

New River

1

New River Improvement Project

2

Sewage Bypasses in Mexicali

3

Next steps?



New River Improvement Project

Calexico Phase



2011 Strategic Plan



Key Components

- * River Reaches
- * Structural Controls
- * Non-structural Controls

Today's focus

Figure 1. Strategic plan Recommended Solutions



New River in Calexico





Recommendations for Calexico





Calexico Project Phases

- Phase 1
 - Design of trash screen, culvert, Pump-back system
 - Environmental documentation
- Phase 2
 - Construction



Progress

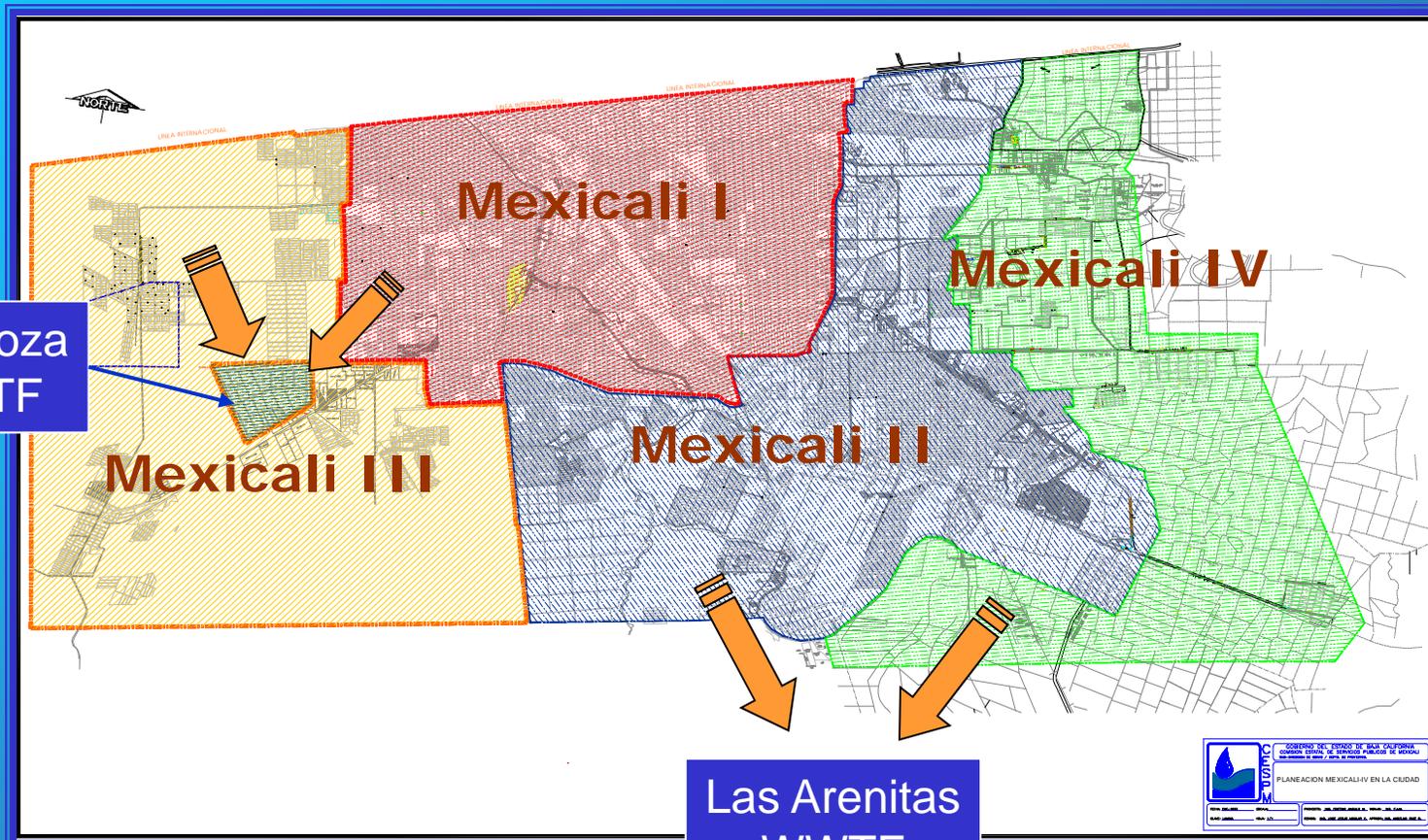
- Feb 2016
 - CMBRC accepts revised recommendations
 - Formed core workgroup
- Apr – Sep 2016
 - Costs estimates: design and environmental work
 - Initial consultation and coordination
 - Pursued various funding sources
 - Designated Project Manager
- 2016-2017 Budget Trailer Bill
 - Appropriates \$1.4M for Phase 1
- Apr 2017 – Prepared scope of work

Sewage Infrastructure in Mexicali

and New River Water Quality



City of Mexicali Planning Areas





The Plan (Treaty Minute 288)

■ Quick Fixes

- 11 Emergency repairs, including rehab of pumping plants

\$7.5 M

■ Mexicali I Projects

- Sewer main rehabilitation (~20 miles)
- Telemetry, O&M equipment

\$51 M

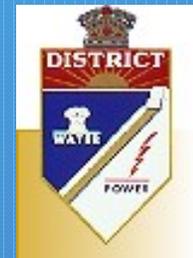
■ Mexicali II Projects

- New 20-mgd pumping plant
- New 20-mgd force main
- New 20-mgd WWTF (Las Arenitas WWTF)

\$26 M

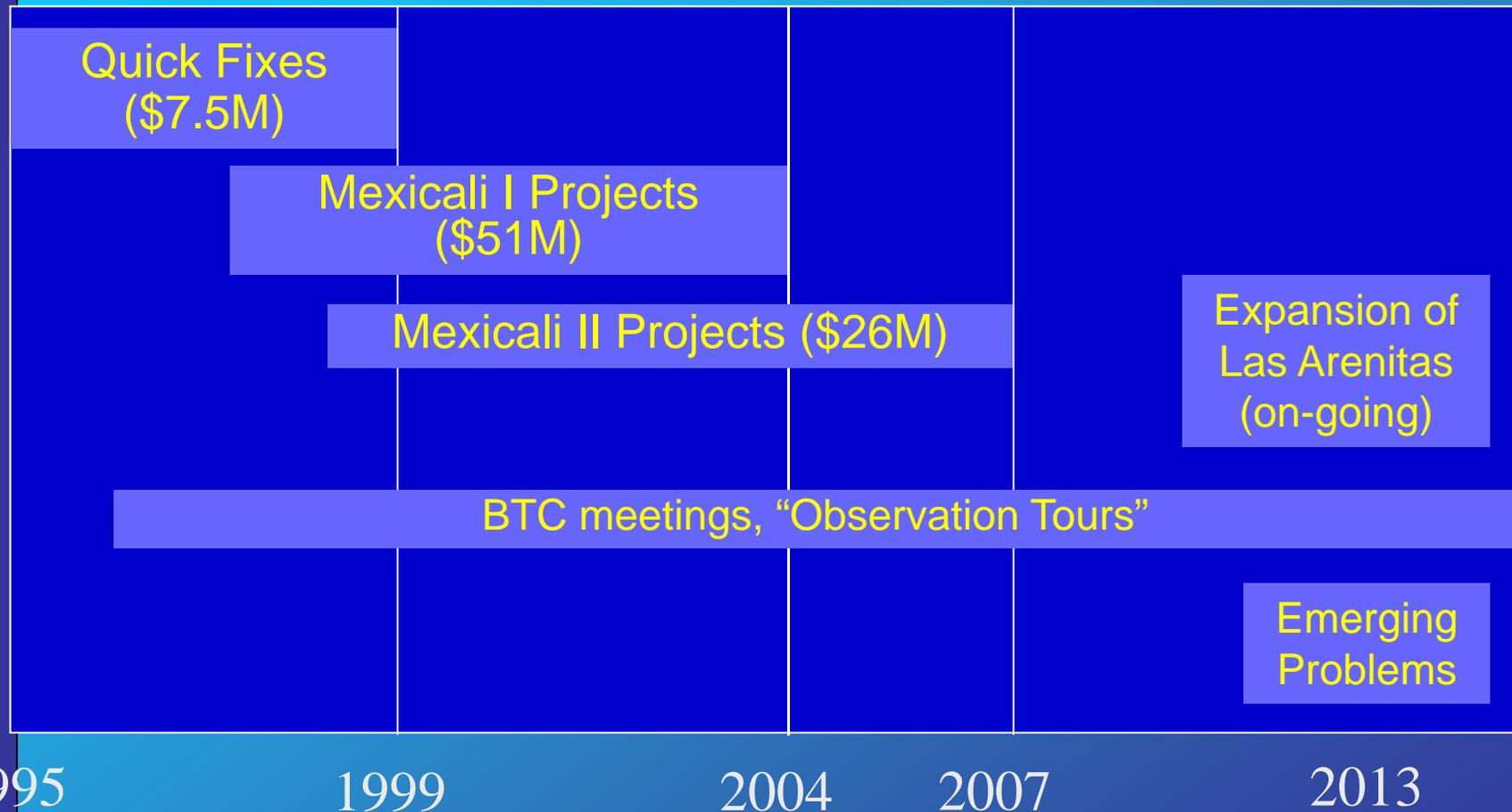


Binational Technical Committee (BTC)



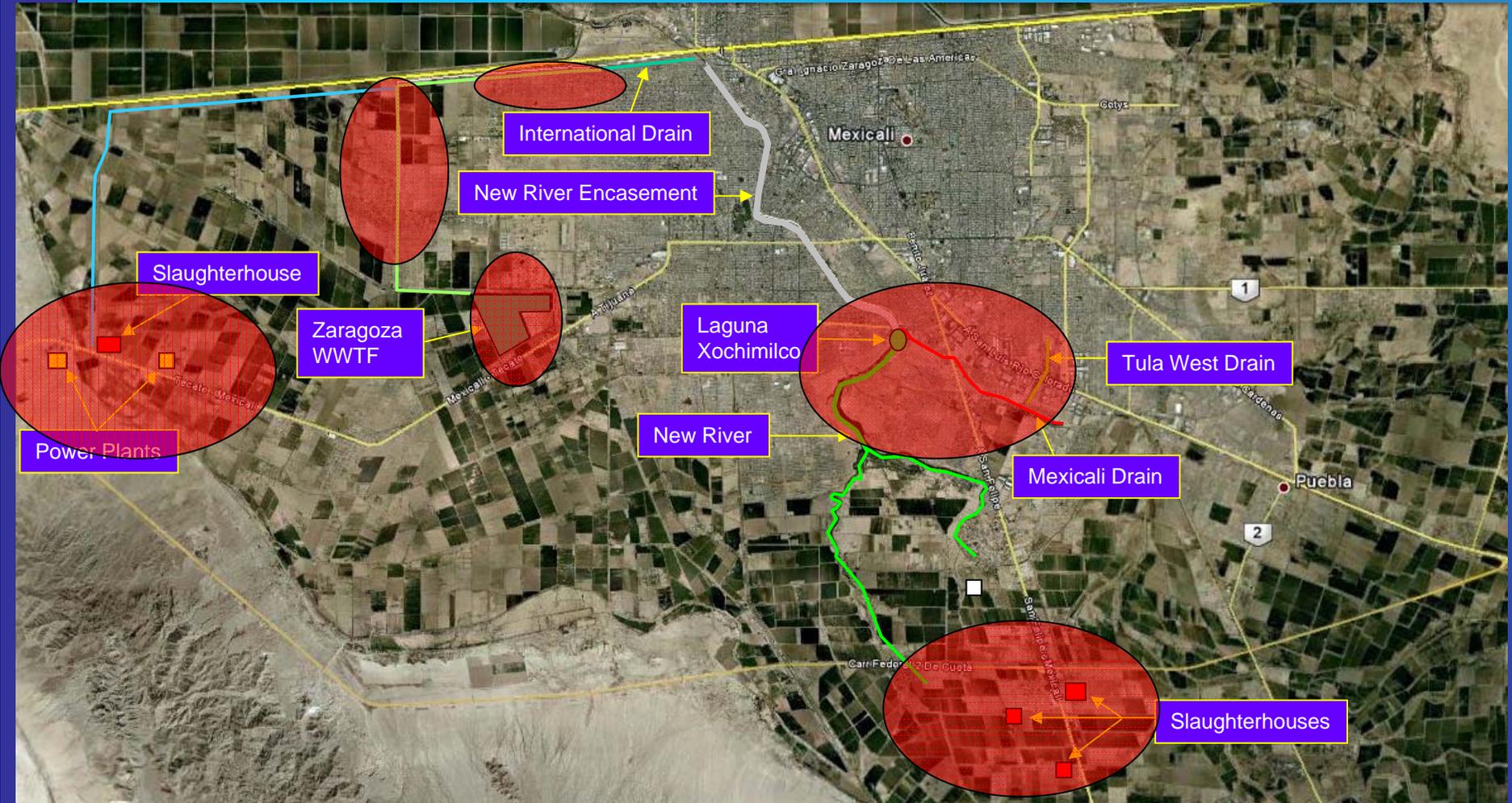


Binational Projects and Emerging Problems



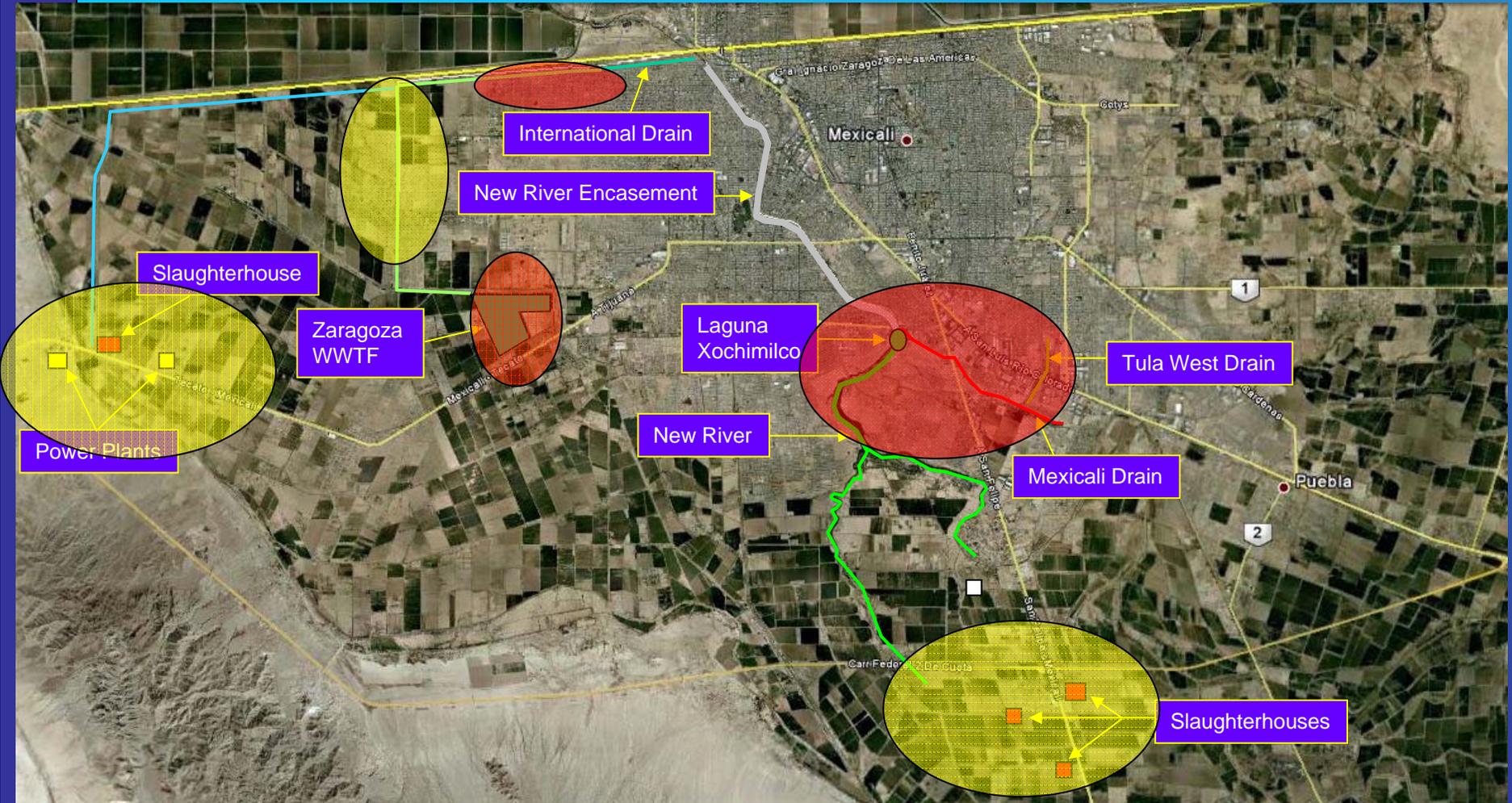


Regulatory Efforts





Regulatory Efforts





Key Sewage Infrastructure

Key Sewage Infrastructure	Quantity
Major Pumping Plants	12
Lift Stations	27
Sewage collectors	800 Km
Wastewater Treatment Plants	2
Sewer Vac Trucks	2



Emerging problems

■ 2013

- Pumping Plant problems
- Sewage collectors
- Operation and maintenance equipment
 - Threatened bypasses of raw sewage into New River

■ 2014

- 3 bypasses of raw sewage into New River
- Brought problems to IBWC's and USEPA's attention





Emerging Problems (cont'd)

■ 2015

- Policy meeting with USEPA, US IBWC, IID, County, State
 - Feds funded study to better characterize problems
- 3 bypasses of raw sewage
- Mexico rebuilds PP3

■ 2016

- More bypasses of raw sewage
- Study completed and draft report released to BTC
 - Key infrastructure at or beyond its useful life
 - O&M needs
 - Cost to address problems \$75M-\$80M



Equipment to Prevent Bypasses

Equipment	Quantity	Price/Unit	Total
4-inch Trash Pump	2	\$35,000	\$70,000
6-inch Trash Pump	3	\$45,000	\$90,000
8-inch Trash Pump	1	\$100,000	\$100,000
12-inch Trash Pump	1	\$175,000	\$175,000
Inflatable Plugs, connections, and hoses [to deal with broken pipes]	1	\$50,000	\$50,000
Total			\$485,000



Assets Needed to Protect System

Equipment	Quantity	Price/Unit	Total
Sewer Vac Truck	1	\$350,000	\$350,000
Power Bucket Machine	2	\$100,000	\$200,000
Total			\$550,000



Alternate Outlook

- Bypasses of raw sewage
 - 5 to 20 mgd from Mexicali I and III areas (Zaragoza WWTF)
 - 20 mgd from Mexicali II and IV areas (Las Arenitas WWTF)
- Increased pathogens in New River
 - Threat to public health
- Increase nutrients into Salton Sea
- Loss of water quality improvements



Questions/Comments?