



International Boundary and Water Commission United States Section

For immediate release
March 21, 2024

USIBWC San Diego Citizens Forum Public Meeting in Coronado March 28

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 **Thursday, March 28, from 5:30 – 7:30 p.m. PST.**

Citizens Forum Board Member Alberto Pombo, Ph.D., and CEO of Border Communities for a Healthy Environment, will present a study analyzing data compiled over 25 years on pollution origins on the Tijuana River on the Mexico side of the border.

Morgan Rogers, P.E., Area Operations Manager, USIBWC San Diego Field Office, will present an update of Commission activities in the San Diego region. The presentations will include an update on Minute 328 projects, the operational status of the San Diego Wastewater Treatment Plant, an accounting of transboundary flows, and an update on San Diego–Tijuana wastewater infrastructure improvement projects.

The public meeting will be held in person at:

**Nautilus Room - Coronado Community Center
1845 Strand Way
Coronado, CA 92118**

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: Call-in number +1 872-240-1286, 66915462# Phone Conference ID: 669 154 62#

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://www.ibwc.gov/meetings/category/san-diego/>, and look for the links for the 3/28/2024 meeting.

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 March 26, 2024.

News Media Contact:

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

SAN DIEGO CITIZENS FORUM

Thursday March 28, 2024, 5:30 – 7:30 p.m. PST

**Nautilus Room - Coronado Community Center
1845 Strand Way
Coronado, CA 92118
And via Teams Webinar**

Agenda

- **Welcome and Introductions**
- **Geographical analysis of water pollution sources along the Tijuana River (2024) –**
Alberto Pombo, Ph.D., CEO of Border Communities for a Healthy Environment
- **Update on Minute 328 projects and funding -** Morgan Rogers, P.E., Area Operations
Manager, USIBWC San Diego Field Office
- **Update of IBWC and Activities in San Diego Region –** AOM Rogers
- **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 915-832-4770 or email leslie.grijalva@ibwc.gov.

Microsoft Teams meeting

[Click here to join the meeting](#)

Meeting ID: 282 290 542 896

Passcode: CnusXW

[Download Teams](#) | [Join on the web](#)

Or call in (audio only)

[+1 872-240-1286,66915462#](#) United States, Chicago

Phone Conference ID: 669 154 62#



International Boundary & Water Commission

San Diego Field Office Update

Citizens' Forum
March 28, 2024

Morgan Rogers
Area Operations Manager
U.S. Section- IBWC



AGENDA

- South Bay International Wastewater Treatment Plant
- Transboundary Flows
- San Diego – Tijuana Wastewater Infrastructure
- Initiatives
- Minute 328 Projects





South Bay International Wastewater Treatment Plant (SBIWTP)

Current Conditions

- Design/Permit 25 MGD
- NPDES Permit non-compliance with volume & water quality

July 2022	23.6
Aug 2022	31.4
Sept 2022	33.7
Oct 2022	32.5
Nov 2022	31.5
Dec 2022	28.6
Average	30.2

Jan 2023	27.5
Feb 2023	29.2
Mar 2023	24.9
Apr 2023	21.2
May 2023	26.7
June 2023	29.4
July 2023	33.0
Aug 2023	27.5
Sept 2023	23.8
Oct 2023	25.4
Nov 2023	26.7
Dec 2023	29.3
Average	27.1

Jan 2024	26.6
Feb 2024	25.4
Mar 2024	23.0
Average	25.0

South Bay International Wastewater Treatment Plant (SBIWTP)

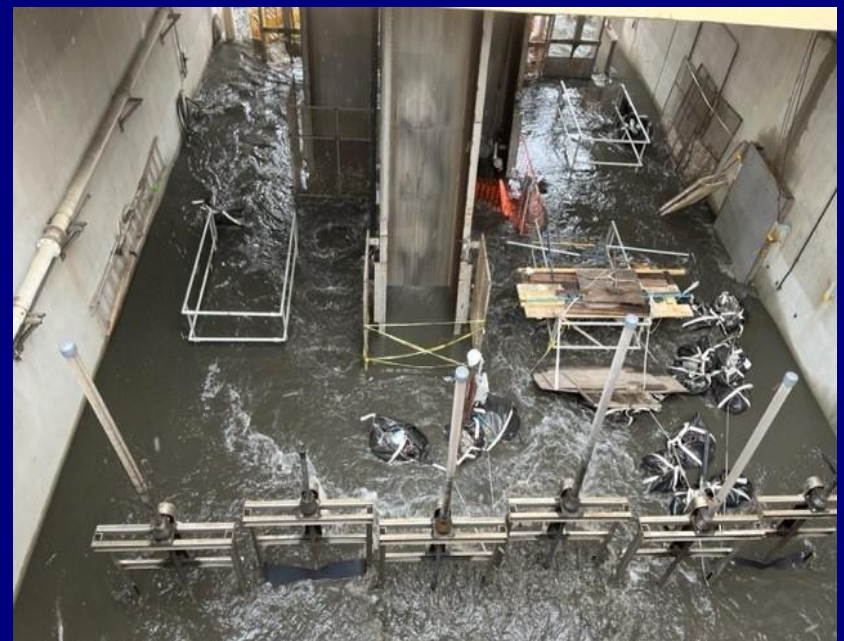
Status of Repairs

- \$31M USIBWC funds redirected to SBIWTP since 2020
- \$18M obligated FY23 & FY24
- Compliance August 2024



South Bay International Wastewater Treatment Plant (SBIWTP)

Status of Repairs



Tropical Storm Hilary Aug 2023 – Before & During



South Bay International Wastewater Treatment Plant (SBIWTP)

Status of Repairs



Normal PST



Overloaded PST

South Bay International Wastewater Treatment Plant (SBIWTP)

Status of Repairs



Influent Pumps

- 3 of 6 pumps operational
- 2 new pumps received
- 4 new pumps ordered



Grit Chambers Cleaning

- Excessive grit accumulation
- Cleaning in progress
- Estimated completion Apr 2024



Primary Sedimentation Tanks

- 0 of 5 operational
- #5 online Apr 2024
- #1-#4 Rehab Apr-Sep 2024

South Bay International Wastewater Treatment Plant (SBIWTP)

Status of Repairs



Primary Non-Potable Pumps

- 2 of 4 pumps operational
- Redundant to secondary
- 4 new pumps on order



Secondary Non-Potable Pumps

- 3 of 5 pumps operational
- 5 new pumps on order



Activated Sludge Tanks

- 7 of 7 operational
- 1 of 2 waste pumps operational
- 5 new waste pumps ordered

South Bay International Wastewater Treatment Plant (SBIWTP)

Status of Repairs



Unstabilized Sludge Storage Tanks

- 1 of 2 tanks operational
- 2 of 6 pumps operational
- 1 spare pump on hand
- 6 pumps ordered



JB-1 Rehab

- Provides flow control into the SBIWTP
- Commenced Nov 2023
- Completion Feb 2025



Hollister Pump Station

- 3 of 4 pumps operational
- 2 new pumps on hand



South Bay International Wastewater Treatment Plant (SBIWTP)

SBIWTP Expansion

Procurement

- Design-Build Contractor Procurement
 - Phase I – Review Statements of Qualifications, in progress
 - Phase II – Review Cost & Technical Proposals
- Contract Award – Late Summer 2024, commence project design and construction
- Construction Complete – Estimate contract award plus 5 years

Funding

- USMCA \$300M Allocated
- USIBWC FY24 \$156M Allocated, annual budget
- Emergency Leg. \$310M Pending
- Expansion Cost \$600M +/- 30% (50 MGD + 75 MGD peak)





Transboundary Flows

Tijuana River

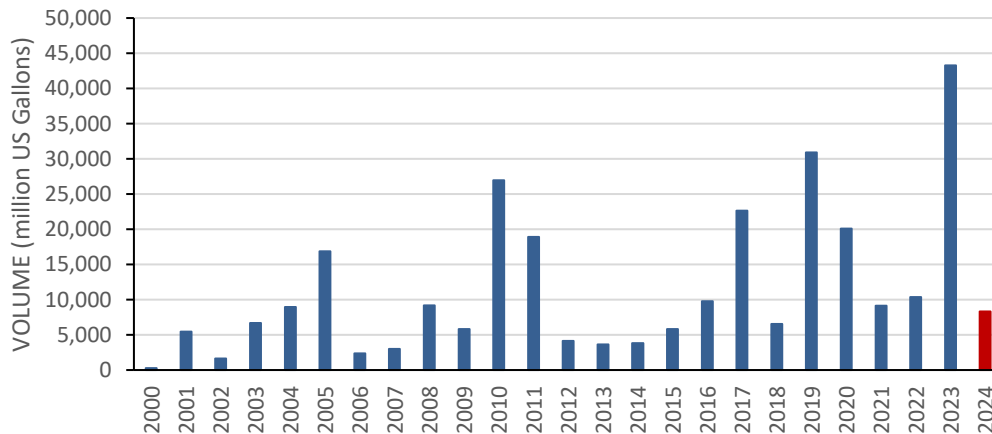
2024 flows > 22.8 billion gallons

Today 80 MGD

Stormwater vs Raw Sewage Flow

- Total dry weather flows 30 MGD
 - Treated flow 10 MGD
 - Potable/groundwater flow 5 MGD
 - Raw sewage flow 15 MGD

ANNUAL TRANSBOUNDARY FLOWS ON TIJUANA RIVER



2024 Flows 22.8 BG

88 days Jan 1 - March 28

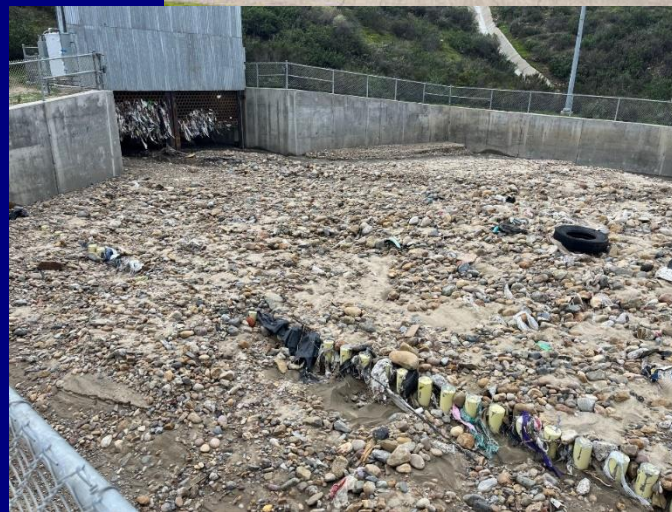
Raw sewage 88 x 15 = 1.3 BG

$1.3/22.8 = 6\%$ raw sewage



Transboundary Flows

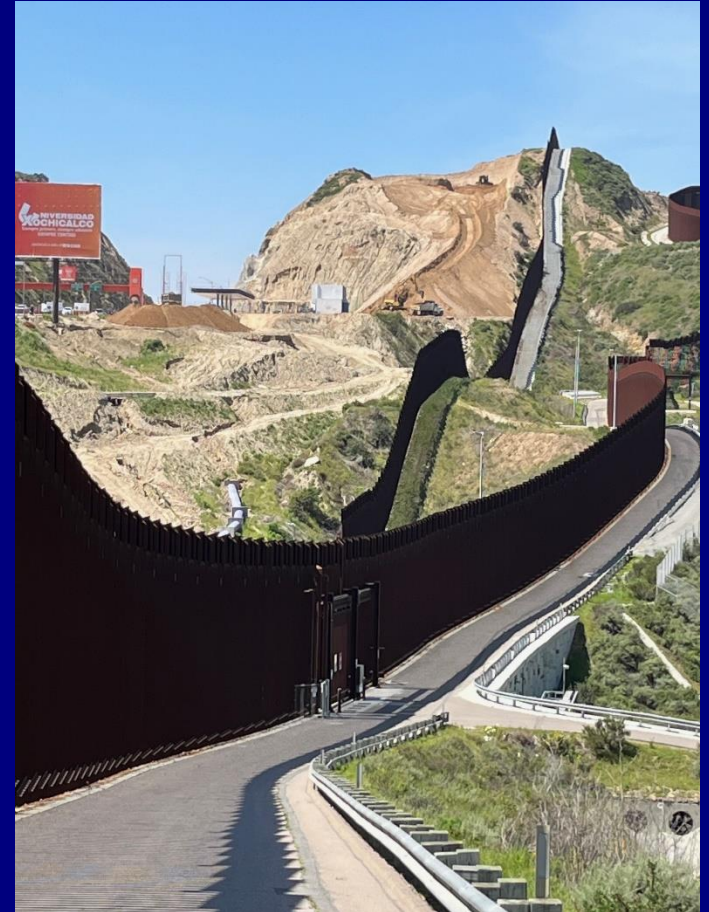
Canyon Collectors – Smugglers Gulch





Transboundary Flows

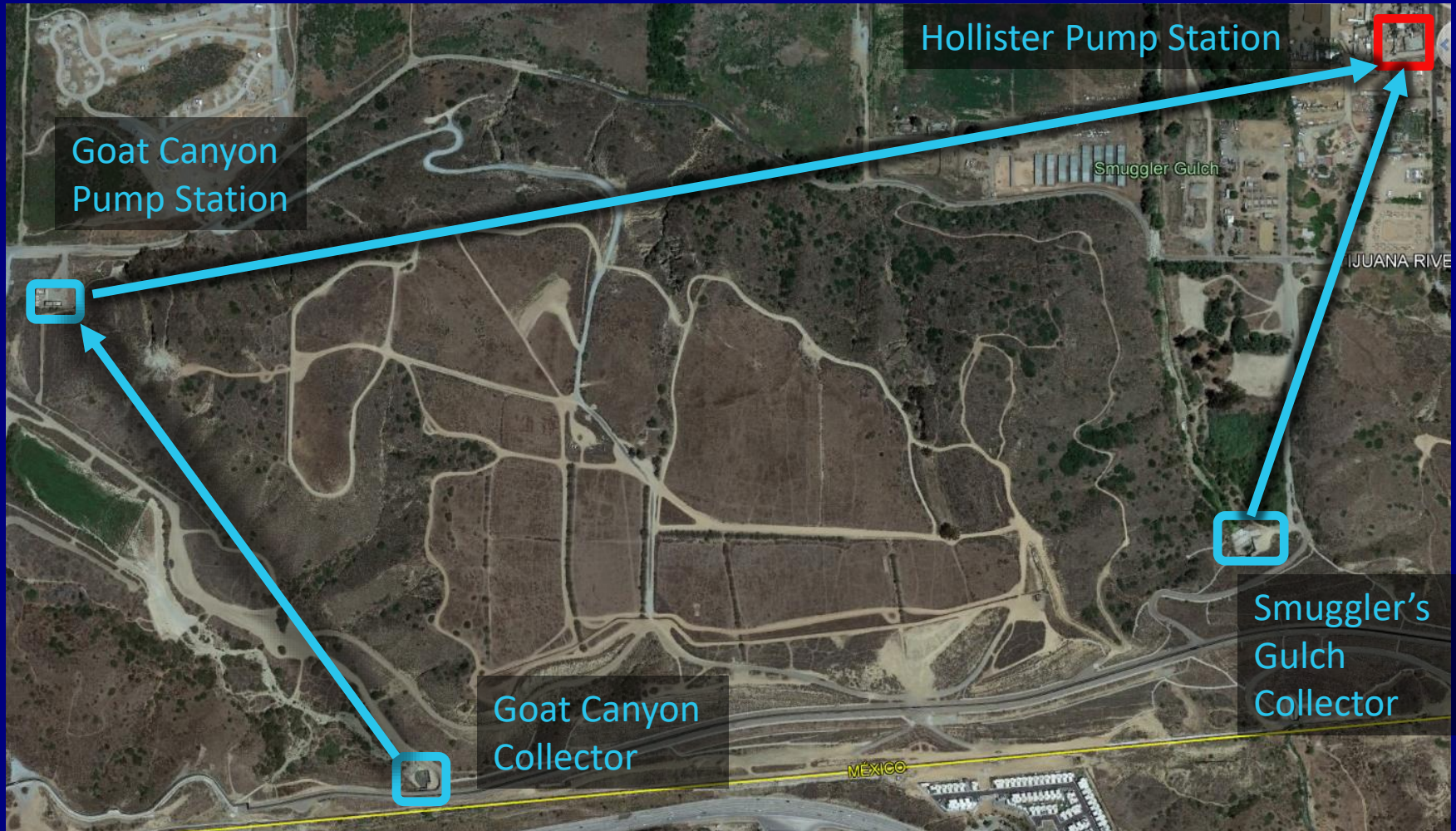
Canyon Collectors – Goats Canyon





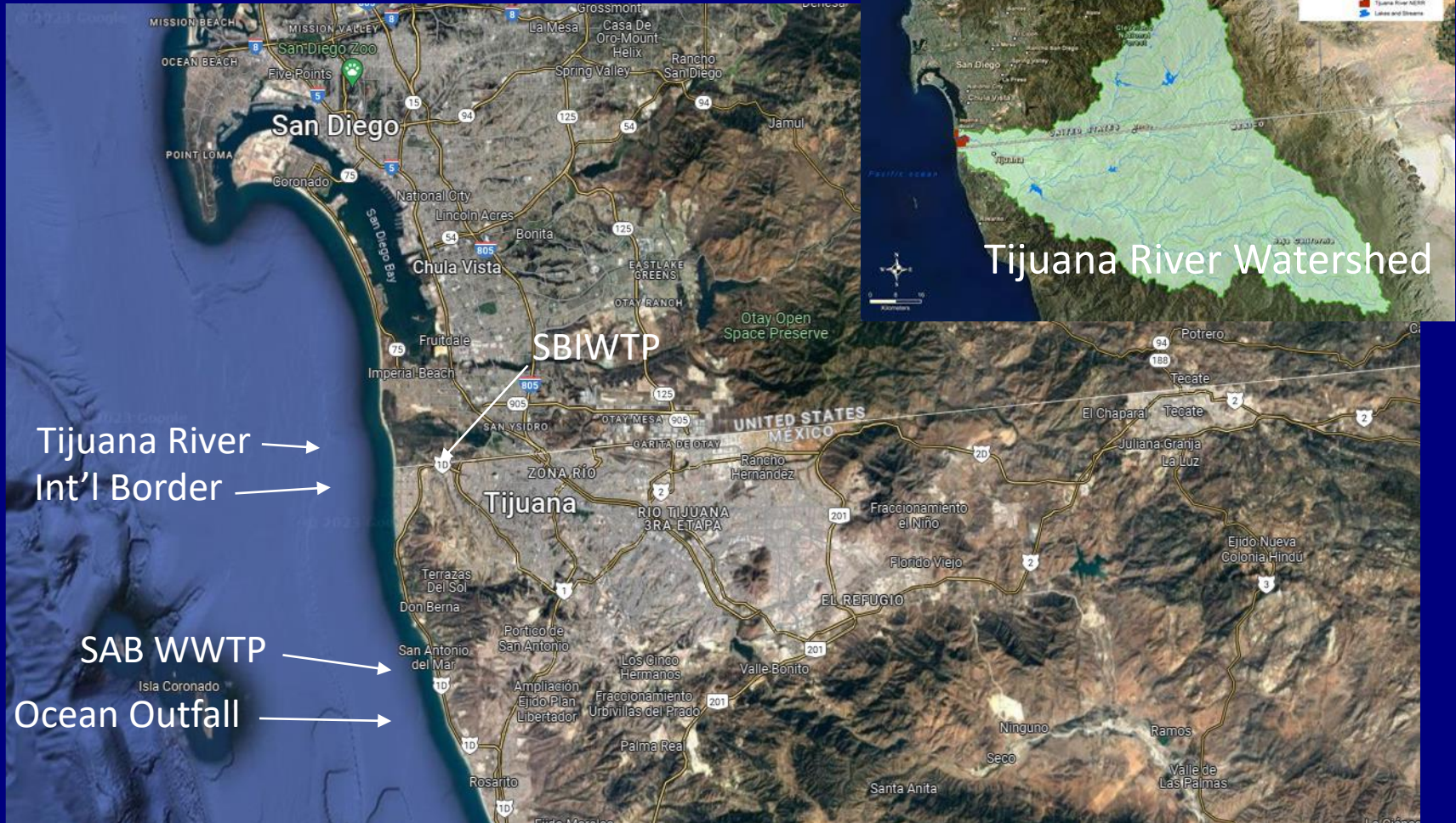
Transboundary Flows

Canyon Collectors & Pump Stations





San Diego - Tijuana Infrastructure Region





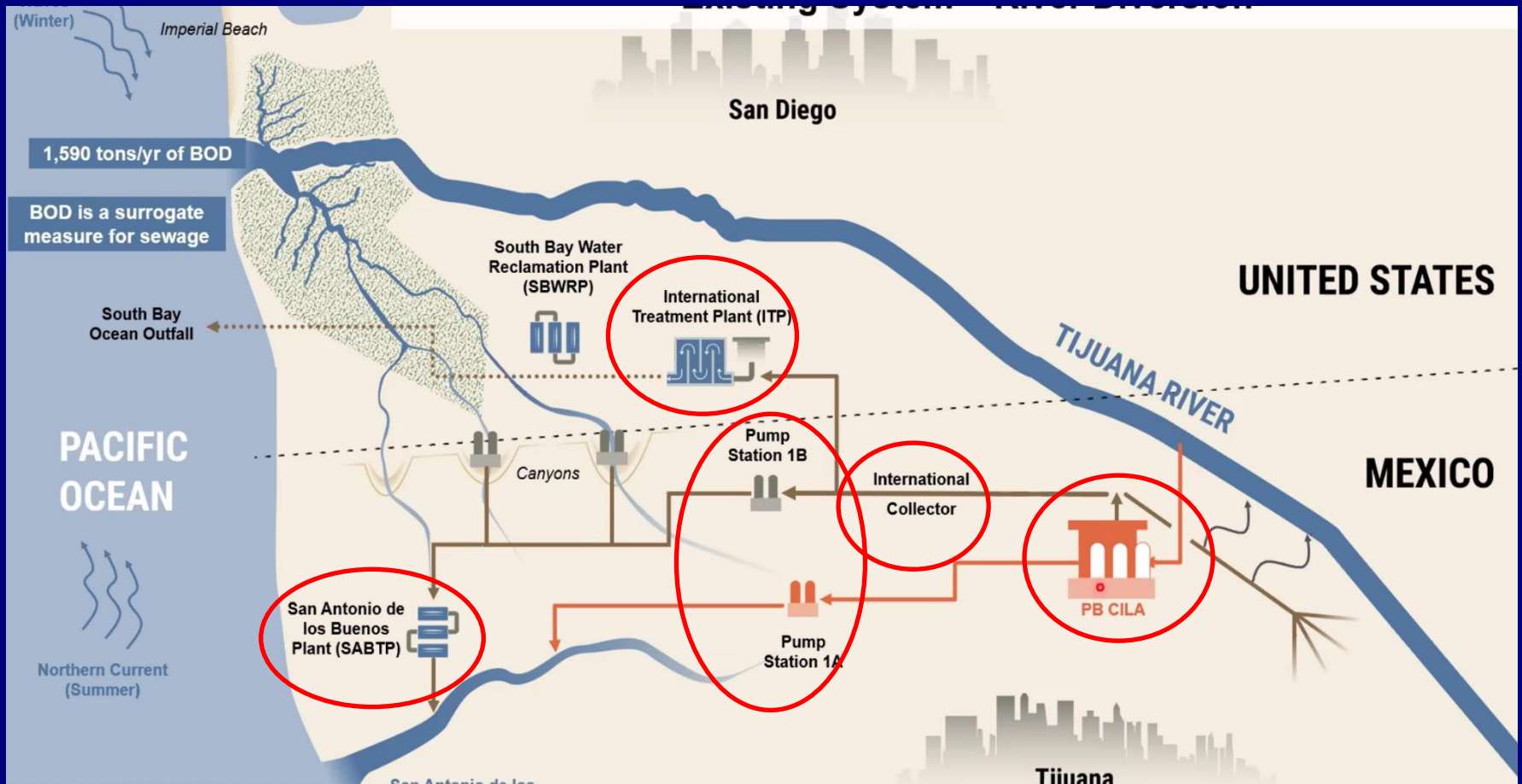
San Diego - Tijuana Infrastructure

Wastewater System





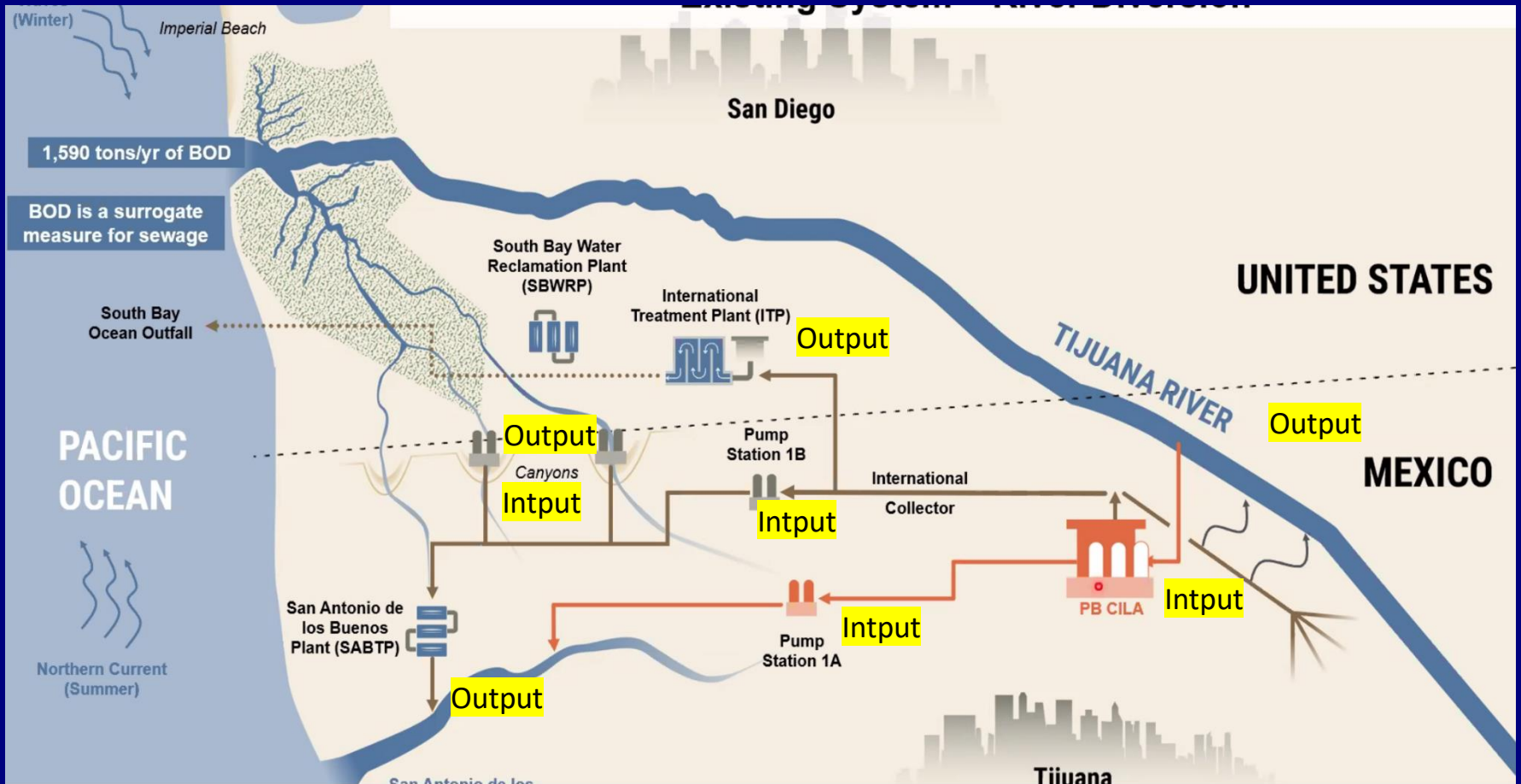
San Diego - Tijuana Infrastructure Status and Conditions





Initiatives

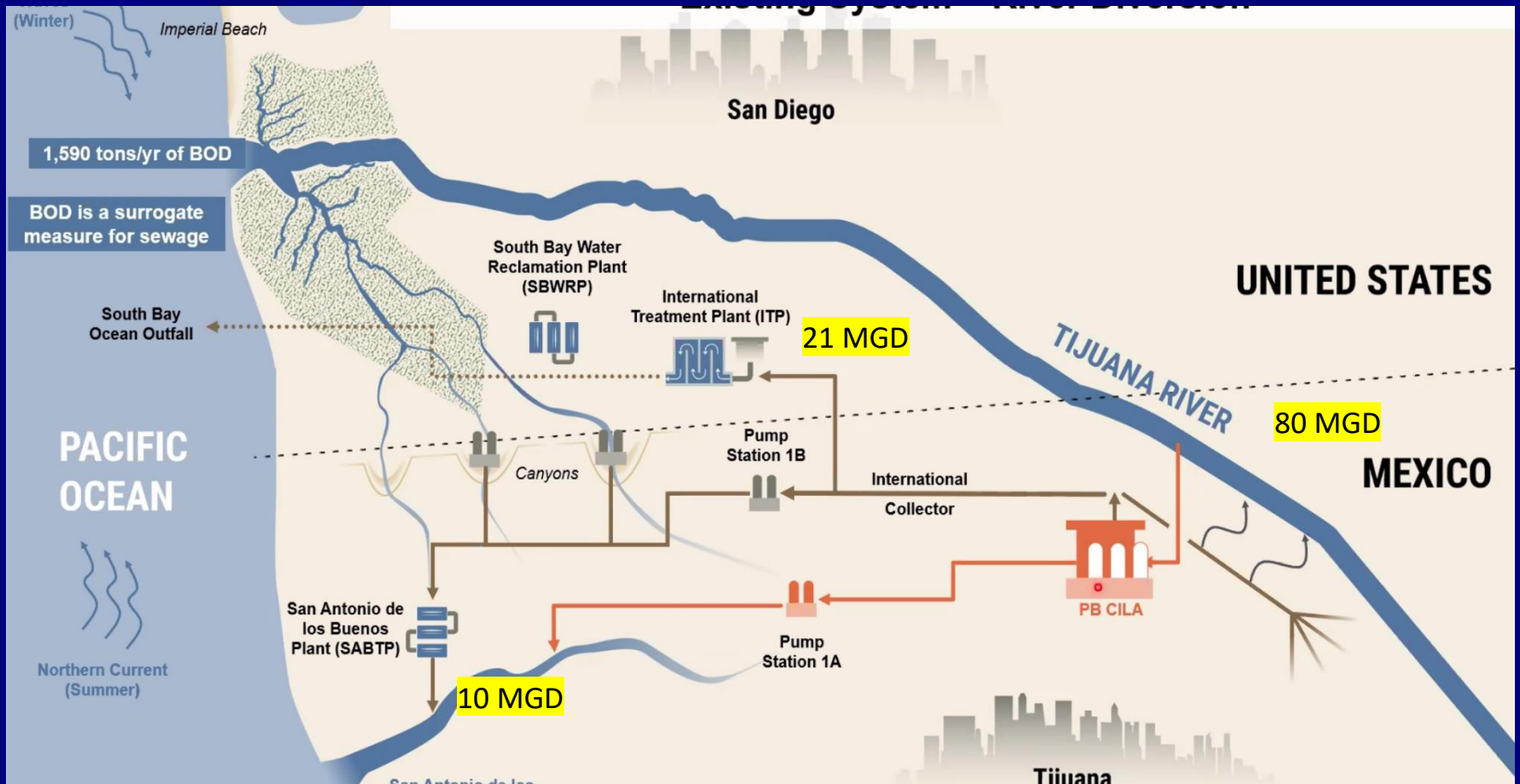
Mass Balance Plan – Real Time





Initiatives

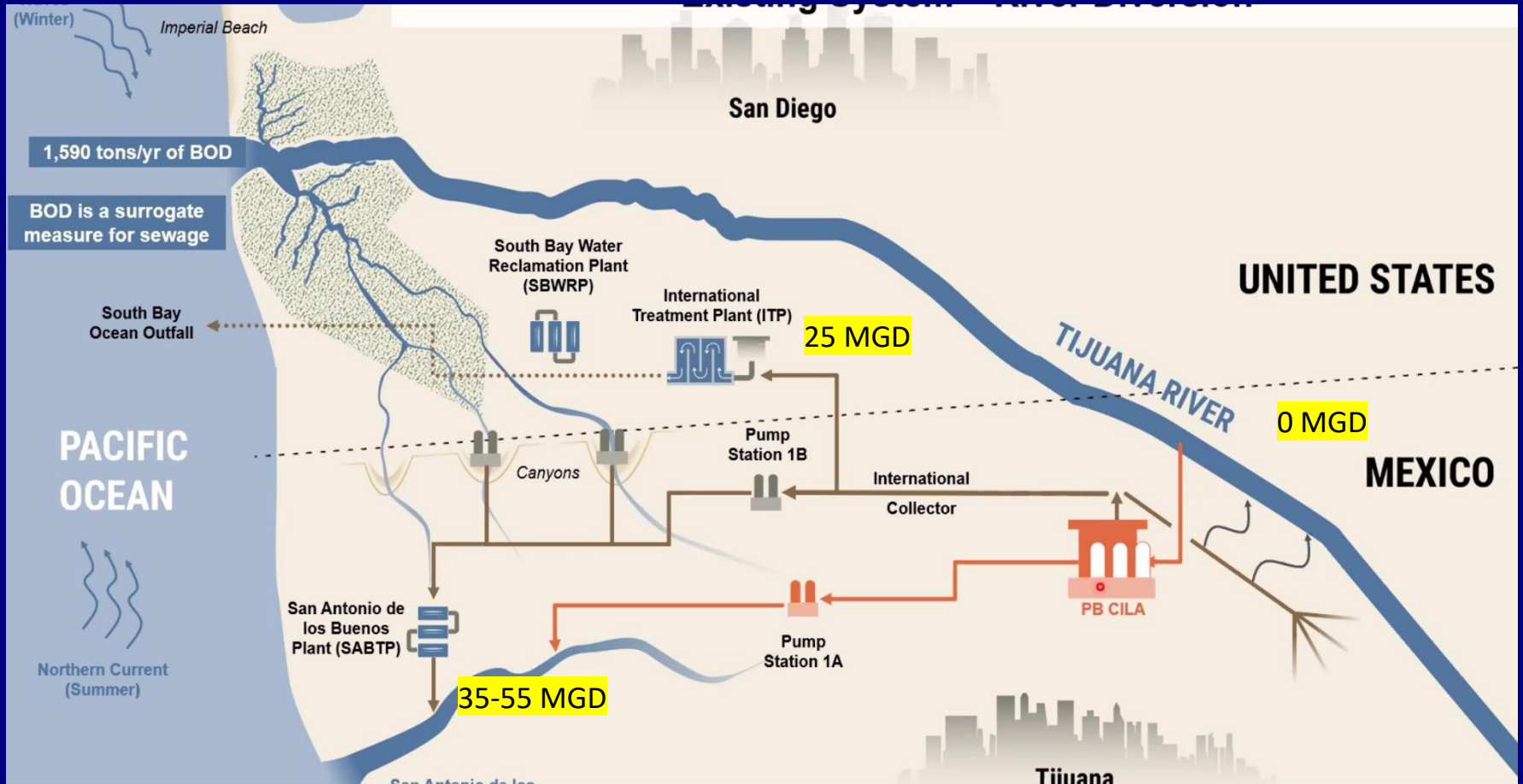
Mass Balance Plan – March 28, 2024





Initiatives

Mass Balance Plan – March 28, 2024





Initiatives

Sod Farm Cleanup



Before...





Initiatives

Sod Farm Cleanup



In progress...



Minute 328 Projects



- United States - \$330M
- Mexico - \$144M (30% funded)

A	B	C	D	E	F	G	H	I
Last Updated: Oct 2023			SOI/Min 328 Commitment			Secured Funding / Actual Costs		
#	Project	Secured?	US Government share	Mexican Government share	Total	US Government share	Mexican Government share	Total
			million USD	million USD	million USD	million USD	million USD	million USD
Located in the US								
1	Expansion of SBIWTP to 50 mgd	Y	\$ 300.0	\$ -	\$ 300.0	\$ 300.0	\$ -	\$ 300.0
Located in the Mexico								
1 a	Rehabilitation of PBCILA	Y	\$ -	\$ 4.0	\$ 4.0	\$ -	\$ 4.7	\$ 4.7
1 b	Rehabilitation of PB1	Y	\$ 8.0	\$ 4.0	\$ 12.0	\$ 13.4	\$ 3.7	\$ 17.1
2	Oriente collector	Y	\$ 0.9	\$ 0.9	\$ 1.8	\$ 1.0	\$ 1.2	\$ 2.2
3	Rehabilitation of the International Collector, phase I	Y	\$ 4.0	\$ 4.0	\$ 8.0	\$ -	\$ 9.0	\$ 9.0
	Rehabilitation of the International Collector, phase II	Y	\$ 4.0	\$ 4.0	\$ 8.0	?	?	?
4	Rehabilitation of the parallel gravity line	N	\$ -	\$ 10.3	\$ 10.3			\$ -
5	Rehabilitation of the Antiguo Force Main	N	\$ -	\$ 9.5	\$ 9.5			\$ -
6	Enclose the open channel from PB1 to SAB	N	\$ -	\$ 12.8	\$ 12.8			\$ -
7	Rehabilitation of the Insurgentes Collector	N	\$ -	\$ 17.9	\$ 17.9			\$ -
8	Rehabilitation of Poniente Interceptor	N	\$ -	\$ 1.4	\$ 1.4			\$ -
9	Rehabilitation of the Collector Carranza	N	\$ -	\$ 2.9	\$ 2.9			\$ -
10	Rehabilitation of the Oriente Interceptor	N	\$ -	\$ 15.5	\$ 15.5			\$ -
11	Phase 1 of reuse of La Morita and Arturo Herrera effluent	N	\$ 10.0	\$ 10.0	\$ 20.0			\$ -
12	Lift station and force main from Sainz Canyon to Arturo Herrera	N	\$ -	\$ 2.2	\$ 2.2			\$ -
13	Rehabilitation of PB Laureles 1	Y	\$ -	\$ 2.0	\$ 2.0	\$ -	\$ 2.0	\$ 2.0
	Rehabilitation of PB Matadero and Laureles 2	N	\$ -	\$ 5.6	\$ 5.6			\$ -
14	New 18 mgd SAB	Y	\$ -	\$ 33.3	\$ 33.3		\$ 33.0	\$ 33.0
15	Tijuana River Gates	N	\$ 1.9	\$ 1.9	\$ 3.8			\$ -
16	Backup power supply for PB1	N	\$ 1.5	\$ 1.5	\$ 3.0			\$ -
	Commitment secured		\$ 316.9	\$ 45.5	\$ 369.1			
	Commitment Remaining		\$ 13.4	\$ 98.2	\$ 104.9			
	Total		\$ 330.3	\$ 143.7	\$ 474.0	\$ 314.4	\$ 53.6	\$ 368.0
				\$ 6.66				

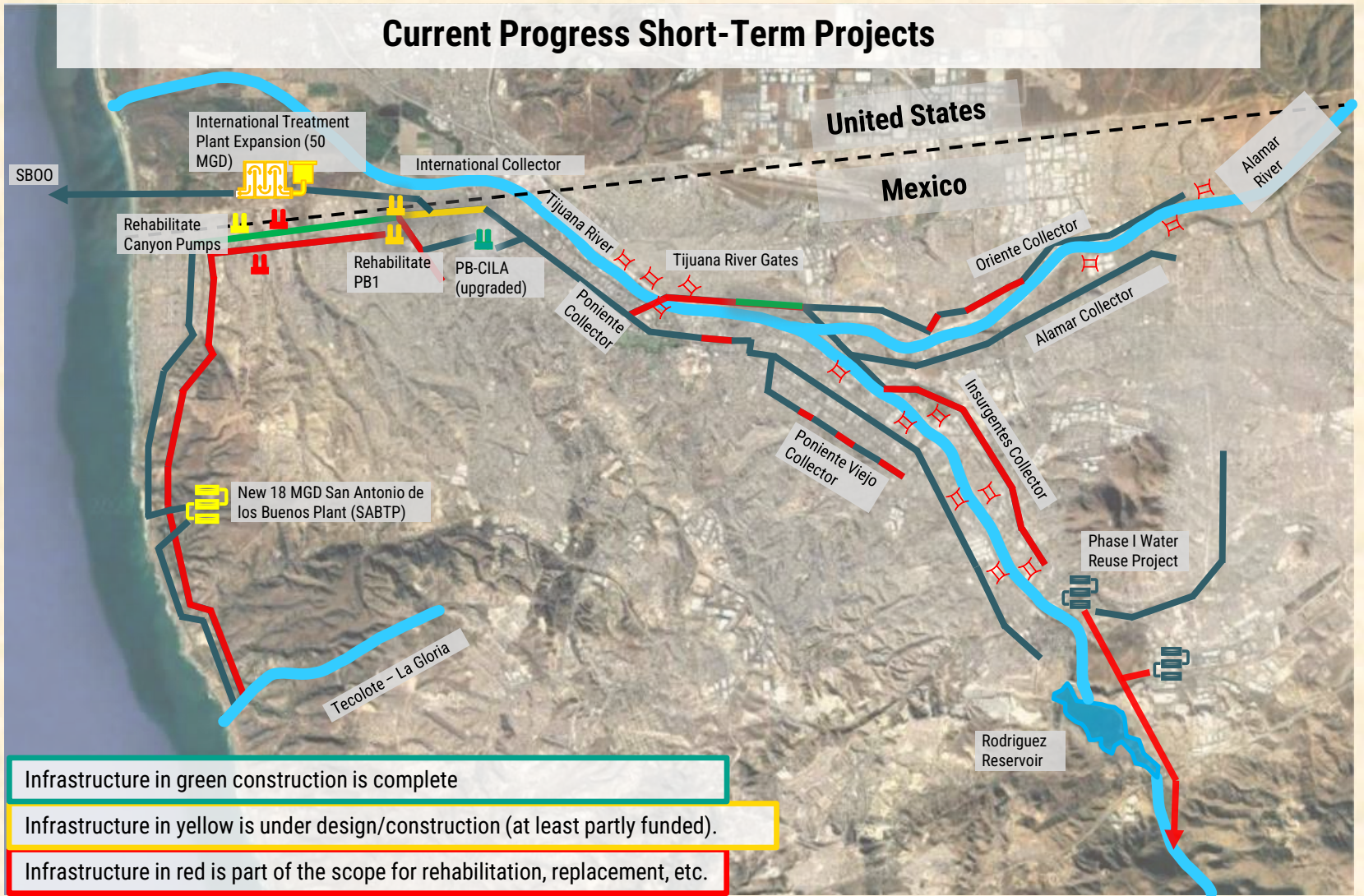


Minute 328 Projects

- United States
 - Expand/Rehab SBIWTP
- Mexico
 - Rehabilitate PB1 (PB1A & PB1B)
 - Rehabilitate International Collector
 - Reuse Arturo Herrera & La Morita treated wastewater
 - Reconstruct SAB wastewater treatment plant to 18 MGD capacity



Current Progress Short-Term Projects



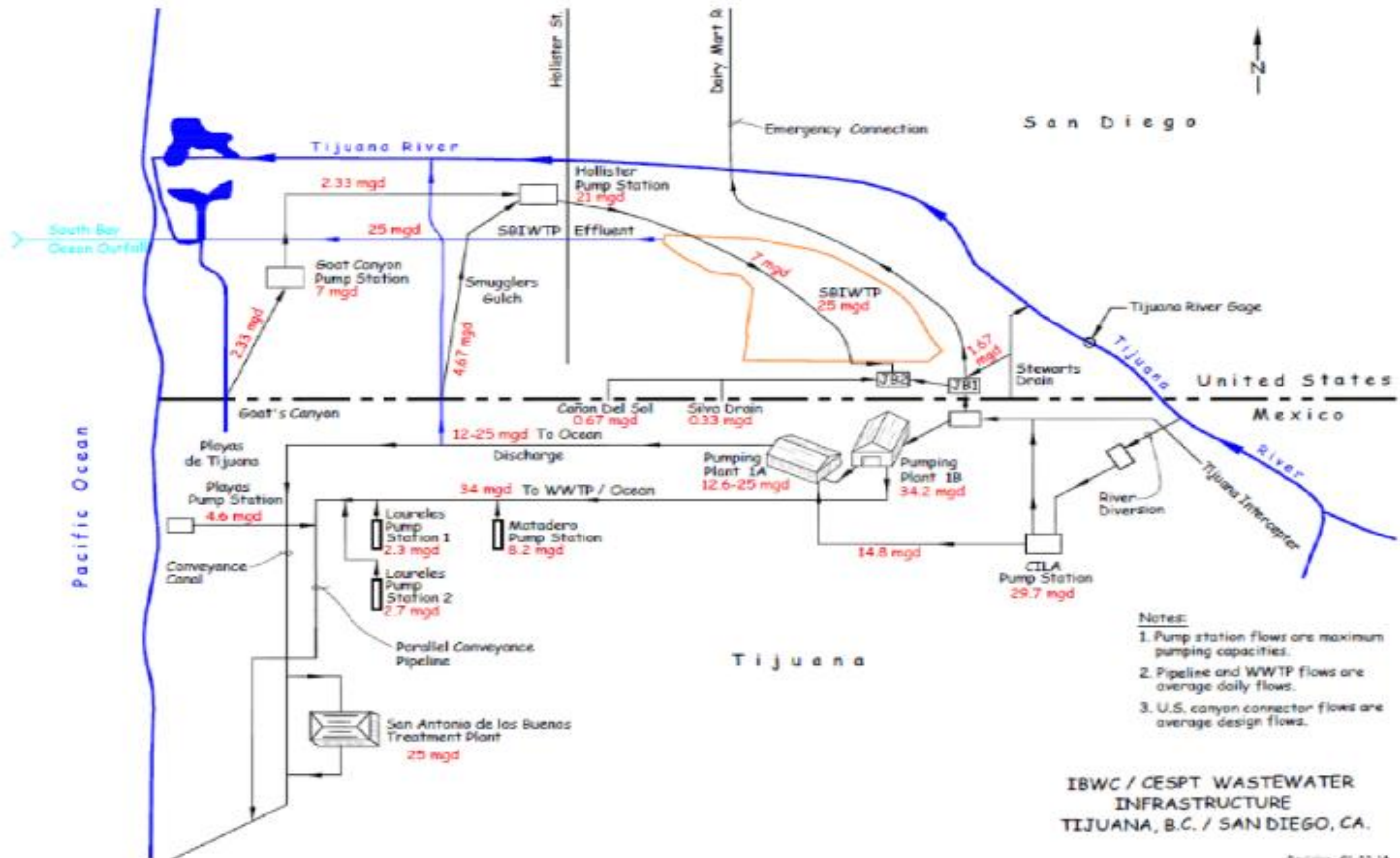


For additional information, contact:

Morgan Rogers
Area Operations Manager
U.S. Section- IBWC

(619) 662-7601

Morgan.Rogers@ibwc.gov





GEOGRAPHICAL ANALYSIS OF WATER POLLUTION SOURCES ALONG THE TIJUANA RIVER (2024)

- ▶ The pollution origins of the Tijuana River are intricate and multifaceted. The data presented here is a compilation of public sources and firsthand field observations collected by the author over a period exceeding 25 years. Utilizing geographic information systems aids in comprehending the wastewater contamination, which is classified into four primary groups with an additional subcategory for deeper analysis: unsewered, municipally sewerred, rural, and Industrial-Real Estate. Furthermore, an illicit thrash dumping site map is provided. Proposed solutions for addressing each category are presented.

ABSTRACT

THE TIJUANA-TECATE REGION HAS A COMPLEX MIXTURE OF SEWERED AND NON-SEWERED ÁREAS. BASED ON CONAGUA AND INEGI INFORMATION THESE ARE THE MOST IMPORTANT SOURCES OF WASTE WATER

- 1) Non-sewered homes
- 2) Properly sewerred áreas
- 3) Rural
- 4) Industrial
 - a) Properly industrial (Industrial parks)
 - b) Real State development (decentralized wastewater treatment)



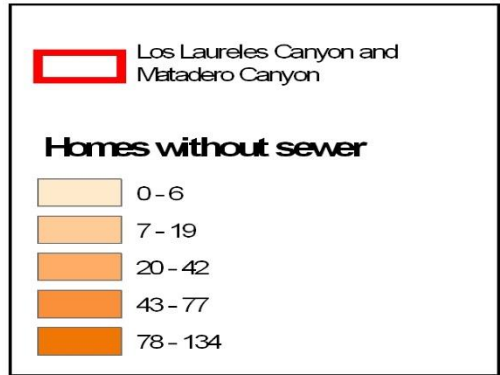
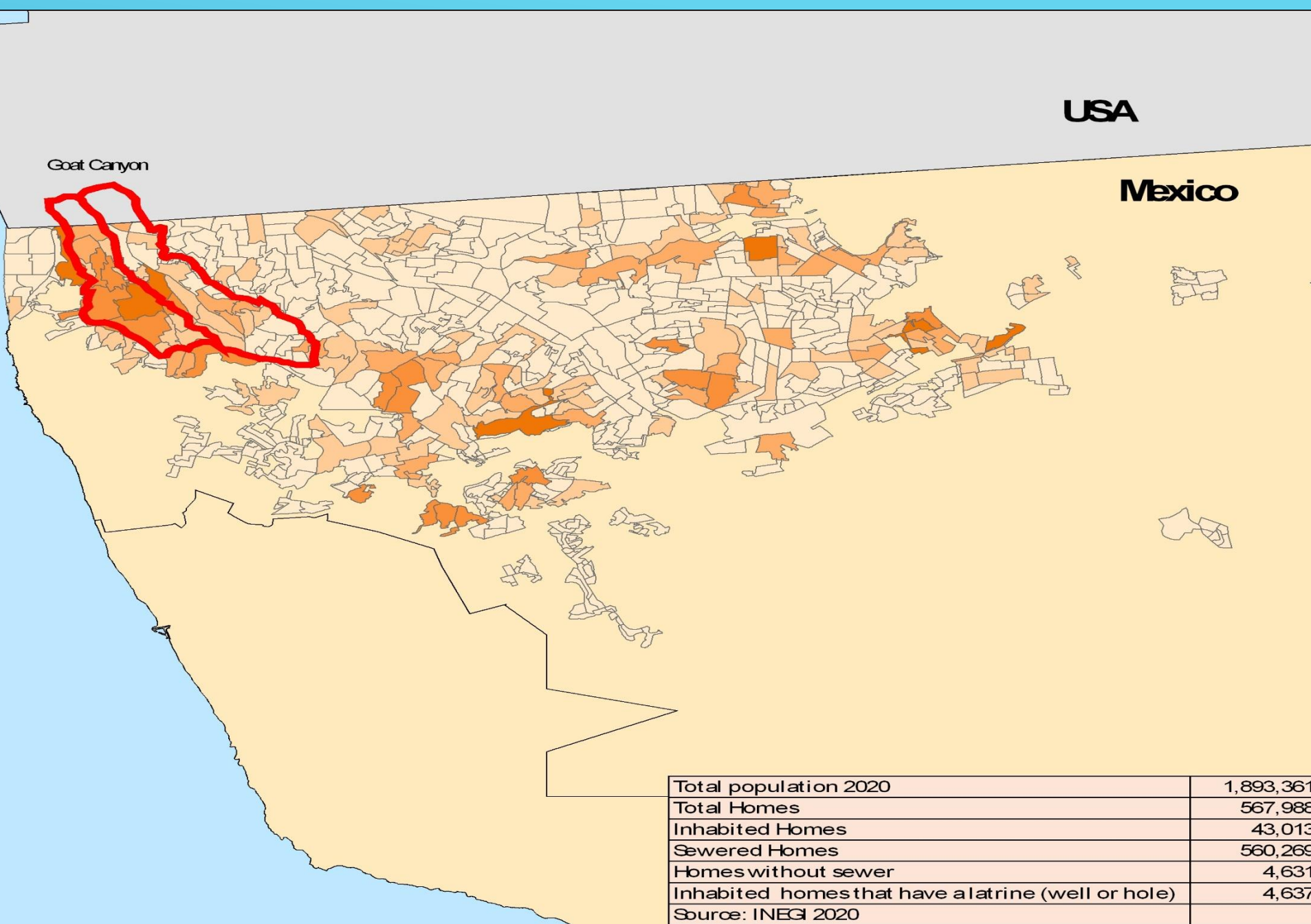
www.bchesd.org

	m³/day	MGD	m³/day Not including S.A.M.	MGD
total CESPT	312,682.00	82.6	217,641.60	57.5
total Agriculture	10,925.00	2.9	10,925.00	2.9
total Industrial-Real Estate:	2,823,911.09	746	2,823,911.09	746
total Industrial	4,115.60	1.1	4,115.60	1.1
Total : a +b+c+d	3,147,518.09	831.5	3,052,477.69	806.4

IRREGULAR SETTLEMENTS (NO SEWER CONNECTION)

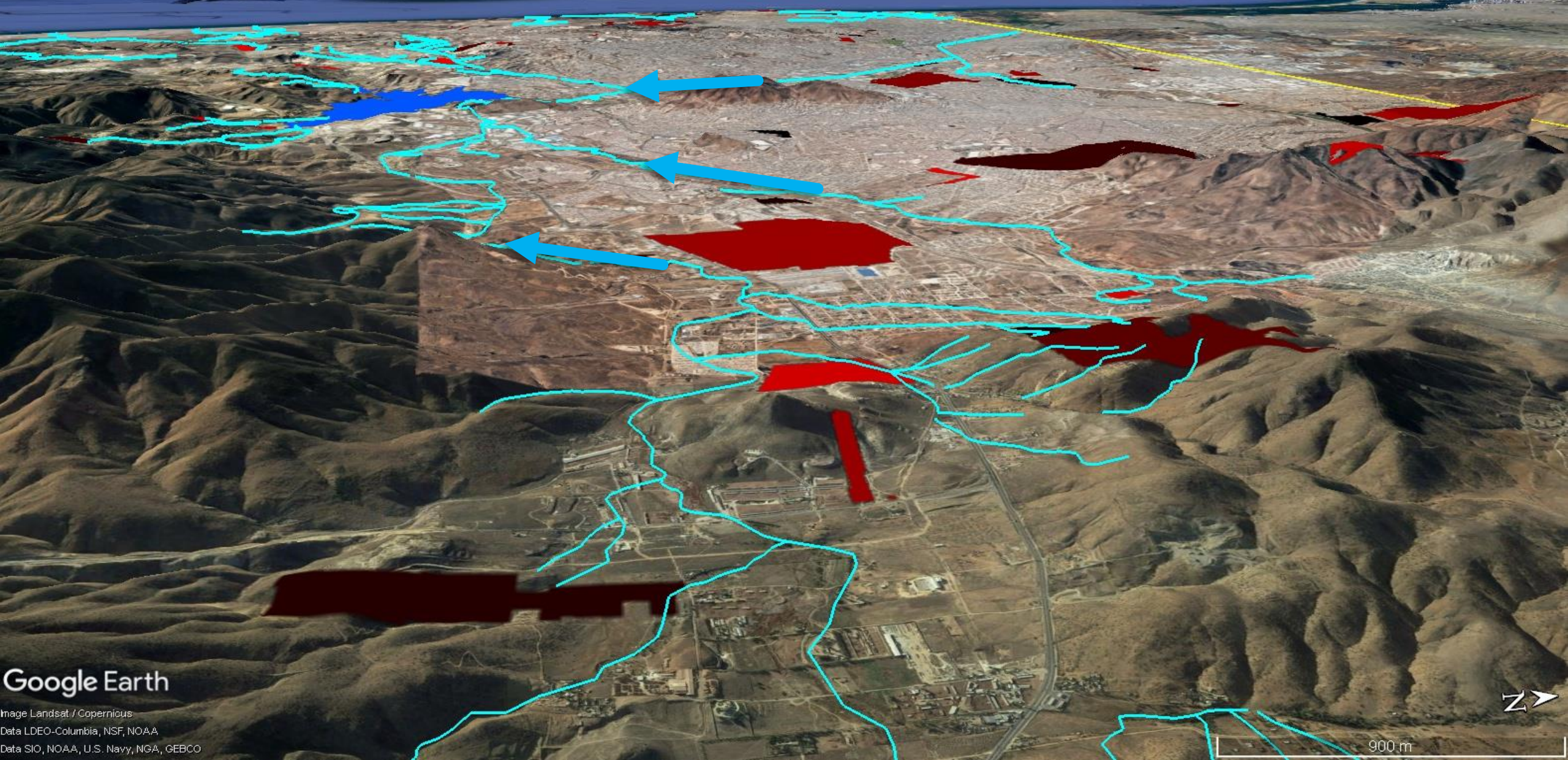


www.bchesd.org



El Florido

Presa Abelardo L. Rodríguez



Google Earth

Image Landsat / Copernicus
Data LDEO-Columbia, NSF, NOAA
Data SIO, NOAA, U.S. Navy, NGA, GEBCO



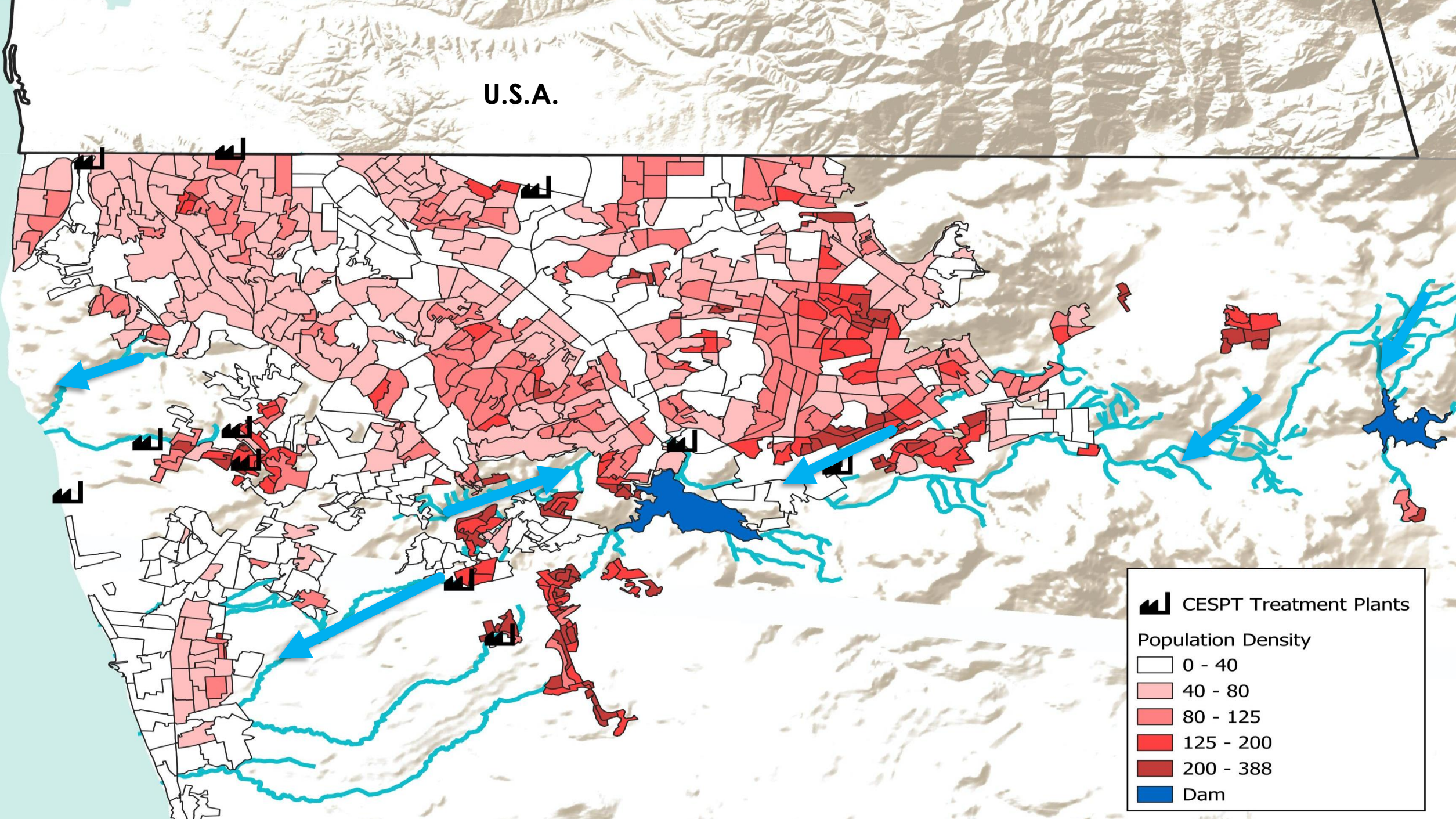
900 m


CESPT INFRASTRUCTURE
VOL: 312,682.00 M³/DAY
: 82.6 MGD









www.bchesd.org

U.S.A.



 CESPT Treatment Plants

Population Density

-  0 - 40
-  40 - 80
-  80 - 125
-  125 - 200
-  200 - 388
-  Dam

Zona del Florido plantas CESPT



RURAL WASTE WATER DISCHARGE PERMITS

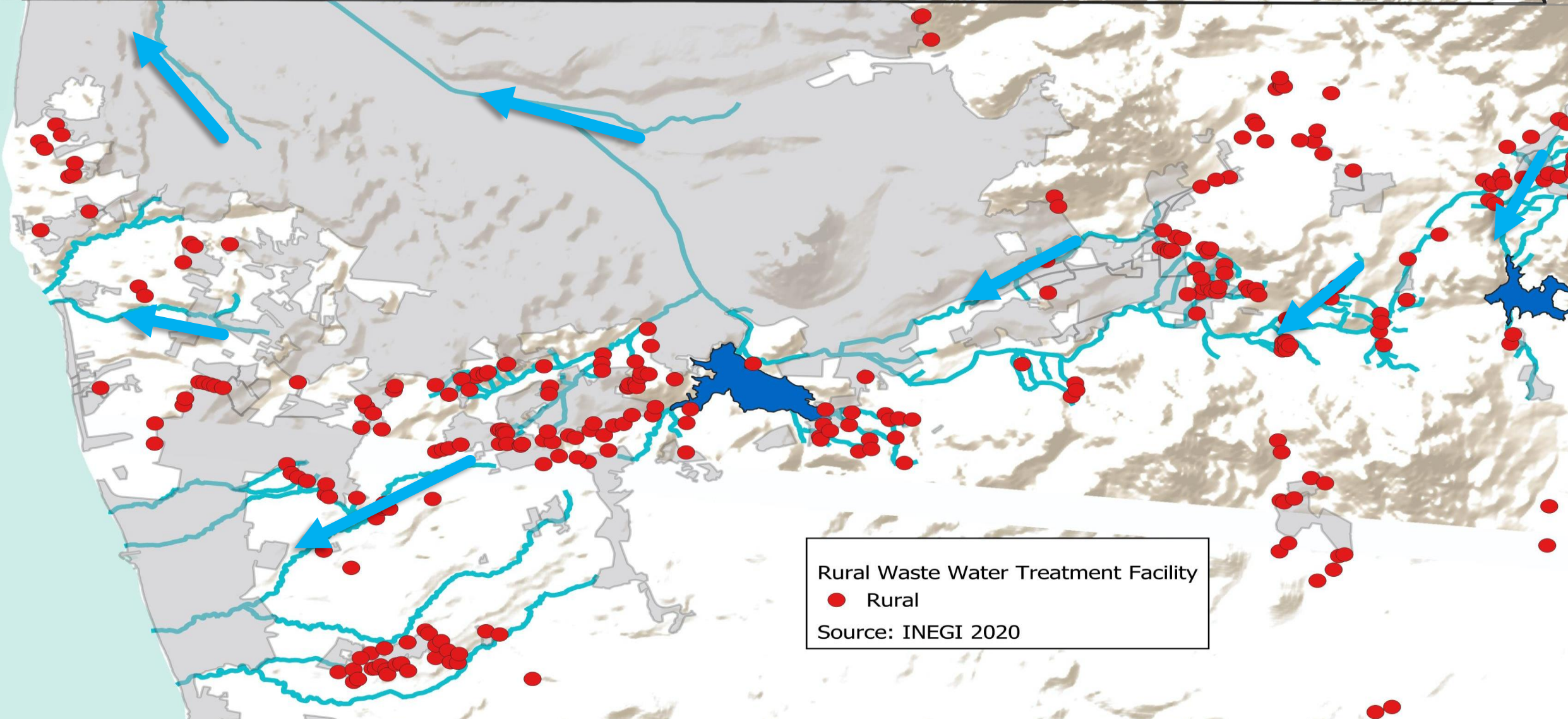
N = 687 VOL = 10,925.00 M³/DAY
= 2.9 MGD

(SOURCE: INEGI + REPDA CONAGUA)



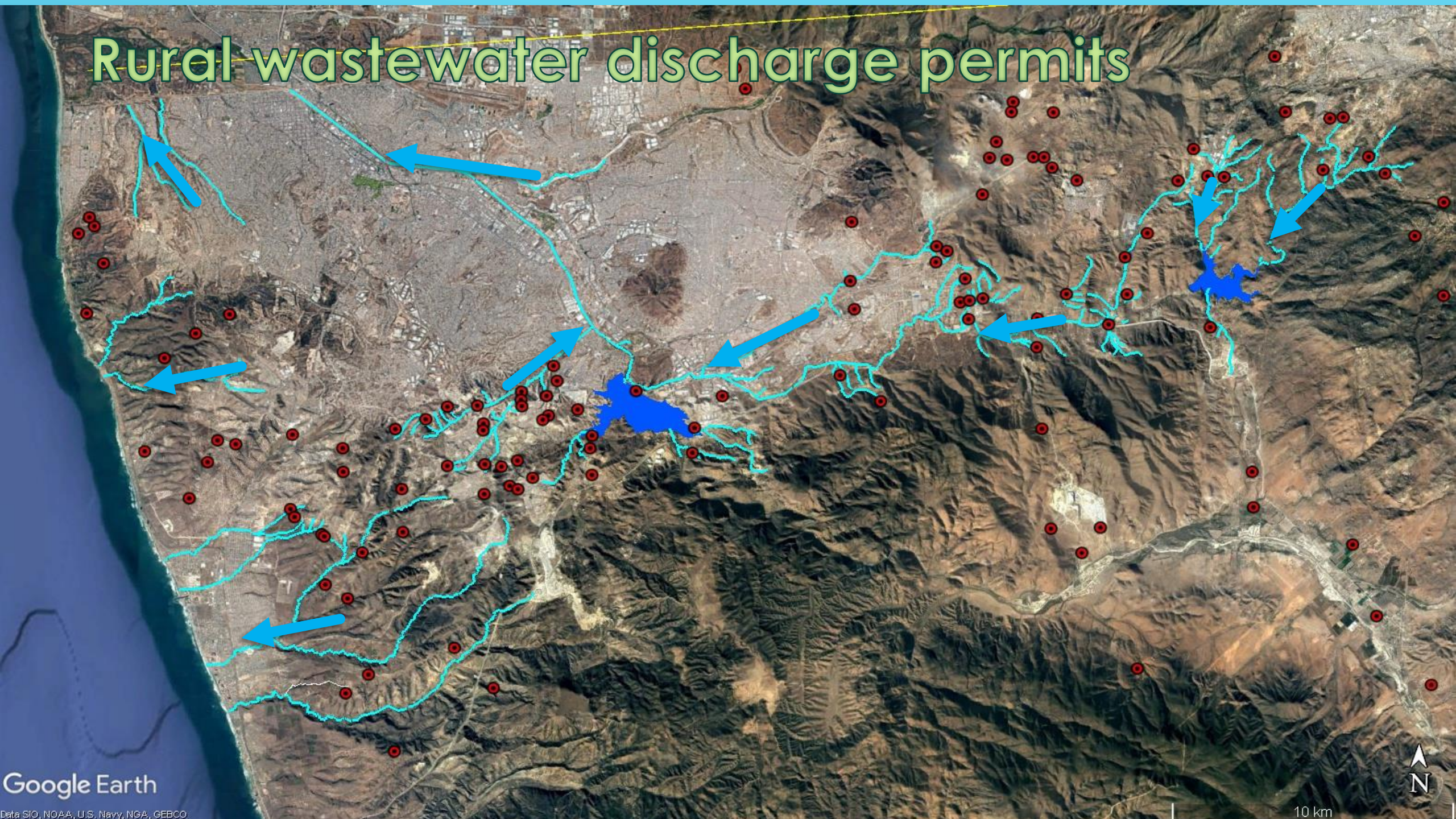
www.bchesd.org

U.S.A.



Rural Waste Water Treatment Facility
● Rural
Source: INEGI 2020

Rural wastewater discharge permits



Presa Abelardo L. Rodríguez



dairy farms





Los Establos

Villas del Campo

Toyota



PARTIALLY (I)REGULAR DEVELOPMENTS (LEGAL LIMBO)



www.bchesd.org

Asentamientos irregulares CORETT 2010

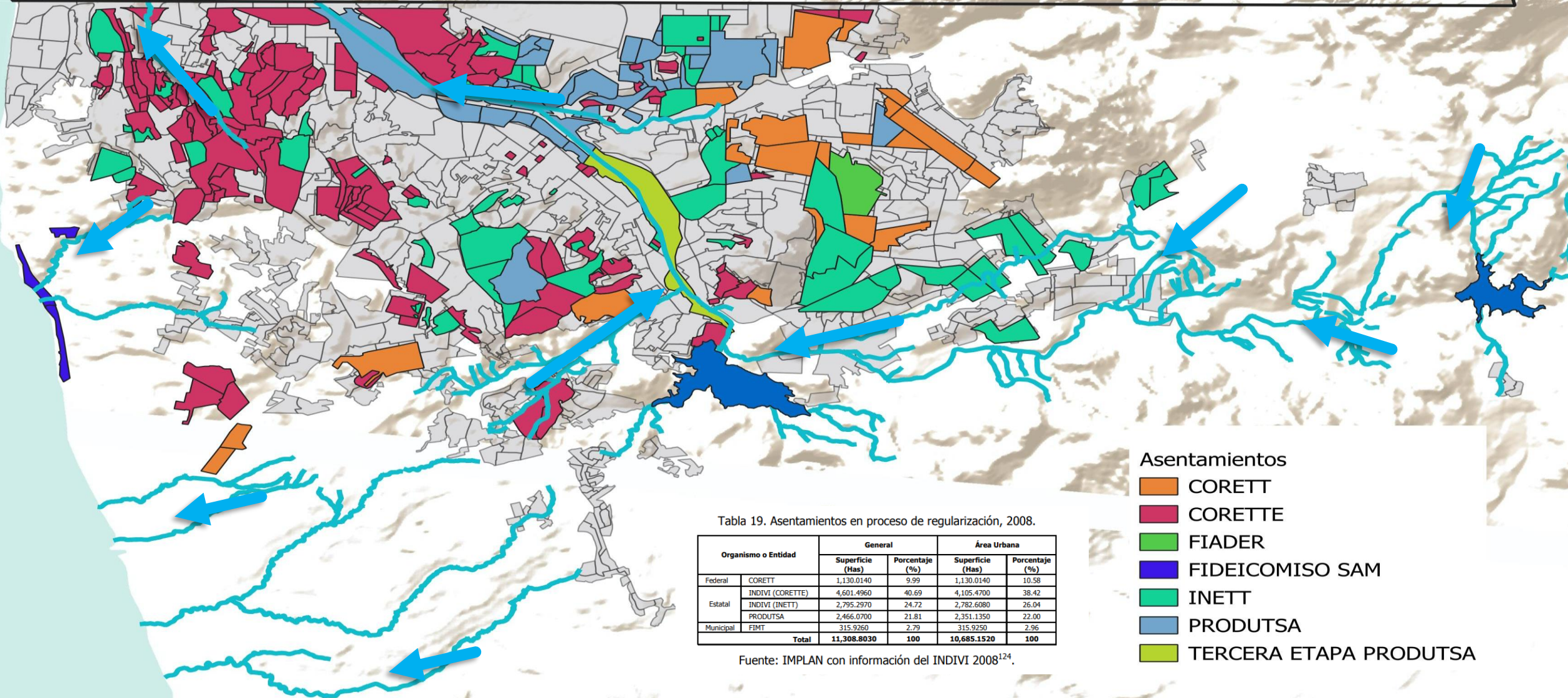


Tabla 19. Asentamientos en proceso de regularización, 2008.

Organismo o Entidad		General		Área Urbana	
		Superficie (Has)	Porcentaje (%)	Superficie (Has)	Porcentaje (%)
Federal	CORETT	1,130.0140	9.99	1,130.0140	10.58
	INDIVI (CORETTE)	4,601.4960	40.69	4,105.4700	38.42
Estatad	INDIVI (INETT)	2,795.2970	24.72	2,782.6080	26.04
	PRODOTSA	2,466.0700	21.81	2,351.1350	22.00
Municipal	FIMT	315.9260	2.79	315.9250	2.96
Total		11,308.8030	100	10,685.1520	100

Fuente: IMPLAN con información del INDIVI 2008¹²⁴.

Asentamientos

- CORETT
- CORETTE
- FIADER
- FIDEICOMISO SAM
- INETT
- PRODOTSA
- TERCERA ETAPA PRODOTSA

INDUSTRIAL/REAL ESTATE DEVELOPMENTS

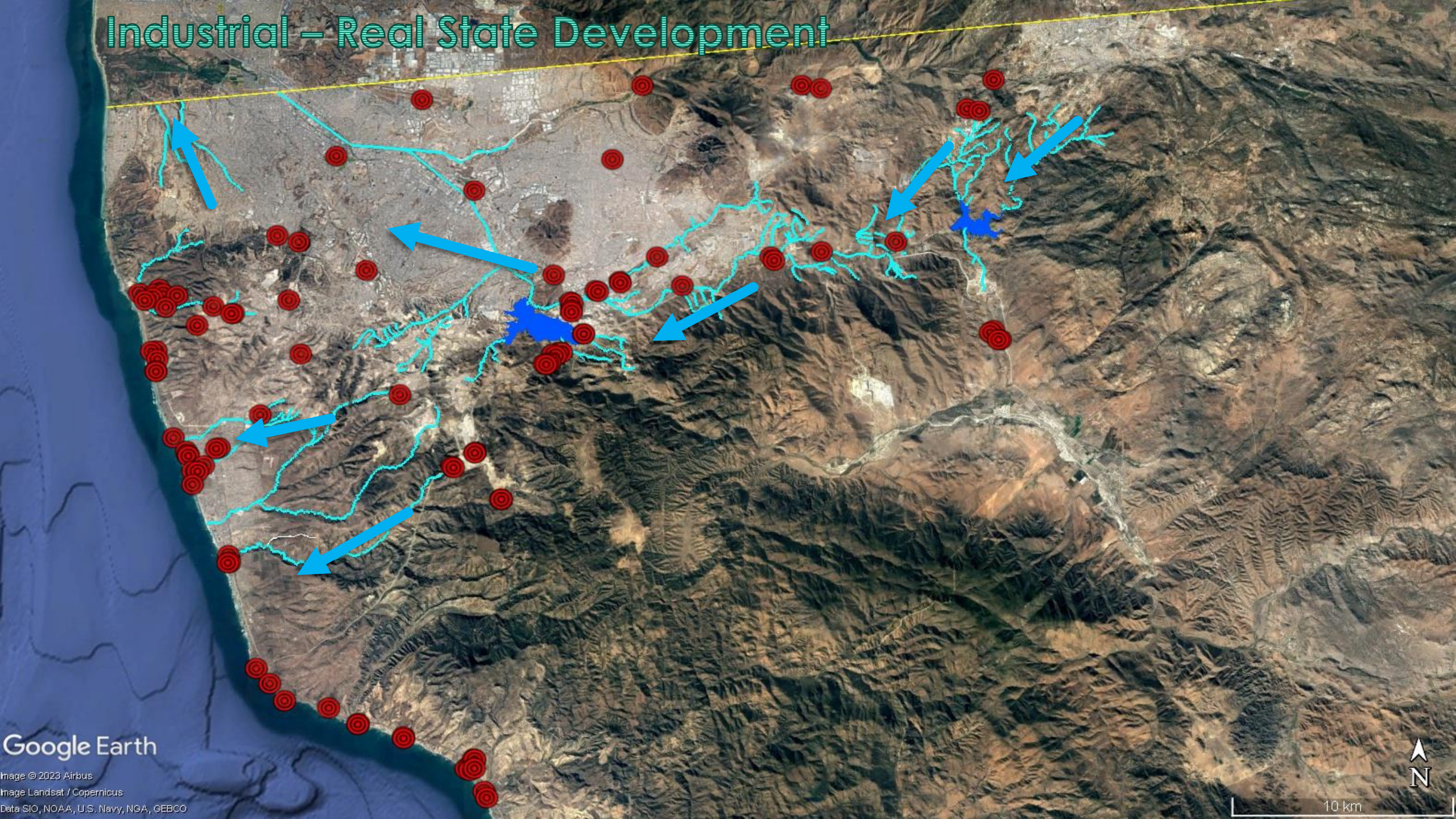
N = 98 VOL = 2,823,911.09 M³/DAY
= 746 MGD

(SOURCE: CONAGUA)



www.bchesd.org

Industrial – Real State Development



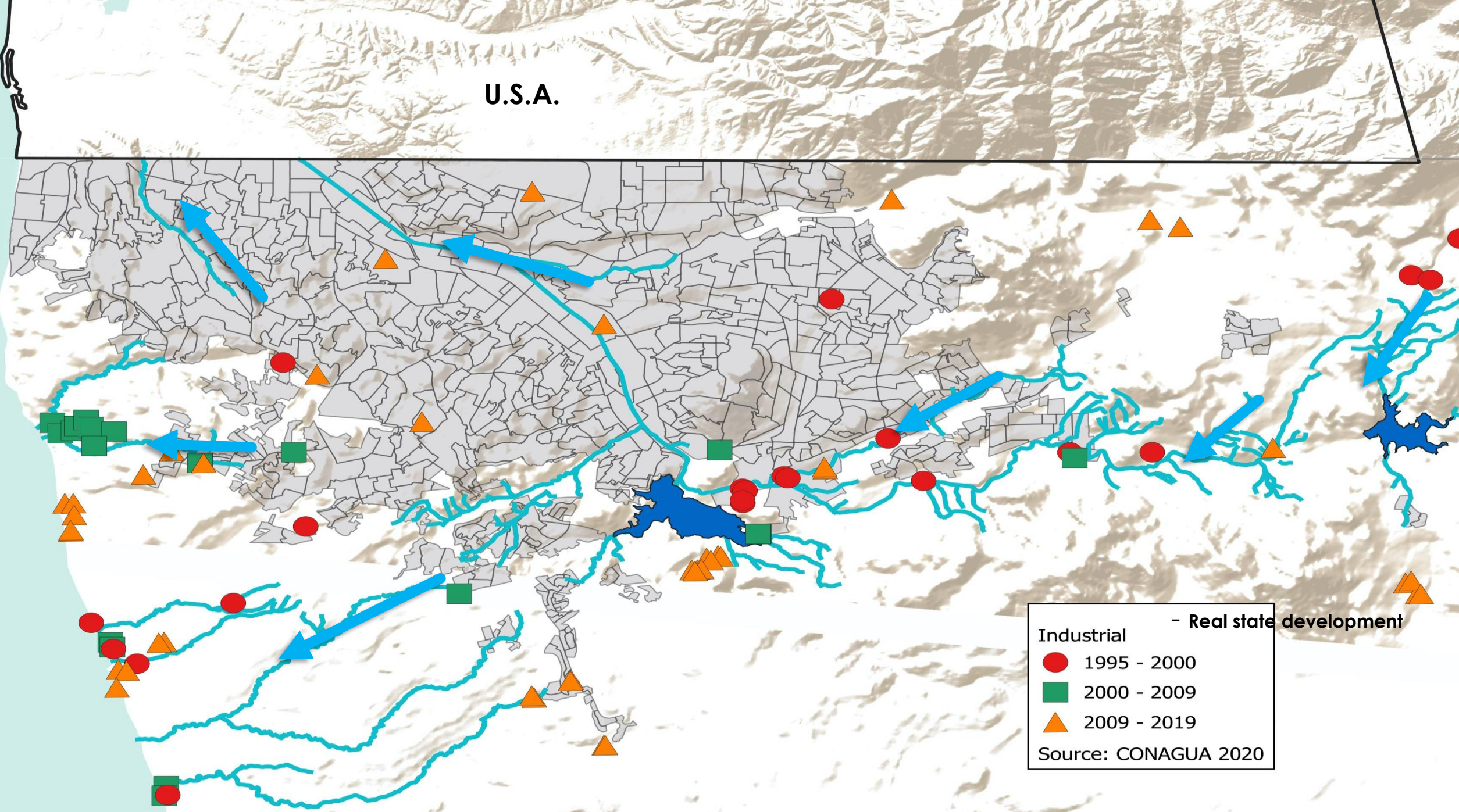
Google Earth

Image © 2023 Airbus
Image Landsat / Copernicus
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

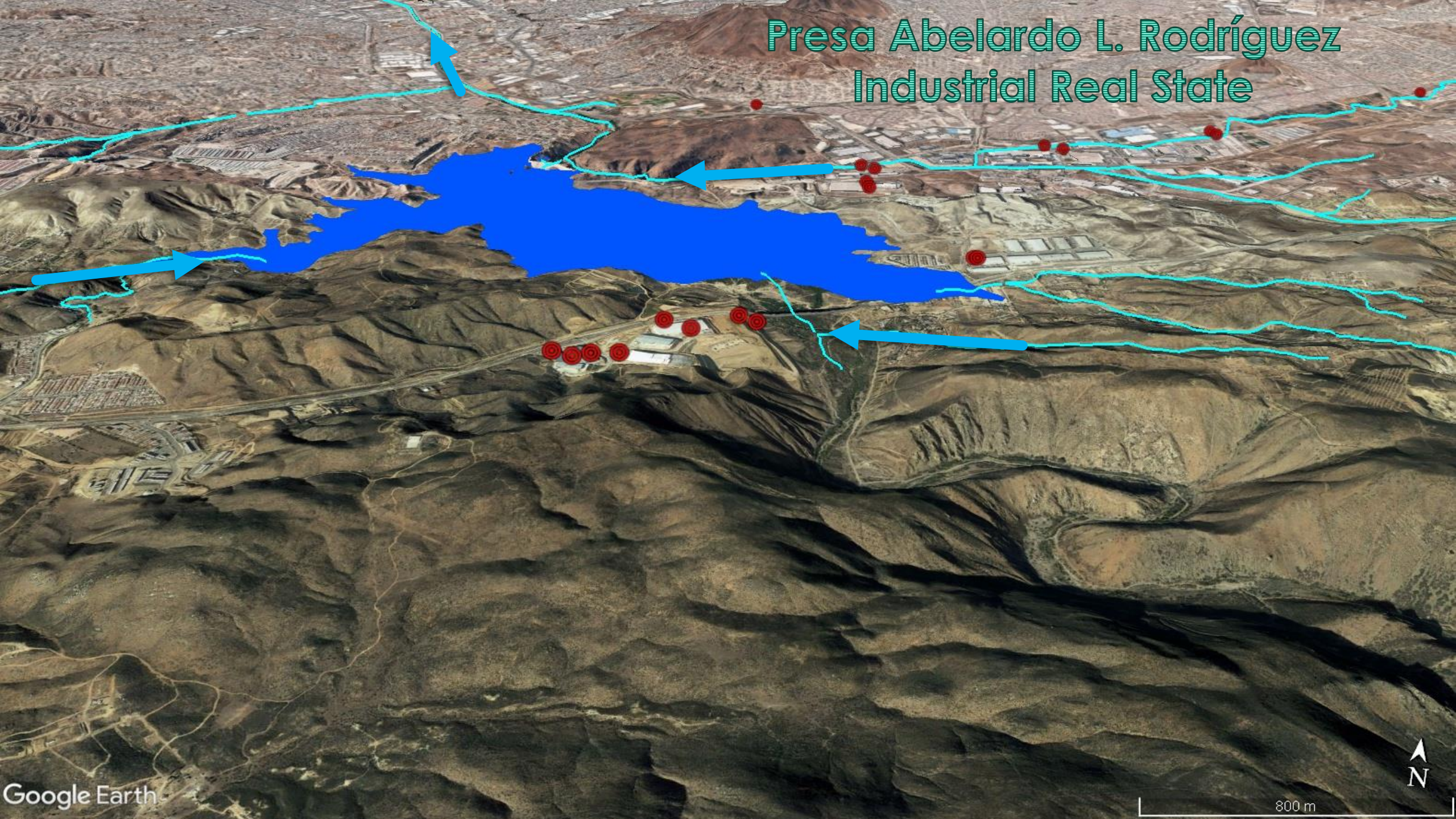


10 km

U.S.A.



Presa Abelardo L. Rodríguez Industrial Real State



Presa El Carrizo

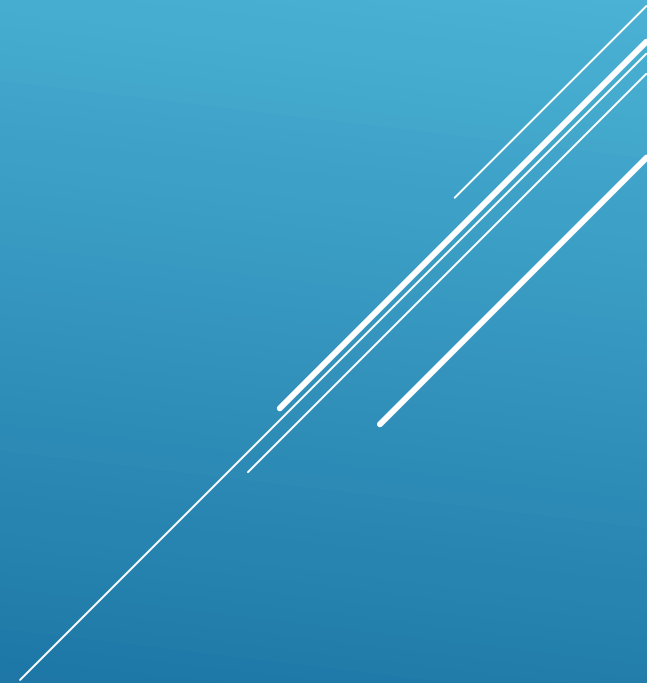
Industrial real state



Urbi Quinta del Cedro
Industrial Real State



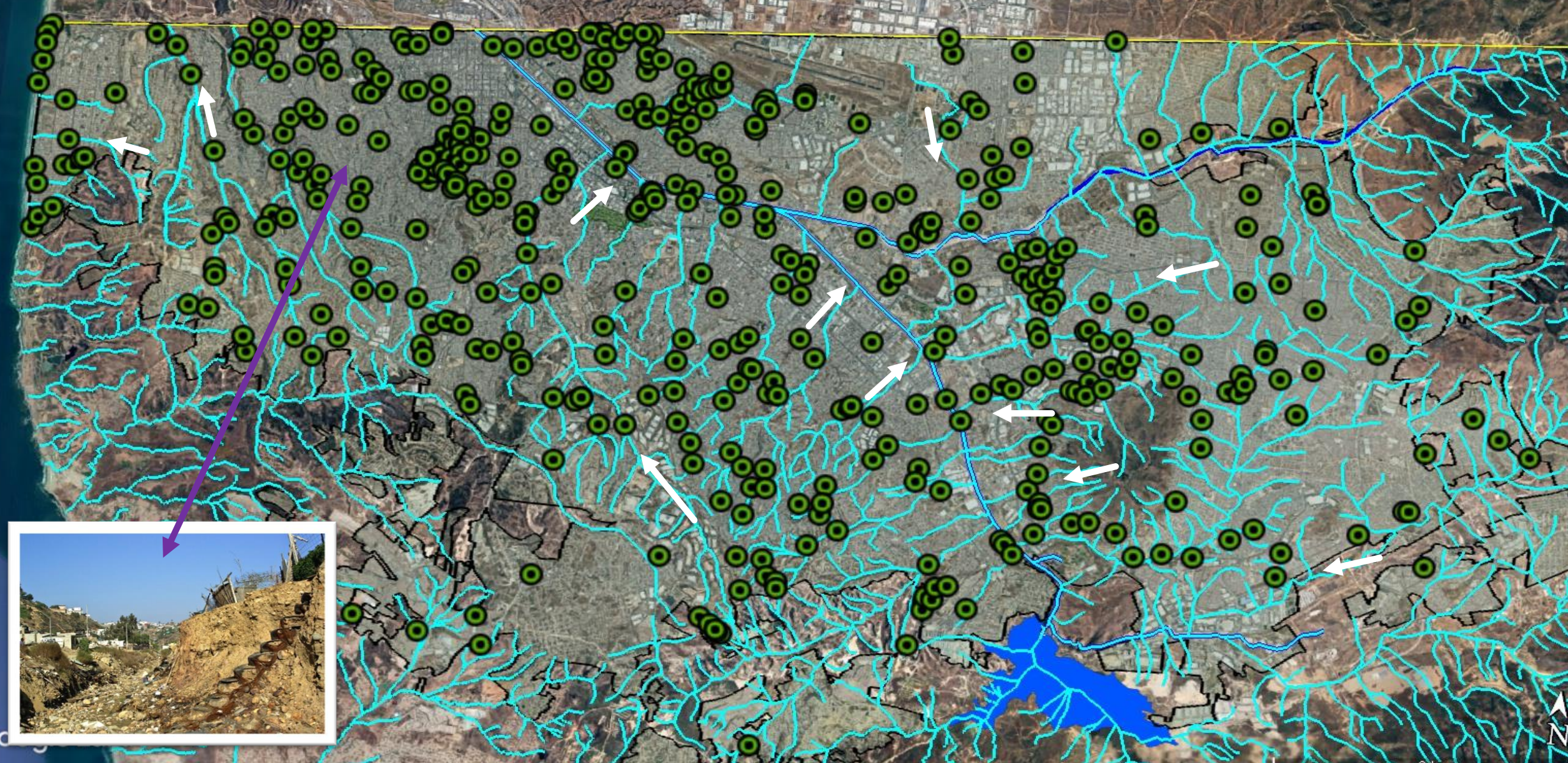
TRASH IN THE RIVER BASIN THAT
POLLUTES THE TIJUANA RIVER



Clandestine trash dumpster sites

Source Implan 2019

Goat Canyon



- ▶ The solution to each source of pollution requires different approaches



www.bchesd.org

- ▶ Main problem: San Antonio de los Buenos treatment plant and sewer lines ruptures
- ▶ IBWC and CILA are solving it

CESPT PROBLEM



www.bchesd.org

- ▶ Fine evaluation of each facility
- ▶ Precise evaluation of the volumes
- ▶ Characterization of the discharges
- ▶ Propose alternative technologies
- ▶ Economic analysis of the proposed solutions

RURAL WASTEWATER DISCHARGES
N = 687 VOL = 10,925.00 M³/DAY
= 2.9 MGD



www.bchesd.org

- ▶ Locate and evaluate the present administrative condition each plant
- ▶ Produce an accurate assesment of the volumes
- ▶ Produce a detailed report of the state of conservation of the facilities
- ▶ Propose a technical solution for each plant
- ▶ Evaluate the costs of the proposed solution(s)
- ▶ Estimate the maintenance and operational costs
- ▶ Design of an economic strategy to long term sustainability

DECENTRALIZED WASTEWATER PLANTS

$N = 98$ $VOL = 2,823,911.09 \text{ M}^3/\text{DAY}$
 $= 746 \text{ MGD}$



www.bchesd.org



POPULATION NOT CONNECTED TO
SEWER LINES (8,269 HOMES)



- ▶ **Sanitary Sequence** based on autoconstruction consisting of:
 - ▶ Improvements to the existing latrines (VIP latrines)
 - ▶ Pit covered by concrete slab to avoid overflow in rain events
 - ▶ Ventilation to prevent proliferation of flies
 - ▶ Transformation of existing cesspools into real anaerobic digesters (onsite primary treatment)
 - ▶ Small bore condominal sewer lines to collect the outflow of digesters
 - ▶ Decentralized wastewater plant to provide secondary treatment to the primary treated effluents

SOLUTION PROPOSED BY B.C.H.E. TO ÁREAS WITHOUT SEWER CONNECTION



www.bchesd.org

Expense Categories	Grant Dollars Requested
Personnel / Personal	\$24,920.00
Materials / Materiales	\$3,420.00
Communications and publications/ Comunicaciones y publicaciones	\$5,000.00
Transportation / Transporte	\$1,240.00
Equipment / Equipo	\$5,610.00
Other / Otros	\$1,000.00
Indirect Costs / Costos Indirectos	\$6,000.00
	\$47,190.00

Number of workshops	2 Personal	Workshops	
	Persons	Quantity	1 workshop
		2	2 \$ 2,720.00
		3	2 \$ 2,340.00
	Material need for workshops		
	Canpoy	\$ 1,800.00	
	Table	\$ 110.00	
	Chairs	\$ 600.00	
	Projector	\$ 700.00	
	Water	\$ 60.00	
	Snacks	\$ 40.00	
	Coffee	\$ 60.00	
	Camera	\$ 3,100.00	
	Plastic bins	\$ 350.00	
	Pipes	\$ 200.00	
	Tool kit	\$ 500.00	
	Materials	\$ 500.00	
		\$ 8,020.00	
	Transportation 1 workshop	\$ 620.00	
	Full tank for workshop	120	
	Srpinter rental	500	

THANK YOU FOR YOUR PATIENCE

