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# USMCA Tijuana River Watershed

## Interagency Consultation Group (IACG)

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**October 1, 2020**

10:00 a.m. – 12:00 p.m. Pacific  
(1:00 p.m. – 3:00 p.m. Eastern)

### **Agenda Topics**

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5 min	<b>Welcome and Overview – Co-Chairs</b>
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30 min	<b>Update on Short-Term Impact Projects</b>
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- Temporary Tijuana River Diversion Project
- Trash & Sediment Capture at Smuggler's Gulch

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25 min	<b>Project Evaluation Criteria</b>
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40 min	<b>Proposed Long Term Projects to be Evaluated – Region 9</b>
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10 min	<b>Next Steps – Co-Chairs</b>
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5 min	<b>Closing Remarks &amp; Adjourn</b>
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The background of the slide is a close-up photograph of water with many small, clear bubbles rising from the bottom. The bubbles are of various sizes and are concentrated more towards the left and bottom of the frame. A solid teal rectangle is overlaid on the right side of the image, containing the title and meeting information.

# **USMCA Tijuana River Watershed Interagency Consultation Group (IACG)**

Virtual Meeting: October 1, 2020





## Role Call: Interagency Consultation Group (IACG) - Principals and Delegates

- CalEPA
- California Natural Resource Agency
- City of Chula Vista
- City of Coronado
- City of Imperial Beach
- City of San Diego
- North American Development Bank
- Port of San Diego
- San Diego County
- San Diego Regional Board
- US Army Corps of Engineers
- US Customs & Border Protection
- US Department of Commerce
- US Department of State
- US Fish and Wildlife
- US International Boundary and Water Commission
- US Navy



# Agenda

- Update on Potential Short-Term Impact Projects
- Project Evaluation Criteria
- Proposed Long-Term Projects to be Evaluated
- Next Steps
- Closing Remarks & Adjourn



A close-up photograph of water with many small, clear bubbles rising from the bottom, set against a light blue background. The bubbles are of various sizes and are concentrated on the left side of the frame.

# Update on Potential Short-Term Impact Projects in Tijuana Valley

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
- WRP and WTP 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

- Concept: divert up to 10 mgd of dry weather flows to ITP to reduce/stop flows
- Earthen berm/weir with temporary piping/pump to move flows to ITP
- ITP would treat flows and discharge through ocean outfall
- San Diego County may construct diversion (to be reimbursed with State funds); IBWC would operate
- Given upcoming “wet season”; likely construction in late winter/early spring 2021
- Working with IBWC, Water Board, Army Corps to address regulatory needs
- Funding for operating diversion may be a constraint



# River Diversion to ITP: Conceptual Rendering

Temporary earthen weir/berm  
(~ 2 meters X 10 meters)

Tijuana River

Open trench-~50 m X 3 meters max depth

International  
Treatment  
Plant i

12" diesel pump

JB 2 (inlet to  
headworks)

150 meters of flexible 12" tubing

46 m

© 2020 Google  
© 2020 INEGI

Border ↓

Google Earth





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

- Concept: fast-track sediment capture basin and trash boom in Smugglers Gulch to trap large trash/sediment flows, reduce downstream impacts
- Combines 2 proposals in County's SB507 Report
- Partnership with San Diego County, City of San Diego, Regional Water Board
- Seeking funding for construction from CA Coastal Conservancy
- Coordinating closely with Border Patrol to address potential concerns
- Would be built in late ~2021



Tijuana River ↑

# Smuggler's Gulch Border Pollution Control Basin

Sediment Basin

Passive Trash Boom

Operations Pad

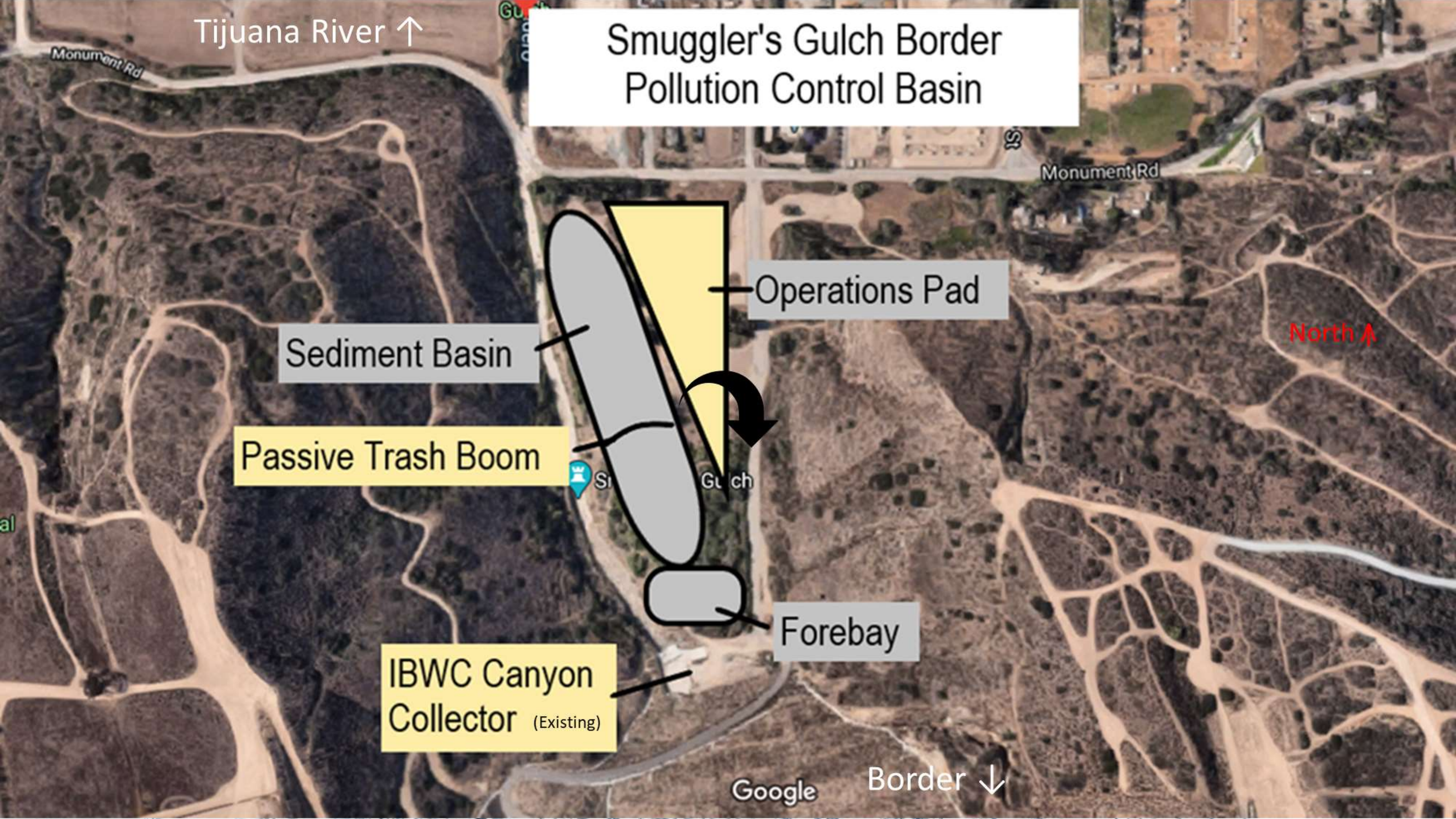
North ↑

Forebay

IBWC Canyon  
Collector (Existing)

Google

Border ↓





# Discussion:

- Clarifying questions?
- Are there additional considerations to note in advancing these short-term projects?



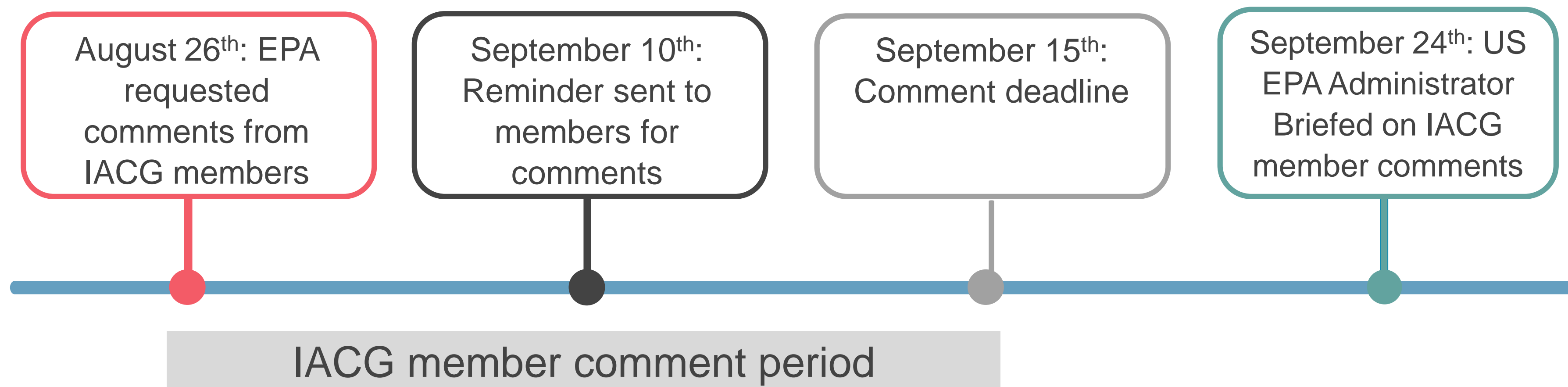
A background image showing numerous small, clear water bubbles rising from the bottom left towards the top right, set against a light blue and white gradient.

# Project Evaluation Criteria

Tomas Torres, Water Division Director, EPA Region 9



# Criteria Feedback Timeline & Overview



Comments received from these organizations:

- The International Boundary and Water Commission (IBWC)
- The North American Development Bank (NADB)
- The California Environmental Protection Agency (CalEPA)
- U.S. Customs and Border Protection (CBP)
- Imperial Beach in collaboration with Chula Vista, San Diego County, San Diego Regional Board, and Port of San Diego.





## Comments Received and Refinements Made

- Significant refinements based on comments
- Clarifying language
- Delete/add new sub-criteria
- Weighting



# Refinement to Criteria 1: Effectiveness


- Effectiveness in reducing U.S.-side environmental and human health impacts (40%)
  - Location of project
    - U.S. v. Mexico
    - Main river channel v. broader watershed
    - Tijuana River valley v. San Antonio de los Buenos wastewater treatment plant on Tijuana's south coast
  - Impacts to affected populations
    - Account for future population growth and continued urbanization
  - Effectiveness in reducing:
    - Bacteria, beach advisories, and impact to recreation and human health in Imperial Beach, along the Silver Strand up to Coronado Beach
    - Impact to border security operations and border workforce
    - Impact on Navy training grounds
    - Transboundary flow frequency
  - Source and type of pollution reduction
    - Untreated sewage discharged to river or ocean ~~Sewage overflows~~
    - Urban stormwater run-off
    - Trash (e.g. waste tires)
    - Sediment
  - Environmental benefits in addition to public health protection
    - Marine environment
    - Wildlife
    - Tijuana River Estuary



## Refinement to Criteria 2: Technical Feasibility

- **Technical Feasibility** ~~Engineering Feasibility~~ (10%)
  - ~~Stage in planning process~~
  - Spatial constraints **with consideration of jurisdiction's willingness to collaborate**
  - **Feasibility of design and construction** ~~Complexity of design~~
  - **Details of cost estimates** ~~Robustness of cost estimates~~
  - Proven technology





## Refinement to Criteria 3: Financial Feasibility

- Financial feasibility Leveraging (5%)
  - Availability of matching funds, public or private
  - Percentage of grant applied to capital expenditures v. planning and feasibility
- Attractiveness for private investment





## Refinement to Criteria 4: Regulatory Feasibility

- Regulatory feasibility (10%)
  - **Feasibility** complexity and timing of permitting and approvals
  - Environmental analyses and potential adverse impacts not associated with pollution reduction potential
  - **Requirements for construction and/or operation agreements**





## Refinement to Criteria 5: Implementation Timeline

- **Implementation Timeline** ~~Timeframe to construct (15%)~~
  - **Timing for completion of design** ~~Shovel-readiness of design~~
  - Speed of contractor engagement and deployment and materials acquisition
  - ~~Litigation risk from local or other opposition~~





## Refinement to Criteria 6: Operations and Maintenance

- Operations & Maintenance (20%)
  - Annualized cost projections
  - Source of funding
  - Responsible party and feasibility of O&M plan
  - Talent acquisition and project management plan
  - Risk associated with Mexico-side operations
  - Effective and long-term U.S. oversight of construction and operations and maintenance





# Discussion:

- Any clarifying questions?
- Other considerations on the project criteria?



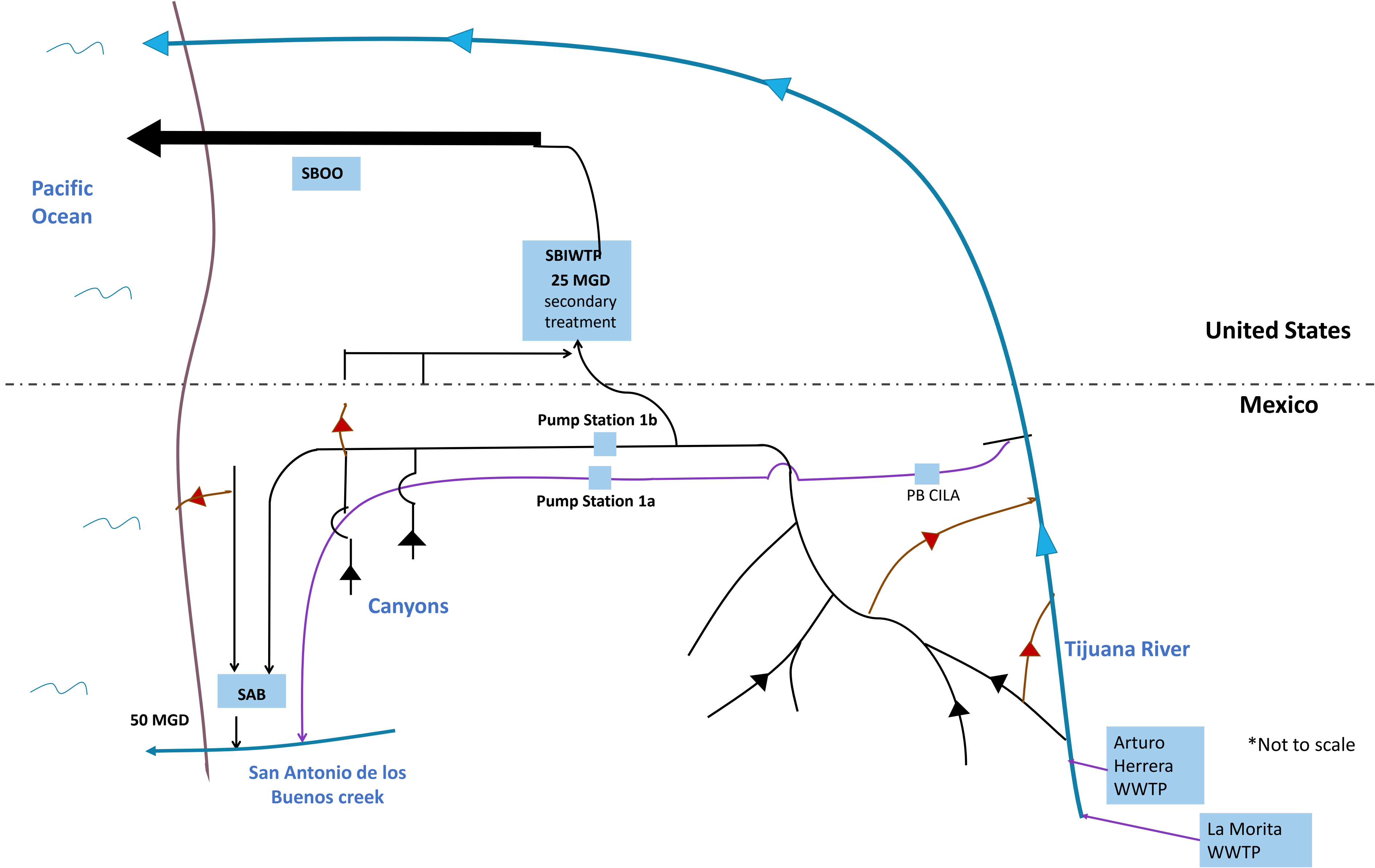
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# Proposed Long Term Projects

Doug Liden, Environmental Engineer, EPA Region 9

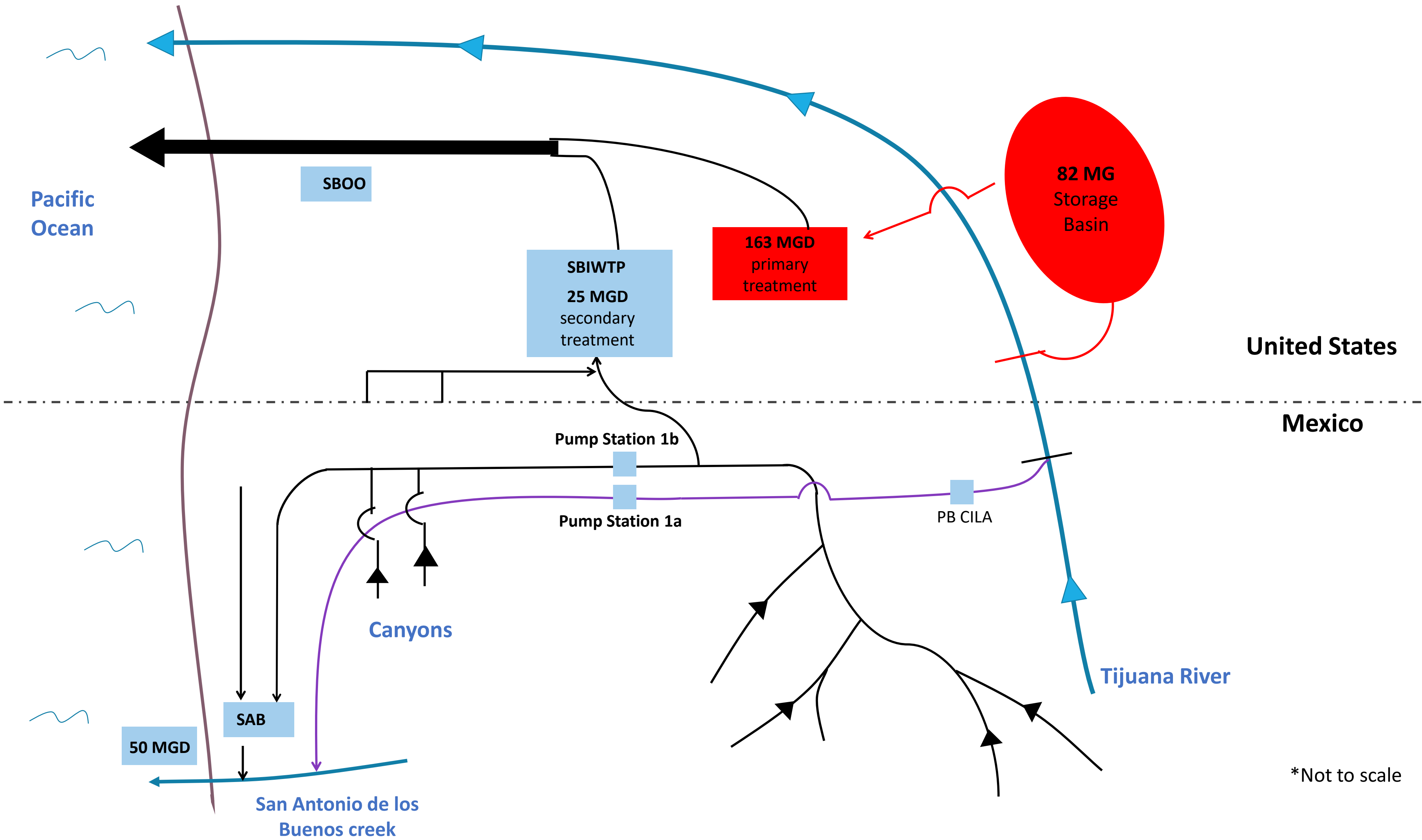


# Existing System



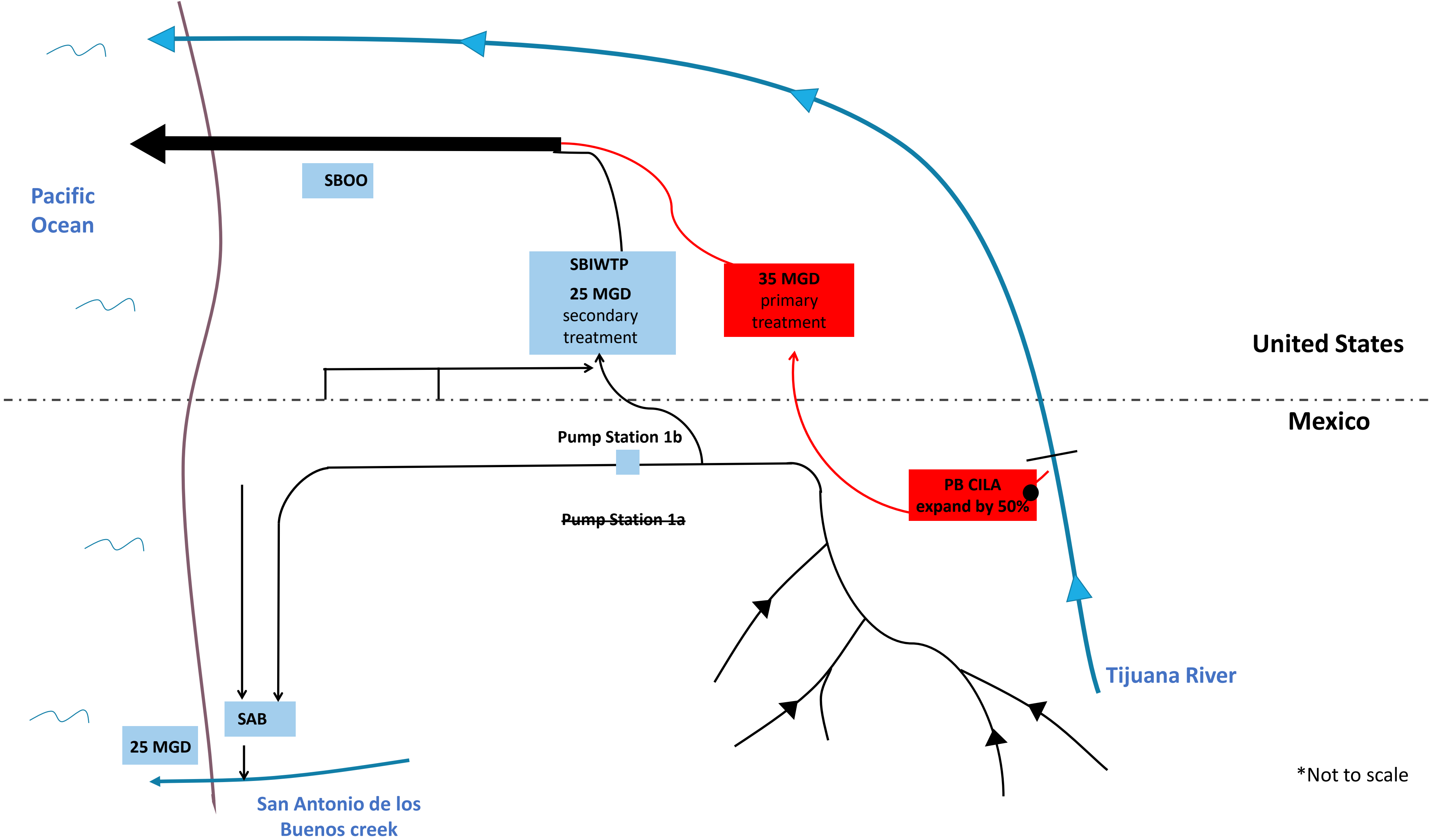


# Proposal 1: Build River Diversion and Treatment in U.S. to Reduce Transboundary River Flows (SB507)



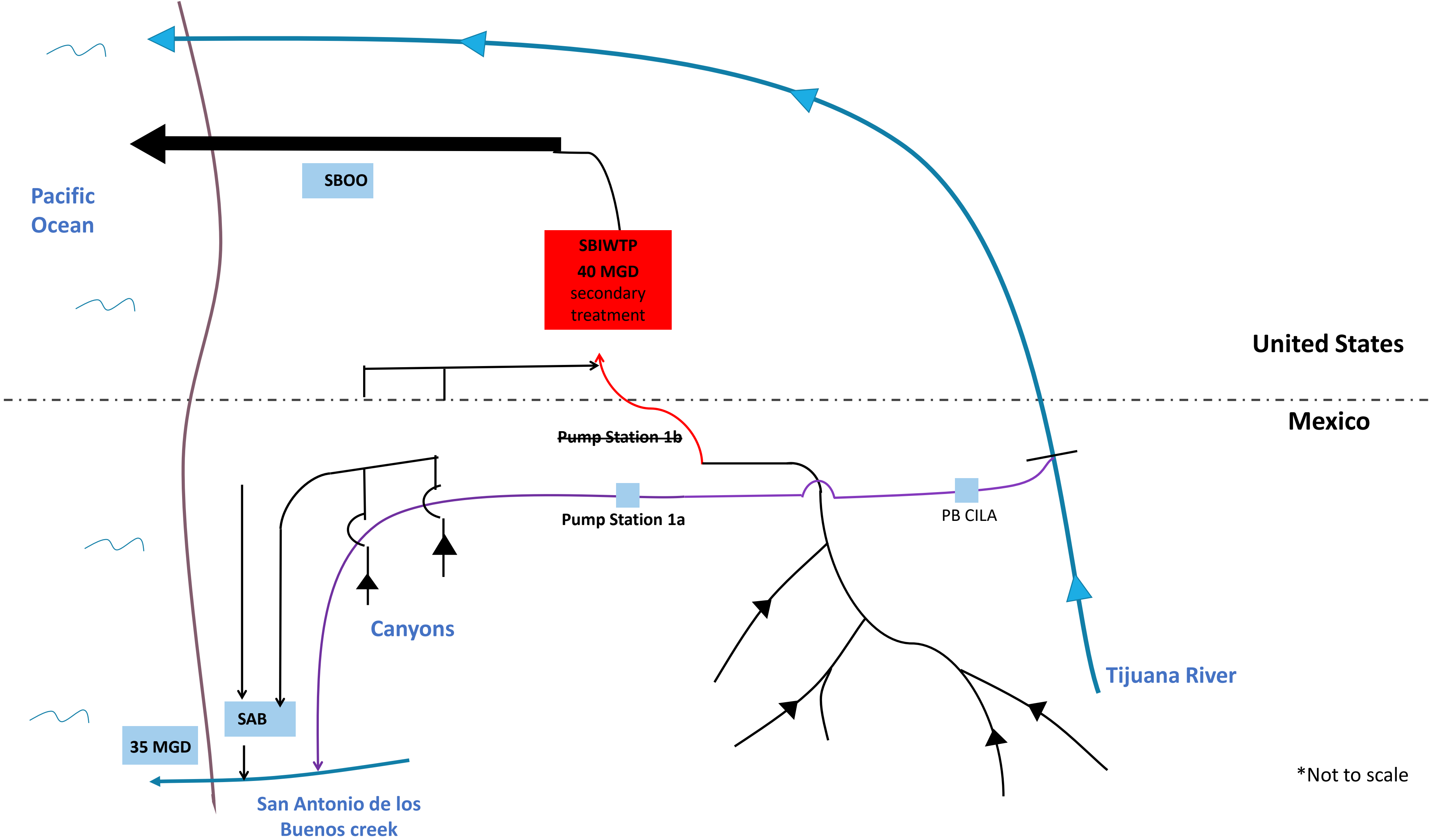


**Proposal 2: Increase PBCILA Capacity, Treat All River Flows in U.S.  
to Reduce Transboundary River Flows into Ocean (NADB study)**





Proposal 3: Expand ITP in U.S. to Reduce Sewage  
Flows Going to River and/or SAB





The diagram illustrates the water treatment and outfall system for the San Antonio de los Buenos Creek (SAB) and Tijuana River. Key components and flow paths include:

- San Antonio de los Buenos Creek (SAB):** A blue line representing the creek, with a flow rate of 30 MGD indicated in a blue box.
- Pump Station 1a:** A blue square representing the first pump station, located in the United States.
- Pump Station 1b:** A blue square representing the second pump station, located in Mexico.
- SBIWTP (50 MGD secondary treatment):** A red box representing the San Antonio de los Buenos Wastewater Treatment Plant, located in Mexico.
- SBOO (San Antonio de los Buenos Ocean Outfall):** A black line representing the outfall pipe, located in the United States.
- Tijuana River:** A blue line representing the river, flowing into the Pacific Ocean.
- PB CILA:** A blue square representing the Point of Connection to the International Water Treatment Plant, located in Mexico.
- United States and Mexico:** A dashed horizontal line separates the two countries.
- Pacific Ocean:** The body of water to the left of the outfall pipe.
- Flow Arrows:** Indicate the direction of water flow throughout the system.
- Legend:** A note at the bottom right states "\*Not to scale".

\*Not to scale

The map illustrates the proposed 50 MGD sewer system for the San Antonio de los Buenos Creek (SAB) area. The system is shown as a red line with arrows indicating flow direction. Key components include:

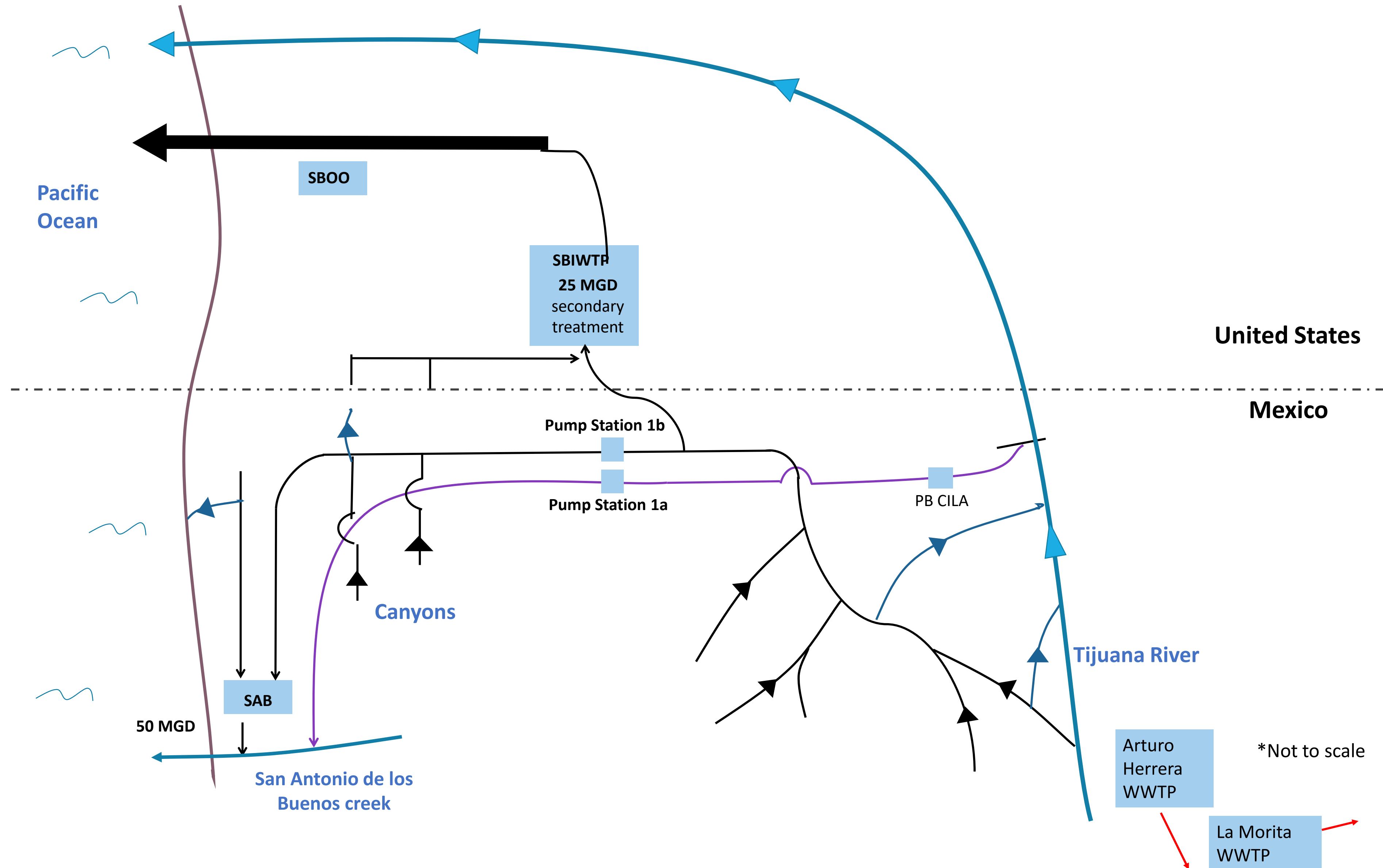
- SAB (San Antonio de los Buenos Creek):** The source of the wastewater, located in the lower left.
- 50 MGD:** The capacity of the proposed sewer system, indicated by a red box.
- Pump Station 1a and 1b:** Two pump stations located along the sewer line, marked with blue squares.
- SBIWTP (San Antonio de los Buenos Wastewater Treatment Plant):** A 25 MGD secondary treatment facility located in the upper right.
- SBOD (San Antonio de los Buenos Outfall Disposal):** The final destination for the treated effluent, located in the upper right.
- Tijuana River:** The river flowing along the right side of the map, marked with a blue line and arrows.
- Smart covers:** Indicated by red dots and arrows pointing to the sewer line, suggesting locations for improved access.
- Canyons:** Labeled in the lower right, indicating the terrain of the area.
- United States and Mexico:** The international border is shown as a dashed line, with the United States to the north and Mexico to the south.

\*Not to scale

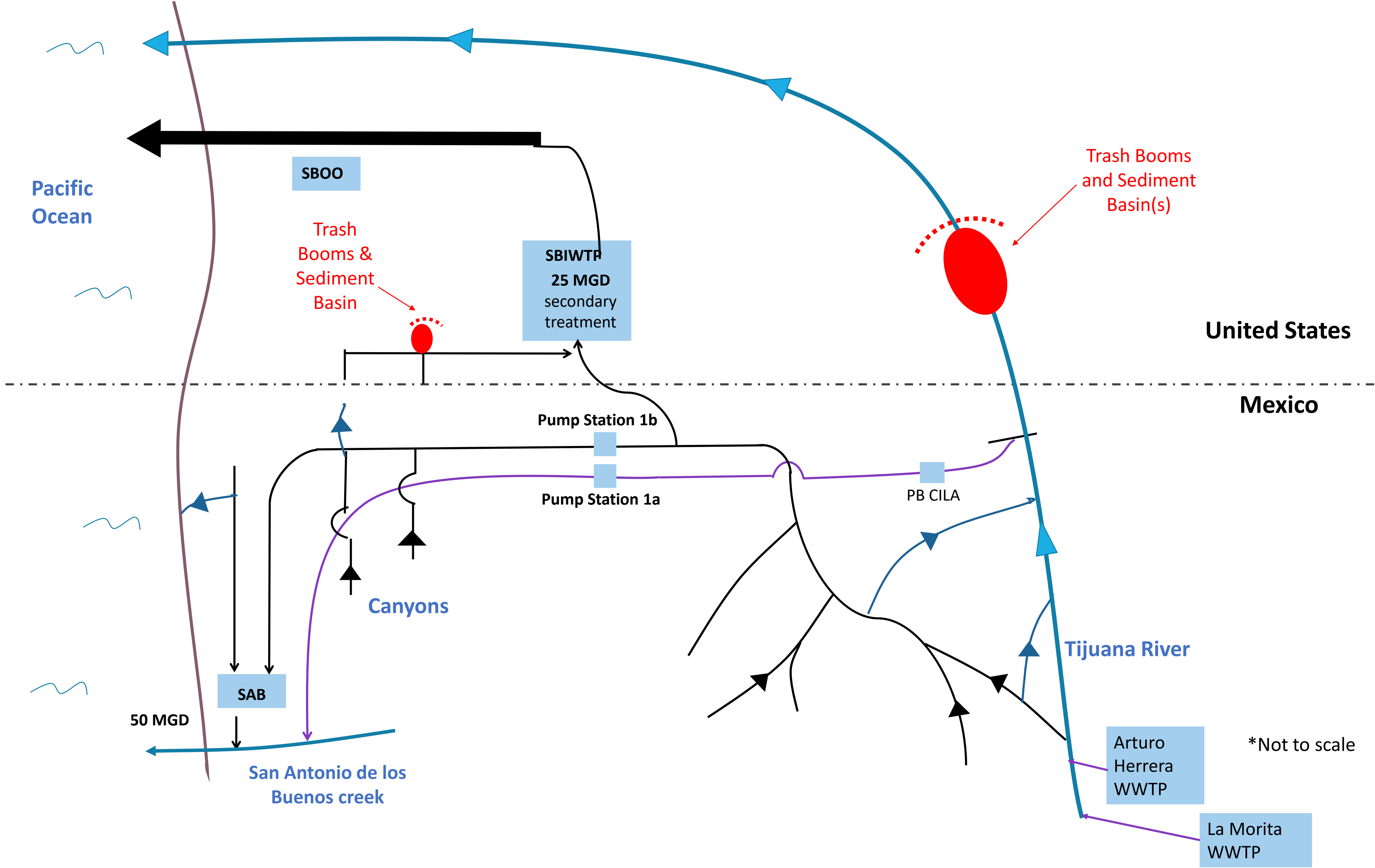
\*Not to scale



# Proposal 6: Wastewater Reuse in Tijuana to Reduce Transboundary Flows in River (NADB study)



Proposal 7: Sediment and Trash Devices in U.S. to Reduce Trash and Sediment Flow into Estuary and Ocean (SB507 and IBWC)

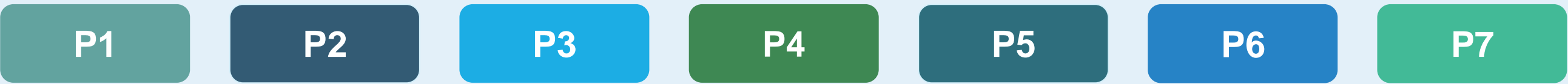




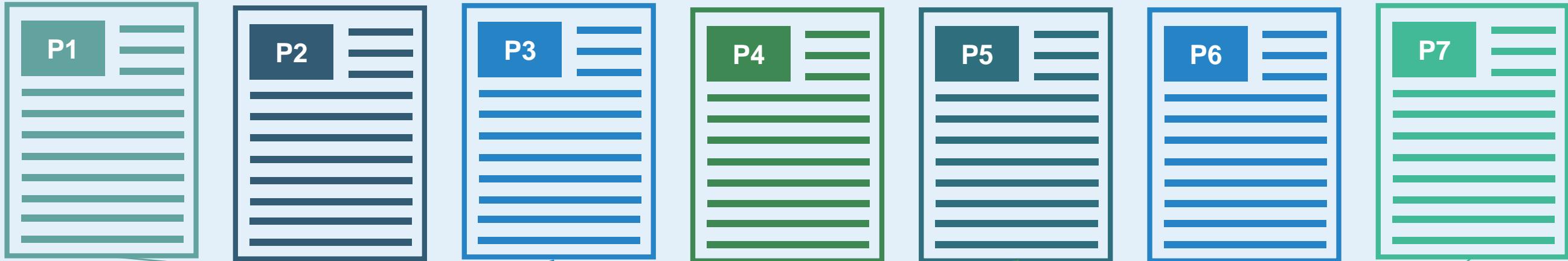
# USMCA Tijuana River Infrastructure Technical Analysis Milestones

We Are Here

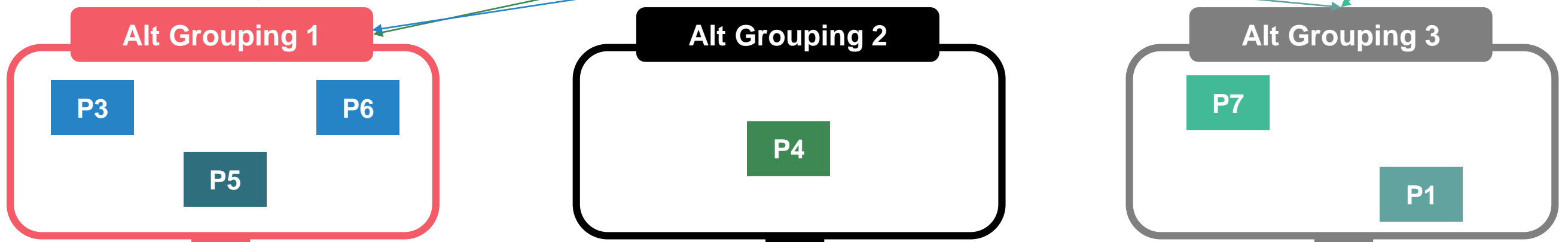
Select Potential Projects



Evaluate Potential Projects



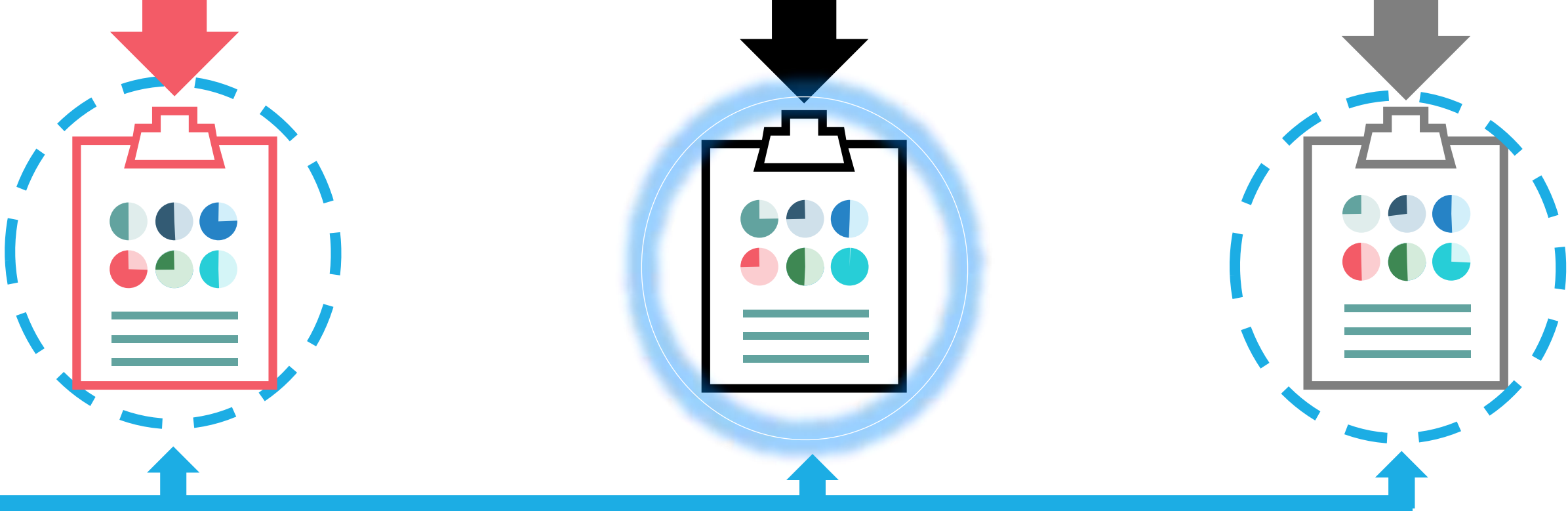
Develop Alternatives



Assess Alternatives



EPA Administrator to Select Preferred Alternative





# Discussion:

- Any clarifying questions?
- Any additional considerations to better characterize and evaluate individual projects?
- Are there technical experts in your organization that should be consulted while evaluating potential projects?



A close-up photograph of water with many small, clear bubbles rising from the bottom left towards the top right. The bubbles are of various sizes and are set against a light, slightly hazy background.

# Next Steps & Wrap Up

Co-Chairs



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**Thank you**