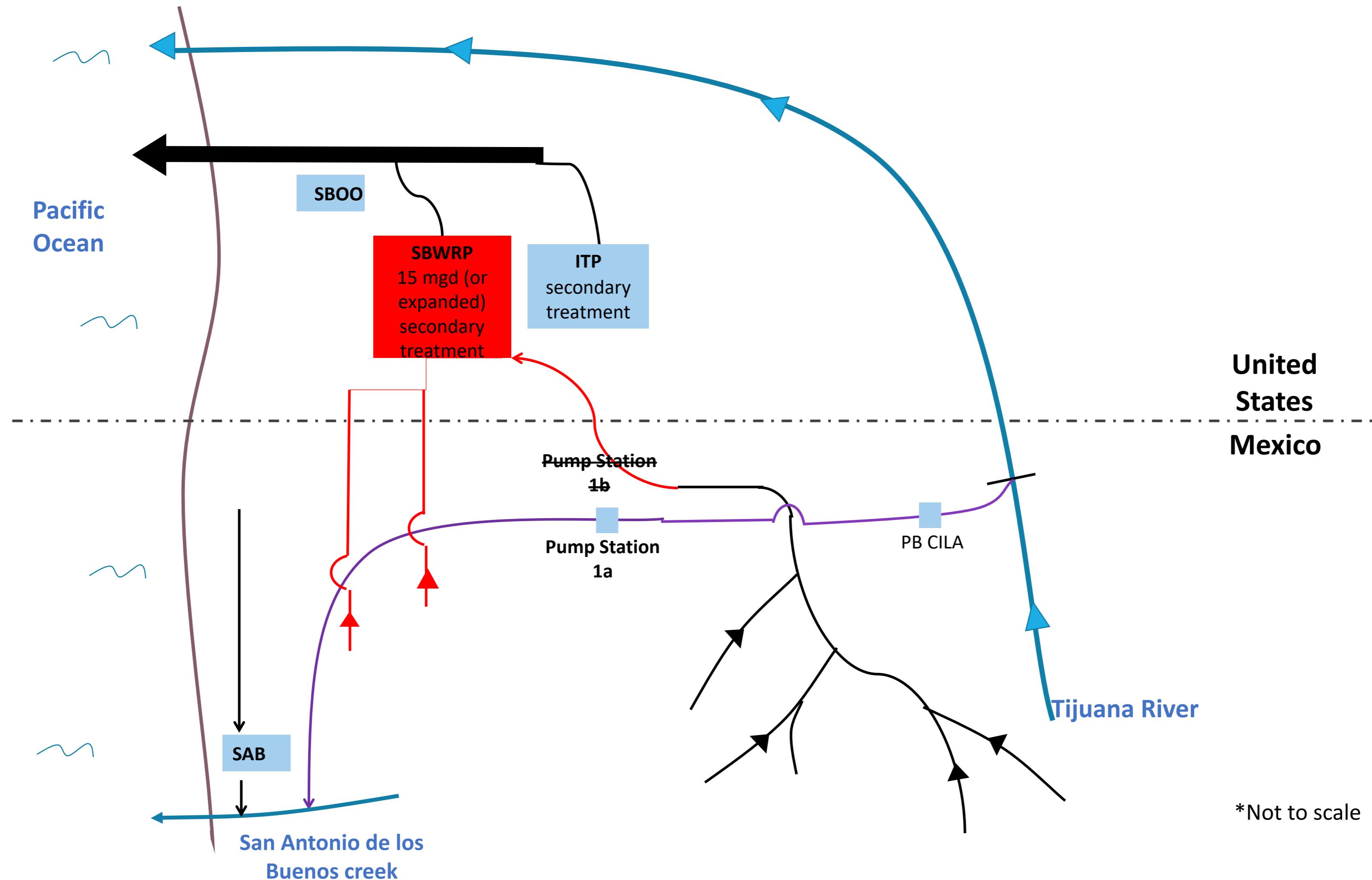
Project 8: Upgrade SAB to reduce untreated wastewater to coast

Location	Mexico
Pollutant addressed	Sewage
Benefited area in U.S.	Ocean/beaches (via SAB)



Project 9: Shift more wastewater treatment to U.S. (via SBWRP) to reduce flows in TR and SAB

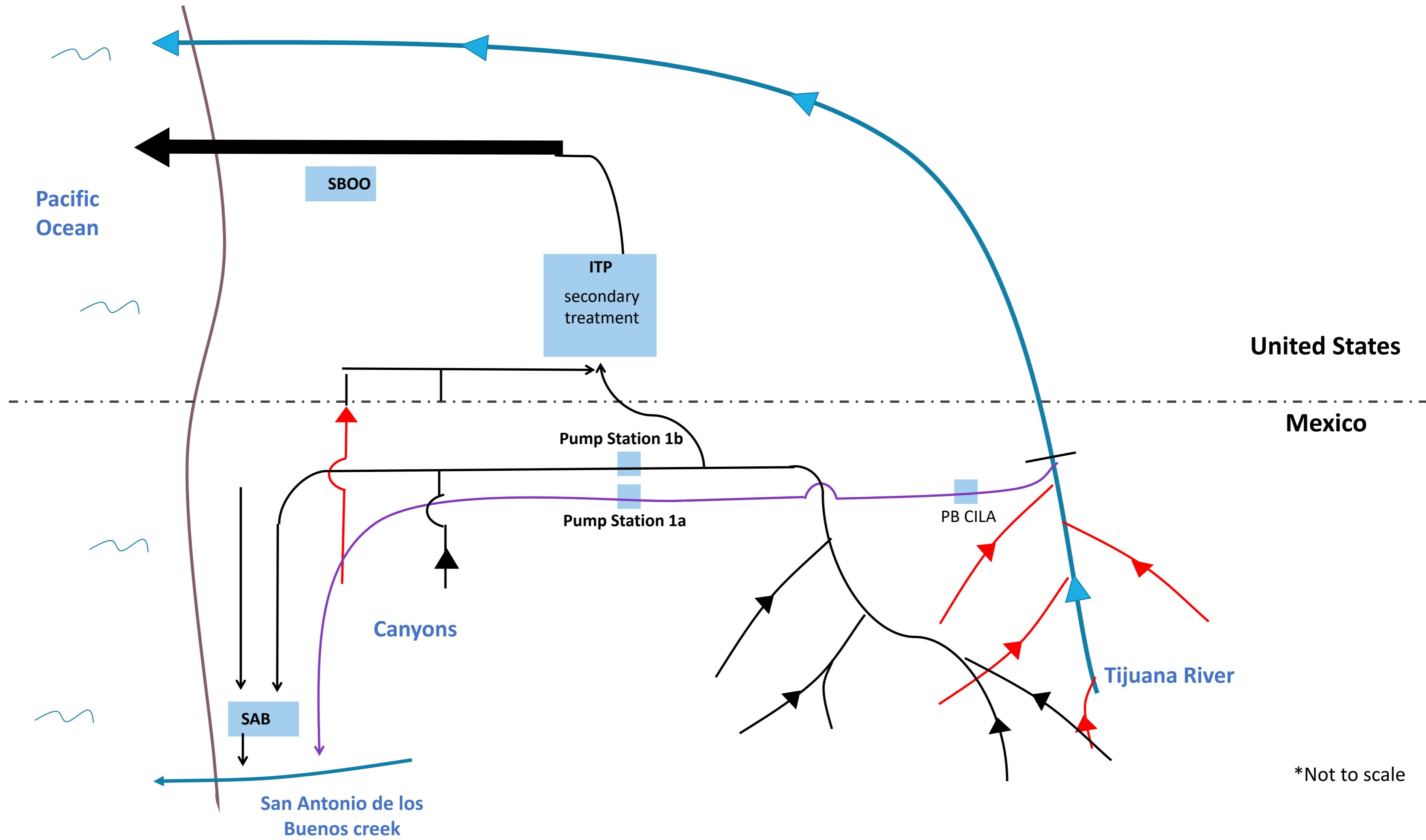
Location	Mostly U.S.
Pollutant addressed	Sewage
Benefited area in U.S.	Tijuana River/ocean



*Not to scale

Project 10: Reduce trash and sediment in TR and Goat Canyon via source control projects in Mexico

Location	Mexico
Pollutant addressed	Trash, sediment, marine debris
Benefited area in U.S.	Tijuana River/ocean



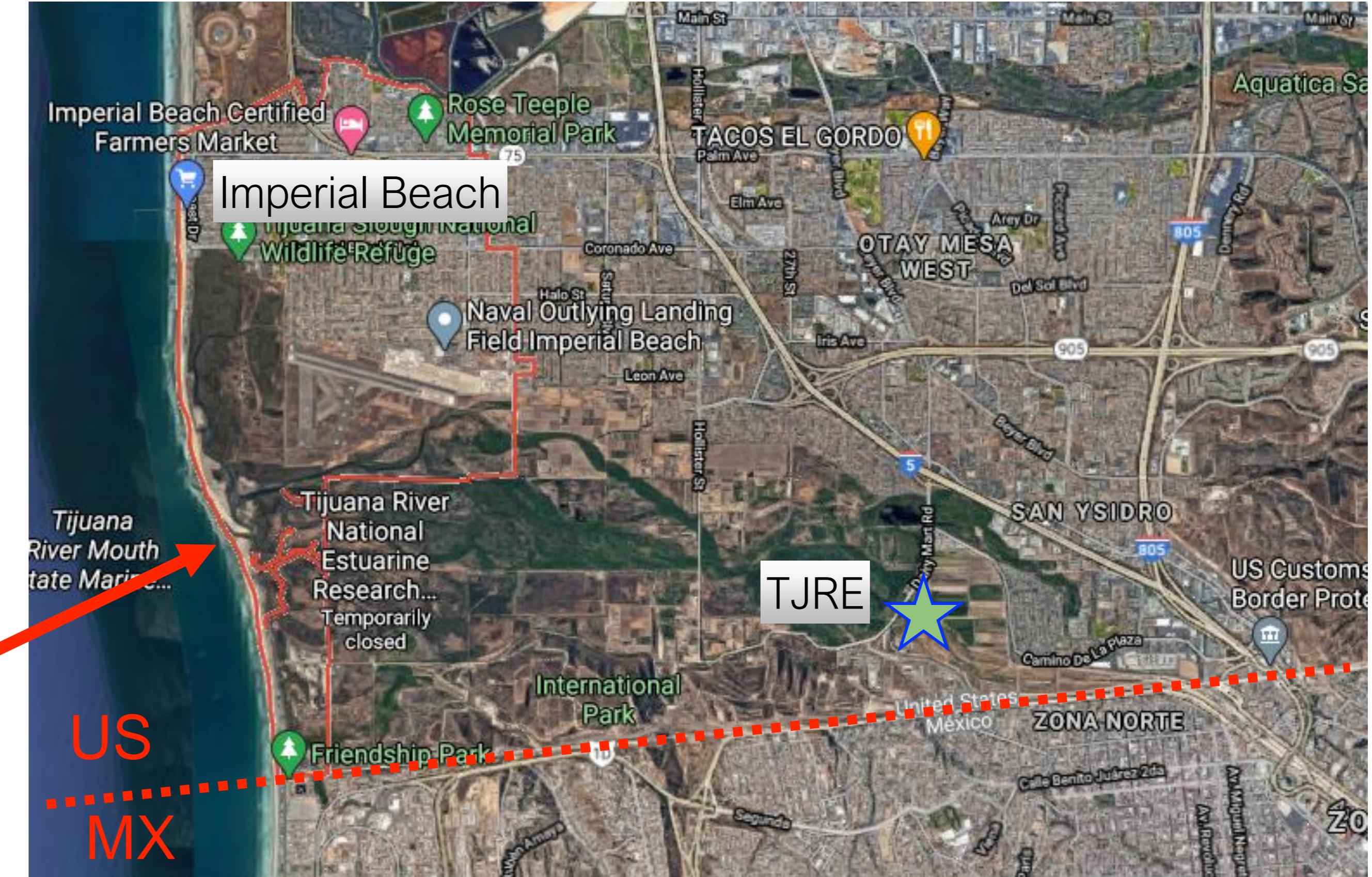
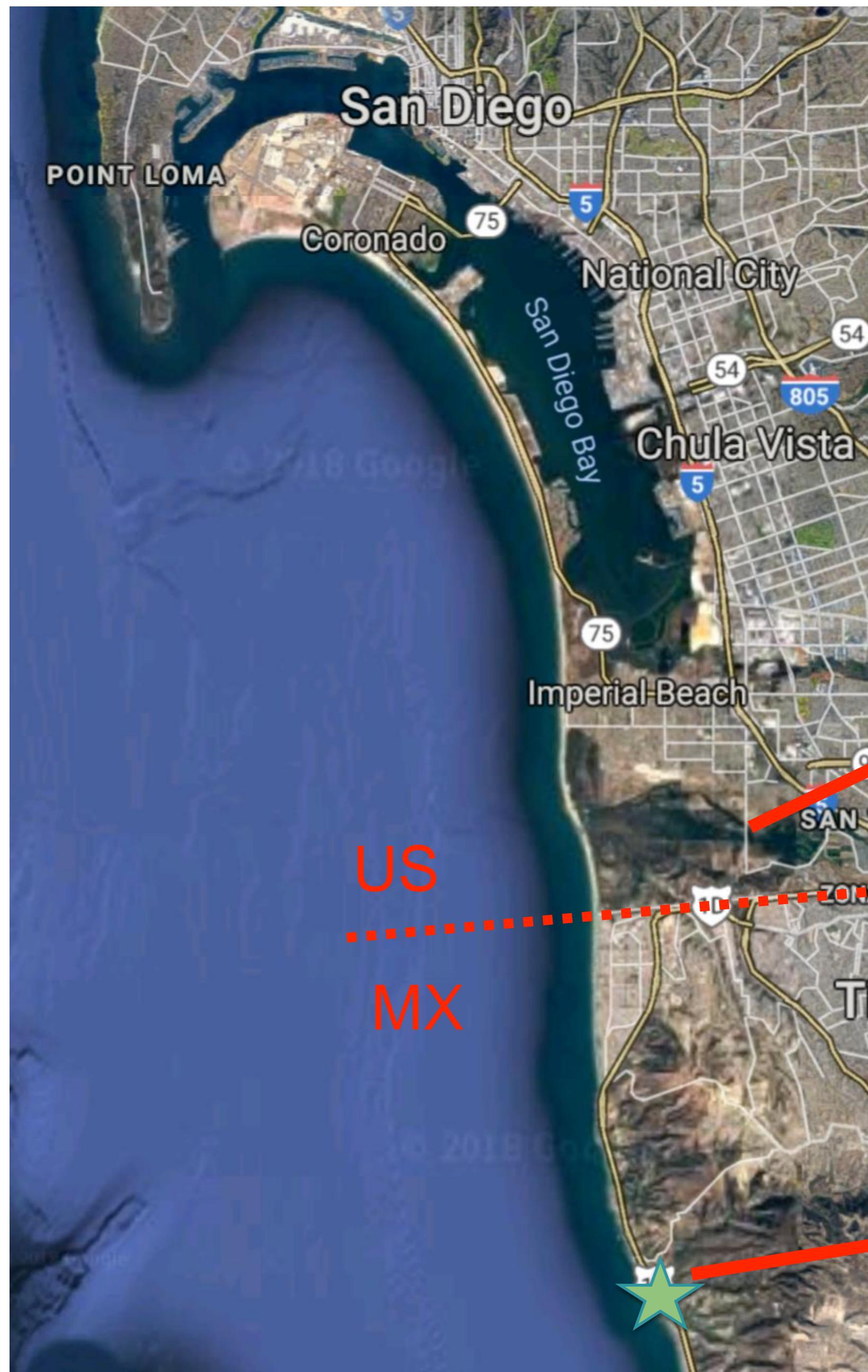
Coastal Ocean Untreated Wastewater Modeling of the US/Mexico Border Region for USMCA decision making

Falk Feddersen & Sarah Giddings

Scripps Institution of Oceanography, University of California San Diego



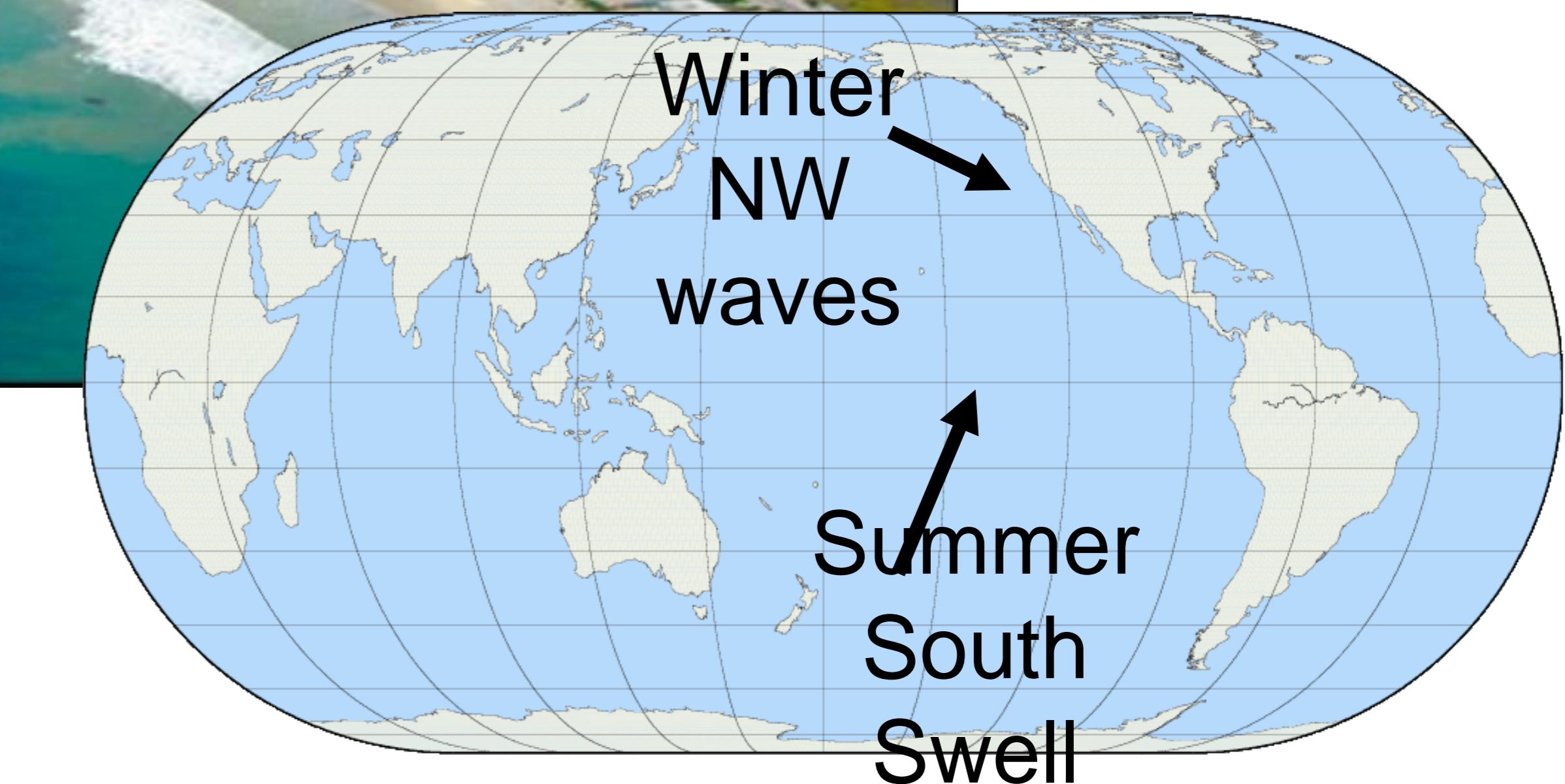
San Diego/Tijuana Regional Geography: TJRE and SAB/PTB



San Antonio de Los Buenos
Pt. Bandera (SAB/PTB)

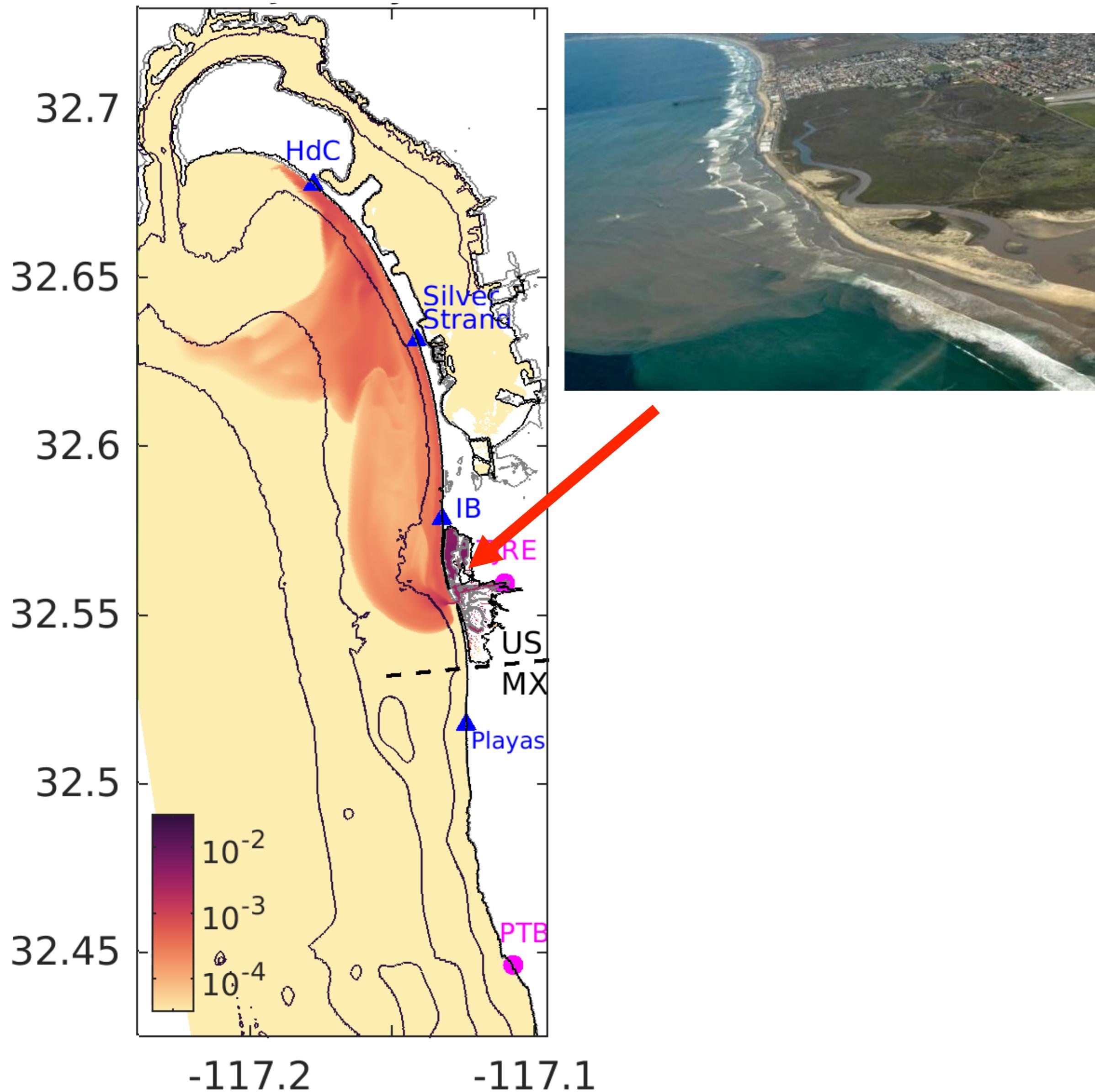
Border to IB: 3 miles N
Border to TJRE: 1.5 miles N
Border to SAB: 6 miles S

Imperial Beach (IB): Northward Surfzone Dye Transport During Waves from South

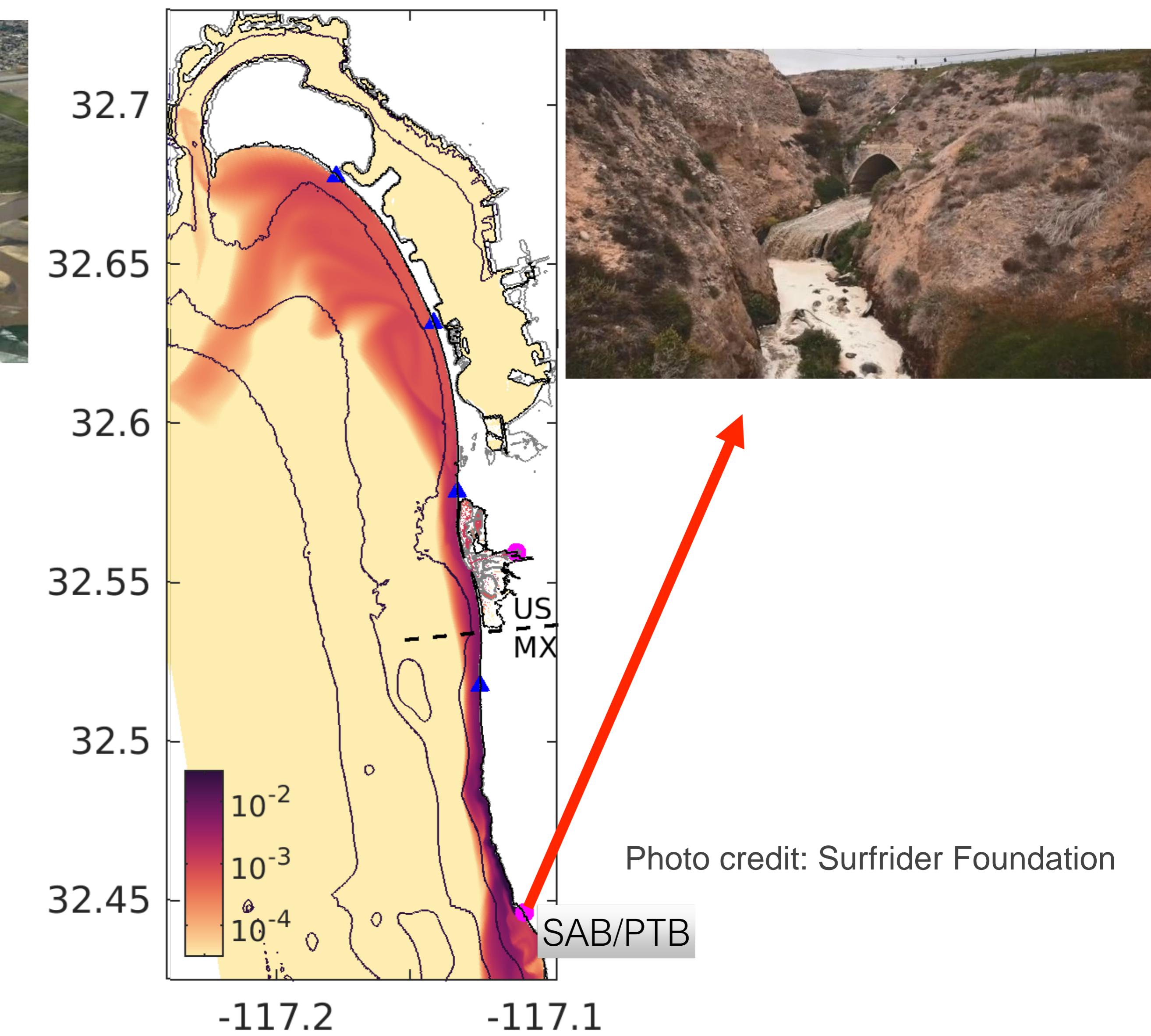


Modeling the Year 2017 Untreated Wastewater Concentrations

Winter Big Event (from TJRE)

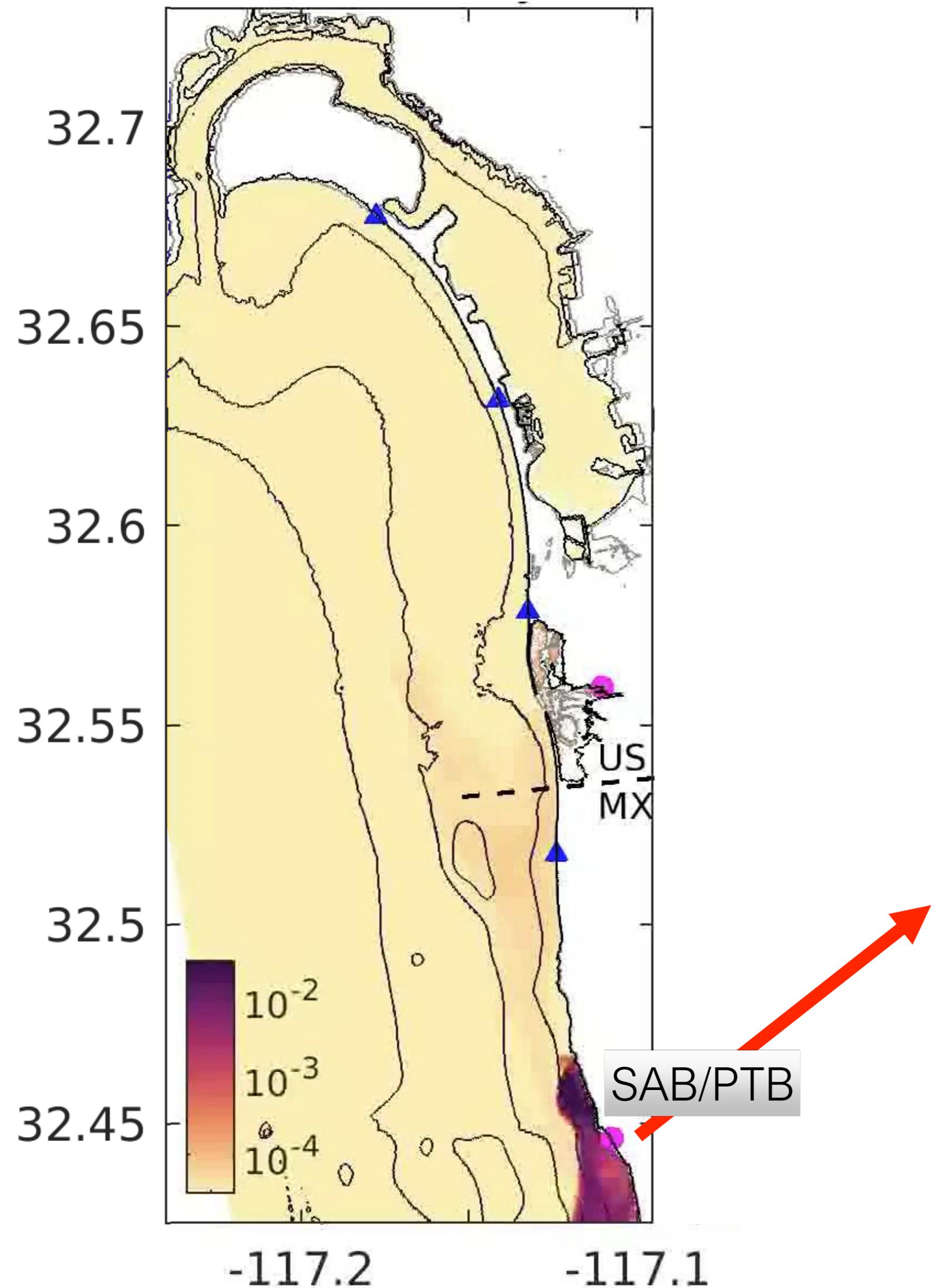


Summer Big Event (from SAB/PTB)



Modeling the Year 2017 Untreated Wastewater Concentrations

Summer Big Event (from SAB/PTB)



Example:

- July 2017
- 10 days of continuous waves from the south (south swell)
- Wastewater impacts from SAB/PTB to entire region

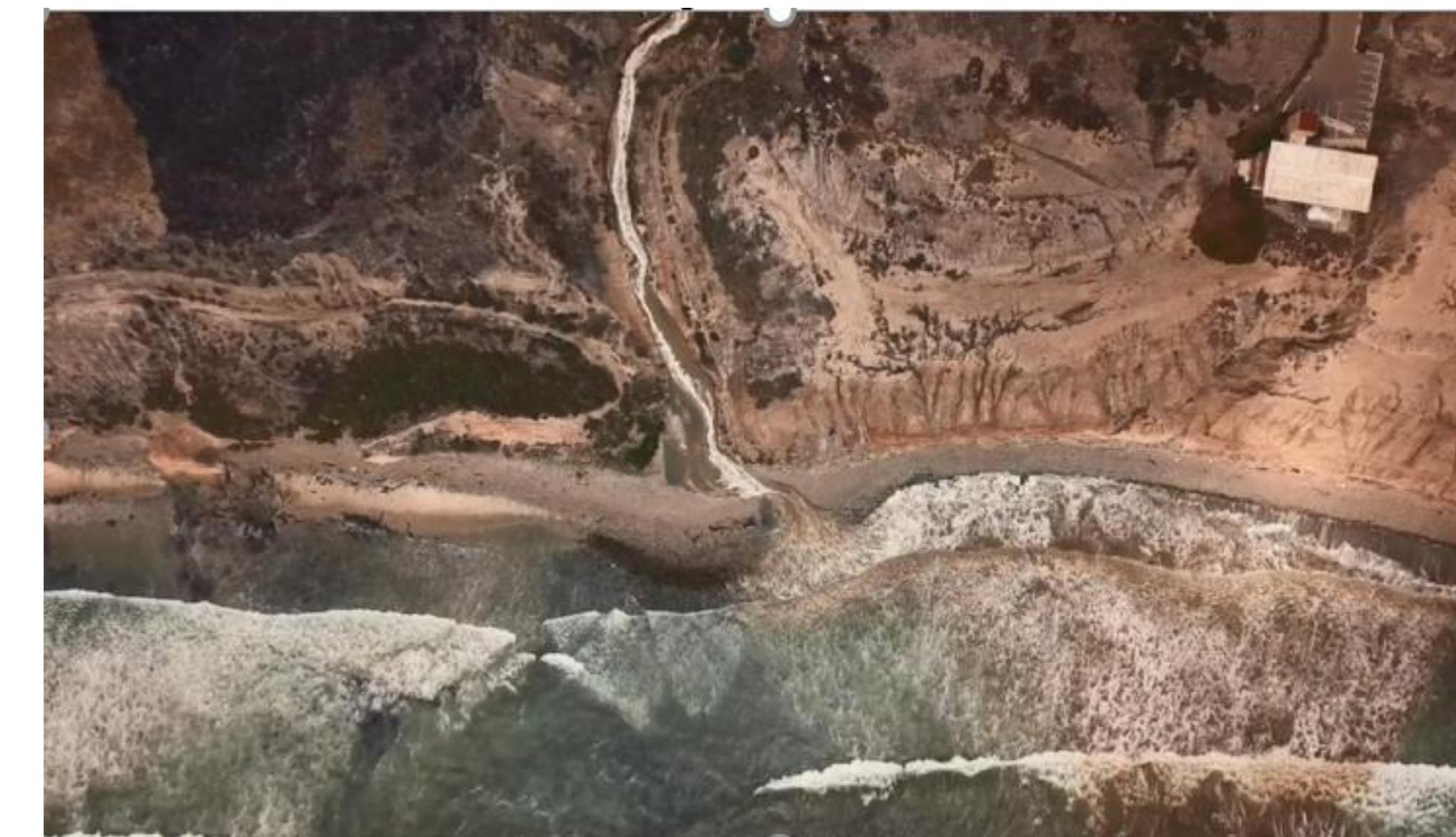
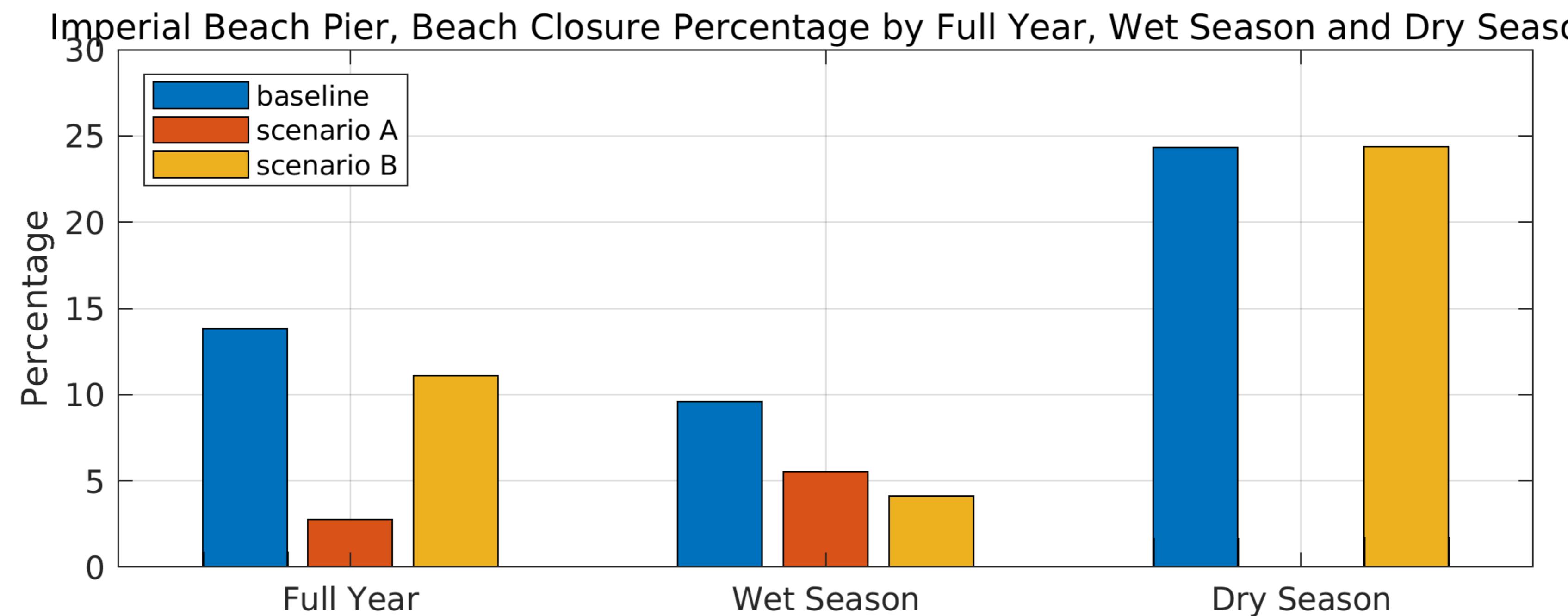


Photo credit: Surfrider Foundation

Percentage of Beach Closure at Imperial Beach CA: 3 scenarios

- 1. scenario A: divert TJRE <35 MGD, reduce SAB/PTB
- 2. scenario B: divert TJRE < 163 MGD, baseline SAB/PTB

- full year of 2017
- CA wet season (10/1 to 4/1)
- dry (tourist) season (5/22 to 9/8)



- scenario A: largest reduction beach closures overall, particularly for summer (dry season)
- scenario B: largest reduces wet season beach closures



Question and Answer Session



EPA Closing Remarks

- Andrew Sawyers, Director of the EPA Office of Wastewater Management
- Tomás Torres, Water Division Director, EPA Region 9



Thank you