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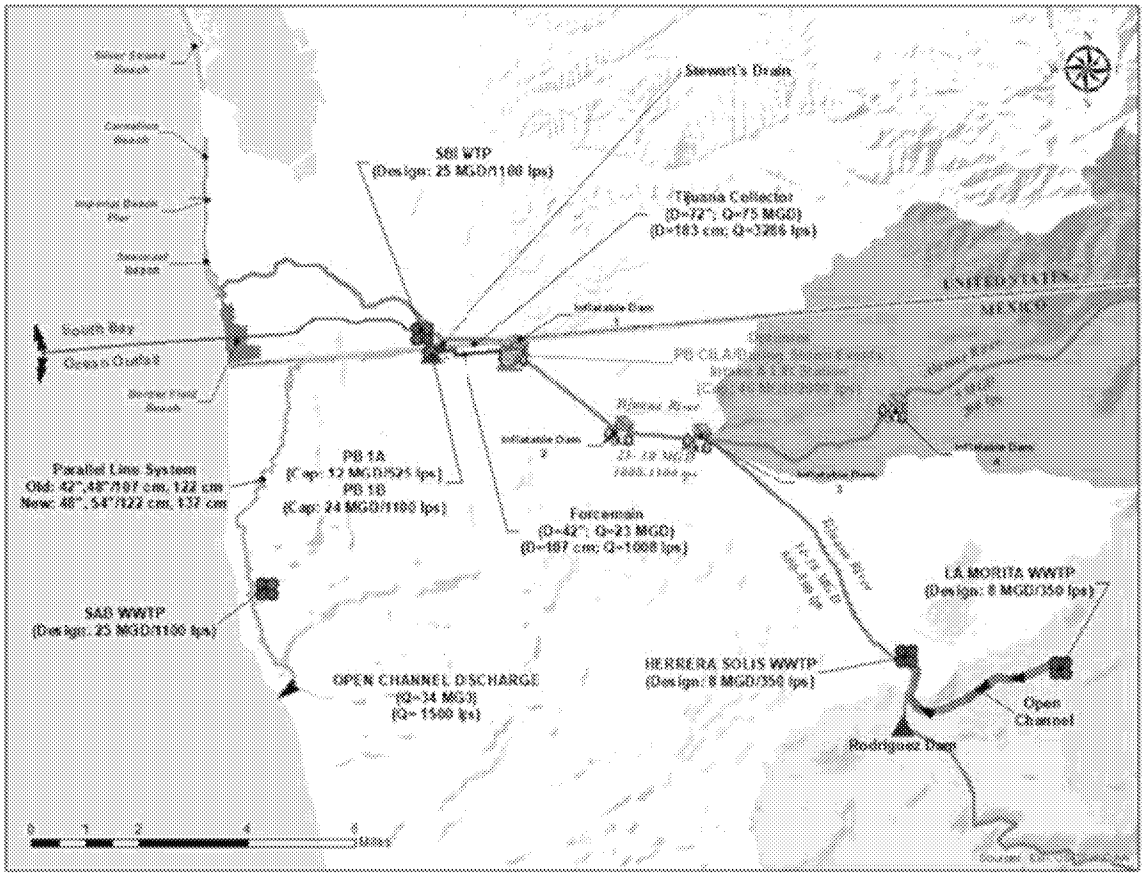
Alternative 2c - Existing Facility Optimization: Operational modifications for During Storm Event Operations

Infrastructure optimization includes improvements to the following:

- All improvements from Alternative 2b
- Addition of four inflatable dams
- Capital Cost: Cost: **$36.7M USD**



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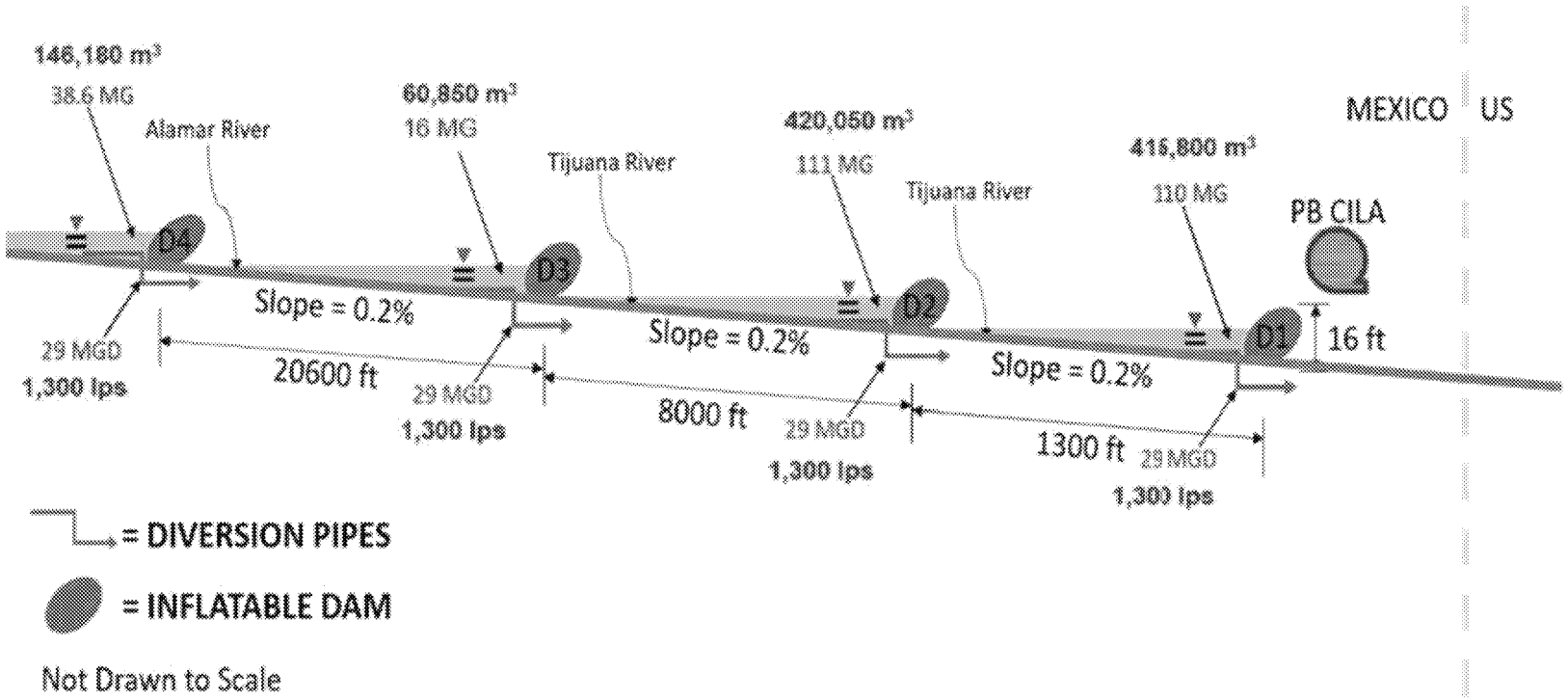
Alternative 2c - Existing Facility Optimization: Operational modifications for During Storm Event Operations



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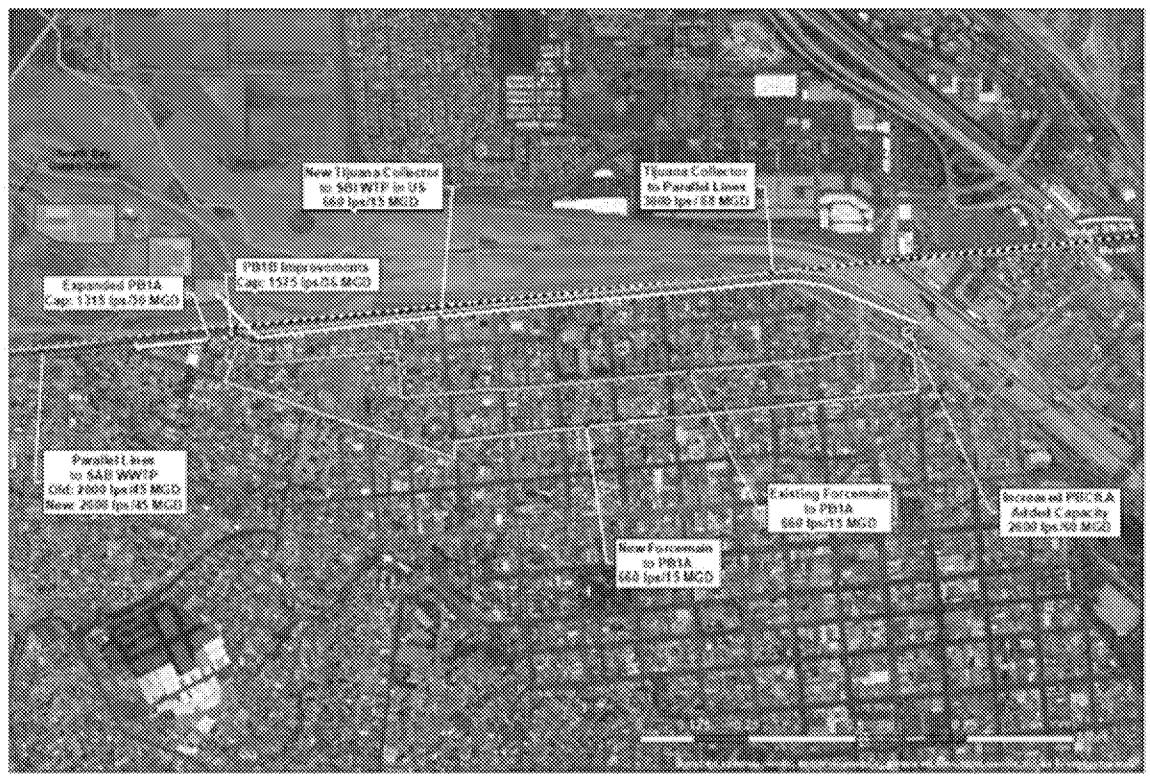
Alternative 3a – Capacity Increase: New Diversion and conveyance infrastructure in Mexico including expanding intake, conveyance and Pump at PBCILA, PB1A&1B

Infrastructure expansion and optimization includes the following improvements:

- Intake expansion, PBCILA expansion, Forcemain expansion from PBCILA to PB1A
- Pump stations with add 30 MGD (1,300 lps) of flows for PB1A and PB1B and generator
- Additional line added to Parallel Line system to tie into SAB WWTP
- Capital Cost: **$109.4M USD**



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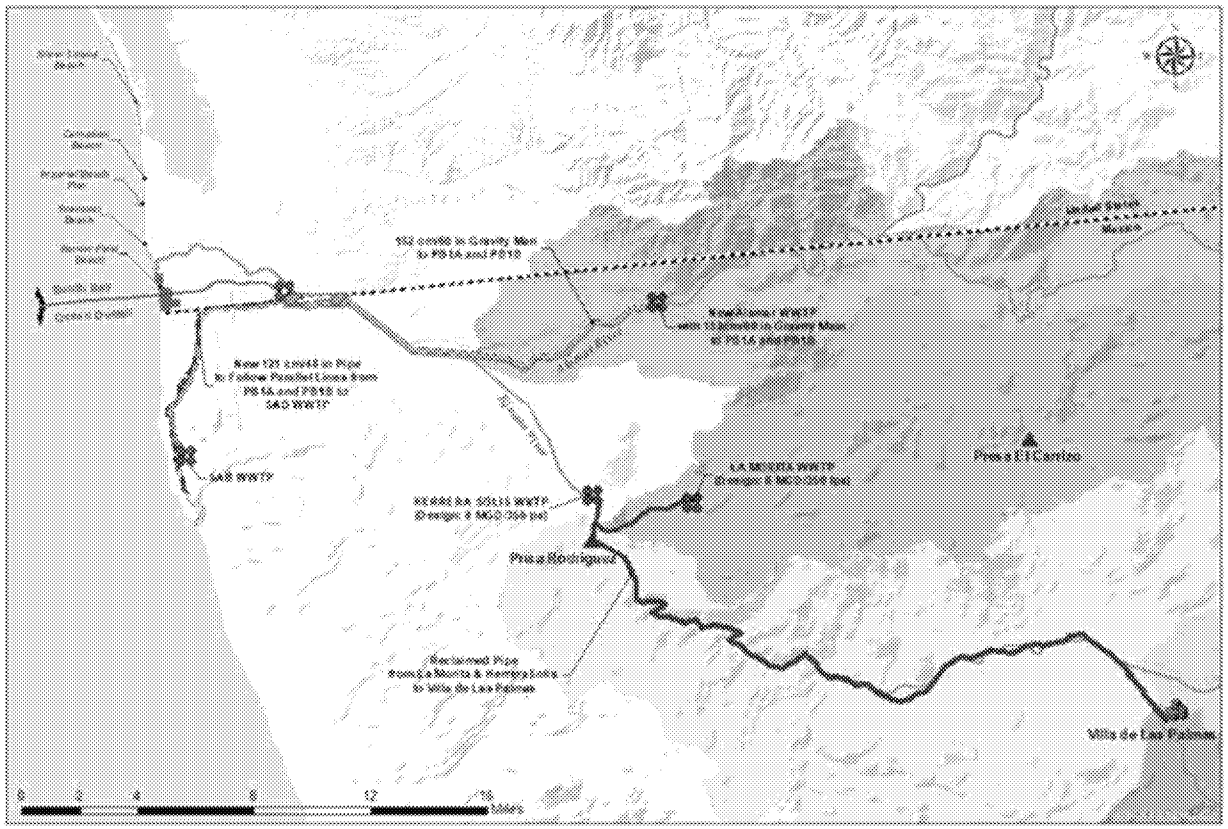
Alternative 3b - Gravity WW/reclaimed water pipeline System from Alamar, La Morita/Herrera Solis WWTPs with discharge directly to PB1A, and infiltration at Valle de las Palmas

Infrastructure expansion and optimization includes the following improvements:

- Improvements from Alternative 3a
- Addition of a proposed 32 MGD (1,400 lps) WWTP at Alamar
- New 104 km reclaimed water pipe to Villa de las Palmas
- Capital Cost: **$211.7M USD**



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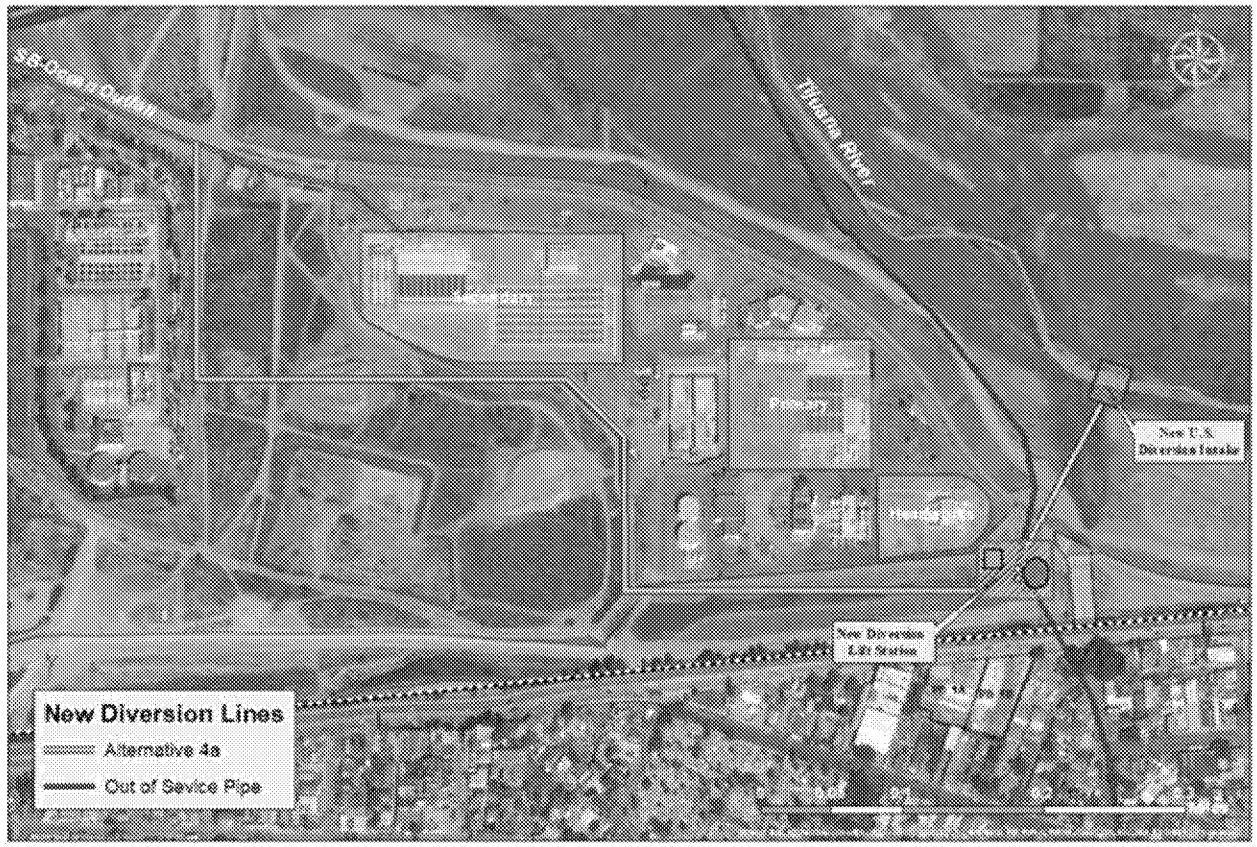
Alternative 4a - New Lift Station to discharge directly to South Bay Ocean Outfall (SBOO) without treatment

US based alternatives infrastructure includes the following:

- Concrete river intake box
- 35 MGD (1,500 lps) Lift station
- 5,100 linear feet (1,555 meters) new ductile iron pipelines, (36 and 42 inch diameter)
- Tie in to SBOO
- Capital Cost: **$22.1M USD**



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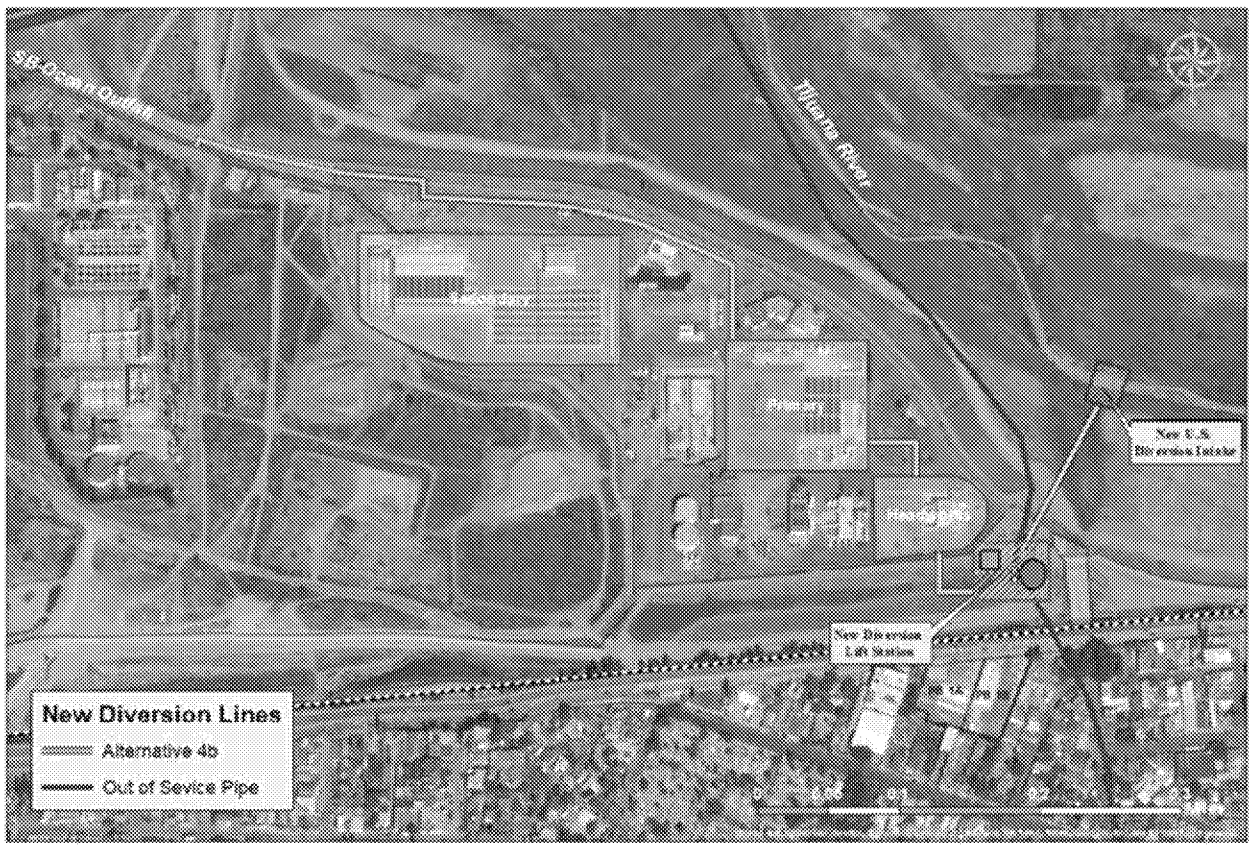
Alternative 4b - New Lift Station to Discharge at South Bay International Wastewater Treatment Plant (SBIWTP) for primary treatment only

US based alternatives infrastructure includes the following:

- Alternative 4a lift station components
- 3,500 linear foot (1,080 meters) new ductile iron pipeline (36 and 42 inch diameter)
- SBI WTP improvements to have additional 35 MGD treated through primary treatment
- Capital Cost: **$36.8M USD**



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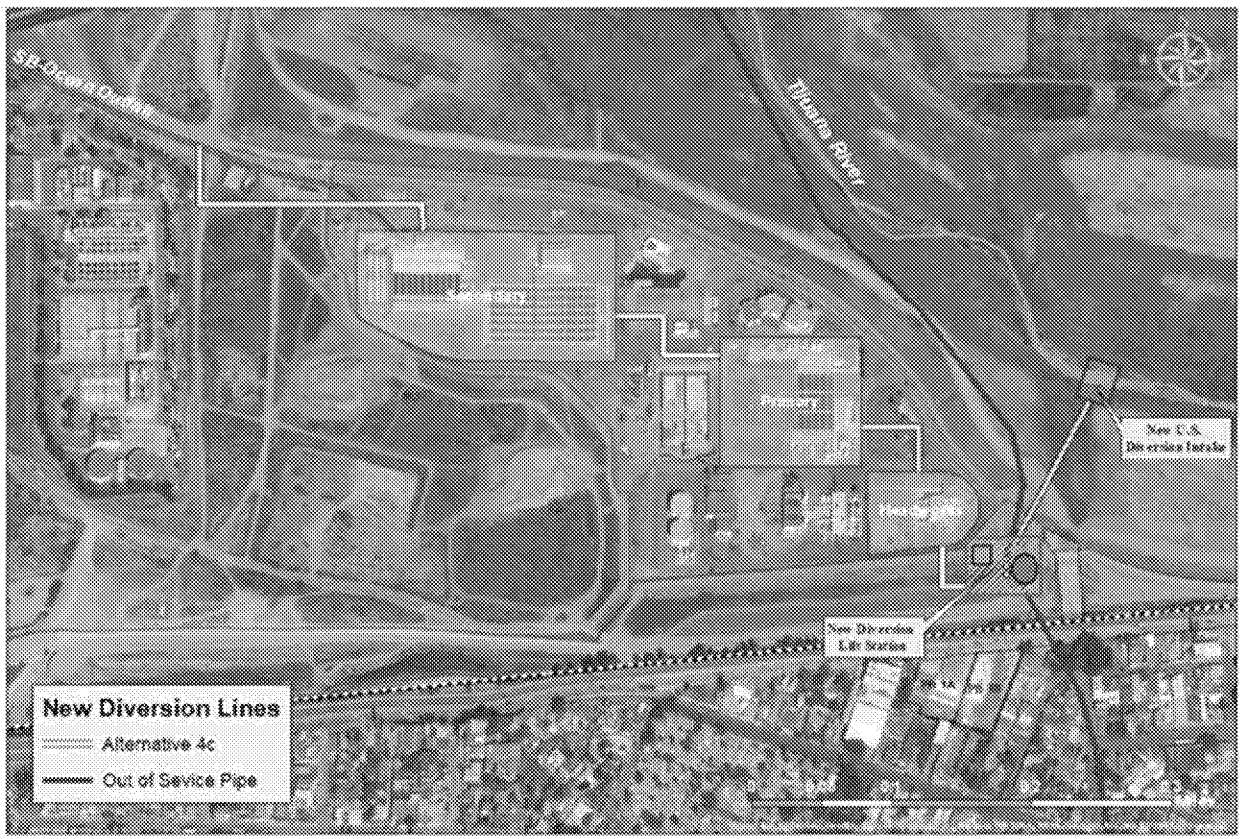
Alternative 4c - New Lift Station to Discharge at SBIWTP for full plant treatment

US based alternatives infrastructure includes the following:

- Additions from 4b
- Addition of improvements for secondary treatments including activated sludge and sedimentation basins
- 35 MGD (1,500 lps) additional treated flow through the full plant
- Capital Cost: **$210.1M USD**



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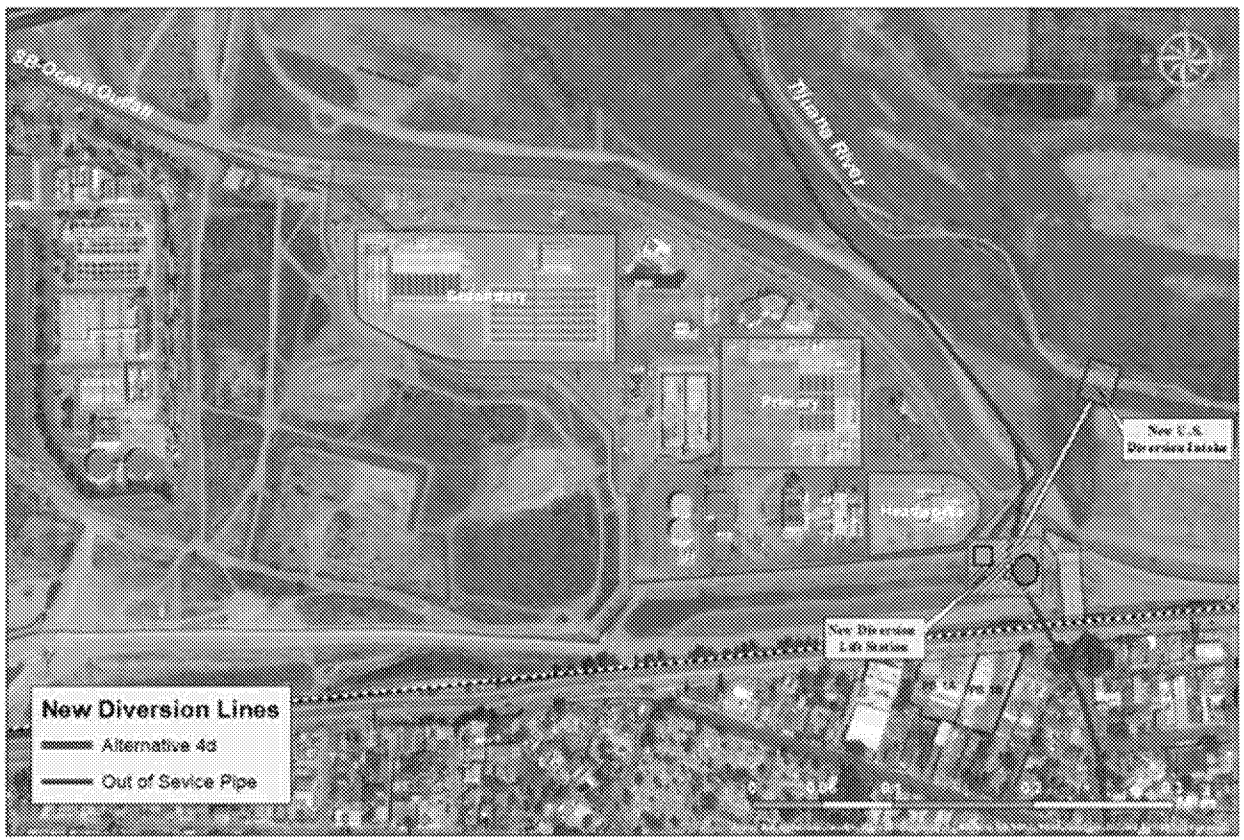
Alternative 4d - New Lift Station to Discharge at Point Loma WWTP

US based alternatives infrastructure includes the following:

- Concrete river intake box
- 35 MGD (1,500 lps) Lift station
- Tie in to abandoned pipeline
- Wastewater pipeline replacement and tie-in
- 35 MGD combined flow diverted into force main leading to Point Loma WWTP
- Capital Cost: **$36.2M USD**



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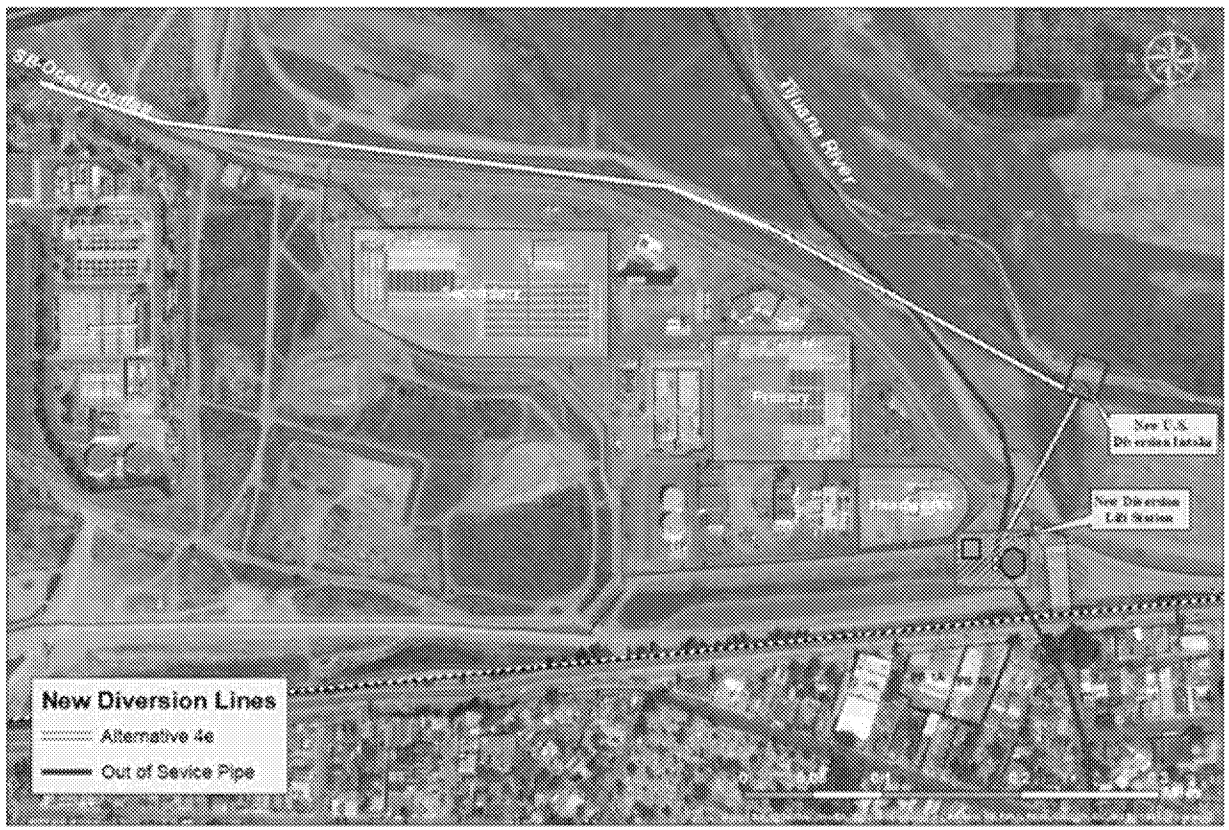
Alternative 4e – Gravity flow to the SBOO

US based alternatives infrastructure includes the following:

- 4,200 linear foot (1,280 meters) new RCP 48 inch pipe to have additional 35 MGD flows to tie in to SBOO
- Capital Cost: **$15.2M USD**



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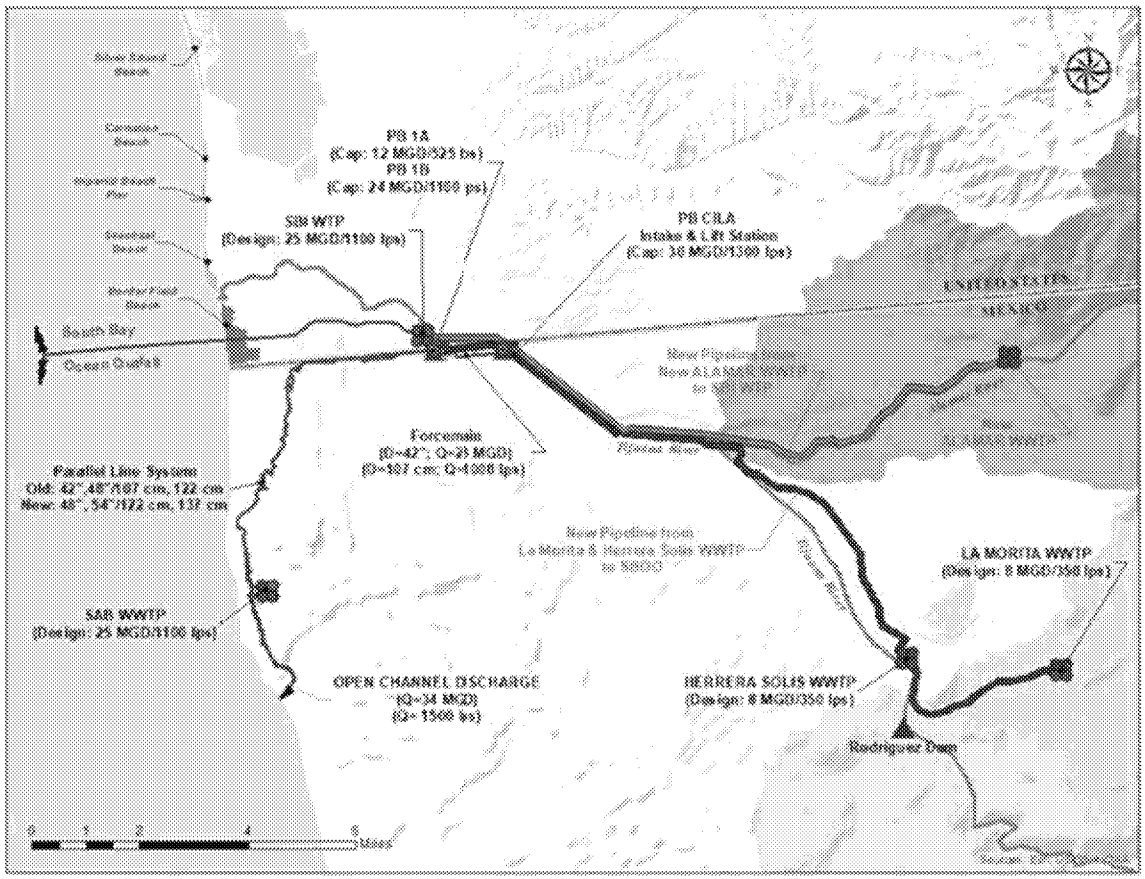
Alternative 5a - Gravity reclaimed water pipeline System from La Morita/Herrera Solis WWTPs to SBOO

Combined diversion facilities in the U.S. and Mexico include:

- New reclaimed water pipeline extending 12 miles (20 km) through Tijuana from La Morita/Herrera Solis WWTPs effluent to SBOO
- Proposed WWTP at Alamar
- 11 miles (18 km) Reclaimed water pipeline connecting Alamar WWTP with discharge to SBOO
- Capital Cost: **$233.3M USD**



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