

International Boundary and Water Commission United States and Mexico

TRANSBOUNDARY ISSUES IN THE TIJUANA RIVER BASIN NEWSLETTER

Volume 7



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.

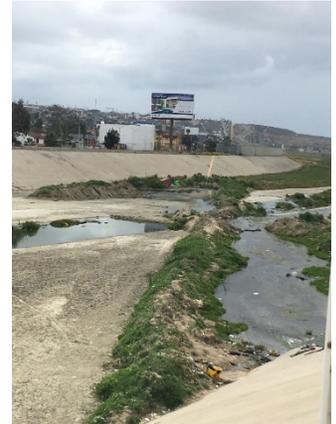
This newsletter summarizes the actions carried out by the Commission and the Minute 320 Work Groups during the month of April 2018. It also summarizes the recommendations derived from the investigation on the wastewater spill to the Tijuana River that occurred during the first week of February 2017.

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 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) 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. As part of these investments, a motor-pump unit was purchased, mounted in a mobile unit to prevent floods and spills, whose total cost was \$ 16.07 million pesos (\$900,000 USD).
- 2. Installation of flow meters:** The IBWC acquired and installed flow meters 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.
- 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, at a cost of \$240,000, is being financed by the U.S. Environmental Protection Agency and administered by the North American Development Bank (NADB). Procurement activities have been completed and the project has been awarded. There will be a kick-off meeting with a core group on May 9 and a Stakeholder meeting on May 17.
- 5. Infrastructure Works:** On April 23, the Mexican Section of the IBWC completed installation of a sandbag weir in the Tijuana River Channel to capture normal peak flows that are not captured by PB-CILA. Previously, an earthen dam was built within the Tijuana River channel at the international border to contain flows that exceeded the capacity of PB-CILA. Additional pumps were brought in to pump water captured by the berms and pump it back to PB-CILA. The Mexican Section will also carry out the following improvement activities of the "PB-CILA" system in the coming months:
- Installation of four (4) 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 four (4) pumps.
 - Hiring of personnel to continuously attend to the operation of PB-CILA.
 - Installation of steel grating and settling basin inside the Tijuana River.



CESPT continues to carry out rehabilitation works in the emerging wastewater collectors in Tijuana, among which are the Insurgentes, Oriente, INV and San Martín-Cañón del Sainz collectors. Likewise, CESPT will join resources with CONAGUA, NADB and USEPA for the rehabilitation of more than 5 kilometers of the "Poniente" wastewater collector.

Additionally, with the support of resources from CONAGUA, CESPT will carry out the replacement of four pumping equipment and the rehabilitation of the electric substation on the PB-1, as well as the acquisition of a power generator from backup and control panels for the operation of the pumping equipment in PB-CILA.

The North American Development Bank (NADB) and the local water utility, Comisión de Servicios Públicos de Tijuana (CESPT) signed a \$1.17 million grant agreement for a project to rehabilitate part of a collector main (Collector Poniente), as well as replace a few related subcollectors, in the northwestern area of Tijuana, Baja California.

- 6. Water Quality Monitoring:** 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. Likewise, both Sections of the IBWC developed a monitoring program binational water quality for the Tijuana River and for the flows transboundary fisheries that occur in the basins of the basin, which includes soil sampling and monitoring of border sites international, in Mexico and in the United States. This program is still in development

and under revision, and will be presented to the Binational Work Group on Water Quality at the binational meeting that will take place on May 9.

- 7. Binational Field Inspections:** IBWC has made joint tours of the Tijuana River channel and tributary streams to detect and act on potential transboundary wastewater spills. Likewise, the Water Quality group for Minute 320 will begin to carry out joint inspection tours of the Tijuana River, works and sites of interest within the basin. The first round of the Water Quality work group is scheduled for May 22.

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 USIBWC is soliciting proposals from its IDIQ design consultants to conduct a feasibility study of the sediment basins for the Tijuana River and its tributaries. The proposals are expected by the end of May. Following the receipt of proposals, they will be reviewed and a contract will be issued. The feasibility study will consist of hydrologic/hydraulic and sediment transport modeling. In addition to sediment, the basins are intended to also capture trash, debris and transboundary flows. The sediment basins shall be sized to be sufficiently large so as to also capture incidental wastewater flows.

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.

In April, the Secretariat of Urban Development and Ecology of the City of Tijuana, with the support of the Secretary of Environmental Protection of the State of Baja California (SPABC), closed two areas that were used as clandestine dumps in the San Antonio areas of the Buenos and Presa Este in Tijuana, BC. The removal of solid waste in these areas will be carried in the coming months.