

# International Boundary and Water Commission United States and Mexico

## TRANSBOUNDARY ISSUES IN THE TIJUANA RIVER BASIN NEWSLETTER

Volume 5,  
February 2018



Through Minute 320 of the International Boundary and Water Commission, United States and Mexico (IBWC), entitled "*General Framework for Binational Cooperation 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 actions carried out by the Commission and the Minute 320 Work Groups during the month of February 2018. It also summarizes the recommendations derived from the investigation on the wastewater spill to the Tijuana River that occurred during the first week of February 2017.

### 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 as a result 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) has made a total investment of \$39.28 million pesos (\$2.12 million USD) for the acquisition of construction equipment and maintenance of the sanitary sewer network. Additionally, 100% of the funds for emergency equipment has been appropriated and the equipment has been purchased.
- 2. Installation of flow meters:** The IBWC acquired and installed flowmeters at three locations in the Tijuana River. Currently, the flow meters that are in operation in the Tijuana River are: one located downstream of the diversion of the Tijuana River into the pumping station "PB-CILA" immediately before the international border; one located immediately upstream of the diversion to PB-CILA; and one located in the Tijuana River downstream of the border in the U.S.

- 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 Mexican Section of the IBWC maintains a record of transboundary spills in the Tijuana River basin. From January 2017 to present, there have been 39 events of this nature, whose causes are varied but mainly due to: failures in the sanitary system or in the potable water system, high flows in the channels by the presence of rains, or suspension of electric power in PB-CILA. These spills have been treated according to the communication protocols mentioned in the preceding paragraph.
- 4. Infrastructure Assessment:** A scope of work for a contractor to perform a diagnosis of the existing bypass and pumping system was developed by the Minute 320 BWG. The diagnostic includes the evaluation of new infrastructure alternatives in Mexico and the United States to increase the flow management capacity of the Tijuana River. This diagnostic is being financed by the North American Development Bank (NADB), which has already begun the bidding process. The procurement activities are expected to be completed on or about March 30, 2018. The study is expected to take about 8 months.

**5. Infrastructure Works:**

CESPT has continued to carry out rehabilitation work on the critical wastewater collectors in Tijuana. These works carried out through the "Declaration of Emergency" issued by the State of Baja California and CESPT, amount to a total cost of \$ 170.7 million pesos (\$9.22 million USD), This total cost includes the costs for the acquisition of equipment and for the work of rehabilitation, dredging and installation of the pipes. It is estimated that Mexico needs \$87 million pesos (\$4.6 million dollars) to correct the major emergency collector's repairs in Tijuana.



Additionally, The Mexican Section of the IBWC will carry out the following rehabilitation and improvement activities of the "PB-CILA" system in the coming months:

- Installation of three (3) variable speed pumps with a capacity of 2700 gpm (170 liters per second) provided by the U.S. Section of the IBWC.
- Acquisition and installation of control panels for operation of the three (3) pumps.
- Hiring of personnel to continuously attend to the operation of PB-CILA.
- Installation of steel gratings in the pump intake and of two (2) settling basins inside the Tijuana River.
- Construction of a temporary dam in the channel of the Tijuana River adjacent to the construction site to capture small bypass flows.

- 6. Water Quality Monitoring:** Mexico's National Water Commission (CONAGUA) established monitoring sites on the Tijuana River and the Alamar River as part of its national water quality monitoring network and is currently monitoring these sites. In the United States, the USIBWC developed a water quality monitoring program for the Tijuana River as well as sampling any transboundary flows at each of the canyon collectors. This program is still being developed as stakeholder input is still in process.

- 7. Binational Field Inspections:** IBWC has made joint tours of the Tijuana River channel and tributary streams in order to detect and act on potential transboundary wastewater spills. Eventually, institutions from both countries will participate in these tours, such as CESPT, SPA-BC, U.S. Customs and Border Protection, USEPA, CONAGUA, etc. The next IBWC inspection is set for April 24, 2018

**The next BWG Meeting for the water quality work group is tentatively scheduled for April 13, 2018.**

## B) Sediment

The Sediment BWG has focused its efforts on studies, actions, and maintenance of the infrastructure to control the sediment in the upper part of the Tijuana River basin.

A study promoted by the sediment work group is expected to be carried out by the U.S. Army Corps of Engineers on the Hydrological, Hydraulic, and Sediment aspects of both the Mexican and American parts of the Tijuana River basin, based on the information available from both countries and collected during 2017.

The United States Section is preparing a work plan to remove approximately 40,000 cubic yards of sediment from the concrete lined section of the Tijuana River in the United States to prevent the sediment from moving downstream during a high flow event.

The Directorate of Works and Urban Infrastructure of the City of Tijuana currently performs preventive maintenance to the sediment retention structures in the city.

The Mexican Section of the IBWC with resources contributed from CONAGUA, is undertaking the bidding process for works to remove solid waste and sediment from the Tijuana River channel in México for 500 meters upstream of the international border.

**The next Sediment BWG meeting is tentatively scheduled for April 11, 2018.**

## 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 and its tributaries on both sides of the border is prepared and awaiting funds to submit for bid to perform the feasibility study.

The City of Tijuana, B. C, began a program called "TjLimpia", through which people from different offices such as of the Mayor of Tijuana, delegations, as well as citizens and other institutions joined forces to remove more than 20 tons of garbage in the city. In addition to this effort, the Municipal Public Services Directorate has carried out cleaning in different areas of the city collecting more than 170 tons of waste, some of these activities were carried out in the Divina Providencia neighborhood, Terrazas de San Bernardo, Aguaje de la Tuna , and Federico Benítez Boulevard, among others.



**The next Solid Waste BWG meeting is tentatively scheduled to meet on April 11, 2018**

For more information, please contact either: USIBWC: Wayne Belzer (wayne.belzer@ibwc.gov), MXIBWC: Manuel Morales (amorales@cila.gob.mx) or visit our website at <https://www.ibwc.gov/Organization/Environmental/Minute320.html>