

State of California
Regional Water Quality Control Board
San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT
June 25, 2008

ITEM: 10

SUBJECT: **WORKSHOP FOR PERSONS AND AGENCIES
INTERESTED IN ACTIVITIES TO RESTORE THE
WETLANDS AND TO ABATE POLLUTION IN THE
TIJUANA RIVER VALLEY WATERSHED** (*John Robertus*)

PURPOSE: The objective of the Workshop is to offer a public forum to exchange information on the activities of various federal, state, and local government agencies and non-governmental organizations.

PUBLIC NOTICE: Notification of for this Workshop was included in the June 25, 2008 agenda notice, which was provided to recipients of the Agenda Notice on June 4, 2008 and has been posted on the Regional Board web page. This notification satisfies the requirements of California Government Code section 11125 for a 10-day notice.

DISCUSSION: Tijuana River Watershed Background
The Tijuana River watershed is the largest of the San Diego Region's watersheds, draining a 1,730 square mile basin (See Supporting Document 1). The watershed is divided by the U.S. / Mexico border with just over 27% located within the San Diego Region. With headwaters in both the United States and Mexico, the main stem of the river flows via a wide concrete-lined flood control channel through the City of Tijuana crossing the international boundary into the United States near San Ysidro, California. The Lower Tijuana River then flows westerly in a broad floodplain about 5.3 miles into the Tijuana Estuary (also named Oneonta Lagoon) before discharging into the Pacific Ocean at a point about 1.5 miles north of the border.

A watershed management plan, the Tijuana River Binational Vision, was prepared by the Institute for Regional Studies of the Californias and the Department of Geography at San Diego State University for the Binational Watershed Advisory Council with significant public participation in 2003. It was updated in 2005 and includes recommendations for actions

to protect water quantity, water quality, natural resources, solid waste, and air quality on both sides of the international border.

Approximately 58 Clean Water section 401 Water Quality Certifications have been issued for projects in the Tijuana River Watershed (see Supporting Document 2). Several of these projects have been to address sediment discharges from Smuggler's Gulch and Goat Canyon. There are two projects pending at this time.

Water Quality Monitoring Results

The State Water Board's Surface Water Ambient Monitoring Program (SWAMP) included sampling tributaries to the Tijuana River in the United States, and at sites on the Tijuana River downstream of Tecate and upstream of tidal influence. Samples for water quality and benthic macroinvertebrates were collected and analyzed from the Tijuana River watershed in 2005 and 2006. The data was assessed for stream condition and biological integrity.

Sites in the upper Tijuana River watershed were found to be in fair to good condition and included some of the best conditions found during the five year program in the San Diego Region. Sites in the lower Tijuana River watershed and with inflow from Mexico have significantly poorer water quality including high toxicity in Tecate Creek and the Tijuana River.

Toxic substances were detected in Tecate Creek and the Tijuana River including polyaromatic hydrocarbons (PAHs) (seven exceeding human health and aquatic life thresholds in the Tijuana River) and five pesticides. Apart from diazinon, all anthropogenic organic constituents identified during the SWAMP monitoring were found in streams draining from Mexico into the United States. The levels of PAHs found in the Tijuana River samples indicate impacts from industrial discharges into the Tijuana River while agricultural sources are indicated by levels of pesticides in the Tecate Creek samples.

Aquatic life thresholds for ammonia, phosphorus, oxygen, pH, conductivity, and turbidity were also exceeded. These exceedances are most likely to be the result of uncontrolled pollution sources from Mexico, although some loading may be occurring due to sources in the Tijuana watershed in the U.S.

Water Quality Impairment and TMDLs

Both the Tijuana River and its estuary have numerous 303(d) listings for pollutant impairments (See Supporting Document 3). For the river, these include eutrophic conditions, indicator bacteria, low dissolved oxygen, pesticides, solids, synthetic organics, trash elements, and trash. For the estuary, these include eutrophic conditions, indicator bacteria, lead, low dissolved oxygen, nickel, pesticides, thallium, trash, and turbidity.

Developing, adopting, and implementing TMDLs for these water bodies is complicated by the number, type, and international nature of the discharges causing or contributing to the impairments, the problematic nature of regulating discharges in Mexico using state and federal authorities, the lack of funding to develop and implement the TMDL(s), and the lack of recent monitoring data. TMDLs are scheduled to be complete by 2019, but efforts to collect data necessary for the TMDL are already underway.

Proposed Tijuana River Strategy

The Tijuana River remains a top priority for the San Diego Regional Board (See Supporting Document 4). A draft Tijuana River Strategy Plan has been proposed to guide management of water quality and beneficial uses in the lower Tijuana River and Estuary. The proposed strategy includes five points for review and discussion during the workshop:

1. Wetlands protection and restoration accomplished with the Wetlands Recovery Project and Related Grant Funded Projects.
2. Control and Treatment of Sewage with IBWC IWWTP.
3. Collection and removal of trash entering the United States (Trash TMDL).
4. Detention and removal of sediments entering the United States (Sediment and Nutrients TMDL).
5. Abatement of all sources of pollution through joint efforts in Mexico to control urban runoff.

Grant Funding Opportunity

The US EPA Region 9 has announced a grant program from the West Coast Estuary Initiative (See Supporting Document 5). Proposals for these grants are due August 25, 2008. The Regional Board proposes that the interested parties coordinate and submit a joint application to obtain grant funding for projects to address cross-border pollutant transport. Among the possible projects are:

1. Collect and remove trash entering US/California via grates constructed with grant funds. Data collected from the trash removal operation will serve as foundation for future Regional Board trash TMDL.
2. Detain and remove sediment entering US/California via detention/settling basins constructed with grant funds. Sediment collected may eventually be treated and sold at market value. Normal sediment operations include washing and sorting; additional disinfection process should likely not affect profitability. Data collected from the sediment detention and removal will serve as foundation for future Regional Board TMDL(s) for sediment and other associated constituents.

KEY ISSUES:

1. Development of the Tijuana River Watershed Strategic Plan to guide Regional Board regulatory activities and stakeholder efforts to address pollutants entering the United States from Mexico.

LEGAL CONCERNS:

None.

SUPPORTING DOCUMENTS:

1. Map of the lower Tijuana River watershed.
2. Inventory of lower Tijuana Watershed 401 Certifications.
3. Tijuana River watershed 2006 Clean Water Section 303(d) List of Water Quality Limited Segments Requiring TMDLs, San Diego Regional Water Quality Control Board.
4. Regional Board Planning Matrix for the Tijuana River Watershed.
5. 2008 US EPA West Coast Estuaries Initiative for California Request for Proposals.

RECOMMENDATION(S): Recommendations may be provided at the conclusion of the workshop.

Lower Tijuana River & Estuary



Goat Canyon

Smugglers Gulch

Tijuana River