COMMISSION PUBLISHES
TIJUANA RIVER WATER QUALITY STUDY

The International Boundary and Water Commission, United States and Mexico, has published the “Binational Water Quality Study of the Tijuana River and Adjacent Canyons and Drains,” prepared under Minute 320, “General Framework for Binational Cooperation on Transboundary Issues in the Tijuana River Basin.” The sampling and laboratory analysis for the study were performed from December 2018 to November 2019. The findings indicate the presence of treated and untreated domestic and industrial wastewater.

Scientists from the United States and Mexico collected samples from a total of seven transboundary channels in the Tijuana River Basin in San Diego, California – Tijuana, Baja California. They analyzed 267 different parameters in water and 204 parameters in sediment for pathogens, metals, industrial organics, pesticides, and conventional parameters typically found in wastewater. Of the parameters tested, 131 were not detected and 136 had detectable levels. These results were compared against State of California and Mexican water quality standards.

Parameters that exceeded standards in both countries at all monitoring sites are those associated with the presence of wastewater: Ammonia, Biochemical Oxygen Demand, Chemical Oxygen Demand, oils and greases, Phosphorus, Nitrates, Methylene Blue Active Substances (MBAS), and coliform bacteria. Data analysis indicates that the parameters exceeding standards originate as uncontrolled sewage spills from Tijuana. Disposal of solid waste or trash contributes to the presence of certain parameters exceeding the standards, such as the organic compound DEHP. Commonly used in the manufacture of plastics, DEHP exceeded applicable standards at all monitoring sites and could have leached from plastic accumulated in the canyons and Tijuana River.
The results showed that certain parameters of concern, Hexavalent Chromium (CR6) and the pesticides DDT and Aldrin, were either not detected or found in very low amounts below the limits established in both countries’ applicable regulations. Likewise, metals such as copper, nickel, and zinc, which are commonly used in the metal plating industry, were detected at levels within applicable standards in both countries.

The report also includes recommendations related to control of industrial wastewater discharges in Tijuana, increased resources and assistance for wastewater collection and treatment systems in Tijuana and continued joint water quality monitoring and field inspections to detect and respond timely to wastewater flows.

The Final Report and complete results are available for viewing here:

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