Improving Water Quality in the Tijuana River Valley

Project #7: Divert or Reuse Treated Wastewater from Existing Wastewater Treatment Plants in Mexico to Reduce Flows into the Tijuana River

Overview

This project includes improvements to conveyance and reduces untreated wastewater flows in the Tijuana River by providing additional capacity to divert or reuse treated wastewater from existing wastewater treatment plants in Mexico. This is done by diverting treated water south of the border into the Rodriguez Dam impoundment for reuse or by constructing pipelines to convey treated wastewater from the wastewater treatment plants in Mexico to the South Bay Ocean Outfall (SBOO) for disposal to the Pacific Ocean. This project will:

- Provide a source for indirect potable reuse in Tijuana.
- Reduce the need to divert and treat river water at the border, and ultimately reduces the quantity and frequency of transboundary flows.

Project at a Glance

Location of Operations	Mexico and possibly United States
Entry Points Addressed	Tijuana River
Targeted Pollutant(s)	Untreated Wastewater

Will this project increase public health and beach water quality?

This project will result in an overall reduction in transboundary flows from Mexico to the U.S. EPA is assessing how effective the project will be in protecting public health.

Does this project improve work conditions for government activities?

This project will reduce transboundary flows in the Tijuana River, reducing hazards to U.S. Border Patrol and U.S. Navy personnel. However, it will not reduce transboundary flows in the canyons.

COST ESTIMATES	
Capital	$ 21M - 78M
Annual O&M[1]	$40K- 365.5K
40-year lifecycle	$34M – 79M

TRANSBOUNDARY TIJUANA RIVER IMPACT (Annual Benefit)	
Flow day reduction	20%
Flow rate reduction	4%
Sewage reduction[2]	44%

SAB CREEK IMPACT (Annual Benefit)	
Flow rate reduction	11%
Sewage reduction	-4% (increase)

BEACH CLOSURE IMPACTS (Annual Benefit)	
Closure reduction[3]	5%

LEGEND

[1] O&M: Operations and maintenance
[2] Estimates of sewage reduction are based on the reduction of BOD (biochemical oxygen demand), a standard surrogate for sewage
[3] Beach closure reduction estimates are based on Scripps Institution of Oceanography models

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