

# International Boundary and Water Commission United States and Mexico

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## TRANSBOUNDARY ISSUES IN THE TIJUANA RIVER BASIN NEWSLETTER



Through Minute 320 of the International Boundary and Water Commission, United States and Mexico (IBWC), entitled "*General Framework for Binational Cooperation on Transboundary Issues in the Tijuana River Basin*," dated October 5, 2015, different issues have been identified in the Tijuana River basin requiring binational coordination between the United States and Mexico to address them. The Minute identifies the priority topics of common interest in this basin as water quality, sediment, and solid waste.

Minute 320 established a Binational Core Group composed of federal, state, and local government agencies as well as non-governmental organizations (NGOs) from both countries and tasked it with establishing Binational Work Groups (BWG). These groups meet to discuss the issues that require attention, as well as to explore different opportunities for cooperation on the three priority themes.

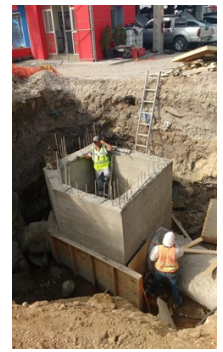
This newsletter summarizes the status of implementing recommendations derived from the investigation of the wastewater spill to the Tijuana River that occurred during the first week of February 2017. It also summarizes the actions carried out by the Commission and the Minute 320 Work Groups during the months of January through June of 2019 2018.

### **A) WATER QUALITY:**

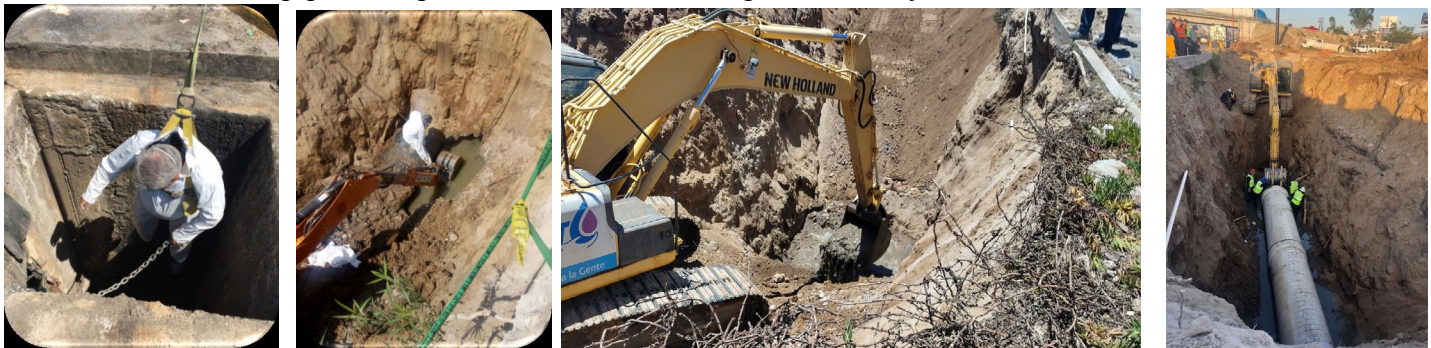
During March and April of 2017, a binational investigation was carried out on the spill of untreated wastewater that was bypassed into the Tijuana River. This bypass occurred because of the rupture of a section of the "Insurgentes" collector, in the vicinity of the confluence between the Tijuana and Alamar Rivers, in Tijuana, Mexico. According to the recommendations derived from the investigation, the institutions of both countries that make up the Minute 320 Water Quality BWG have done the following:

- 1. Equipment for emergency situations:** The State Public Services Commission of Tijuana (CESPT) acquired equipment for the construction and maintenance of the sanitary sewer network.
- 2. Installation of flow meters:** The IBWC acquired and installed flow meters in the Tijuana River. Currently, there are 3 flow meters owned by the Commission that are operating in the Tijuana River. This will help quantify the amount of wastewater in the system or lost in the event of a spill.
- 3. Communication:** An international protocol for spill notifications was prepared and is being used by the responsible agencies of both countries. Likewise, a requirement to notify the IBWC was included in the CESPT emergency response protocol when spills occur with potential for cross-border impact. Also, a protocol for the operation of the PB-CILA pumping station was prepared. These protocols are available on our website.

The previous volume of this Bulletin reported on the collapse of a segment of the Poniente Collector that occurred on December 10, 2018. This caused a discharge of wastewater into the Tijuana River channel and crossed the international border. PB-CILA pumping plant was out of operation during the event because of the rainy season generating volumes in the river that exceeded the pumping plant's maximum capacity of 1,000 liters per second (lps). CESPT carried out repair work in the months of January and February of this year. By the end of February, the work was completed, and the line was back in operation.



On June 23, another spill occurred in the Tijuana River, due to a rupture of another section of the Poniente Collector, located in the vicinity of the confluence with the Alamar River. CESPT diverted some of the flows to different sites in the network, reducing the discharge to the river to approximately 400 lps. Most of these volumes were captured by PB-CILA preventing their crossing to the United States, however, during peak hours they did cross the border. The pipeline replacement work was completed on July 1, 2019.



- Infrastructure Assessment:** In June, the "Executive Summary of the Tijuana River Diversion Study" was completed by Arcadis Company and financed by the United States Environmental Protection Agency (USEPA) through the North American Development Bank (NADB). This project generated proposals for new infrastructure alternatives in Mexico and the US to increase the flow management capacity of the Tijuana River and thereby reduce the number of days of cross-border spills and impacts to water quality in the river and water entering the Pacific Ocean. The executive summary of this study is available for download on the NADB website at the following addresses and the full study is slated for release on August 19, 2019:

In Spanish: [www.nadb.org/es/noticias/se-finaliza-esumen-ejecutivo-epa-bdan-del-diagnostico-del-sistema-de-devio-de-flujo-en-el-rio-tijuana](http://www.nadb.org/es/noticias/se-finaliza-esumen-ejecutivo-epa-bdan-del-diagnostico-del-sistema-de-devio-de-flujo-en-el-rio-tijuana)

In English: [www.nadb.org/news/tijuana-river-diversion-study](http://www.nadb.org/news/tijuana-river-diversion-study)

- Infrastructure Works:** CESPT is currently rehabilitating collectors identified as needing immediate repairs in Tijuana. The following table shows the progress of these works to date:

Collector	Goal	Start Date	Status
Insurgentes Collector, El Mexicano-Puerta Ermita	791 meters	6/25/18	69%
Insurgentes Collector, Parque Morelos-Los Alamos	714 m	6/25/18	15%
Oriente Collector, Buena Vista	494 m	6/8/18	62%
INV Collector, Fundadores-Estaban Calderon	1,066 m	6/25/18	48%
Poniente Collector, Viento Alisos-Cuauhtemoc, stage 1	207 m	6/16/18	80%
Poniente Collector, Viento Alisos-Cuauhtemoc, stage 2	604 m	7/2/18	73%
San Martin Collector, San Martin-Canon Del Sainz	535 m	6/25/18	76%

**Wastewater collector repairs:**  
**These works began in mid-2018, in which a total investment of \$86 million pesos (\$4.5 million dollars) will be allocated for the rehabilitation of a total of 4,411 linear meters of pipeline.**

- 6. Water Quality Monitoring:** Both Sections of the IBWC developed a Binational Monitoring Program to collect and analyze water quality in the Tijuana River and adjacent transboundary canyons from Dec 2018 to Nov 2019. The program includes sampling and analysis of conventional parameters, metals, organic and pathogens in water and in sediment. Samples are collected quarterly in the Canyons and monthly in the Tijuana and Alamar rivers, both in Mexico and in the US, and also includes monitoring after 2 precipitation events. The first collection of joint samples took place on December 7<sup>th</sup> and 8<sup>th</sup> and it corresponded to a rain event. At the end of the project, both Sections of the IBWC will summarize the results of the sampling and prepare a technical report to be published in both English and Spanish.



Preliminary review of the first quarter data, which occurred during the rainy months of December 2018 to February 2019, showed high levels of bacteria and other domestic wastewater parameters. Most other parameters were either not detected or had trace amounts. The results of the testing will be posted on the Minute 320 website once finalized.

California Beaches Reports issued their report *Heal the Bay* providing a grade for the health of California Beaches. All of the beaches near the Mexican border except for one received the worst grade of *F* during the rainy season, which is consistent with sewage-contaminated flow in the Tijuana River affecting the shoreline. Conversely, these beaches all received a grade of *A*, including one *A+*, during the dry season, indicating the effectiveness of the existing infrastructure to capture and/or treat dry-weather transboundary flows.

Source: <https://healthebay.org/>

- 7. Binational Field Inspections:** The IBWC conducts tours of the Tijuana River and tributary streams to detect, record and deal with wastewater spills with potential for cross-border impacts. The last binational inspection was conducted on July 24, 2019.

## **B) SEDIMENT:**

The USIBWC has awarded a contract to Stantec for a feasibility study to locate and size sediment basin(s) in the Tijuana River between the International Border and Dairy Mart Road to intercept sediment, transboundary flows, incidental wastewater flows, and capture debris and trash. The study will include Hydrologic/Hydraulic and Sediment Transport modeling. The study will develop alternatives and identify a preferred alternative. The study is currently at 60% and the results were presented on June 27, 2019

## **C) SOLID WASTE:**

The scope of work on the binational study for the installation of trash booms in different strategic sites along the Tijuana River on the U.S. and Mexican side has been developed and is awaiting funds to perform the feasibility study.