

**USIBWC Citizens Forum**  
**Thursday, June 2, 2016**  
**6:30pm – 8:30pm**  
**Tijuana Estuary Meeting Room**  
**\*Tentative Meeting Notes**

**Board Members in Attendance:**

Paola Avila, San Diego Regional Chamber of Commerce  
Stewart A Halpern, San Diego Coastkeeper  
Roger L. Kube, Jr, Surfrider Foundation, San Diego Chapter  
John Holder, Wildcoast  
Antonio Martinez, IV, Imperial Beach and Nestor Community Health Centers  
Eddie Meyer, Office of Congressman Juan Vargas  
Sierra Michelle Graves, Private Sector, San Diego State University  
Marisa Aurora Quiroz, International Community Foundation  
Rick Van Schoik, North American Research Partnerships  
Edward J. Spriggs, City Council, City of Imperial Beach

**USIBWC Staff in Attendance:**

Steven Smullen, USIBWC Area Operations Manager

**Members of the Public in Attendance:**

Jeff Crooks, Tijuana River National Estuarine Research Reserve  
Mike Williams – former member of board  
Jim Nakagama, Imperial Beach City Planner  
Ruth Martine – San Diego City Councilman David Alvarez’s Office  
Tim Pudmill, Citizen  
Joe Ellis, Citizen  
Jen White, Citizen

**Welcoming Remarks:**

At 6:40PM USIBWC Area Operations Manager Steven Smullen convened the meeting. He welcomed the group, board members introduced themselves and then the audience introduced themselves. Mr. Smullen went on to give a brief overview on meeting agenda items, discussing issues with habitat in the San Diego area, human quality of life, and problems with Tijuana River. Mr. Smullen introduced the first presenter Jeff Crooks.

**Presentation One: Mouth Closure at the Tijuana Estuary – Jeff Crooks, Research Coordinator for the Tijuana River National Estuarine Research Reserve**

Mr. Crooks began with a summary of Tijuana Estuary Mouth Closure, 1982 – 1983 El Niño. There was a “very strong” El Niño event that produced larger than normal storms that led to huge sea swells and dune wash over, and eventually resulted in the closure of the Tijuana River Mouth in April 1984. The estuary remained closed until dredging in December 1984 manually reopened it.

Historical records and observations have shown Tijuana Estuary (TJE) rarely closes. Other

vegetation was also altered. Areas of marsh that were once species-diverse shifted towards being monotypic pickle weed.

A few years ago, in 2013 the city of Imperial Beach conducted a sand replenishment project north of the Tijuana River Mouth. Here, a local Imperial Beach newspaper and the San Diego Union Tribune printed articles about the fears of a mouth closure due to the addition of sand to the beaches. Allegations of El Niño provide snapshot of potential future. Tijuana River Mouth rarely closes; when it does there are major impacts, highlighting the importance of long-term monitoring, real-time data access, and rapid management response.

Mr. Crooks presented images of the mouth closure that occurred in March 2016. The natural dam was likely caused by El Niño, sediment that flowed from Mexico canyons and the 2012 sand-replenishment project at the shores of Imperial Beach.

When it rains, the CILA pump station in Tijuana along the concrete channel usually shuts down in order to protect the pumps. As a result, unprocessed sewage and street runoff is sent down the Tijuana River and out to sea. With the river mouth closed this spring, the sewage became food for algae that also consumed all the oxygen so there was the loss of dissolved oxygen. Through monitors, estuary scientists watched the oxygen levels drop and rise every day.

The Tijuana River no longer flows into the ocean! Recent high tides, big waves and powerful near shore currents combined to completely seal the river mouth with sand. Now one can easily walk by where the river once ran. The water has been halted several hundred feet short of the Pacific Ocean. It is believed that a similar condition existed after the great storm of 1983. Employees of the U.S. Fish And Wildlife Service, who were surveying the area, said the prospect of reopening the slough by mechanical means was being considered. Some believe El Niño was a bust this year but from river flow it was significant

Over the past several years, the mouth has continually migrated southward. It was noticed in mid-February that the southern channel had closed. A little more than a month later the entire estuary became non-tidal.

- Tide Chart Dec 2015 (diagram): Blue predicted wave and green was actually observed
  - Observed was significantly higher than predicted
  - Water expands when warmer, but also the wind pattern changed causing water to rise.
  - Very energetic marine El Niño adding a lot of water into the system

A few years ago, the city of Imperial Beach conducted a sand replenishment project north of the Tijuana River Mouth. Local newspapers had articles about the fears of a mouth closure due to the addition of sand to the beaches. Causes are yet to be determined but energetic storms and larger waves due to the current El Niño conditions definitely contributed to the closure, as possibly did the beach replenishment. As sea levels rise and more intense storms occur, the Mouth of the Tijuana River is likely to close more often. Although the Tijuana River Mouth rarely closes; when it does there are major impacts, highlighting the importance of long-term monitoring, real-time data access, and rapid management response.

The presentations ended with questions from the board and public.

### Q&A

Q: It appears from a graph presented that the dissolved oxygen (DO) is low. Is that accurate?

A: We don't understand systems and how quickly the nutrients affect the oxygen level. Assumption is that organisms metabolize rather quickly and absorb the oxygen

Q: To what extent can we anticipate the mouth closing?

A: We have seen 5 major Niño events and only 2 closures so we are still figuring out how to determine it. If it's a very wet El Niño it will likely open it. If it's one like this, it will likely close. If we just have tidal action without big waves, that helps keep it open because not as much sand is piling up.

Q: Following up on the previous question, regarding response time needed to get a permit and to get equipment to respond... What lessons have we learned that allow us to get a faster response?

A: It is generally very difficult to respond quickly because there are many moving parts. From the regulatory arena, the federal government is deciding when to pull the trigger. With mouth opening there is also the "right time" when we want to do it. Typically, U.S. Fish and Wildlife and other guys were talking to lagoon professionals about how to handle this because lagoons deal with this every year. They said not to do this right before a big storm because then you're working against the wave. You want to get on the other side of a big wave event and then try it. Compared to the 1980s everything is moving faster. People are attempting to get a standing permit in order to have the right to respond quickly.

Q: You talk about it like it's binary – open or closed – are there other levels?

A: There are all sorts of different variations as well as people who view things differently (half closed vs. half open). Some people say that it is always closed; it's just a matter of where. There is always a sand bar somewhere. What happens is if this weren't opened, it would stay closed for a long time. We've lost some of the natural dynamics of the system. We just got funding to increase the tidal prism. We want to help the system stay open on its own naturally. We've lost a lot of marsh and a lot of the ability for the system to move water in and out so we are trying to restore marsh and thus function.

Q: What is the ideal way to respond to these things in your opinion?

A: We've tried to keep loggers alive down there but the river events can bury them. Think we need a better resolution to help us understand the river situation as well. Basically, we want more technology and spatial coverage, as well as connection with the ocean.

Q: How many times does it open and does it get wider or narrower?

A: First time they opened it was just what's in the picture where you see we have water level 3 – 4 feet above. We want to have the hydraulic head working so we need to open it when the

tide is low. The second one was a series of openings. They're out there just trying to keep the system breathing. The hope is that it will maintain itself. To do that, we would go back to where the mouth was and try to reopen it there, which is very challenging.

**Presentation Two: Update on South Bay International Wastewater Treatment Plant (SBIWTP) Projects and Minute 320 Activities – Steve Smullen, IBWC Area Operations Manager**

Steve Smullen opened with an update on the new IBWC San Diego Administration Building, set for completion June 2016, featuring:

- LEED Certified Gold with 90% recycled Materials
- Blast Proof – DOD Anti-Terrorist Standards Medium Level
- Alternative Energy - Solar Panels- Low E Windows
- Xeriscape – Low Water Use
- Permeable Paving
- Security Card Readers and Cameras

For the treatment plant, Secondary Improvements to the Secondary Process are underway, including 3 new secondary clarifiers and new activated sludge pumps; the current pumps are failing prematurely, probably a manufacturing problem. New flow equalization basin will help give capability to divert things from Mexico into another basin. If it's toxic or something, we can divert it and send it at a lower rate. Improvements are being made to help with peak flow; also allows more capacity. We treat 25 million gallons (mgd) per day on average, usually 30 – 35 mgd flow rate from 10 a.m. to midnight then it drops. Theoretically we could take more flow during the day and pump it into the system at night. This will help treatment capability. The projected timeline for completion date is July 2017. Project cost is \$15.8M.

Mr. Smullen went on to give an update on Minute 320 Binational Work Groups. Minute 320 provides a binational framework for cooperation to address issues in the Tijuana River Watershed. Below please see February 18th Binational Work Group meeting table of ideas on all topics:

- **Water Quality**
  - Joint Monitoring Programs for coastal waters – Playas neighborhood of Tijuana and Imperial Beach
  - Operation and maintenance of Pump Station CILA
  - Control of runoff in the Tijuana River
  - Integral water reuse program
- **Sediment**
  - Source identification & control
  - Control of construction and land development practices
  - Binational program for removal of sediment from river
  - Study on lands available for sediment disposal
- **Solid Waste**
  - Surveillance and inspection program
  - Better solid waste removal from canyons, streams

- Environmental education
- Integral solid waste program -Tecate and Tijuana
- Proper disposal of tires

Minute 320 has a watershed approach to develop solutions on these issues that are seriously impacting ecology of Tijuana River and United States. Formal submission and acceptance of recommendations are still needed from the Minute 320 Binational Core Group to the Commissioners of the International Boundary and Water Commission (IBWC) and formal acceptance by IBWC; they are working on this procedure.

The Final Recommendations from the April 5 meeting of the Binational Work Groups include installation of two flow meters for pump station CILA, quarterly river inspection in Mexico, and exchange of treatment plant effluent data. Development of a written protocol for operation and maintenance of Pump Station CILA is due by Mexico at next Minute 320 meeting scheduled for June 27<sup>th</sup>. The recommendations also include development of a bi-national work-plan for sediment management. Planning discussions continue on solid waste matters. A possible study of installation of trash control devices near the border in both the United States and Mexico is under consideration but concerns regarding capital cost involved and identification of a location need to be addressed.

Mr. Smullen's presentation concluded with questions from the board and public.

#### **Q&A**

**Q:** Water quality problems are allegedly due to pump station in Mexico being inoperable during rain. It will be valuable to have a protocol for pump station operations to address this concern. In your estimation, how much of the problem is due to pump stations not being operated during a period when they could be operated?

**A:** One of the problems is we have one place where flow is measured. We don't know what's going on with Mexico. We don't know what's going in or leaving. If their pump is on, we may still get flow at our gage because they can't keep up with river flow. Putting meters/gages on flow will help us determine where issues are occurring. It would help to have a place to measure upstream. Mexico kind of depends on us but it's almost too late because it's already here.

**Q:** What's in the realm of the possible of this group to help find solutions?

**A:** Bi-national Work Group, dialogue between two countries, is determining benefit to both countries. Must be a joint project.

**Q:** Is there a public review of the Binational Work Groups? Any chance for public comments and/or review of framework?

**A:** No mechanism for public comments on the Binational Work Groups' framework.

#### **Board Discussion:**

#### **Next agenda ideas suggested:**

- Interaction with Mexican Citizens Forum, possible joint meeting of the U.S. and Mexican boards or U.S. attendance at Mexican Citizens Forum meeting
- Presentation on costs for top-tier Minute 320 projects
- Roger Kube to do presentation on his visit to Tijuana
- September 1 suggested date for next meeting
- Marisa Quiroz going to work on sending out a Doodle poll to determine the date for a board field trip.

**Meeting was adjourned at 8:42PM**

\*Meeting notes are tentative and summarize in draft the contents and discussion of Citizens Forum Meetings. While these notes are intended to provide a general overview of Citizens Forum Meetings, they may not necessarily be accurate or complete, and may not be representative of USIBWC policy or positions.