

TIJUANA RIVER NEEDS AND OPPORTUNITIES ASSESSMENT - ALTERNATIVE EVALUATION MATRIX

Alternative	Projects	Description	Metrics											
			Estimated Cost ¹	Avg. Trans-boundary Flows ² (baseline of 138 days/yr ³)	Implementation and O&M			Environmental		Community/Societal				
					Technical Feasibility	Operating Complexity	Sustainability (i.e., energy usage)	Impact to Habitat (River Valley)	Impact to Habitat (Ocean)	Environmental Justice	Ancillary Community Benefits	Community Disruption	Public Support	
					Ratings									
A	3a/4a	Diversion of up to 35 mgd to New SBIWTP for Primary Treatment and Discharge to Deep Ocean through SBOO	Implementation: \$78M Annual O&M: \$1.9M/yr Env. Monitoring: \$10M	56 days (61%)										
B	3b/4b	Diversion of up to 100 mgd to New SBIWTP for Primary Treatment and Discharge to Deep Ocean through SBOO	Implementation: \$167M Annual O&M: \$2.9M/yr Env. Monitoring: \$10M	20 days (84%)										
C	3c/4c	Diversion of up to 163 mgd to New SBIWTP for Primary Treatment and Discharge to Deep Ocean through SBOO	Implementation: \$230M Annual O&M: \$4.5M/yr Env. Monitoring: \$10M	12 days (91%)										
D	3c/4d	Diversion of up to 163 mgd to New SBIWTP for Primary Treatment and Discharge to Deep Ocean through SBOO, plus Additional Storage at New San Ysidro Basin	Implementation: \$408M Annual O&M: \$4.8M/yr Env. Monitoring: \$10M	12 days (91%)										
E	3a/4e	Diversion of up to 35 mgd to Existing SBIWTP for Primary Treatment and Discharge to Deep Ocean through SBOO (per NADB Tijuana River Diversion Study Alternative 4B)	Implementation: \$52M Annual O&M: \$7M/yr Env. Monitoring: \$10M	56 days (61%)										
F	5a/6a	Diversion of up to 20 mgd to Existing SBWRP and Discharge to Deep Ocean through SBOO	Implementation: \$47M Annual O&M: \$1M/yr Env. Monitoring: \$10M	75 days (46%)										
G	5b/6b	Diversion of up to 50 mgd to Existing SBWRP and Discharge to Deep Ocean through SBOO	Implementation: \$83M Annual O&M: \$1.5M/yr Env. Monitoring: \$10M	41 days (70%)										
H	7	Pumped Direct Discharge of up to 193 mgd to SBOO without Treatment	Implementation: \$22M Annual O&M: \$1.6M/yr Env. Monitoring: \$10M	9 days (93%)										
I	8	Gravity Flow Direct Discharge of up to 193 mgd to SBOO without Treatment	Implementation: \$87M Annual O&M: \$125K/yr Env. Monitoring: \$10M	9 days (93%)										
J	9	Tijuana River In-Stream Water Quality Detention Basin - 20 mgd	Implementation: \$75M Annual O&M: \$200K/yr Env. Monitoring: \$10M	75 days (46%)										

¹ Includes \$4M for environmental permitting and \$1M/yr for 10 years for environmental monitoring; environmental mitigation is excluded.

² This column includes the number of transboundary flow days per year estimated to remain unaddressed after implementation of the projects in each alternative. The percentage reflects estimated reduction in transboundary flow days/year from baseline.

³ Per EPA's Tijuana River Diversion Study

- Positive Impact
- Moderate Impact
- Negative Impact

TIJUANA RIVER NEEDS AND OPPORTUNITIES ASSESSMENT - ALTERNATIVE EVALUATION MATRIX

Alternative	Projects	Description	Metrics										
			Estimated Cost ¹	Potential Benefit	Implementation and O&M			Environmental		Community/Societal			
					Technical Feasibility	Operating Complexity	Sustainability (i.e., energy usage)	Impact to Habitat (River Valley)	Impact to Habitat (Ocean)	Environmental Justice	Ancillary Community Benefits	Community Disruption	Public Support
					Ratings								
K	1/2	Tijuana River Trash Booms and Sedimentation Basins (per IBWC's Tijuana River Basin Feasibility Study)	Implementation: \$18M Annual O&M: TBD Env. Monitoring: \$10M	Removal of 20,500 tons of trash and sediment (5-year)									
L	10/11a	Smuggler's Gulch Trash Boom and In-Line Sedimentation Basin	Implementation: \$6.2M Annual O&M: \$1.1M/yr Env. Monitoring: \$10M	Removal of 15,600 tons of trash and sediment (5-year)									
M	10/11b	Smuggler's Gulch Trash Boom and In-Line/Off-Line Sedimentation Basin	Implementation: \$7M Annual O&M: \$1.1M/yr Env. Monitoring: \$10M	Removal of 16,100 tons of trash and sediment (5-year)									
N	16	Sedimentation and Trash Management in Goat Canyon	Annual O&M: <\$5M	Reduced ongoing cost for use and/or removal of captured sediment and trash									

¹ Includes \$4M for environmental permitting and \$1M/yr for 10 years for environmental monitoring; environmental mitigation is excluded.

- Positive Impact
- Moderate Impact
- Negative Impact

TIJUANA RIVER NEEDS AND OPPORTUNITIES ASSESSMENT - ALTERNATIVE EVALUATION MATRIX

Alternative	Projects	Description	Metrics											
			Estimated Cost ¹	Potential Benefit	Implementation and O&M			Environmental		Community/Societal				
					Technical Feasibility	Operating Complexity	Sustainability (i.e., energy usage)	Impact to Habitat (River Valley)	Impact to Habitat (Ocean)	Environmental Justice	Ancillary Community Benefits	Community Disruption	Public Support	
					Ratings									
O	12	Smuggler's Gulch Retrofit Low Flow Diversion	Implementation: \$13M Annual O&M: \$500K/yr Env. Monitoring: \$10M	Diversion of up to additional 30 MGD	●	●	●	●	●	●	●	●	●	●
P	13	Smuggler's Gulch In-Stream Water Quality Detention Basin	Implementation: \$44M Annual O&M: \$1.5M/yr Env. Monitoring: \$10M	Diversion of up to additional 163 MGD	●	●	●	●	●	●	●	●	●	●
Q	14	Goat Canyon Retrofit Low Flow Diversion	Implementation: \$15M Annual O&M: \$500K/yr Env. Monitoring: \$10M	Diversion of up to additional 30 MGD	●	●	●	●	●	●	●	●	●	●
R	15	Goat Canyon Retrofit In-Stream Water Quality Detention Basin	Implementation: \$44M Annual O&M: \$1.5M/yr Env. Monitoring: \$10M	Diversion of up to additional 163 MGD	●	●	●	●	●	●	●	●	●	●
S	17	Yogurt Canyon Low-Flow Diversion	Implementation: \$14M Annual O&M: \$500K/yr Env. Monitoring: \$10M	Diversion of up to additional 30 MGD	●	●	●	●	●	●	●	●	●	●
T	18	Yogurt Canyon Pilot Channel	Implementation: \$9M Annual O&M: \$5K/yr Env. Monitoring: \$10M	Reduce sediment and freshwater impacts to TJR Estuary; reduce flooding on Monument Road	●	●	●	●	●	●	●	●	●	●
U	27	Tijuana Estuary Tidal Restoration Program (TETRP)	Implementation: \$200M Annual O&M: TBD Env. Monitoring: \$10M	Provides increased function of ecological wetland processes	●	●	●	●	●	●	●	●	●	●

¹Includes \$4M for environmental permitting and \$1M/yr for 10 years for environmental monitoring; environmental mitigation is excluded.

-  Positive Impact
-  Moderate Impact
-  Negative Impact