

Colorado River Citizens' Forum
Calexico, California
March 3, 2008
***Tentative Meeting Notes**

Board Members in attendance:

Tom Davis	Richard Ryan
Bill Plummer	Nancy Wright
Brian McNeece	Stella Mendoza
Cary Meister	

Board Members absent:

Wade Noble	Mark Watson
Francisco Zamora	Kevin Eatherly

USIBWC Staff in attendance:

Al Goff
Anna Morales

MXIBWC Staff in attendance:

Francisco Bernal

❖ 16 Members of the public in attendance

Welcome and Introductions

Al Goff, USIBWC, chaired the meeting, welcomed the attendees and asked everyone to introduce themselves.

Drop 2 Storage Reservoir Update – Cindy Hoeft, Resource Management Office Director, U.S. Bureau of Reclamation, YAO

Reservoir Location

- Brock Ranch Site
- Adjacent to the Drop 2 Hydroelectric Power Structure on the All American Canal
- Approximately 30 Miles East of El Centro, CA and 25 Miles West of Yuma, AZ

Project Overview

- Will be an 8,000 acre-foot (af) storage reservoir with a conveyance system of 1,800 cubic feet per second
- Provide available storage space for conserving a portion of “non-storable” flows currently not captured in the lower Colorado River system that normally go into Mexico. Typically these flows are weather-related events.
- Will be able to capture an average of 70,000 af a year.

Reason for Project

- Congressional Mandate, December 20, 2006, Public Law No. 109-432 (120 Stat. 2922, 3047) Section 396 “Regulated Storage Water Facility”

Project Funding

- The Southern Nevada Water Authority (SNWA) will fund construction of the Project via an historic Funding Agreement (Agreement) among Reclamation, the Colorado River Commission of Nevada, and SNWA, which was signed on December 13, 2007, at the Colorado River Water Users Association’s annual conference. In exchange for the Project funding, SNWA will receive a temporary supply of least 600,000 af of Intentionally Created Surplus (ICS) water credits at an annual maximum rate of 40,000 af until the year 2036. The Metropolitan Water District of Southern California and the Central Arizona Water Conservation District have an option to become parties to the Agreement; in exchange for funding 1/6th of the costs, each party would receive 100,000 af of ICS.

Update

- The 90% design review scheduled 3/10/08 through 3/15/08
- Preparing Construction contract package
- Preparing Operations Plan
- Various coordination meetings (with Imperial Irrigation District, Landowners, etc.)
- Final Design Period expected to be completed this month, March 2008
- Funding Agreement signed December 2007
- Operations Agreement to be completed by August 2008
- Acquisition Period started January 2008 through September 2008
- Construction Period to start in September 2008 through October 2010
- Stakeholder Integration and Coordination Period will be ongoing
- Environmental, Cultural and Lands Compliance will be ongoing
- Project Management will be on going

Project Contact

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Questions/Answer:

Q: Will the area be open to the public for recreation?

A: No, it will not. Intent is just to capture the flow but will be dry most of the time. Reservoir area will be fenced.

Q: Will it be bermed up or gravity fed?

A: Will have some berm but is a totally gravity fed system.

Q: When it rains, is Imperial Irrigation District (IID) charged for water they have ordered and did not use?

A: No, they are only charged for water used.

Water Quality Sampling on the New River – Carlos Peña, USIBWC Environmental Management Division Engineer & Jose Angel, Assistant Executive Office, California Regional Water Quality Control Board, Region 7

PowerPoint presentations were provided/presented and available on USIBWC website.

Mr. Angel provided a brief background of the New River. Current flow at the New River is approximately 120,000 af per year but has declined significantly by approximately 25,000 af for a number of reasons. Power plants in the eastern part of Mexicali are burning some of the water, receiving less agriculture water due to some lands not in production, and approximately 15-20 million gallons of municipal wastewater is not coming into the U.S. This is compared to 3-4 years ago when California was receiving 12-15 million gallons of raw sewage per day, primarily because Mexico had no treatment capacity for municipal flows.

In the mid 1990's, a Binational Technical Committee (BTC) was created to tackle some of the problems. The committee consisted of U.S. and Mexico entities from the U.S. EPA, California State Water Resources Control Board (SWRCB), California Regional Water Quality Control Board (CRWQCB), Imperial County, Imperial

Irrigation District (IID), Mexico's National Water Commission (Conagua), State Public Services Commission of Mexicali (CESPM); Co-Chairing the committee are the U.S. and Mexican Sections of the IBWC out of their offices in Yuma, AZ and Mexicali, BC.

The solutions were divided into three main components:

- Quick Fixes which were done between 1997 through early 2000
 - 11 Emergency repairs
 - Cost \$7.5 million
 - Repairs consisted of rebuilding some of the waste water pumping facilities; major collector lines that were collapsing.
 - Mexicali I Projects
 - Sewer main rehabilitation (aprox. 20 miles)
 - Telemetry equipment
 - Cost \$51 million
 - Mexicali II Projects (key component)
 - New 20-mgd pumping plant
 - New 20-mgd force main
 - New 20-mgd treatment plant
 - Cost \$26 million
- ✓ All these projects have been completed.
 ✓ Funds from both the U.S. and Mexico.

It was determined through a policy decision that the problem would be tackled from across the border or at the source of the problem instead of in the U.S.

In 2005, the key indicators used to assess the water quality in the New River where Fecal bacteria/E. Coli; Dissolved Oxygen (DO); Nutrients; Volatile Organic Compounds (VOCs) and Trash. Measuring concentration of bacteria or Fecal/E. Coli were >1,000,000. What is considered safe or for human contact is 120-240. There was no dissolved oxygen to sustain aquatic life. Nutrients from the New River accounted for 40% of the total load of nutrients going to the Salton Sea, even though the New River contributes less than 8% of the total flow into the Salton the Sea. Trash was measured at >150 cubic yards per year.

The Mexicali II project planning began 1996-1997. The Wastewater Treatment Plant was completed and became operational last year. The Plant, Las Arenitas, is approximately 20 miles from the border near the Cierro Prieto Mountain. Location was important because it sits on the other side of the water divide so the water will drain south to the Delta and the Rio Hardy. This water is not to come back into our watershed. That is one of the advantages of picking this location.

There are 12 miles of force main pipe built underground, runs right under the median on the San Felipe highway to Las Arenitas.

Recent data shows once Las Arenitas became operational and the raw sewage stopped coming into the New River, water quality dramatically improved.

There are several occasions where data showed it was in compliance with the California standard. Then it stabilized in the 10,000 Most Probable Number (MPN)/100 milliliters (ml) range. It was projected that with the plant operational it would still not meet the standard because it was going to continue to receive residual pollution.

Q: Is that strictly because of the Fecal/E. Coli in the river bank itself?

A: No, there are other sources of pollution out there. We have partial treated and untreated industrial waste that have fecal matter; trash that carries fecal matter and also have the existing discharges from the Zaragoza lagoons.

Q: Is the completion date correct, didn't it come online in 2007?

A: It has been in test mode since 2006. This is the fine tuning period.

(Mr. Angel stopped at this point and concluded after Mr. Peña conducted his presentation.)

Mr. Peña gave a brief background on Minute 264, signed August 26, 1980.

Before any construction work began, Quantitative Standards for the New River were set.

Parameters are a little higher than the State of California standards because Mexico has their own standards and we have our own so between both Sections an agreement was for Biochemical Oxygen Demand (BOD) /Chemical Oxygen Demand (COD) standards. These standards have been in place for about 27 years.

Several graphs of the BOD, COD, Fecal, and Dissolved Oxygen (DO) were shown and discussed of the samples collected from before the plant became operational, when the plant became operational, and current.

The dissolved oxygen (DO) standard of 5.0 mg/l was met and even exceeded at times. Within the last year the DO has been averaging 5-6 mg/l.

Q: What is tap water?

A: Tap water is about 6.5 mg/l.

Q: Looking at your data, what is going on in the summer that it tends to drop?

A: You have sunlight, algae and other things competing for the oxygen.

Data is collected on a monthly basis and reported on a quarterly basis available on the USIBWC website.

In conclusion:

- BOD has decreased and now meets the standard
- COD has decreased at the New River above the Agricultural Drain and meets the standard, although no improvement was detected at the Lagoon Discharge Canal/effluent
- DO has increased and now meets the standard for the first time
- Fecal Coliform has decreased somewhat

Q: Your statement of no improvement at the Effluent, is that from Mexicali I or Mexicali II?

A: Mexicali I

Q: Has there been any testing of Mexicali II effluent?

A: CESPM has the data published on their website at <http://www.cespm.gob.mx/principal.php> (link to data is <http://www.cespm.gob.mx/publicacionesresultado.php?claveTemaPDF=15>)

Q: A U.S. resident at the Rio Hardy claims that it has become very polluted since the plant has become operational, is that because of the effluent from Las Arenitas?

A: Las Arenitas runs 800 liters per second, that is about 12-15 million gallons per day. This is a lagoon type system and it gets more algae. The Rio Hardy is receiving more flow than it usually does so this may have just magnified the already existing problem there.

Q: Are you going to monitor the effluent?

A: No we don't monitor the effluent at Las Arenitas. The State of Baja California monitors it. The flow is going south now.

Mexico is going to have the similar impacts that we have been seeing on the U.S. side because the effluent is not disinfected enough or considered suitable for human contact. Their impacts will not be at the same magnitude as the U.S. was receiving because the effluent is somewhat treated.

Q: How does the performance of the Las Arenitas plant compare with other border treatment plants?

A: Older treatment plants along the border are just the lagoon type systems that let nature take care of the problem. The lagoon at Las Arenitas has aeration and a chlorine type chamber. It would be equivalent to secondary treatment standards.

Edith Santiago from the Sonoran Institute commented on the monitoring of Las Arenitas. The University of Baja California had been monitoring the Rio Hardy River for about a year (2006-2007) and will begin monitoring it again this year. Data will eventually be available to the public.

(Mr. Angel continued)

The IBWC standards do not apply at the border when the river crosses into the U.S. except for the DO and PH, the standards apply from way upstream from the discharge point to the New River. So from a water quality perspective they are useful in measuring the progress on the Mexican side but not useful for our purpose in measuring compliance at the border.

Q: What does the California Regional Water Quality Control Board data show?

A: It shows water quality improvement but there are still significant problems in the New River particularly in the Calexico area.

Graphs were shown and discussed of the Regional Boards data analysis.

Late last year, data results showed a sag in DO. That indicates that there is raw sewage or untreated industrial waste discharging into the river. It couldn't be explained in the data because Las Arenitas was on line and Mexico kept telling us that they were not bypassing untreated sewage into the New River.

Issue was discussed at the subsequent BTC meeting. What was reported at this meeting was that the State of Baja California had decided to encase another portion of the New River but we were not notified. So when they started to remove the mud in the bed of the New River, it started to uplift the bacteria and depleting some of the DO. That indicated a lack of communication. The Regional Board is required to notify the County Health Officer of anything like this.

Recently, after the earthquakes 2-3 wks ago, Mexico started to send raw sewage back into the U.S. This is very sensitive because a substantial portion of the cost of the Mexicali sanitation projects was covered by U.S. dollars. We still do not know what damage occurred at Pumping Plant #4 to cause them to send the sewage to the U.S.

Ongoing problems:

- Pumping raw sewage
- Illegal discharges
- Mexicali I lagoons are not disinfected, high nutrients and high Total Suspended Solids (TSS)
- Communication

Conclusion:

- Slugs persist and wipe out gains
 - Need to report bypasses
 - Need to track/identify slug sources
- Bacteria remains a serious problem
 - Raw sewage?
 - Trash
- Trash remains a significant problem
 - It must be addressed
 - Adds bacteria and other pollutants
 - Dumping of toxicants a concern
- Industrial discharges must be addressed
 - Slaughterhouse discharges
 - Dairies/Confined Animal Feeding Operations (CAFOs)
- Non-point sources (NPS) must be addressed

Even with the plant fully operational, we still have water quality issues in the U.S.

We are currently working to fine tune the water quality results and sampling sites along the border. Trying to measure at various points along the border. This will help to find remaining sources of pollution. This will take additional time and work with Mexico.

Good news there is water quality improvement but not sufficient enough to meet California standards.

Q: Percentage wise, what is the improvement of the before and after of Las Arenitas with the water pollution we are still receiving?

A: Terms of bacteria 300% decrease, improvement in DO is significant. There has also been a 20% reduction of nutrients going into the Salton Sea. The downside is we are losing water. On the standpoint of policy, we still have a long way to go to address the other sources of pollution that are significantly more difficult to control. It will take more money to address. The plant is not the overall fix.

Q: Is there any Treaty requirement for Mexico to continue to send water into the U.S. or can they divert it all?

A: No, we have no water rights.

Q: Where were the sampling points used to design the facility?

A: IBWC slides showed three sampling points in Mexico. Primarily the existing lagoons, Mexicali drain and the New River just before border.

IBWC comment: An in-depth analysis of the wastewater system was conducted by the City of San Diego.

Q: The bypasses, are these temporary? Is the private company still managing the plant?

A: Expect it to be temporary.

IBWC comment: Plant has only been online about 2 years. Once the plant is stabilized it will be turned over to CESPM within one year.

Minute 306 Environmental Projects – Carlos Peña, USIBWC Environmental Management Division Engineer

A PowerPoint presentation was shown, available on the USIBWC web page.

Through a binational effort with Mexico, we are currently working in accordance with Minute 306 to develop joint recommendations regarding projects for conservation and restoration in the Colorado River Delta.

In 2000, it was decided to do something with the Colorado River Delta to include restoration projects, studies related to the delta, and set up a binational advisory group.

A group known as the 4th Work Group had been working on this with several participating agencies from the U.S. and Mexico.

The non-governmental organizations (NGOs) had a head start on this and had identified 45 projects in the delta to improve the environmental make-up of the region. What the Binational Advisory Group did was take eighteen of those projects and make them the initial priorities -- not necessarily doing them or funding them ourselves but working to get them implemented.

A website will be developed to have a database of reports, documents, meeting minutes, events and websites of interest. Mandate is to help work with Mexico and the NGO's to help enhance the Colorado River delta.

Future task:

- Modeling workshop – there is a lot of information on ground and surface water out there. U.S. and Mexican governments want to develop a model to provide an integrated surface and ground water model for the Colorado River system.
- Binational tour of priority projects
- Website

Q: Does the website exist yet?

A: It's not quite ready yet.

Project Update and Status Reports:

All-American Canal Update – Dean Currie, Imperial Irrigation District

Update on construction of the lined portion of the All-American Canal:

- ❖ Excavation activities scheduled to finish March 2010.
- ❖ Construction currently ahead of schedule.

- ❖ Cofferdam failure update: response was quick, very little harm was done. Approximately 50 acre-feet was lost downstream to the Salton Sea. Approximately 650 acre-feet went into the lined All-American Canal but was able to be pumped back out and put back into the old canal.
- ❖ Accomplishments:
 - ✓ 20 million cubic yards of material has been excavated
 - ✓ 420 temporary groundwater control wells have been installed. They are required along the new canal to temporarily lower groundwater level near the new excavation so the channel prism can be properly prepared for placement of the concrete lining.
 - ✓ 21,500 linear feet of new concrete lining
 - ✓ Public access restored at Herman Schneider Memorial Bridge.
- ❖ Future plans:
 - Excavation and lining will continue through next winter
 - New canal will be connected to the existing canal
 - Flow will be transferred to the new lined canal.
 - Construction activities in areas such as Test Hill will begin fall of 2007

Q: Did you lose any equipment?

A: Construction crew did have equipment in lined area and equipment was submerged.

Q: Any damage to lining?

A: No damage.

Board Discussion

Next meeting to be held in Yuma, Arizona Monday, June 9th.

Board members or citizens interested in participating in the bimonthly binational tour of the Mexicali Plant please contact or email the Yuma office. If there is a large response, a special observation can be arranged with Mexico. (928) 782-1598 or email algoff@ibwc.state.gov

Suggested Future Agenda Items

- All-American Canal update
- New River Water Quality updates

Thank you to all the presenters for their presentations.

*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.