New River-Mexicali Sanitation Program

Accomplishments Progress Report

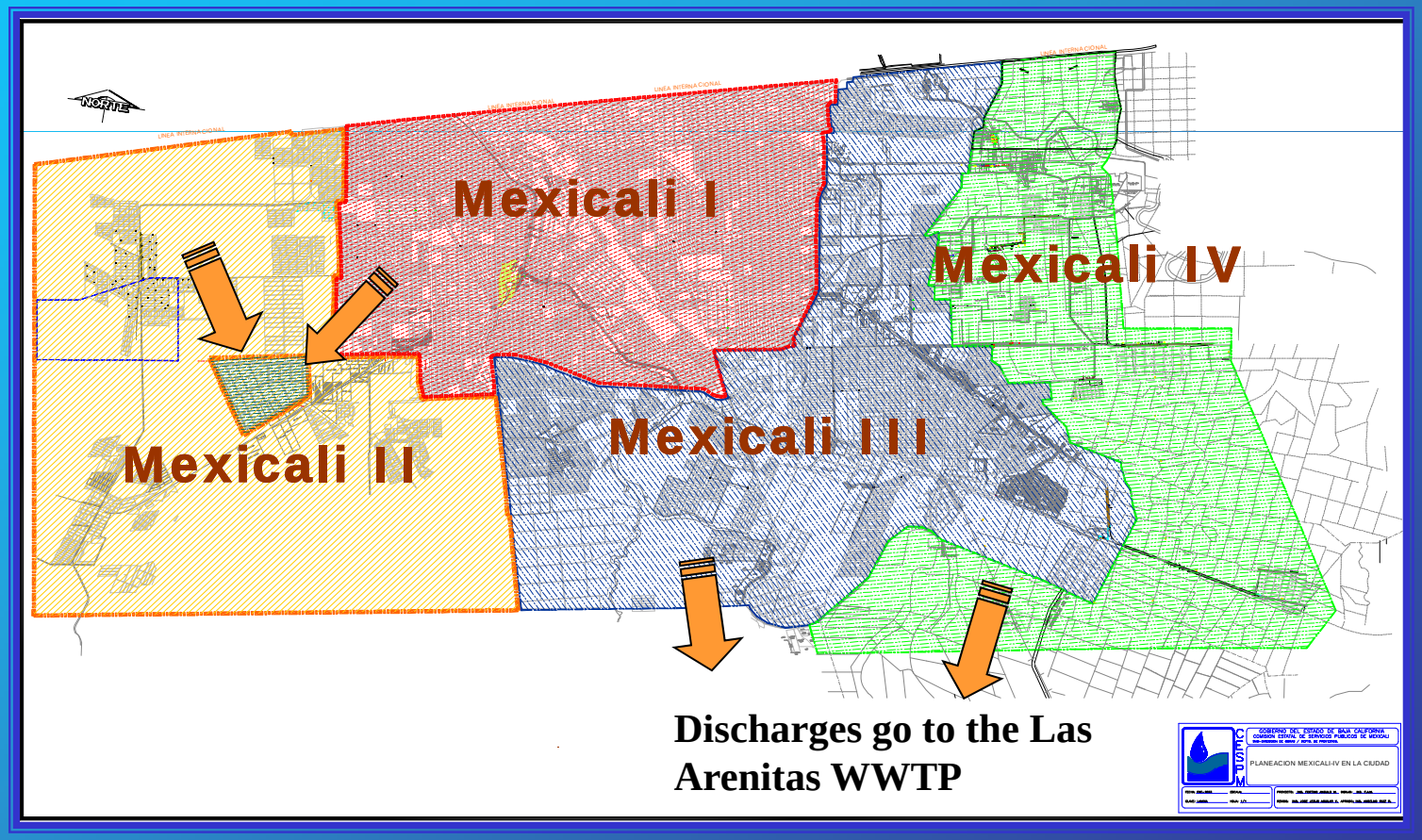
Binational Technical Committee

Presentation Topics

- Background Information
- Minute 294 Binational Projects
  - Quick Fixes
  - Mexicali I
  - Mexicali II
- Mexicali IV
- Regulatory Efforts

New River in Mexico

Mexicali Service Areas



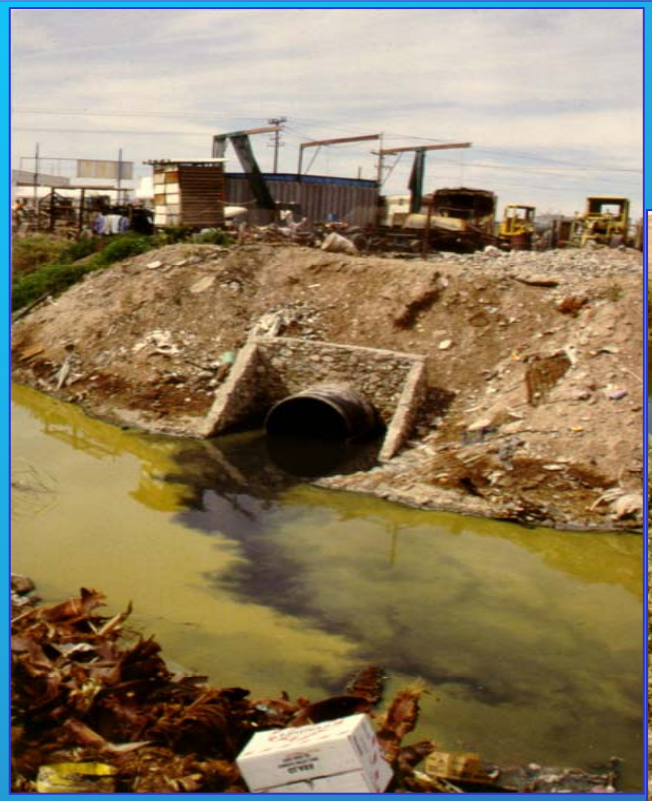
Background:

Late 80s early 90s

Trash Dumping

Industrial wastes

Spills and Bypasses



Sewage Collection System

Equipment Problems

Treatment Lagoons Problems

- Undisinfected
- High in nutrients
- High TSS

New River at Calexico

Total (Avg) = 150-200 cfs	
Municipal WWTFs Flow	20 %
Direct Industrial	7.5 %
Agricultural discharges	65 %
Other	3.5 %

About ~ 20 MGD of raw sewage

Pollution Problem (pre-2007)

Constituents of Concern	
Fecal, E. Coli	> 1,000,000
Dissolved Oxygen	< 1.0 mg/L
Nutrients (PO4)	40% of Load to Salton Sea
VOCs	Some detected
Trash	> 150 cu yds/year
Pesticides	Detected

Avg Flow ~120 MGD

Binational Sanitation Projects

Binational Technical Committee

The 1990s Plan for Border Pollution

- Quick Fixes
  - 11 Emergency repairs

  $7.5 M

- Mexicali I Projects
  - Sewer main rehabilitation (~20 miles)
  - Telemetry equipment
  - Expected completion by 2004

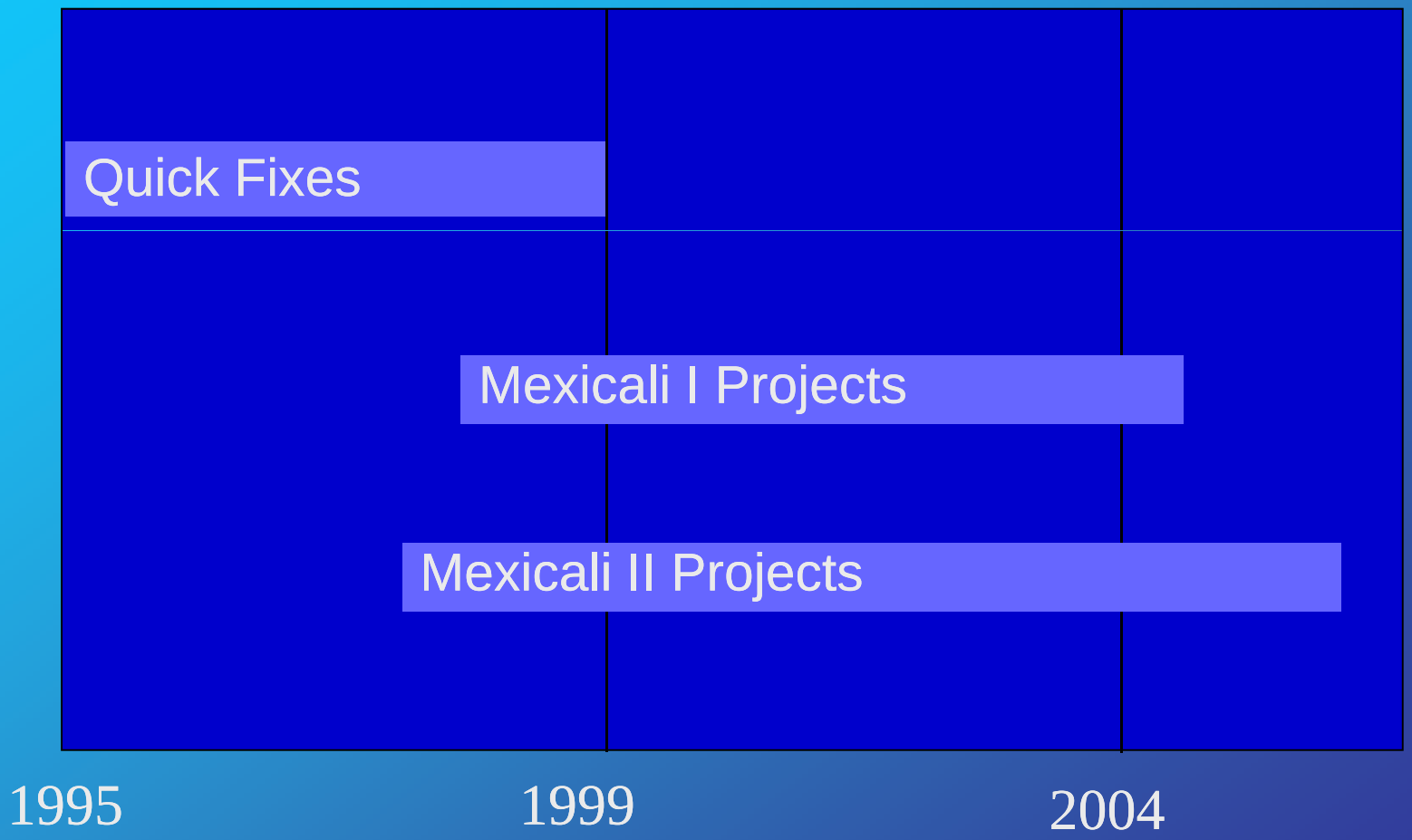
  $51 M

- Mexicali II Projects
  - New 20-mgd pumping plant
  - New 20-mgd force main
  - New 20-mgd treatment plant

  $26 M

Las Arenitas WWTP

Projects in Mexicali



2008 Binational Monitoring Program

Appendix A – New River Sampling Stations

New River at the Border

Issue	Pre Binational Projects	Post Binational Projects
Fecal, E. Coli	> 1,000,000	~ 8,000 – 60,000
Dissolved Oxygen	< 1.0 mg/L	~ 3—5 mg/L
Trash	> 150 cu yds/year	> 150 cu yds/year
Selenium	< 5 ppb	> 5 ppb
Nutrients (PO4)	40% of Load to Salton Sea	20% of Load to Salton Sea
Toxicity	Detected	Still a problem
VOCs	Some detected	Non-detect

Avg Flow ~ 80-100 MGD

Mexicali IV

Sewage Collection System for Mexicali IV

1.- SUB COLLECTOR ABASOLO

2.- COLLECTOR ABASOLO

3.- LIFT STATION ABASOLO

4.- FORCE MAIN ABASOLO

5.- COLLECTOR LADRILLEROS

6.- COLLECTOR ISLAS AGRARIAS

7.- LIFT STATION ISLAS AGRARIAS

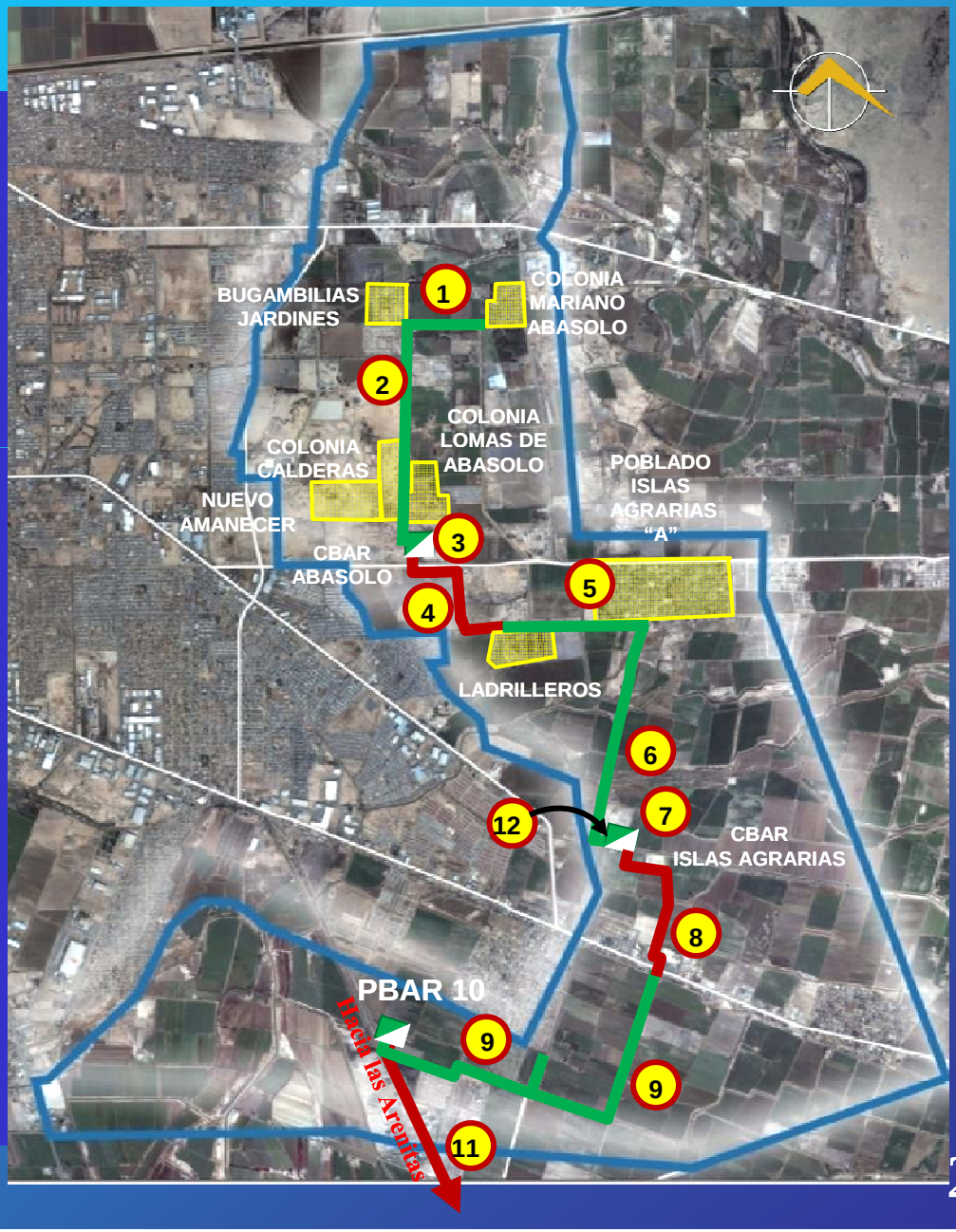
8.- FORCE MAIN ISLAS AGRARIAS

9.- COLLECTOR M4

10.- PUMPING PLANT #10.

11.- FORCE MAIN 10 TO ARENITAS.

12.- LIFT STATION ISLA AGRARIA



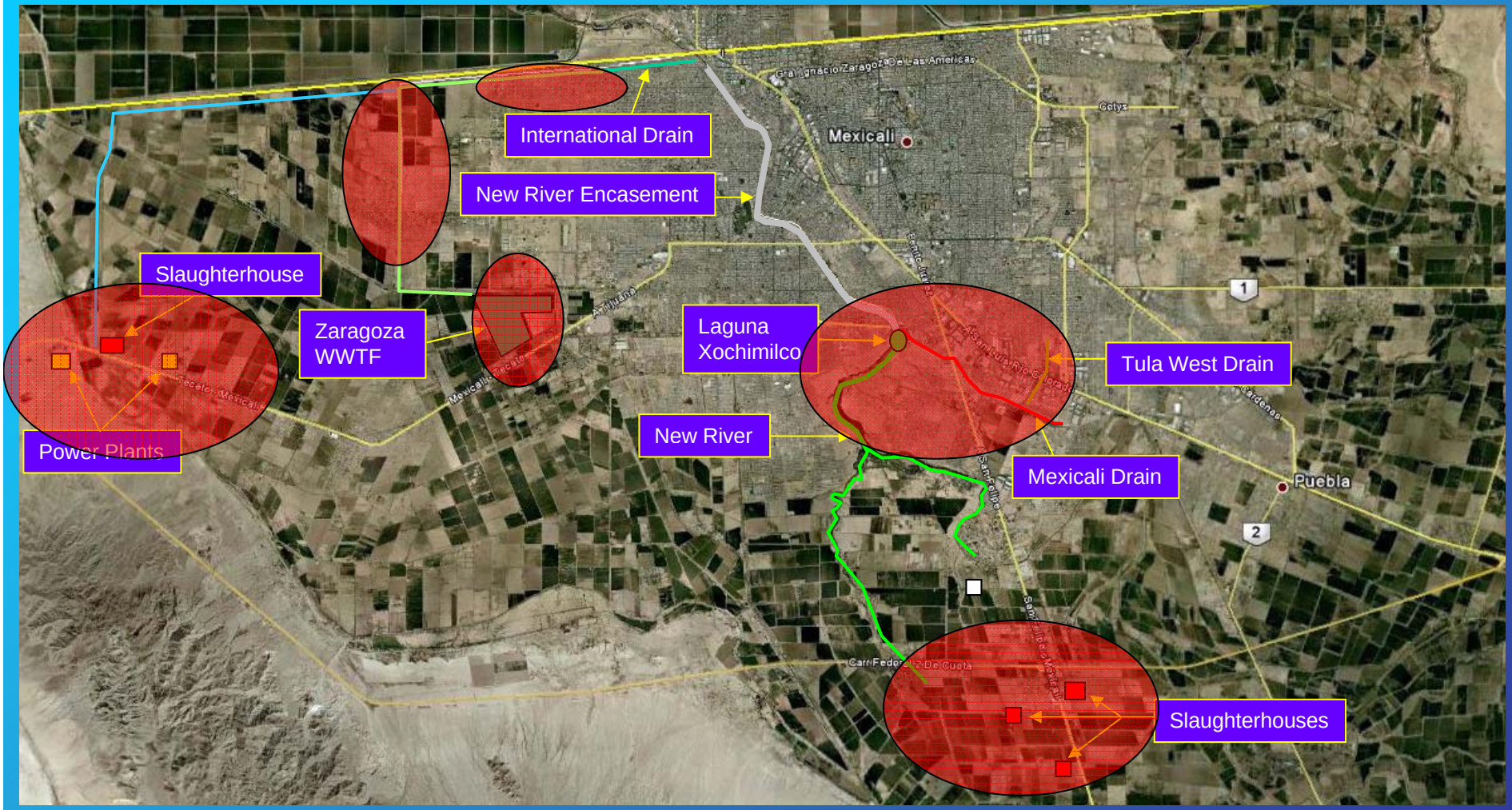
Lift Station Abasolo

Lift Station Islas Agrarias

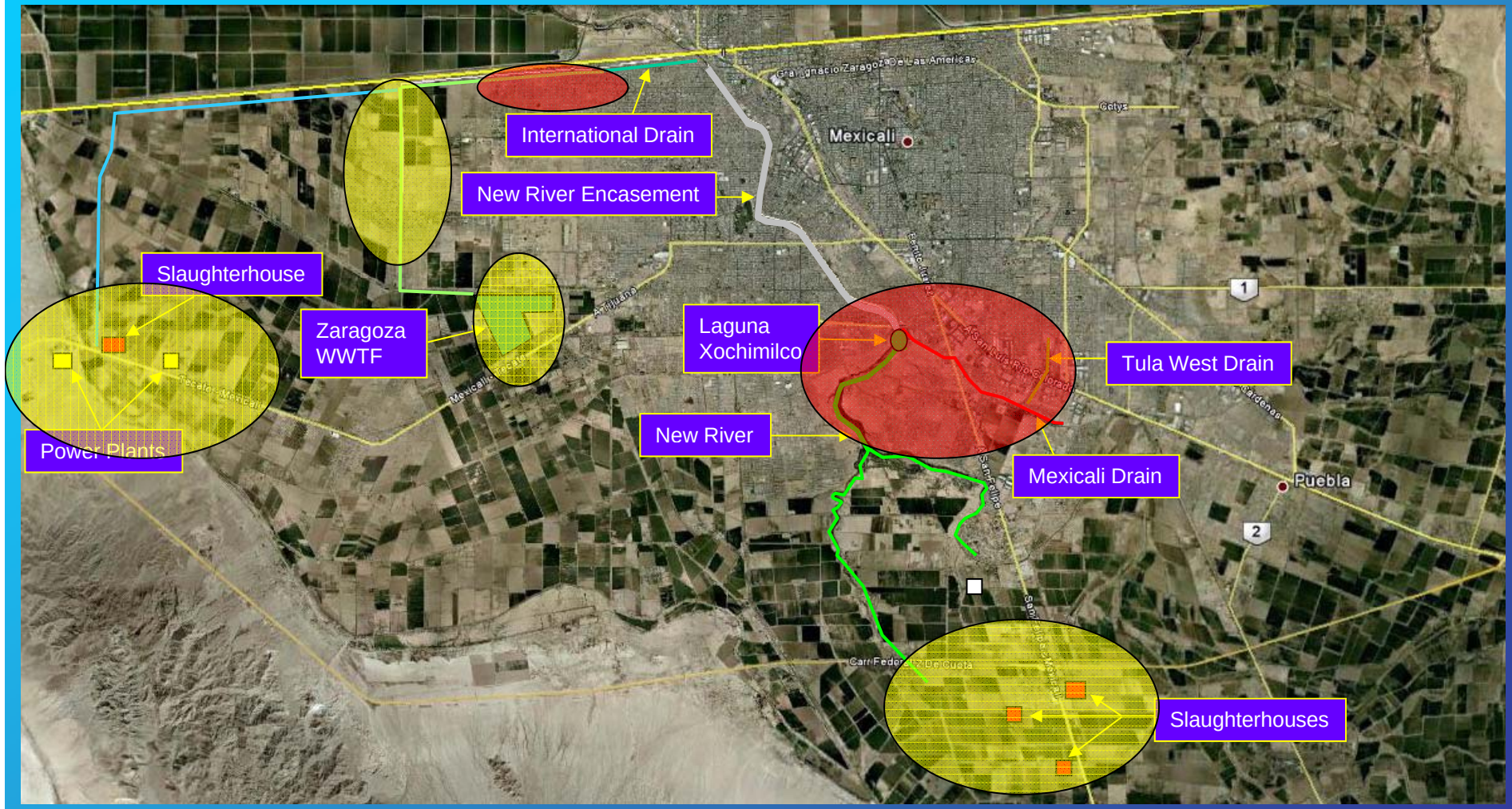
Pumping Plant No. 10

Regulatory Efforts

New River in Mexico



New River in Mexico

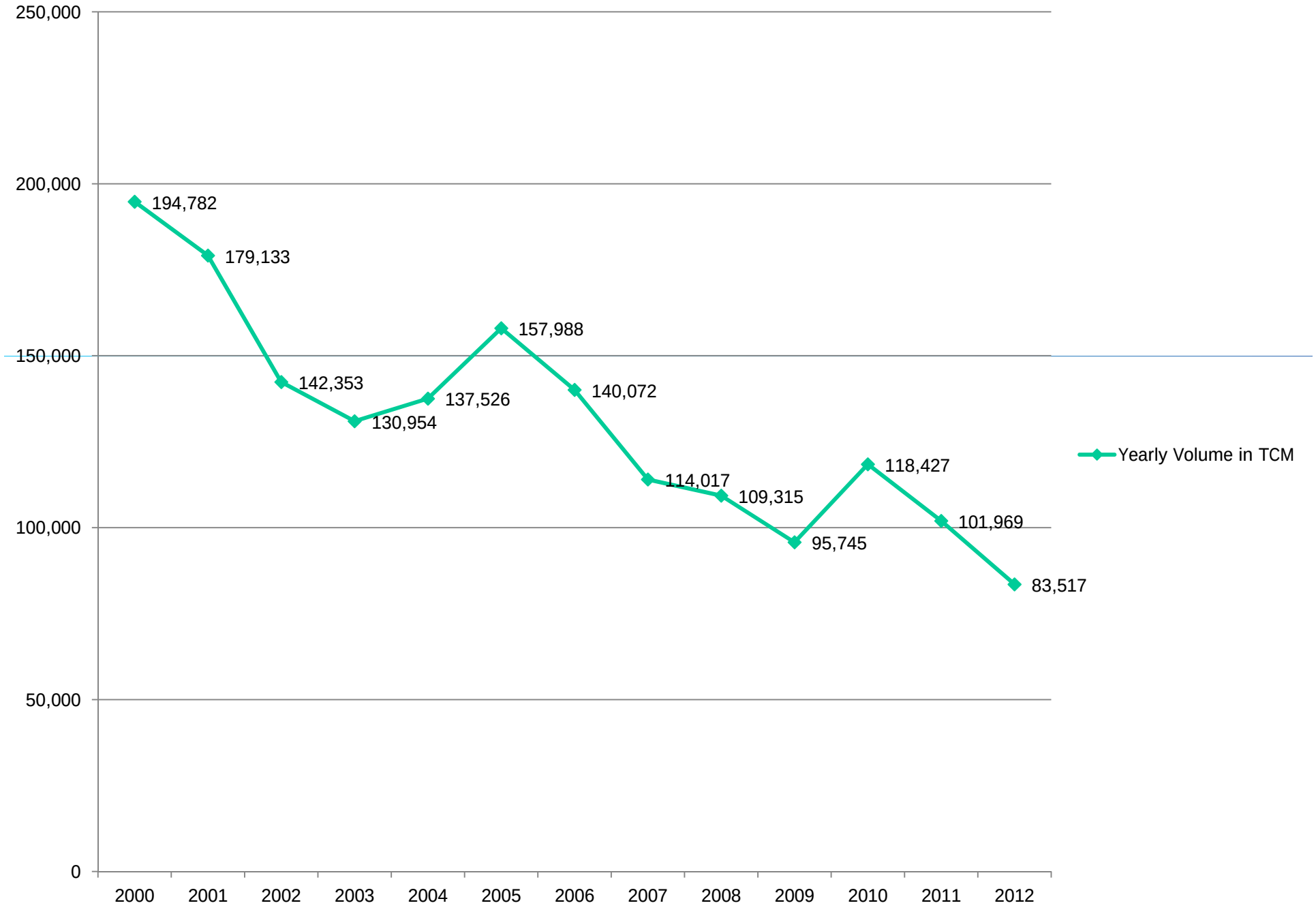


Don Fileto (Slaughterhouse)

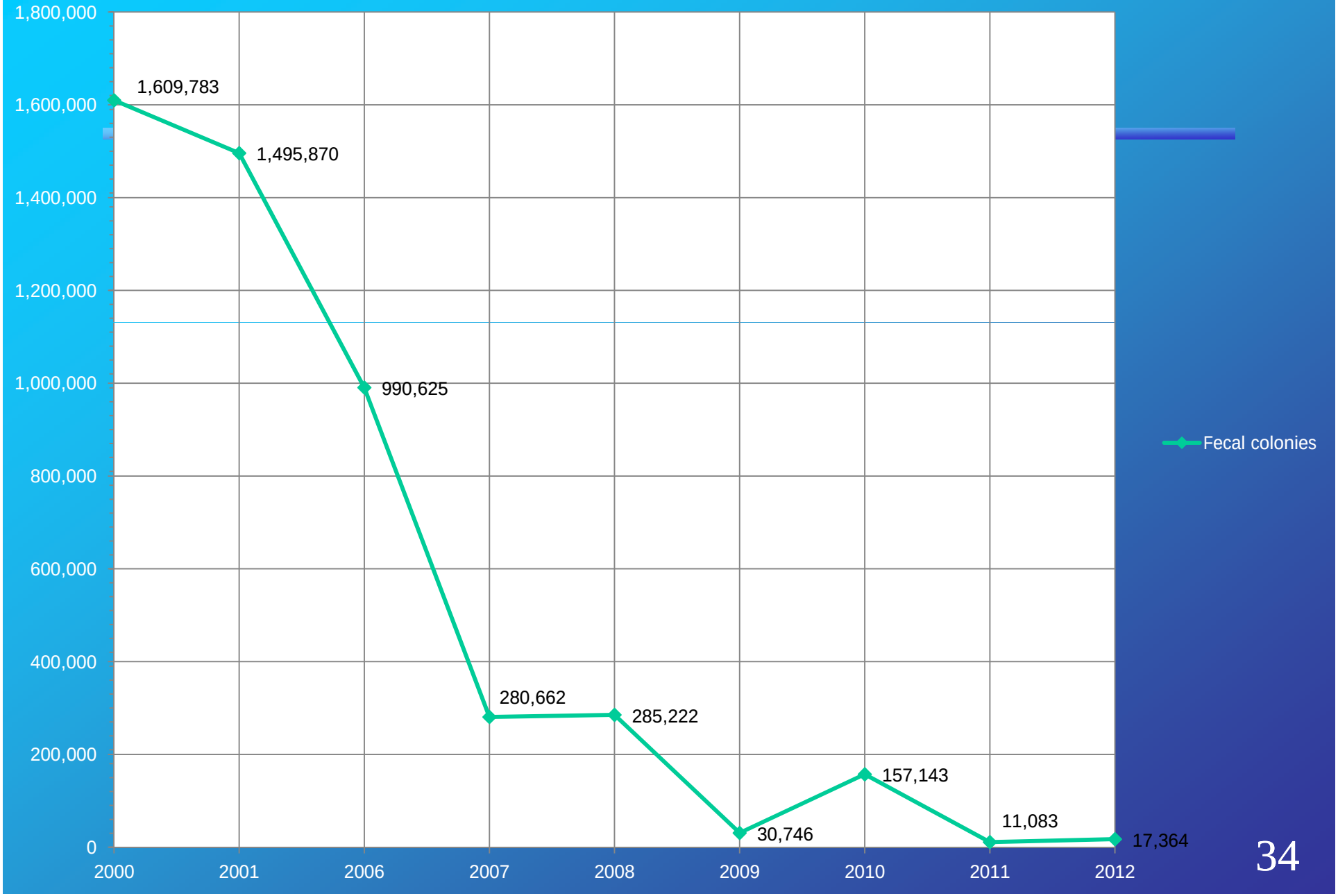
Su Karne (Slaughterhouse)

Su Karne
2013

New River @ International Boundary



Fecal Coliform Colonies/100 ml



New River Encasement

Comments?