

**Colorado River Citizens Forum
Imperial Irrigation District Board Room
El Centro, CA
April 26, 2017
* Tentative Meeting Notes**

Board Members in attendance:

Roberta (Bobbi) Stevenson-McDermott, Yuma Natural Resource Conservation District Member, Arizona Association of Conservation Districts Board Member
Brian McNeece, Retired College Professor and Administrator, El Centro, CA
John Hernandez, Executive Director, Our Roots Multi-Cultural Center, Brawley, CA
Gary Knight, Yuma City Councilmember, Yuma, AZ
Juan Leal-Rubio, Senior Planner, Yuma County Department of Development Services
Jim Buster, Southwest Resource Strategies

Alternate:

Bruce Kuhn, Imperial Irrigation District
Jay Simonton, Director of Utilities, City of Yuma, Arizona
Vic Nguyen, Colorado River Board of California

USIBWC Staff in attendance:

Anna Morales, Yuma Area Operations Manager
Miles Lampo, Yuma Hydrologic Technician (OA)

MXIBWC Staff in attendance:

Diana Rosales, Mexicali, BC
Alfredo De La Cerda, Mexicali, BC

27 Members of the public in attendance:

Welcoming and Introduction Remarks:

At 4:00PM Citizens Forum Co-chair Roberta Stevenson-McDermott convened the meeting by welcoming the group and provided a brief description of the meeting agenda items. Board members and audience attendees were asked to introduce themselves.

Mrs. McDermott introduced herself and turned the meeting over to the first presenter

Presentation One: [New River Improvement Project— Jose Angel, Executive Officer, California Regional Water Quality Control Board, Colorado River Basin](#)

Mr. Angel presented a PowerPoint Presentation.

New River Improvement Project – Calexico, CA

2011 Strategic Plan Key Components:

- The plan divides the New River into 5 reaches
- Structural control recommendations consist of infrastructure projects such as wetlands, wastewater facilities and aeration structures
- Nonstructural recommendations essentially consist of regulatory measures

Calexico, CA River Parkway:

- Approximately ¼ of a mile downstream from the international border to the west side of the All-American Canal
- Design Phase I approximately 90% complete
- Environmental documents complete
- \$4.2 million federal grant
- City of Calexico tentatively to begin construction in a few months
- New River still doesn't meet state water quality standards, continues to pose risks to the public health

Recommendations for Calexico, CA:

An alternative approach to addressing the New River's water quality does not need to vary wildly from the approach already proposed in the Strategic Plan.

The main components of the proposal, including the trash screen, conveyance system, aeration structures, and constructed wetlands, would remain.

The main change would be to forego the disinfection facility and to use the conveyance system to bypass the proposed Parkway and substantively bypass Calexico so that the water would be discharged at a point that significantly minimizes threat to public health (e.g., near Highway 98)

This approach could also include re-routing (e.g., by pumping and piping) up to 4 million gallons per day (mgd) of treated wastewater from the City of Calexico Wastewater Treatment Plant (WWTP) back to the river channel at the border. This will be at state standards and will address public health threat. If this component is included, the total capital costs for the structural components for Calexico would be approximately \$22M plus \$160,000 in annual operations and maintenance.

In April, the Governor signed Budget Trailer Bill for \$1.4 million for design and environmental documentation. Scope of work was developed. Design and environmental documentation expected to be complete by September-October 2018. Private contractor to design infrastructure.

Calexico Project Phases:

- Phase 1
 - Design of trash screen, culvert, pump-back system
 - Environmental documentation
 - Currently 90% complete
- Phase 2
 - Construction

Progress:

- February 2016
 - California-Mexico Border Relations Council (CMBRC) accepts revised recommendations
 - Formed core workgroup
- April – September 2016
 - Cost estimates: Design and environmental work
 - Initial consultation and coordination
 - Pursued various funding sources
 - Designated Project Manager

- 2016-2017 Budget Trailer Bill
 - Appropriates \$1.4 million for Phase 1
- April 2017
 - Prepared scope of work
- \$24 million is needed for the additional structure.

Question and Answer (Q&A):

Q: Rerouting water piping project to cost \$22-24 million but fund is not secured, how is that project going to moving forward?

A: We are Exploring various sources, the focus now is to get design completed.

Q: New River strategic plan was completed in 2011, information or data used to calculate flow of the New River was for that period. How has the flow changed and what impact does it have on the design and cost?

A: Yes, data used was for that time period. In February of 2016, revised recommendations were submitted. The flow has decreased about 50%; the last five years has dropped about 10-15%. Current flow is averaging +/- 80 cubic feet per second (cfs) compared back then to 150-200 cfs.

Q: When will the 20 mgd wastewater plant be built in Mexico for the untreated sewage going into the New River?

A: Las Arenitas was built and operating since 2007, however it needs to be expanded.

Q: How is the water quality since then?

A: Improved, I will continue with my presentation for this information

Q: How many phases are there?

A: Two

Q: Is this still the New River project in Calexico?

A: Yes, what was discussed today is just the Calexico area.

Q: Pump back water is treated water at the border and diluted?

A: No, it's treated water from the wastewater treatment plant put back into the channel. Augmenting water

Sewage Infrastructure in Mexicali and New River Water Quality

City of Mexicali Planning Areas:

It is a service area of 800,000 people, divided into four major service areas:

- Mexicali I is sent to the Zaragoza Wastewater Treatment Plant (WWTP), discharges into the New River tributary. Flow contains a lot of nutrients which creates problems for the Salton Sea.
- Mexicali II flows south to Las Arenitas WWTP. Plant provides secondary treatment into a tributary of the Hardy River.
- Mexicali III is sent to the Zaragoza WWTP, discharges into the New River tributary. Flow contains a lot of nutrients which creates problems for the Salton Sea.
- Mexicali IV flows south to Las Arenitas WWTP. Plant provides secondary treatment into a tributary of the Hardy River.

The Mexicali II project addresses the lack of treatment plant capacity in the Mexicali II planning area, the south-central part of the city. Of the 14 mgd of sewage generated in the Mexicali II, less than 2 mgd is treated at the Gonzalez-Ortega WWTP (taken offline when Las Arenitas WWTP began operations). The remaining sewage discharges untreated into the New River.

The Plan (Treaty Minute 288):

- Quick Fixes
 - 11 Emergency repairs, including rehab of pumping plants
 - \$7.5 million
- Mexicali I Projects
 - Sewer main rehabilitation (approx. 20 miles)
 - Telemetry, O&M equipment
 - \$51 million
- Mexicali II Projects
 - New 20 mgd pumping plant
 - New 20 mgd force main
 - New 20 mgd WWTP (Las Arenitas WWTP). Water quality improved overnight when plant became operational in 2007.
 - \$26 million

A Binational Technical Committee (BTC) was formed with representation from both countries and chaired by IBWC. In terms of regulatory efforts, Mexico addressed untreated discharges into the drains including 4 slaughter houses. Regulatory efforts have improved water greatly

Mexico's Major Sewage Infrastructure:

- 12 Major pumping plants
- 27 lift stations, pumps 200,000 gallons
- 800 km sewage collectors
- 2 wastewater treatment plants, Las Arenitas and Zaragoza WWTP
- 2 sewer vac trucks
- Trash is still a problem in the drains

Emerging Problems:

- In 2013, we started observing problems with equipment. Most have exceeded their useful life.
 - Pumping plant problems
 - Sewage collectors
 - Operation and maintenance equipment
- In 2014, problems with sewage pipes.
 - 3 bypasses of raw sewage into the New River
 - Brought problems to the attention of IBWC and USEPA to tackle the binational problem.
- Rain event causes havoc, as 60-70% of storm drains are connected to the sewer system.
- In 2015
 - Policy meeting with USEPA, USIBWC, Imperial Irrigation District (IID), County, and the State held a meeting in May 2015

- Federal government funded diagnostic study to better characterize infrastructure.
- 3 bypasses of raw sewage
- Mexico rebuilds Pumping Plant #3
- 2016
 - More bypasses of raw sewage
 - Study completed and draft report released to Binational Technical Committee (BTC).
 - Final report came out December 2016 which indicated a cost of \$75-80 million to address the problems in Mexicali
 - Key infrastructure at or beyond its useful life
 - O&M needs

Discharges into the New River continue with about one a month, <800,000 g/d. 1 million or less is still a public health risk. Mrs. Wright, California Regional Water Quality Control Board, requested a U.S. policy meeting in February which did occur on April 19, 2017. The meeting included USIBWC Commissioner, USEPA, CalEPA, BECC, NadBank, Imperial County.

Equipment to Prevent Bypasses:

- Federal government policy makers decided standby equipment is needed to help address the bypasses of raw sewage occurring in the New River.
- Federal government has \$1 million available.

Equipment	Quantity	Price/Unit	Total
4-inch Trash Pump	2	\$35,000	\$70,000
6-inch Trash Pump	3	\$45,000	\$90,000
8-inch Trash Pump	1	\$100,000	\$100,000
12-inch Trash Pump	1	\$175,000	\$175,000
Inflatable Plugs, connections, and hoses [to deal with broken pipes]	1	\$50,000	\$50,000
Total			\$485,000

Assets Needed to Protect System:

- Policy meeting held April 19, 2017, Mr. Angel made a presentation proposal to the Policy Group of assets needed to protect the system.

Equipment	Quantity	Price/Unit	Total
Sewer Vac Truck	1	\$350,000	\$350,000
Power Bucket Machine	2	\$100,000	\$200,000
Total			\$550,000

USEPA and USIBWC want to get these components done. Currently, we are putting a package together to include Mexico funding to get this priority for funding. Next, would need to see if policy makers would be able to fund \$50 million every 10-years. It may be better to look at investing the money in the U.S. instead of in Mexico to have better control of the water quality.

If work is not undertaken to address the problem, the alternative outlook would include:

- Bypasses of raw sewage
 - 5 to 20 mgd from Mexicali I and III areas
 - 20 mgd from Mexicali II and IV areas
- Increased pathogens in New River
 - Threat to public health
- Increased nutrients into Salton Sea
- Loss of water quality improvements
- Even if the \$80 million was funded, it would take years to replace the project
- If equipment is not available and put to use, bypasses would occur more frequently
- Makes anything done to address environmental concerns at the Salton Sea more difficult

Question and Answer (Q&A)

Q: Sounds like water quality has improved but problems that exist, spills cause a lot of problems. Is that lack of maintenance budget?

A: It's complicated. Dealing with infrastructure that has exceeded its useful life, and not enough revenue to maintain. In Mexico, legally they cannot deprive people from water and disconnect their service. Sewer service is included in their water bill. Quite a bit of people do not pay their bill. It's not lack of institutional control, but legal limitations to enforce.

Q: Did you say that a treatment facility would be built in the U.S.?

A: That would be a policy issue for the Federal government, it could be prudent to spend money in the U.S.

Q: Are you looking for Federal government funding?

A: Yes, they do have responsibility.

Q: Your proposal was just brought up last week?

A: It was developed about a month ago, but formally submitted at the meeting.

Q: To be effective, we need to give Mexico more money?

A: The diagnostic study helped prioritize and project certification for Border Environment Cooperation Commission funding. It takes time to implement using the binational path.

Q: Oversight in current quality control, does U.S. have a voice since it funds project?

A: There is significant oversight in the U.S. and Mexico when the project was built. Typically, a private contractor oversees the construction and the bank conducts audits.

Q: Have you looked at pipeline strategies?

A: Some of BTC members have experience with some of the new and old collectors. Evaluated how to reline and which sections to do first.

Q: Has waste energy been thought of?

A: The Bank is starting to look at it.

Presentation Two: Salton Sea Policy – Laura Peters, Senior Engineer, California Department of Water Resources

Mrs. Peters presented a PowerPoint Presentation.

Salton Sea Management Program plan can be found at <http://resources.ca.gov/salton-sea>
The State of California is responsible for restoring the Sea. In 1905, Colorado River experienced heavy flood, a levee breached and filled up the sea. The sea is maintained largely by agricultural runoff from irrigation in the Imperial and Coachella valleys.

Program history:

History of State's involvement in the Salton Sea

- Quantification Settlement Agreement (QSA) commitment (2002)
 - California State agreed to implement Salton Sea Habitat Conservation Strategy. Plan was to be implemented by the State over a 15-year period ending December 2017. The State has not met that obligation.
 - Imperial Irrigation District (IID) to transfer Colorado River water that would sustain the Sea. IID is proposing to withhold future water transfers to QSA beneficiaries until the State meets its obligation.
- 2007 Programmatic Environmental Impact Report (PEIR) – Full Sea restoration alternative (\$9 billion)
 - State proposed a comprehensive \$9 billion preferred alternative for the Sea. The CA Legislature never appropriated any funding – no Record of Decision (ROD)
- 2013 Environmental Impact Report/Environmental Impact Statement (EIR/EIS) – Species Conservation Habitat project (\$35 million)
 - Department of Fish and Wildlife (DFW) is directed to develop a proof-of-concept project for fish/bird habitat and emissive dust control using Prop 84 Salton Sea Restoration Funds.
 - EIR/EIS completed in 2013
 - Preferred alternative: 3,770 acres
 - Permits obtained in 2014
- Governor's Salton Sea Task Force (2015) created
 - Directs California Natural Resources Agency (CNRA) to develop and implement the Salton Sea Management Plan (SSMP)
 - Improve public outreach and local partnerships
 - Accelerate project delivery
 - Meet short-term goal of 9,000-12,000 acres of habitat and dust suppression
 - Meet medium-term goal of 18,000-25,000 acres of same
 - Report bi-annually to SWRCB on progress
- Proposition 1 (2016)
 - Bruce Wilcox oversees all action on the Sea
 - CNRA lead agency for SSMP implementation
 - Response to Governor's Task Force mandates
 - California Department of Water Resource (DWR) is primary staffing agency: \$80 million appropriated to implement program.

Stakeholders consist of State, Federal, Imperial & Riverside Counties, Tribes, and irrigation districts.

Environmental Setting and Issues:

- A 2006 graph was shown of the simulated salinity and simulated elevation of the sea as the 2017 QSA mitigation water ends.
 - Water elevation starts to decrease at the end of 2017
 - Simulated elevation drops -258 ft
 - Simulated salinity (PPM) climbs to 250,000 ppm.
 - Simulation puts Tilapia at brink of extinction at 54,000 ppm

Human Health Impacts – Dust Emissions:

- Biggest impact is dust emissions
- Need to cover as much of the playa (lakebed) as possible
- Respiratory health problems are off the chart
- Childhood asthma
- Elevated PM10
- Large Exposure area
- Wind and sand dunes compound the problem

Water Quality Degradation:

- Trending toward hypersaline lake
- Hydrogen sulfide burps
- Algal blooms
- Oxygen depletion
- Fish kills due to the decay on the bottom of the sea
- Selenium bioaccumulation

Biological Impacts:

- 400,000 birds utilize the Sea
- Fish-eating bird species will no longer be able to feed

Critical Habitat for Birds:

- Management plan contracted and worked with the Audubon of California
- Pacific flyway stopover for shore birds and fish-eating birds
- Special status resident birds
- Breeding/resting/feeding habitat

Fishery Resources:

- Desert pupfish – protected
- Tilapia- food resource

Current Program Elements – two projects

- Species conservation habitat
 - EIR completed 2007
- Salton Sea 10-year management plan
 - 5 projects

Species Conservation Habitat Project:

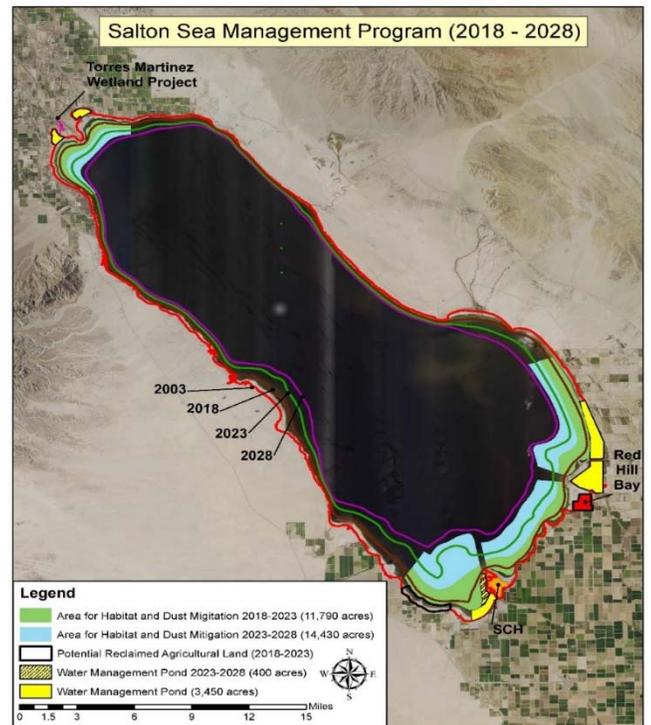
- Prop 84 funding
- 640 acres
- \$21 million

- \$10 million construction
- New River West project
 - Permits complete
 - 100% design
 - Advertise construction within a year
- Need to worry about salinity load and control mosquitos
 - If salinity tolerance is maintained between 20-30 parts per thousand (PPT), should be able to address concern
- Alternative 3 is preferred.
 - 3 habitat areas totaling 3700 acres
 - East side of the New River
 - Includes channels, bird islands, interior and exterior berms, sedimentation basin, cascading ponds, flood bypass river and saline pump station
 - IID Land
 - 640 acre pilot project pond
 - Habitat islands to encourage bird habitat



Salton Sea Management Plan 10-year Plan:

- December 31, 2017 will begin a steep decline of the Sea
- Task Force needs to meet short term goal 9k-12k acres of habitat and dust suppression
- By 10-year, need to cover 25,000 acres
- Slide shows the exposed playa from the years 2003 to 2028



Phase I:



- IID making great progress on dust suppression project
- Ready to advertise first phase of habitat project
- Start construction by September
- Will continue construction until funding is exhausted
- Using plan document to find funding sources for all the other projects

Question and Answer (Q&A)

Q: If the wetlands are developed on the existing edge of the Salton Seas, as the sea shrinks, whatever vegetation exist could act as a windbreak for newly exposed soil. Dust with selenium blowing over produce field would be a disaster. Agricultural grower's problem is dust control. Only takes one incident to destroy product. Dust control for economy is more important than the birds.

A: Agree, I'm not a dust expert, some areas are not as affected, we need to identify areas.

Q: Meantime, the end of this year will there will be a steep decline of the Sea? Will the amount of supplemental water from IID to the Sea be supplied by another entity or will the sea just evaporate more quickly?

A: QSA, law passed. IID agreed to provide mitigation water through the end of this year of 800,000 acre-feet.

A: Tina Shields, of IID - water intended to help salinity levels and give the State of California time to plan.

Q: How close is the pollution to Yuma?

A: It goes very far, I don't know exactly how far.

Q: Is there data available on sediment analysis?

A: I'm not aware of any

A: Tina Shields – there is not a lot of information. Core sampling and numerous studies have been performed.

Q: What is the water evaporation rate?

A: Tina Shields showed an animation video of the exposed playa.

Video can be found at www.IID.com/waters/Salton-sea-initiative Graphic Representation of the QSA water transfer on the Salton Sea or at <https://www.youtube.com/watch?v=Sua-gQyTScU&sns=em>

Tina Shields commented on continued monitoring of the sites using remote cameras.

<http://www.iid.com/water/library/qs-water-transfer/mitigation-implementation/air-quality-mitigation>

Public Comments: None

Board Discussion and Future Agenda Items:

- ✓ Update on the Central Arizona Groundwater Replenishment District (CAGRD) and Yuma Mesa Irrigation and Drainage district pilot fallowing program. (Perri Benemelis, CAGRD)
- ✓ Bruce Kuhn recommended a field trip to IID's managed marsh and Salton Sea wetlands
- ✓ Update on the water level at Lake Mead and a general update on the water forecast (Reclamation)
- ✓ Update on Hunter's Hole project

Next meeting July 26th in Yuma County, location to be determined

The meeting adjourned at 6:21pm.

*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.