USMCA Tijuana River Watershed

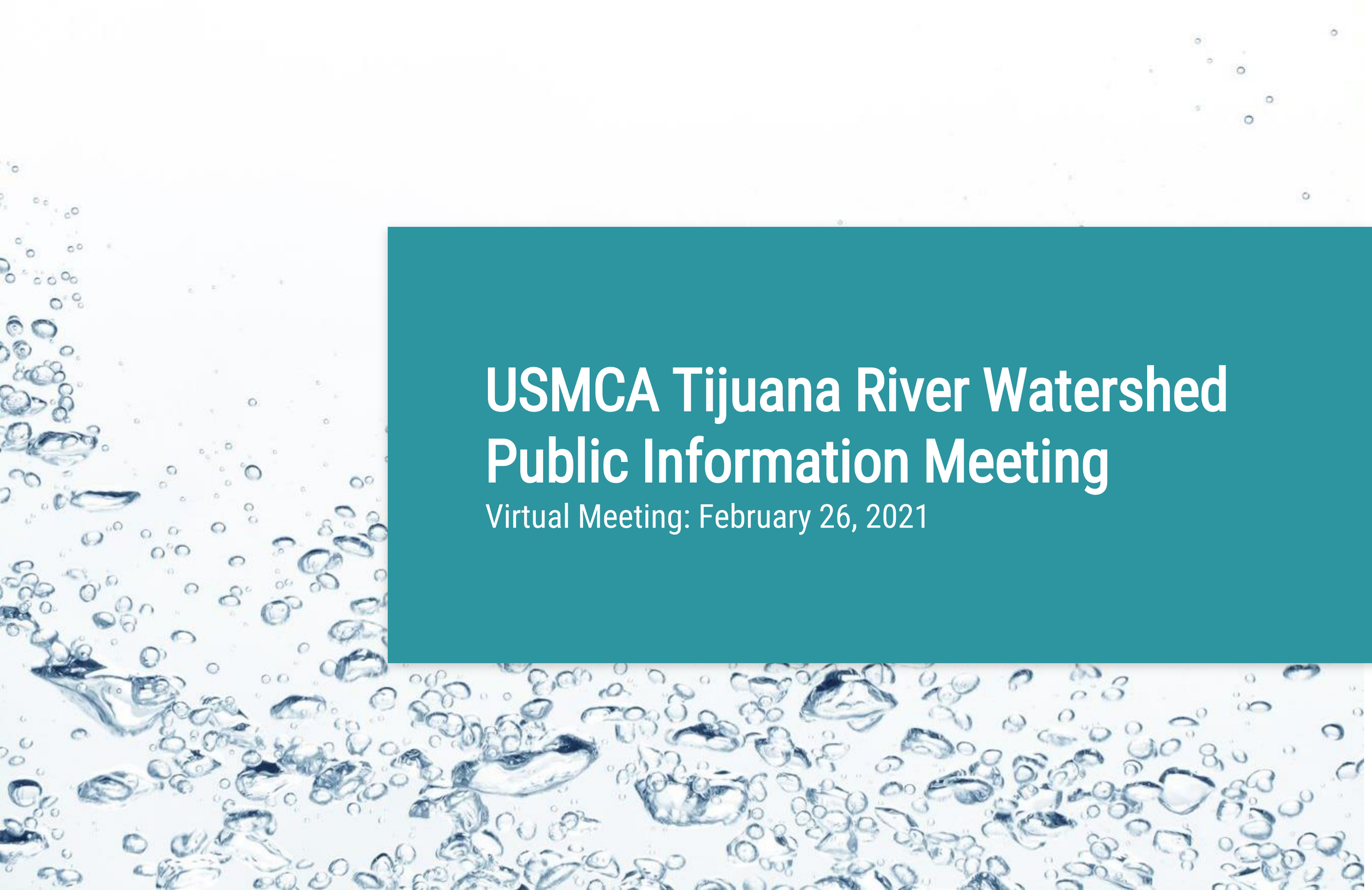
Public Information Meeting

Date & Time: February 26, 2021, 10:00 am to 12:00 pm PT (1:00 -3:00 pm ET)
Virtual Meeting Link: Click here to join the meeting

Goal: Provide an overview of transboundary pollution issues facing the Tijuana River Valley, status of short- and long-term treatment projects being evaluated, and forthcoming NEPA process.

Time	Agenda Topic	Lead
10:00-10:10am	**Welcome and Overview**	Andrew Sawyers, Director of the EPA Office of Wastewater Management Dave Smith, Water Division Assistant Director, EPA Region 9
10:10-10:20am	**Update on Short Term Impact Projects** Objective: Report on development of short-term impact projects.	Dave Smith, Water Division Assistant Director, EPA Region 9
10:20-10:35am	**Technical Analysis Overview** Objective: Provide a knowledge foundation and a general overview of the process and projects. • Overview of key terms and impacts to the Tijuana River Valley • Overview of projects	Doug Liden, Environmental Engineer, EPA Region 9
10:35-11:10am	**Technical Analysis Overview: Treatment Projects & Evaluation Approach** Objective: Review the technical analysis approach and the projects identified for inclusion in the evaluation. • Description of ongoing technical assessment	James Hollibaugh and Tom Rowlett, PG Environmental

11:10-11:20am	**NEPA Public Scoping** Objective: Provide an overview of the Environmental Review process and timeline.	Tom Konner, Environmental Engineer, EPA Region 9
11:20-11:55am	**Question and Answer Session**	Jake Strickler, EPA Office of General Counsel's Conflict Prevention and Resolution Center
11:55 am-12:00pm	**EPA Closing Remarks**	Andrew Sawyers, Director of the EPA Office of Wastewater Management Dave Smith, Water Division Assistant Director, EPA Region 9



USMCA Tijuana River Watershed Public Information Meeting

Virtual Meeting: February 26, 2021

Agenda

1. Short Term Projects - Update
2. Technical Analysis – Current Status
3. NEPA Public Scoping - Update
4. Question and Answer Session
5. Next Steps and Closing Remarks

Welcome & Overview

Andrew Sawyers
Director of EPA Office of Wastewater Management

Dave Smith
Water Division Assistant Director, EPA Region 9

Short Term Projects - Update

Dave Smith, Water Division Assistant Director, EPA Region 9

Short Term Projects - Update

- **Short Term River Diversion**
  - Planned to capture dry weather transboundary flows, treat at International Treatment Plant (ITP)
  - Dry weather transboundary flows largely ceased Summer-Fall 2020
  - ITP regularly treated more sewage from MX than its 25 MGD rated capacity
  - Stressed treatment plant systems
  - Deferring planning for this project for time being

- **Smugglers Gulch Sediment and Trash Capture Facility**
  - Would address trash and sediment crossing border
  - County lead with support from City of San Diego, Regional Water Board
  - EPA provided technical assistance to help grant application
  - County applied in January for CA Coastal Conservancy grant to fund design and construction
  - Awaiting CCC decision on grant application
  - Confer with CBP, other agencies, and stakeholders

Technical Analysis Overview: Treatment Projects & Evaluation Approach

Doug Liden, Environmental Engineer, EPA Region 9

Overview of Key Terms and Impacts

- **What pollutants are in this flow?**
  - **Untreated wastewater,** often referred to as sewage, enters the flow due to insufficient capture and treatment, aging wastewater collectors, trash-blocked manholes and canyon collectors, lack of a stormwater drainage system, and unserved homes.
  - **Trash** produced by the urban area in and surrounding the city of Tijuana in Mexico, when not properly disposed, enters the flow.
  - **Sediment** loading increases with wet-weather events, conveying eroded soil from the canyons and upstream of the Tijuana River.

Overview of Key Terms and Impacts

- **What are the negative impacts of these pollutants?**
  - **Public Health & Beach Water Quality:**
    - Untreated wastewater contains harmful pathogens that pose significant risk to human health.
    - Local governments mandate beach closures to minimize human contact with untreated wastewater.
  - **Wildlife & Habitat:**
    - Wildlife impacted by the degradation of their riparian, marine, and estuarian habitats.
  - **Government Activities:**
    - U.S. Navy and Customs and Border Protection personnel are occasionally exposed to untreated wastewater as part of their job duties

Overview of Projects (Slide 1 of 2)

- 10 Projects that address treatment, conveyance, and/or source control

	Project Title
1.	New Tijuana River Diversion System in the U.S. and Treatment in the U.S.
2.	Expand and Upgrade Tijuana River Diversion System in Mexico and Provide Treatment in the U.S.
3.	Treat Wastewater from the International Collector at the ITP
4.	Shift Wastewater Treatment of Canyon Flows to U.S. (via Expanded ITP or SBWRP) to Reduce Flows to SAB (Complements Projects 3 and 9)
5.	Enhance Mexico Wastewater Collection System to Reduce Flows into Tijuana River
6.	Construct New Infrastructure to Address Trash and Sediment During Wet Weather Flows
7.	Divert or Reuse Treated Wastewater from Existing Wastewater Treatment Plants in Mexico to Reduce Flows into the Tijuana River
8.	Upgrade SAB Wastewater Treatment Plant to Reduce Untreated Wastewater to Coast
9.	Treat Wastewater from the International Collector at the SBWRP
10.	Sediment and Trash Source Control

Overview of Projects (Slide 2 of 2)

- Focus primarily on solutions that have the highest potential to:
  - Mitigate transboundary wastewater flows
  - Protect public health
- Focus on Tijuana River and coastal flows

	Project Title
1.	New Tijuana River Diversion System in the U.S. and Treatment in the U.S.
2.	Expand and Upgrade Tijuana River Diversion System in Mexico and Provide Treatment in the U.S.
3.	Treat Wastewater from the International Collector at the ITP
4.	Shift Wastewater Treatment of Canyon Flows to U.S. (via Expanded ITP or SBWRP) to Reduce Flows to SAB (Complements Projects 3 and 9)
9.	Treat Wastewater from the International Collector at the SBWRP

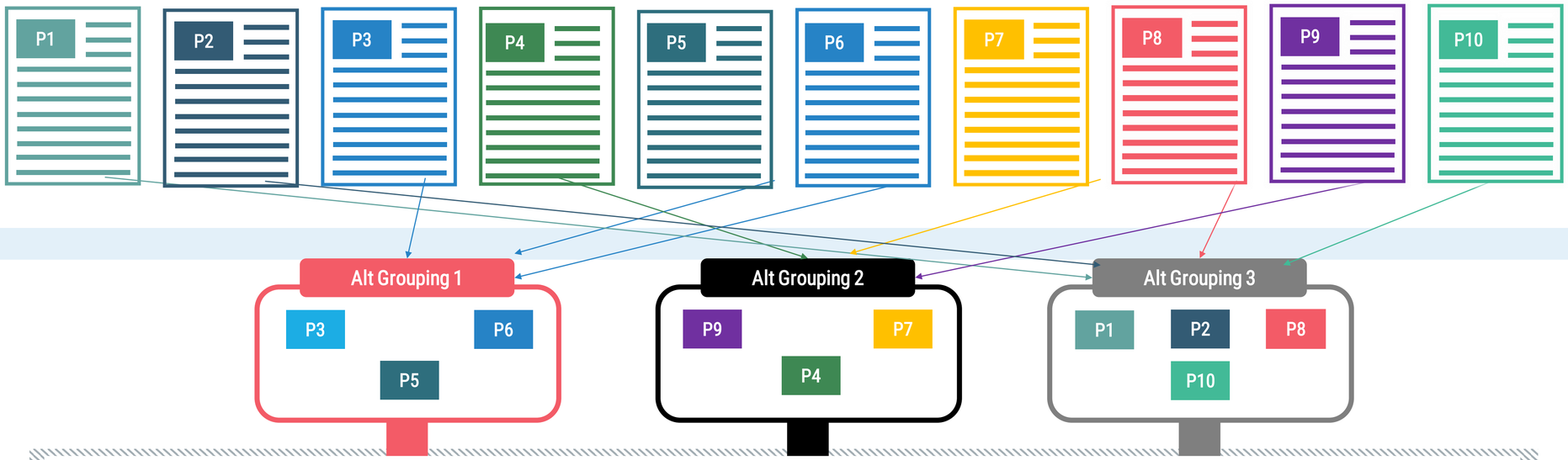
USMCA Tijuana River Infrastructure Technical Analysis Milestones

Project Definition and Refinement

P1 P2 P3 P4 P5 P6 P7 P8 P9 P10

Evaluate Potential Projects

- TECP Meetings
- Data Analysis
- Feasibility Reports



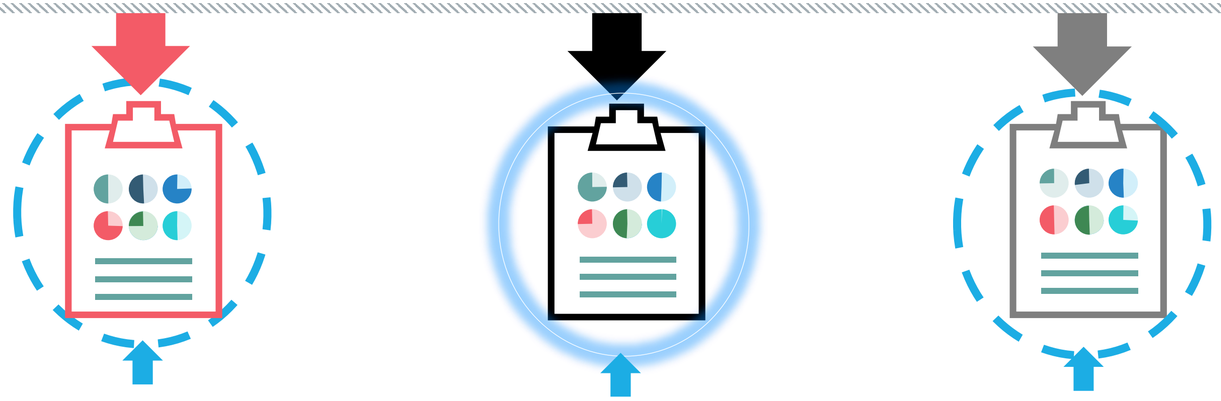
Feb-March

Develop Alternatives

April - May

Assess Alternatives

Evaluated Against Criteria

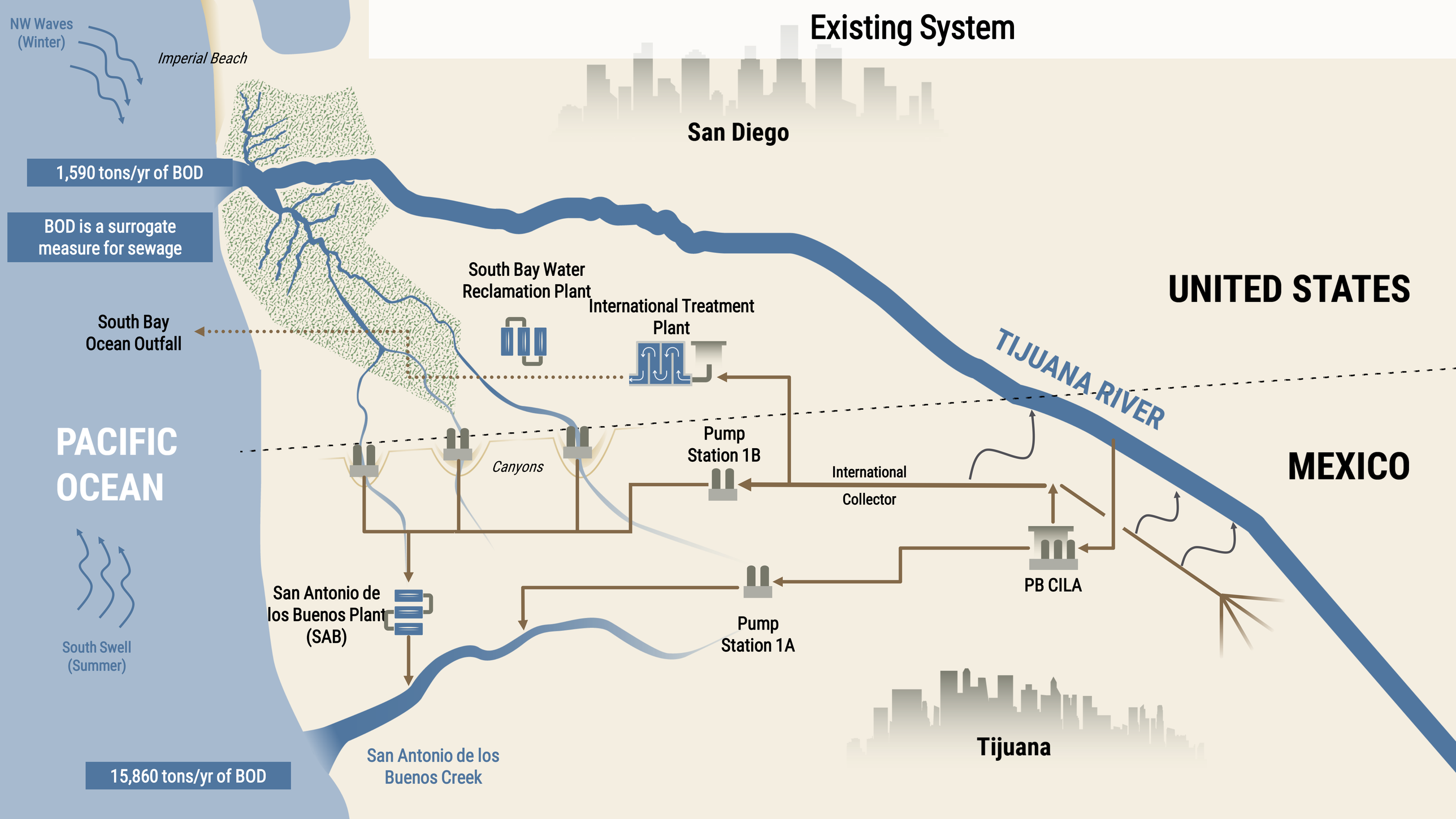


June

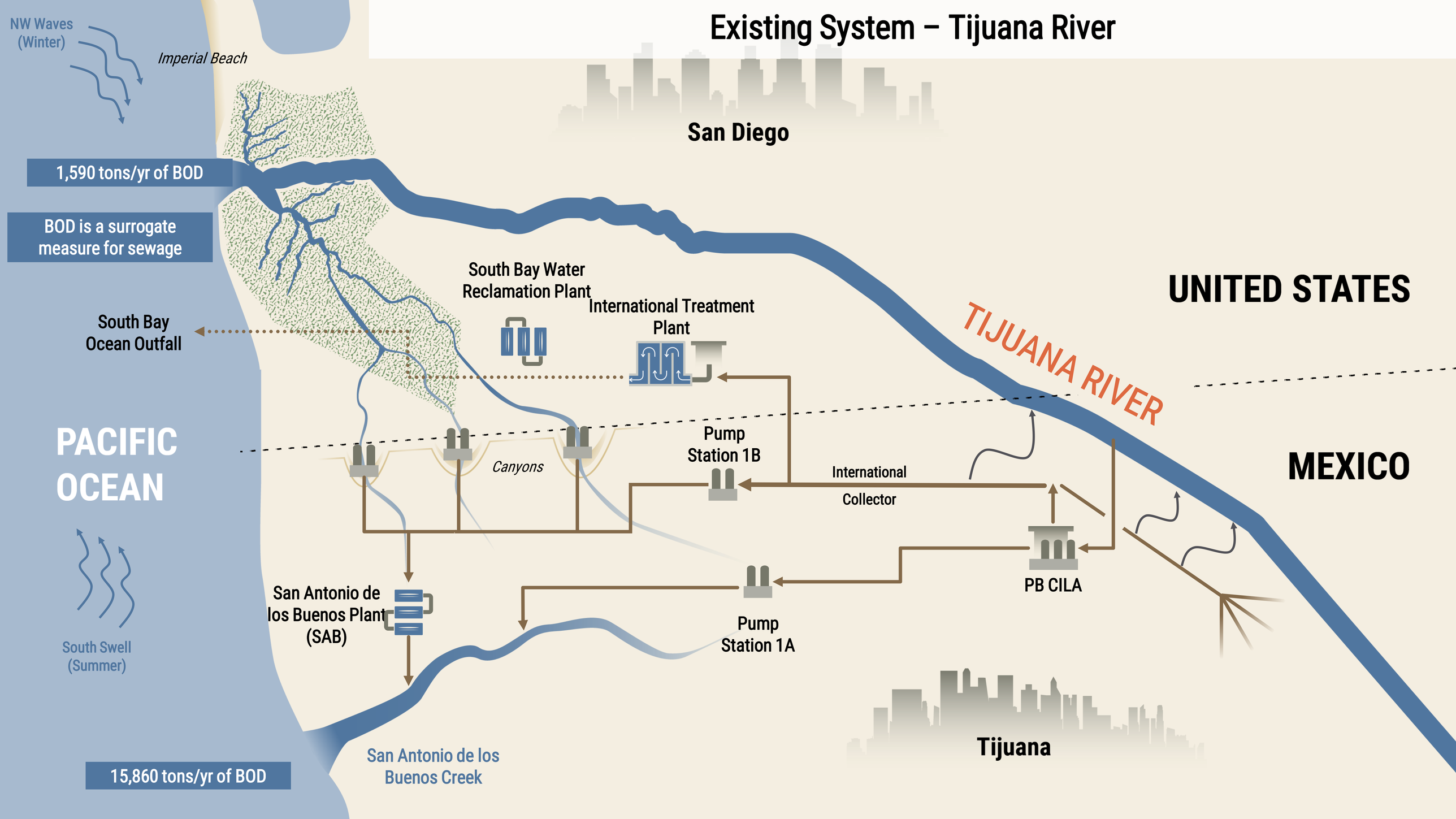
Identify Preferred Alternative

Existing System Overview

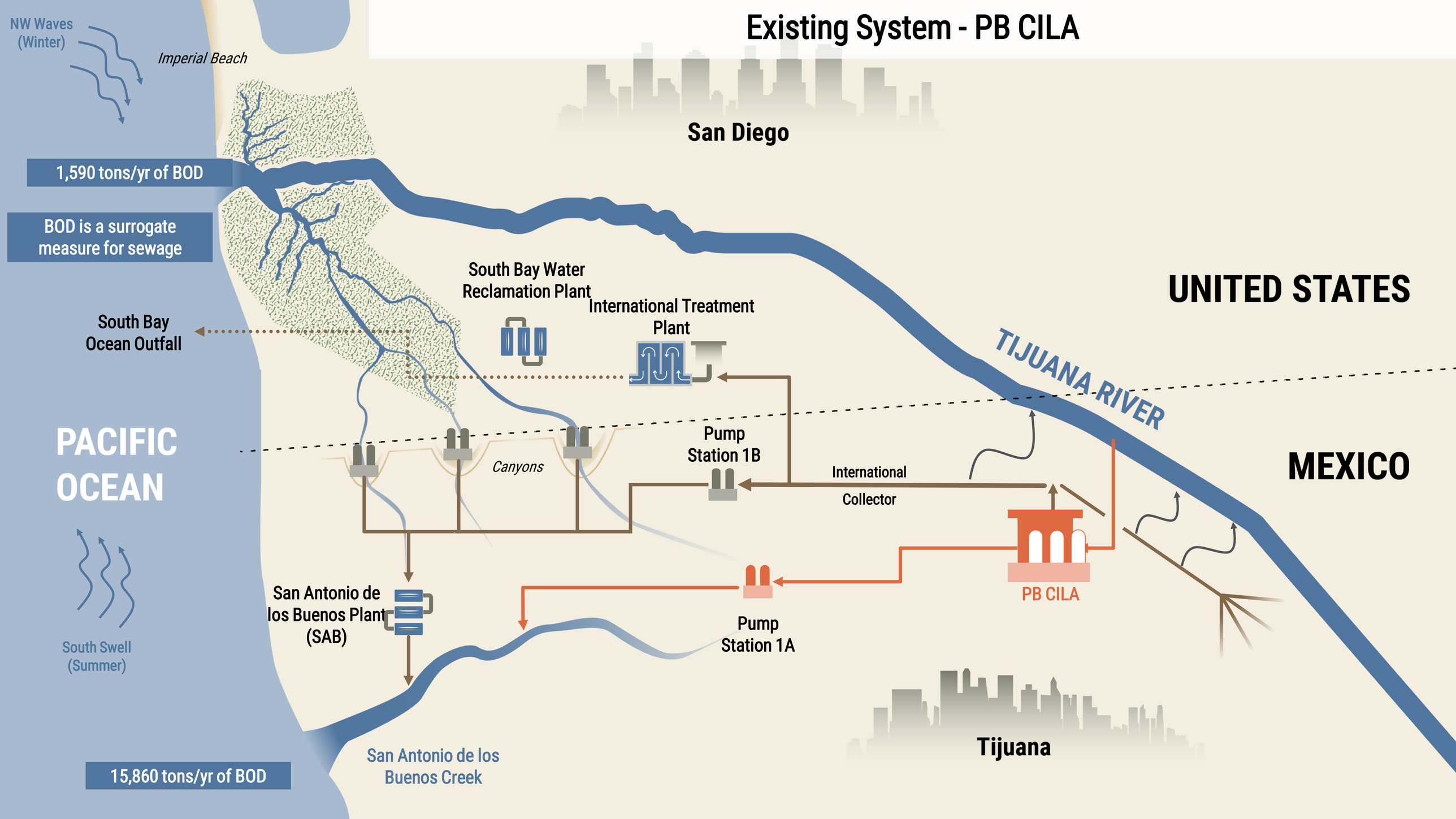
James Hollibaugh and Tom Rowlett, PG Environmental


Existing System
NW Waves
(Winter)
Imperial Beach
San Diego
1,590 tons/yr of BOD
BOD is a surrogate measure for sewage
South Bay Water Reclamation Plant
International Treatment Plant
South Bay Ocean Outfall
UNITED STATES
TIJUANA RIVER
PACIFIC OCEAN
Canyons
Pump Station 1B
International Collector
MEXICO
San Antonio de los Buenos Plant (SAB)
PB CILA
Pump Station 1A
South Swell
(Summer)
Tijuana
San Antonio de los Buenos Creek
15,860 tons/yr of BOD

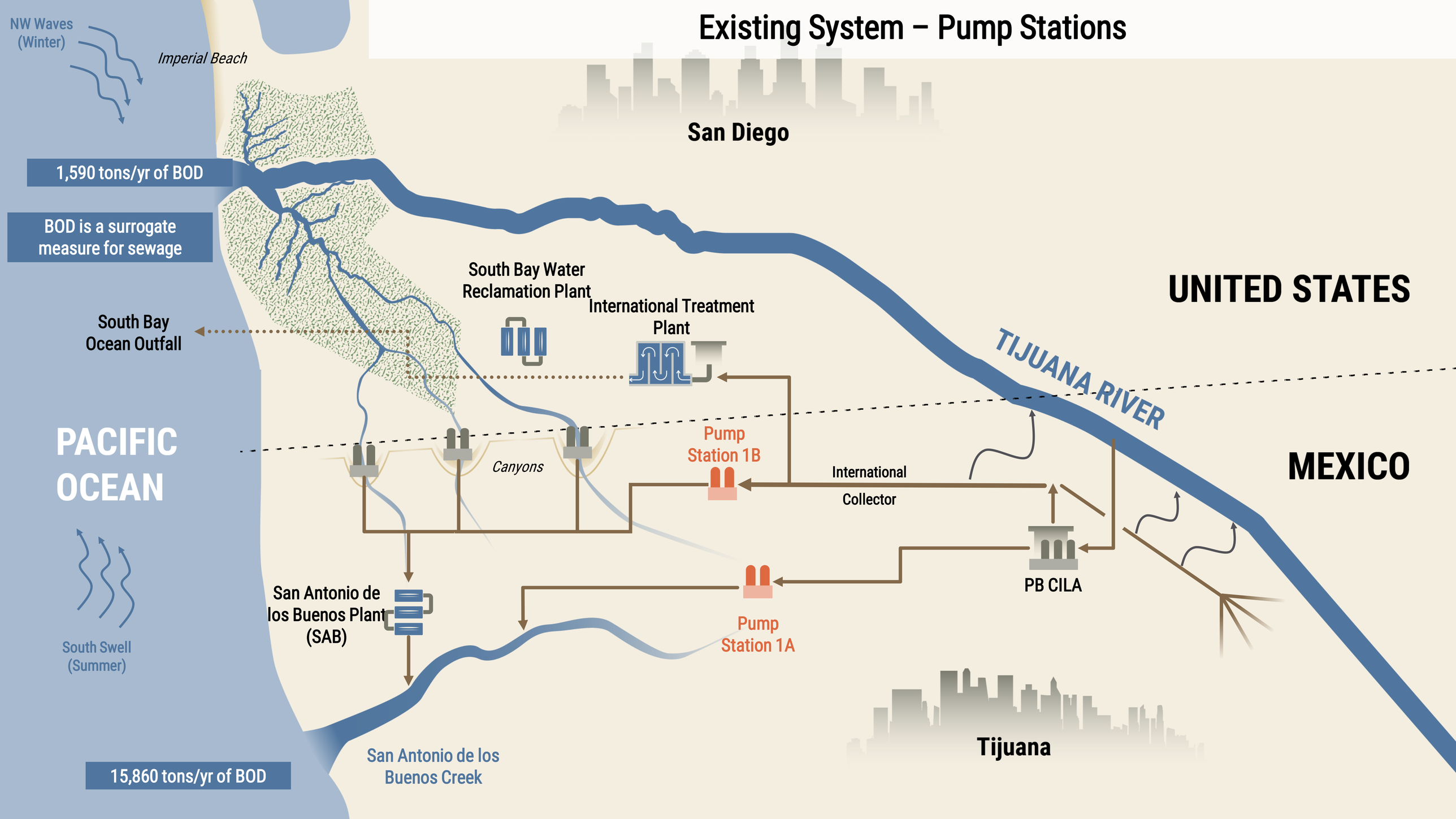
Existing System – Tijuana River



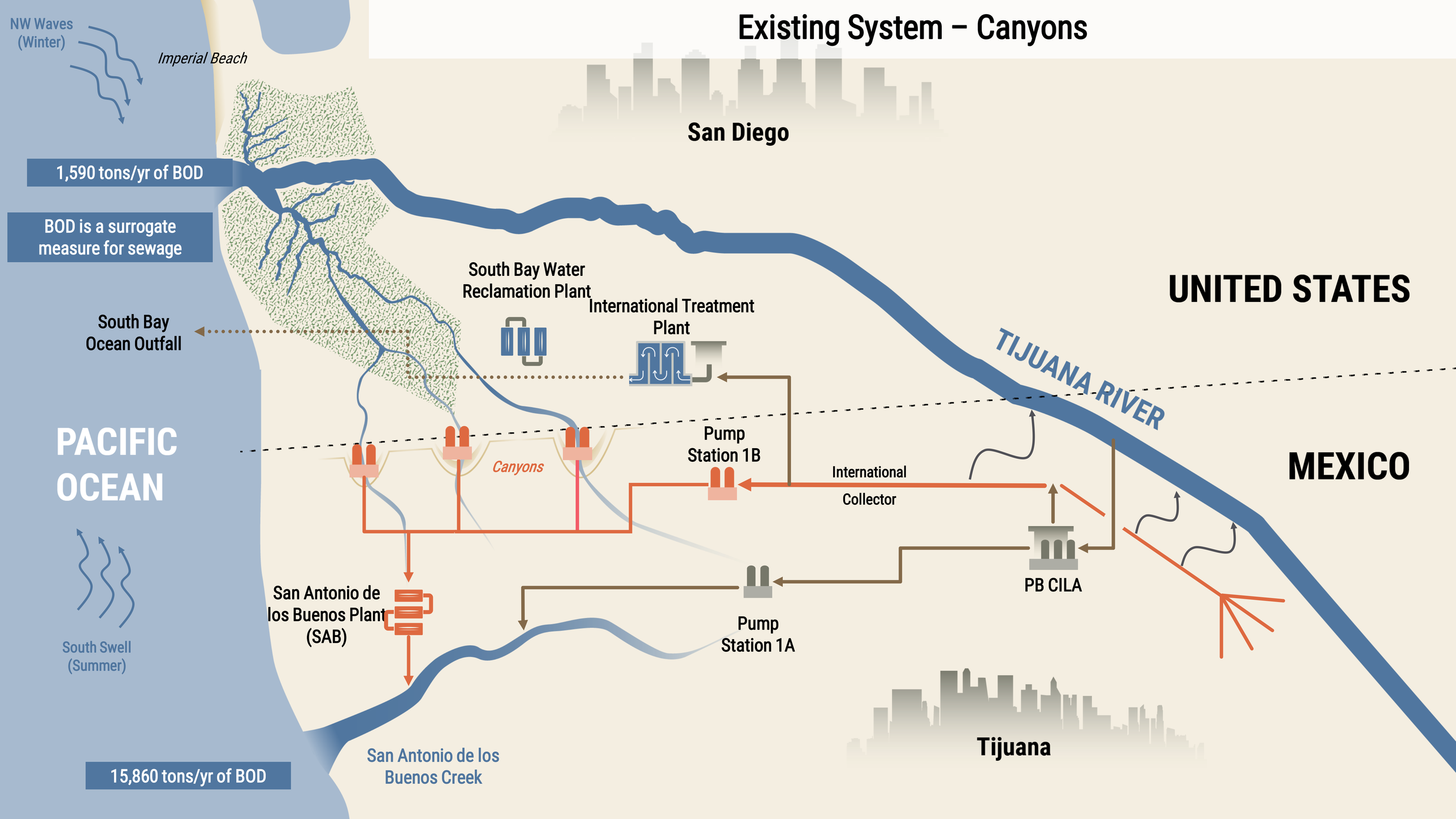
Existing System - PB CILA



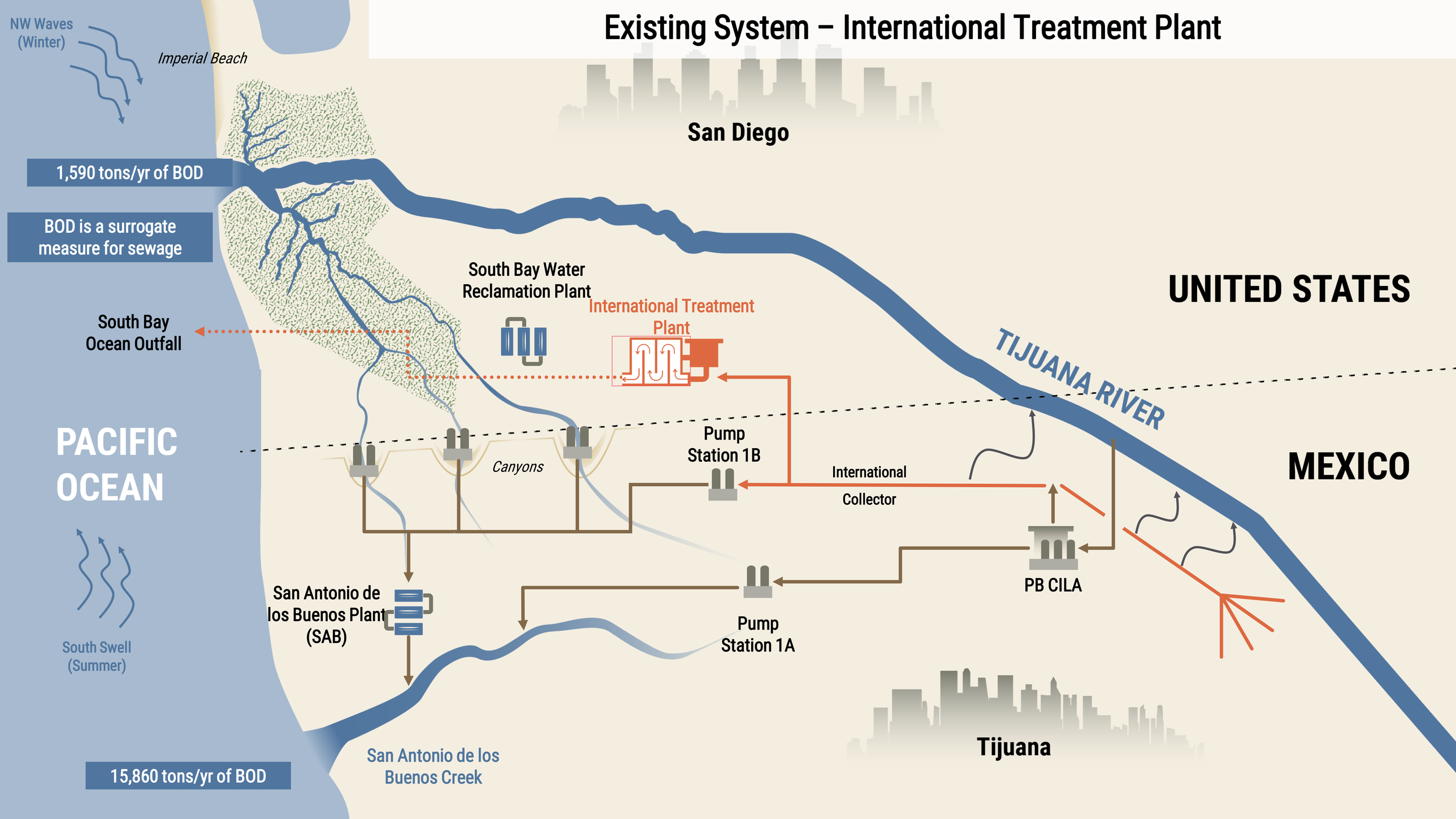
Existing System – Pump Stations



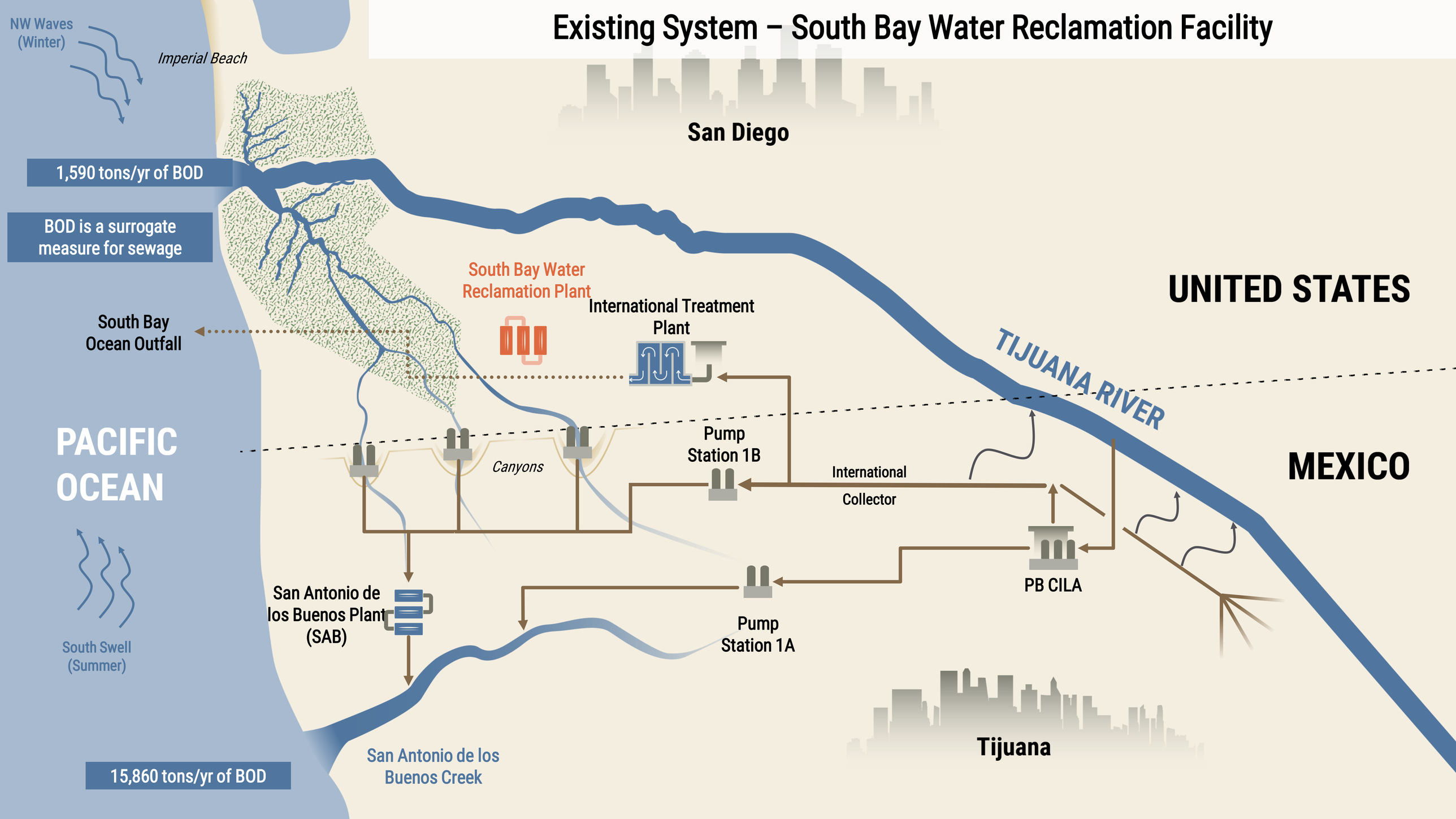
Existing System – Canyons



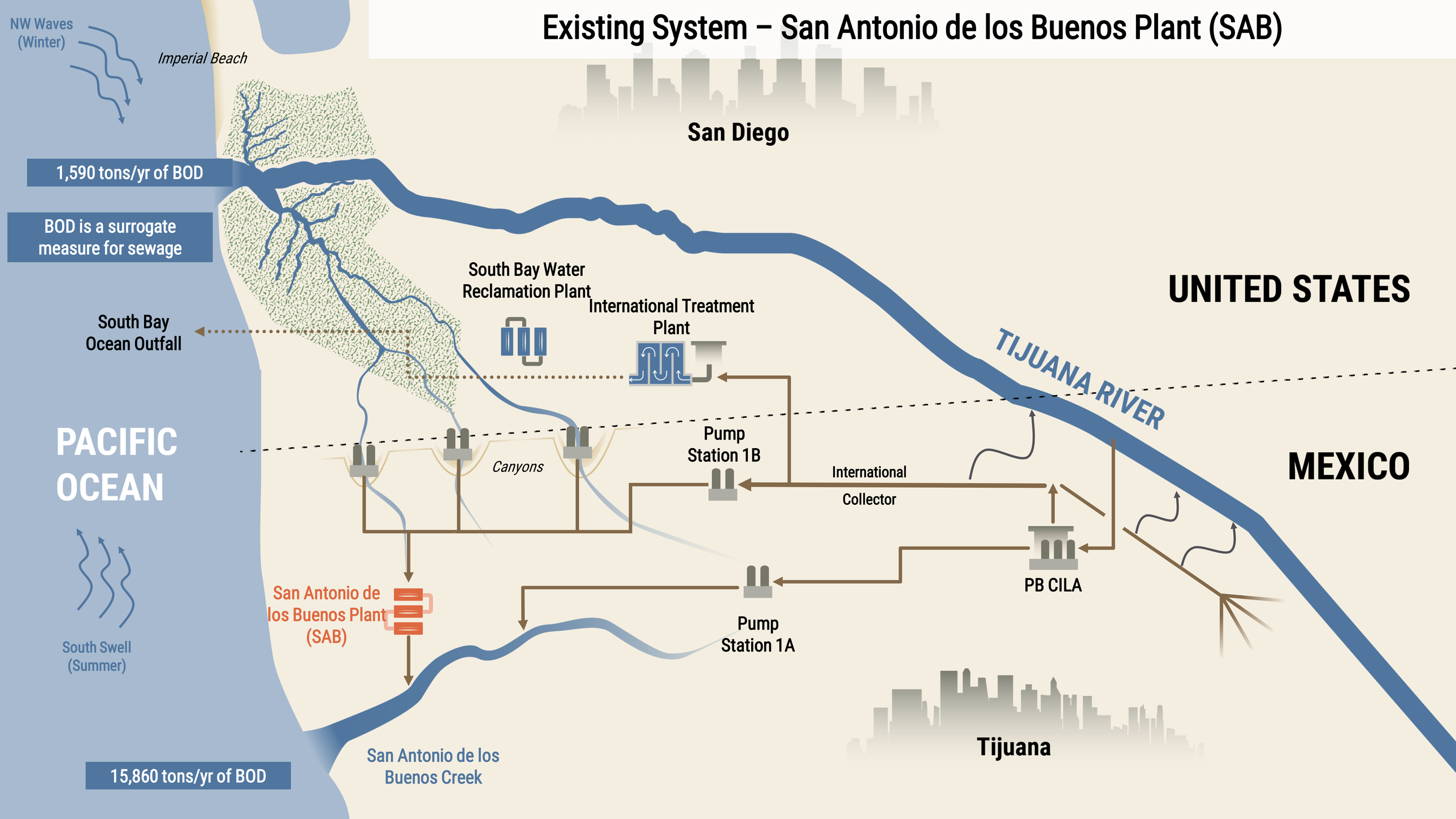
Existing System – International Treatment Plant



Existing System – South Bay Water Reclamation Facility

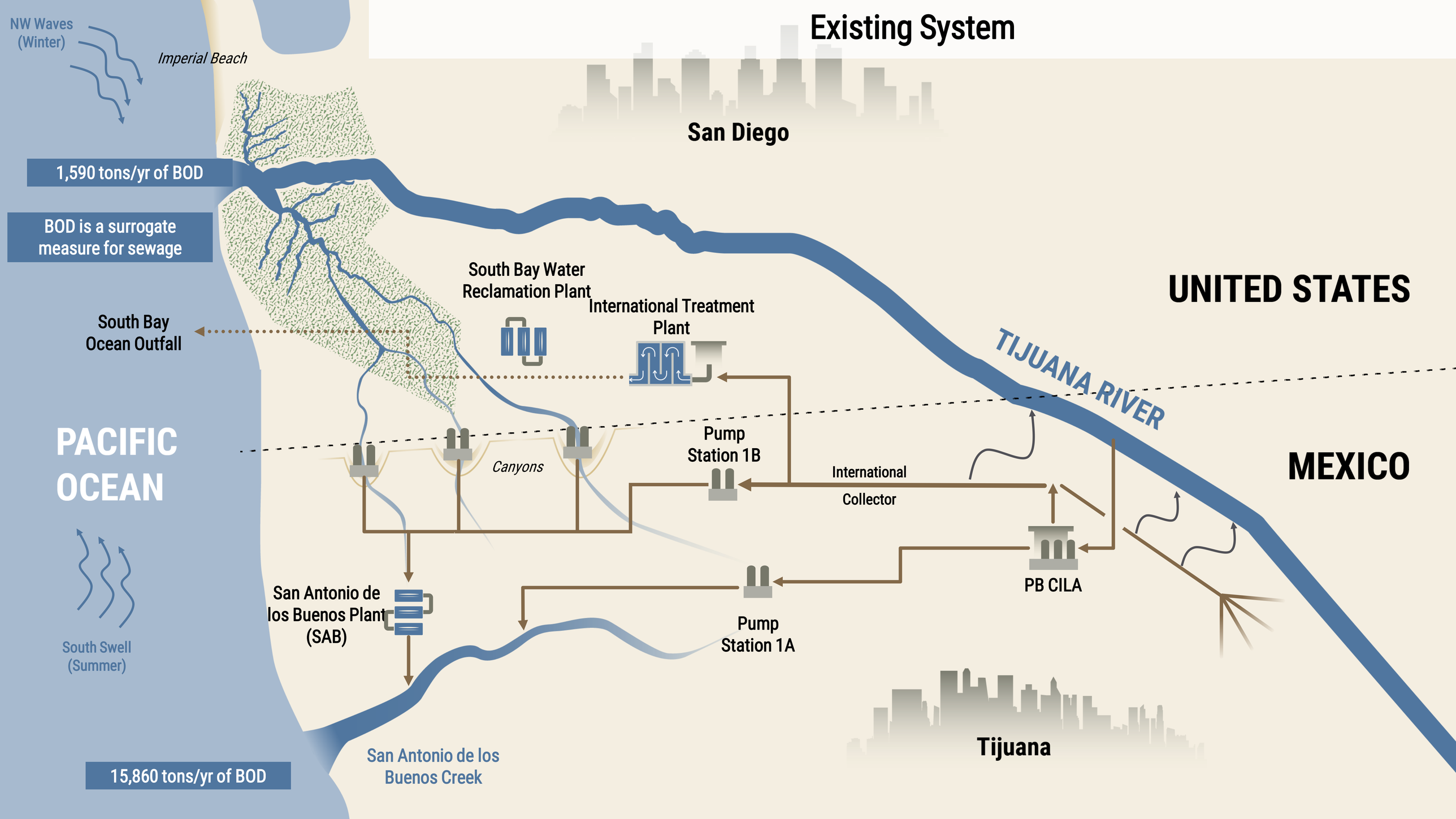


Existing System – San Antonio de los Buenos Plant (SAB)

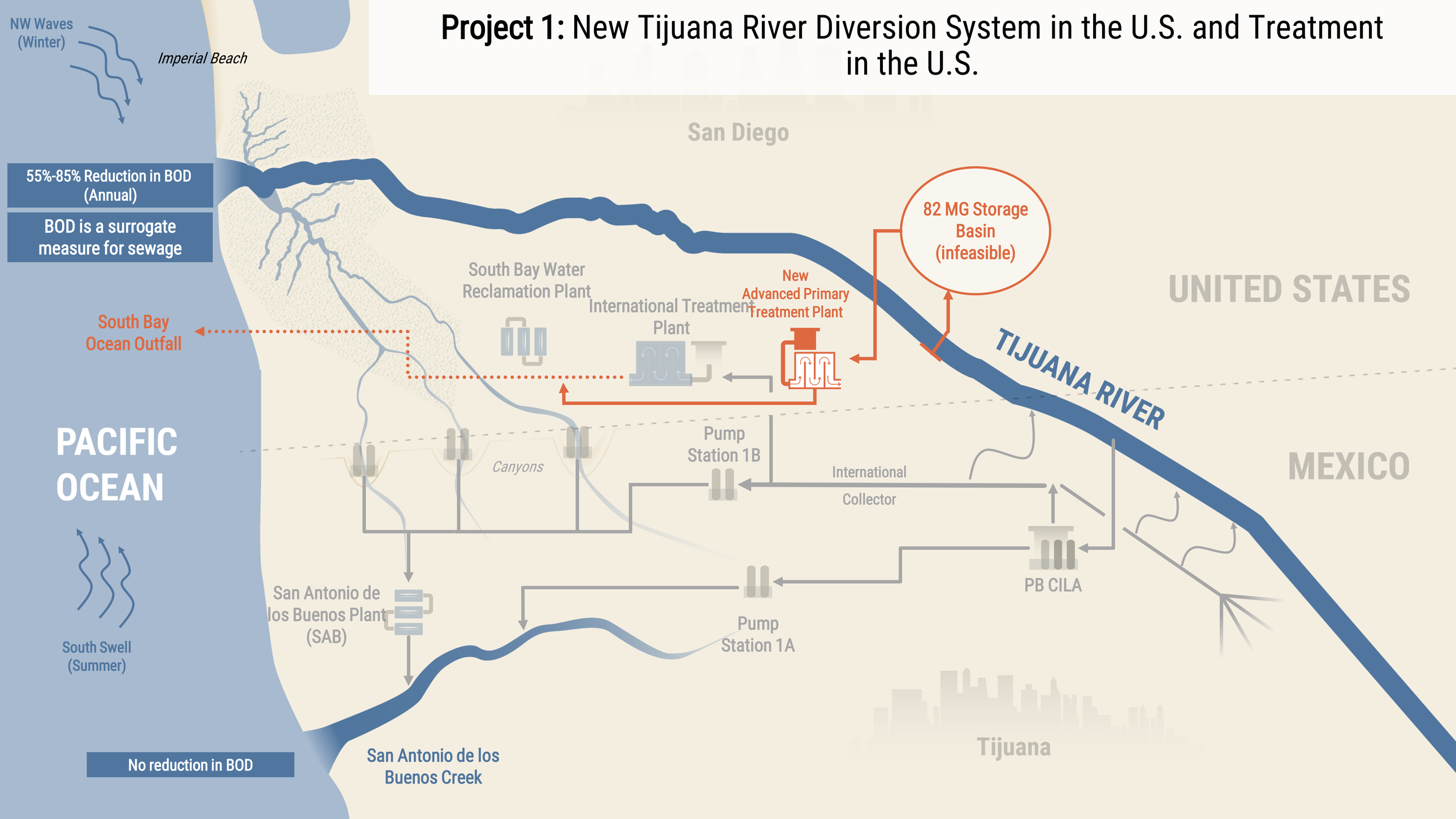


Diverting & Treating River Water (Projects 1 & 2)

James Hollibaugh and Tom Rowlett, PG Environmental


Existing System
NW Waves
(Winter)
Imperial Beach
San Diego
1,590 tons/yr of BOD
BOD is a surrogate measure for sewage
South Bay Water Reclamation Plant
International Treatment Plant
South Bay Ocean Outfall
UNITED STATES
TIJUANA RIVER
PACIFIC OCEAN
Canyons
Pump Station 1B
International Collector
MEXICO
San Antonio de los Buenos Plant (SAB)
PB CILA
Pump Station 1A
South Swell
(Summer)
Tijuana
San Antonio de los Buenos Creek
15,860 tons/yr of BOD

Project 1: New Tijuana River Diversion System in the U.S. and Treatment in the U.S.



Project 1: New Tijuana River Diversion System in the U.S. and Treatment in the U.S.

COST ESTIMATES

	35 MGD	100 MGD	163 MGD
CAPITAL	$110M	$220M	$295M
ANNUAL O&M	$9M	$34M	$53M
40-YEAR O&M	$392M	$1.3B	$2.1B

TIJUANA RIVER (2016-2019)

	35 MGD	100 MGD	163 MGD
Reduction in Days of Transboundary Flows	80 Days 52%	126 Days 82%	133 Days 87%
Reduction in Total Amount Transboundary Flows	1,700 MGD 10%	3,500 MGD 20%	4,400 MGD 25%
Reduction in BOD_5 Load in Flows	871 Tons 55%	1,257 Tons 79%	1,351 Tons 85%

PROJECT CHALLENGES

Sediment Removal* would result in:

- **15** truckloads of sediment per day (35 MGD)
- **107** truckloads of sediment per day (100 MGD)
- **165** truckloads of sediment per day (163 MGD)

- Lack of sufficient data (both trash and sediment) to begin design

SAN ANTONIO DE LOS BUENOS

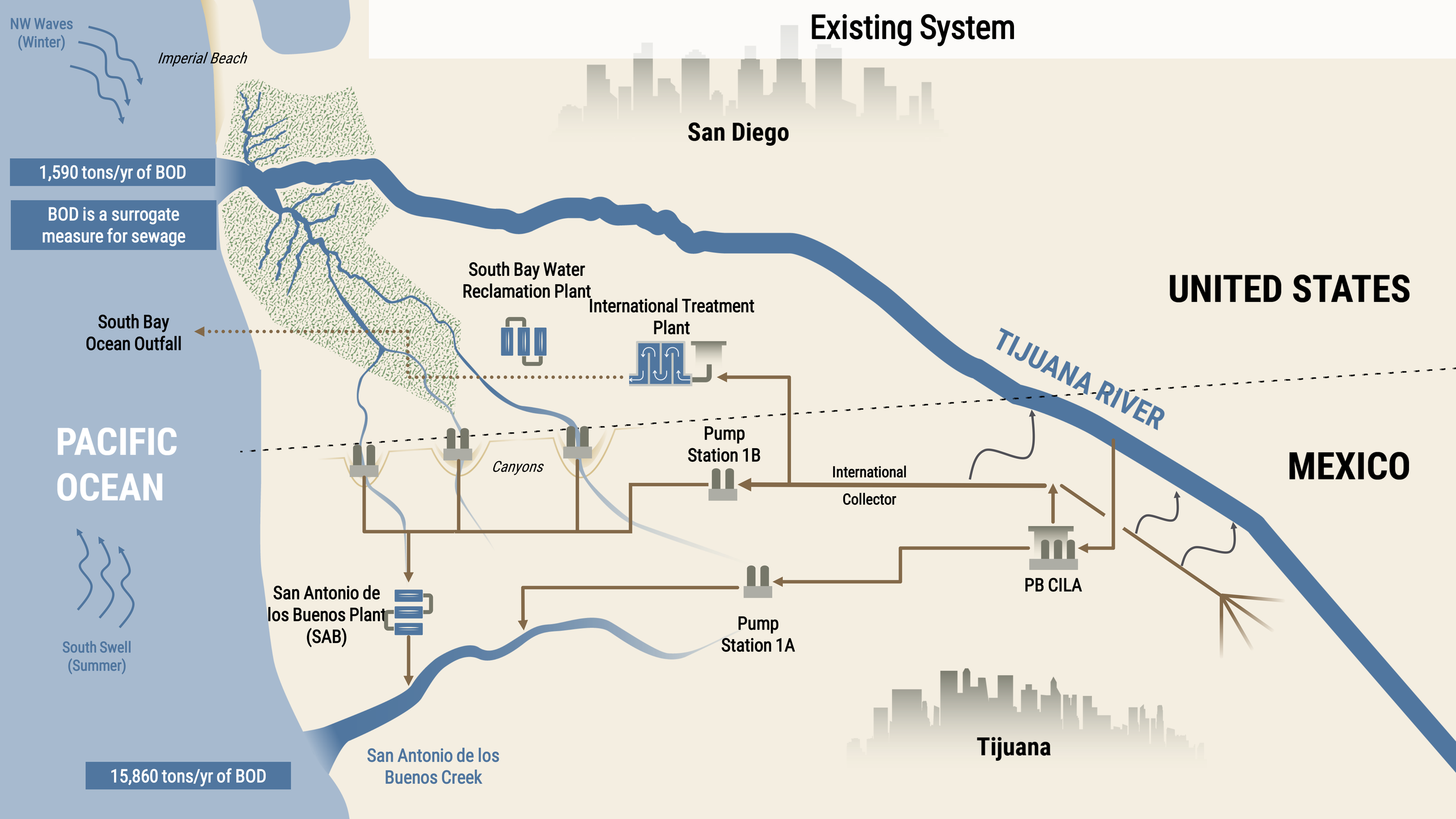
Flows to SAB — % — Days

BOD_5 Load Conveyed to SAB Creek — % — Tons

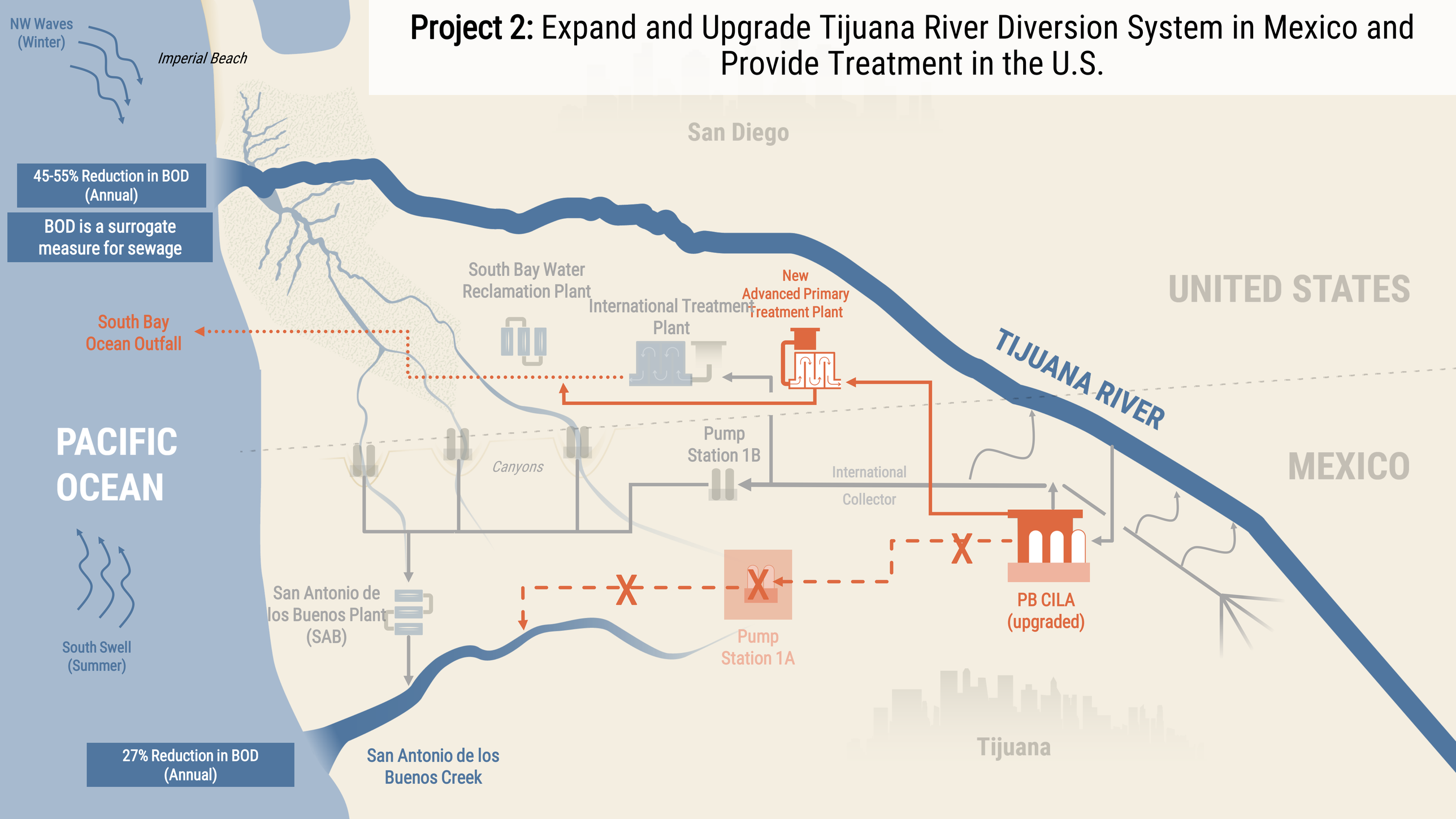
No Anticipated Reduction in Flows to SAB

Based on flow data from 2016 to 2019

*These values reflect the estimated sediment production on days which the APTP is operating: 107 days per year for the 35 MGD design, 126 days per year for the 100 MGD, and 133 days per year for the 163 MGD.


Existing System
NW Waves
(Winter)
Imperial Beach
San Diego
1,590 tons/yr of BOD
BOD is a surrogate measure for sewage
South Bay Water Reclamation Plant
International Treatment Plant
UNITED STATES
South Bay Ocean Outfall
TIJUANA RIVER
PACIFIC OCEAN
Canyons
Pump Station 1B
International Collector
MEXICO
San Antonio de los Buenos Plant (SAB)
PB CILA
Pump Station 1A
South Swell
(Summer)
Tijuana
San Antonio de los Buenos Creek
15,860 tons/yr of BOD

Project 2: Expand and Upgrade Tijuana River Diversion System in Mexico and Provide Treatment in the U.S.



Project 2: Expand and Upgrade Tijuana River Diversion System in Mexico and Provide Treatment in the U.S.

COST ESTIMATES

CAPITAL	$88M
ANNUAL O&M	$7M
40-YEAR O&M	$294M

PROJECT CHALLENGES

- Requires reliable operation of PB-CILA

TIJUANA RIVER (60 MGD or less)

Reduction in Days of Transboundary Flows	52%	80 Days
Reduction in Total Amount Transboundary Flows	10%	1,700 MGD
Reduction in BOD_5 Load in Flows	55%	871 Tons

SAN ANTONIO DE LOS BUENOS

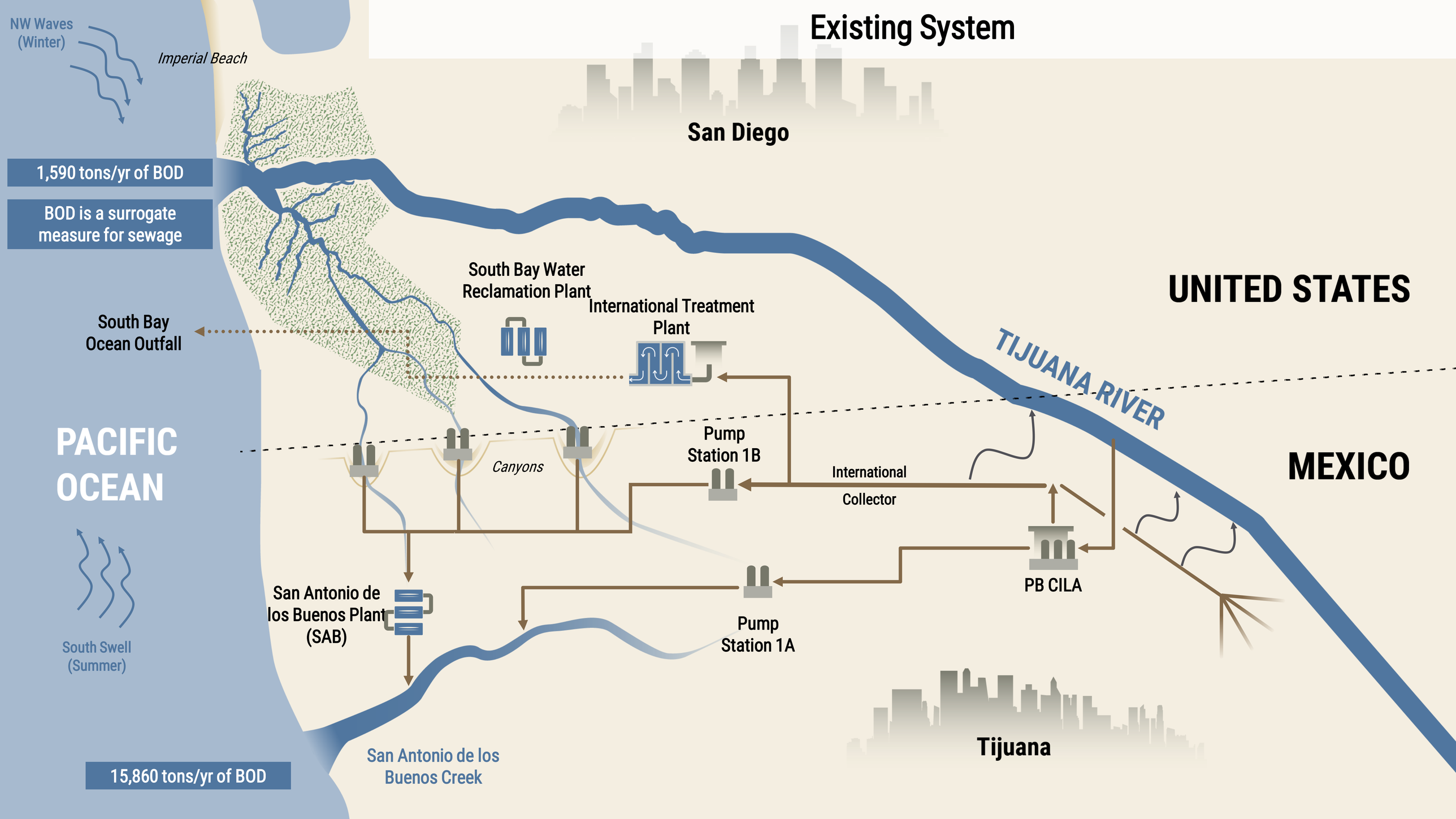
Flows to SAB	47%	6,200 MGD
BOD_5 Load Conveyed to SAB Creek	27%	4,300 Tons

Based on flow data from 2016 to 2019

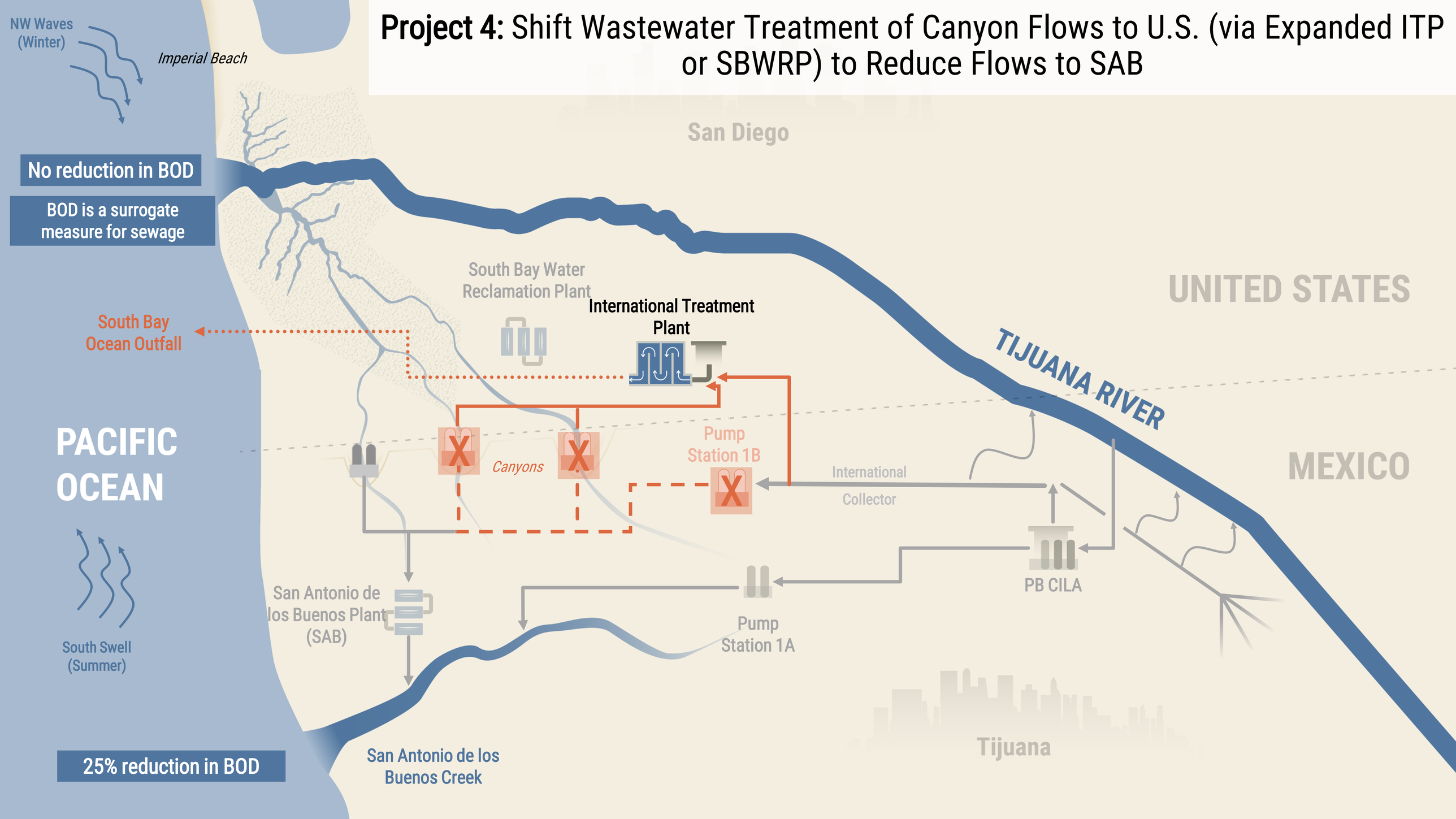
Conveying Sewage to US for Treatment (Project 4)

James Hollibaugh and Tom Rowlett, PG Environmental

Existing System

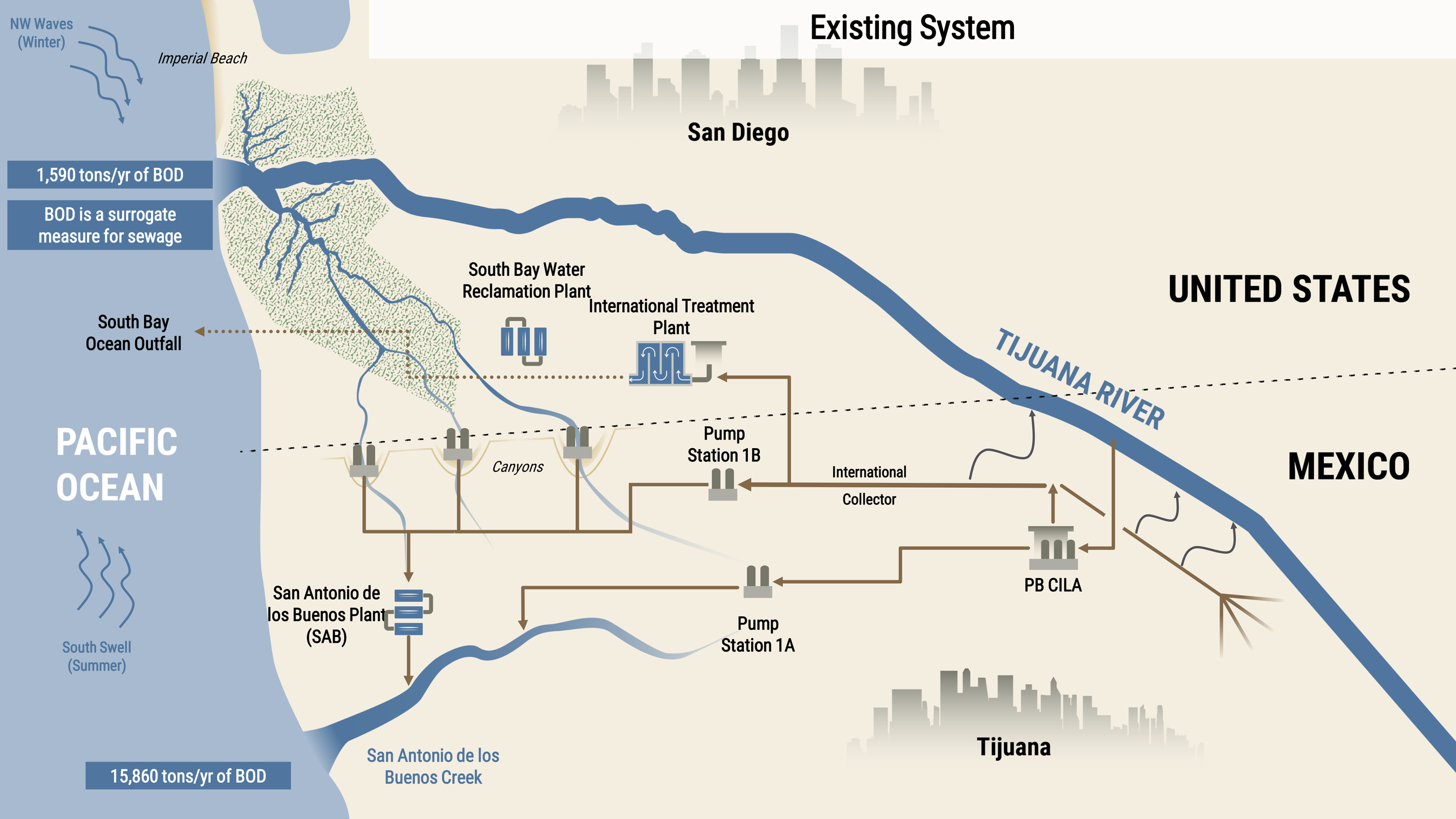


Project 4: Shift Wastewater Treatment of Canyon Flows to U.S. (via Expanded ITP or SBWRP) to Reduce Flows to SAB



Treating Conveyed Sewage (Projects 3 & 9)

James Hollibaugh and Tom Rowlett, PG Environmental


Existing System
NW Waves
(Winter)
Imperial Beach
San Diego
1,590 tons/yr of BOD
BOD is a surrogate measure for sewage
South Bay Water Reclamation Plant
International Treatment Plant
UNITED STATES
South Bay Ocean Outfall
TIJUANA RIVER
PACIFIC OCEAN
Canyons
Pump Station 1B
International Collector
MEXICO
San Antonio de los Buenos Plant (SAB)
PB CILA
Pump Station 1A
South Swell
(Summer)
Tijuana
San Antonio de los Buenos Creek
15,860 tons/yr of BOD

Project 3: Treat Wastewater from the International Collector at the ITP

Project 3: Treat Wastewater from the International Collector at the ITP

COST ESTIMATES

	50 MGD	60 MGD
CAPITAL	$299M	$372M
ANNUAL O&M	$10M	$14M
40-YEAR O&M	$401M	$568M

SAN ANTONIO DE LOS BUENOS

	3,430 MGD	5,740 MGD
Reduction in Flows to SAB	26%	56%
Reduction in BOD_5 Load Conveyed to SAB Creek	7,890 Tons 50%	11,760 Tons 74%

Based on flow data from 2016 to 2019

PROJECT CHALLENGES

- Challenges around air permitting and regulations for anaerobic digestion

TIJUANA RIVER

Days of Transboundary Flows

% Days

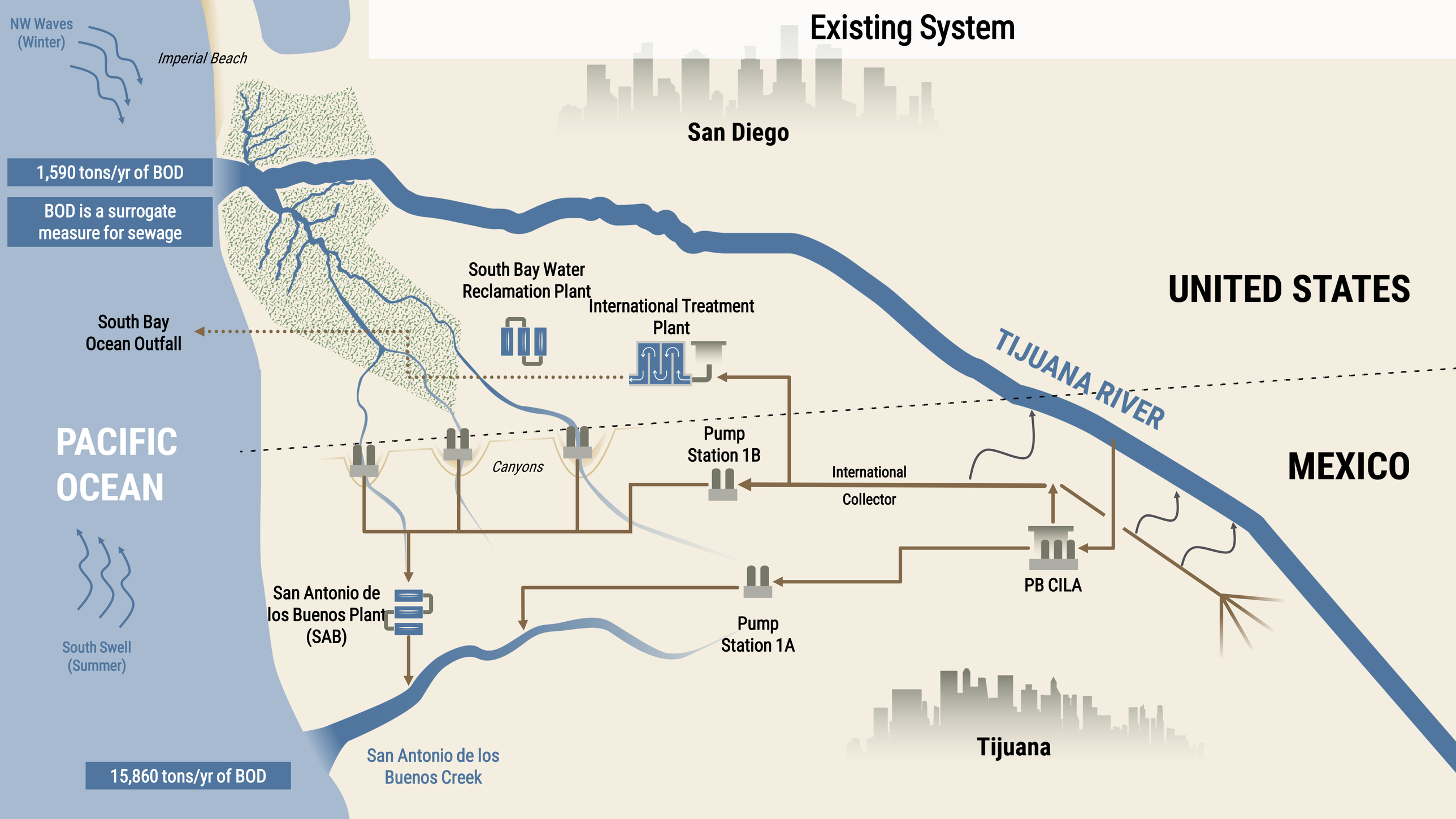
Total Annual Transboundary Flows

% MGD

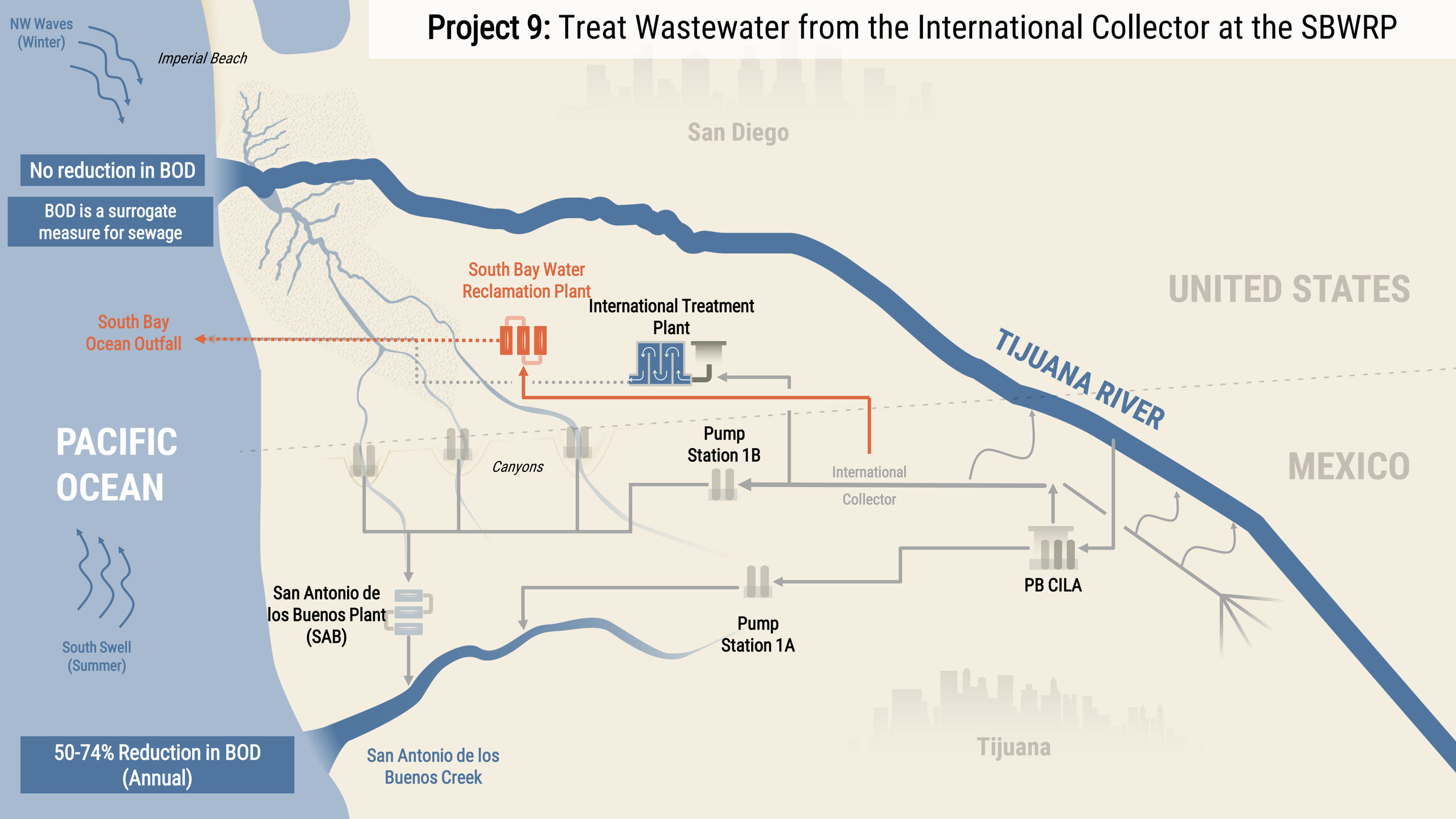
BOD_5 Load in Flows

Tons

This project benefits the Tijuana River when Mexican facilities are not operational


Existing System
NW Waves
(Winter)
Imperial Beach
San Diego
1,590 tons/yr of BOD
BOD is a surrogate measure for sewage
South Bay Water Reclamation Plant
International Treatment Plant
UNITED STATES
South Bay Ocean Outfall
TIJUANA RIVER
PACIFIC OCEAN
Canyons
Pump Station 1B
International Collector
MEXICO
San Antonio de los Buenos Plant (SAB)
PB CILA
Pump Station 1A
South Swell
(Summer)
Tijuana
15,860 tons/yr of BOD
San Antonio de los Buenos Creek

Project 9: Treat Wastewater from the International Collector at the SBWRP



Project 9: Treat Wastewater from the International Collector at the SBWRP

COST ESTIMATES

	15 MGD	15 MGD + Solids	30 MGD + Solids
CAPITAL	$51M	$105M	$274M
ANNUAL O&M	$15M	$16M	$23M
40-YEAR O&M	$629M	$654M	$926M

SAN ANTONIO DE LOS BUENOS

	15 MGD	15 MGD + Solids	30 MGD + Solids
Reduction in Flows to SAB	3,430 MGD 26%	3,430 MGD 26%	5,740 MGD 44%
Reduction in BOD_5 Load Conveyed to SAB Creek	7,890 Tons 50%	7,890 Tons 50%	11,760 Tons 74%

Based on flow data from 2016 to 2019

PROJECT CHALLENGES

- Requires City to sell SBWRP and SBOO.
- Base 15 MGD requires City to accept solids.
- Air permitting/regulations for anaerobic digestion.

TIJUANA RIVER

Days of Transboundary Flows % Days

Transboundary Flows % MGD

BOD_5 Load in Flows % Tons

This project benefits the Tijuana River when Mexican facilities are not operational

NEPA Public Scoping

Tom Konner, EPA Region 9

Public Scoping - Overview

- **Purpose: An early and open process to inform the scope of the EIS**
  - Identify significant environmental issues deserving of study
  - Eliminate non-significant issues from further study
  - Invite comments on the scope of the EIS, including alternatives to be evaluated (see next slide)

- **When to initiate public scoping?**
  - As soon as practicable after determining that a proposal is sufficiently developed to allow for meaningful public comment and requires an environmental impact statement

- **Major components of public scoping process**
  - Notice of Intent (NOI) – published in *Federal Register*
  - Public scoping period (at least 30 days after issuance of NOI)
  - Public scoping meeting(s) – optional, but typical for projects affecting specific sites

Sources: EPA NEPA regulations [40 CFR 6.203(c)]; 2020 CEQ NEPA regulations [40 CFR 1501.9]; pre-2020 CEQ NEPA regulations [40 CFR 1501.7]

Anticipated Schedule

NEPA Activity	Dates
NOI published in Federal Register – initiate 45-day scoping period	**Late March, 2021**
Hold virtual scoping meeting, 6-8p.m. PDT	**April 20, 2021**
End of Public Comment Period	**May 20, 2021**

- Public Scoping Meeting will be Advertised in the Federal Register, Local Newspapers, the North American Development Bank's List Serve and the EPA webpage (going live in March).
- Comments received during the public scoping process will be considered during the preparation of the draft EIS

Question and Answer Session

Closing Remarks

Andrew Sawyers

Director of EPA Office of Wastewater Management

Dave Smith

EPA Region 9

Thank you