

Southeast Arizona Citizens Forum

Nogales, Arizona

April 07, 2011

Tentative Meeting Notes

Board Members in Attendance

Alejandro Barcenas
Ben Lomeli
Bill Odle
Emily Brott
James Barr
Jenny Neely
John Ladd
Rosanna Gabladron
Claire Zugmeyer

USIBWC Staff in Attendance

John Light
Carlos Peña
Alison Lamb
Richard Balmes

About 10 additional members of the public were in attendance.

John Light opened the meeting by welcoming everyone in attendance. Board members then introduced themselves and provided a brief background. Members of the public then introduced themselves.

Friends of the Santa Cruz River

Mr. Light then introduced Sherry Sass, one of the co-founders of Friends of the Santa Cruz River (FOSCR). She presented a PowerPoint presentation regarding the history and mission of the FOSCR. Highlights of her presentation included:

FOSCR was founded in 1991 to protect and enhance the flow and water quality of the Santa Cruz River and it is an all volunteer organization. She emphasized that the riparian environment there supports the following habitat: mesquite bosque, cottonwood, willow, cienega marsh and aquatic. She also stated the presence of various fish, reptiles, birds, mammals, etc. The connectivity for wildlife is a very critical part of the river.

Some of the major issues are water quantity, quality, land use/flood plain dynamics, wildlife corridors/habitat connectivity, and maintenance of ecological services. The FOSCR has a rainwater garden located at the Santa Cruz County complex. They monitor the Santa Cruz River with their River Watch program, collecting samples every month in coordination with the Arizona Department of Environmental Quality (ADEQ). Their sampling sites are at Chavez Siding, Tubac Bridge, Santa Gertrudis, Rio Rico Bridge and the Nogales Wash at Ruby Road. They are looking for funding to continue the sampling projects.

FOSCR expressed their appreciation for the upgrade of the Nogales International Wastewater Treatment plant and visual/olfactory improvements to the river. During the annual fish survey in 2008 there were only 2 fish detected. After the 2009 survey it was wonderful and last year there were more fish in one site alone than there were in the previous year's survey altogether.

The FOSCR puts out various publications in order to educate the public. These include a Guide to the River and a periodic newsletter. They also do walks and other public events and presentations such as this one.

Ms. Sass mentioned that a grate under the Nogales Wash is creating a dam of trash. IBWC is aware of this and working with US Customs/Border Patrol to address this issue.

She also thanked John Light and Richard Balmes for the great work they do at the treatment plant.

The only question asked regarding the presentation was a ballpark cost for the river monitoring. She stated that it is about \$1800 per quarter for five sites. Samples are for metals and *e coli*.

End of Presentation

John Light stated his thanks and appreciation to Ms. Sass for the presentation and kind comments regarding the treatment plant. He also thanked Rick Balmes for all his hard work.

Industrial Pollution Impacts at the Nogales International Wastewater Treatment Plant

Carlos Peña, Jr., Principal Engineer from the Headquarters of the U.S. Section of the International Boundary and Water Commission in El Paso, Texas, gave a presentation on this topic.

Mr. Peña began his presentation by stating how good it was to be back in Nogales, as he is very familiar with this area. He lived in Patagonia from 1991 – 1995, he has a son that was born here and he was previously the Area Operations Manager (AOM) at the Nogales International Wastewater Treatment Plant (NIWTP). He also stated that the IBWC might be able to help FOSCR with funding.

Mr. Peña said that in the late 1980's the NIWTP, which treats sewage from Nogales, Arizona and Nogales, Sonora, consisted of aerated lagoons and that you could see these huge plumes of foam over the lagoons and that the treatment process we have now is much better.

He stated that the treatment plant is important for the Arizona Department of Environmental Quality (ADEQ) and that the IBWC will be getting a lot of help from them over the next couple of months.

He stated that the 2009 upgrade to the NIWTP is a Biological Nutrient Removal System (BNR) plant and that the biological oxygen demand (BOD) levels are less than 10 (non-detect) and Ammonia is non-detect. There has been a significant increase in the effectiveness of treatment. 70% of the water treated comes from Mexico. In his presentation, he showed a picture of the old plant and of the new plant. There has been a dramatic change, which also dramatically increased the costs to operate the plant. Last year's treatment cost was around 3.5 million dollars.

We monitor the quality of influent, effluent, and wastewater at the border. We have had significant levels of cadmium come into the plant and we cannot analyze all of the water all of the time.

Our biosolids were being land applied to local farms. In August we noticed cadmium in the biosolids in excess of the concentration allowed for land application so we stopped the land application. The biosolids that were land applied to the fields are now being removed and sent to a landfill. Due to the biological nature of the treatment plant, any additional technology to treat the metals may interfere with the biological systems. One of the options we are considering is hauling the biosolids back to Mexico. In the meantime we are increasing the monitoring of our biosolids and continue coordination of binational pretreatment efforts.

We are an international agency with a counterpart in Mexico, the Mexican Section of the IBWC, also known as CILA. We will be setting up a binational meeting within two weeks with the City of Nogales, IBWC, CILA, Nogales, Sonora, and ADEQ. One of the topics we will be talking about is pretreatment coordination to mitigate spikes in the metals. Mexico also has funding issues with regards to their pretreatment program. Mexico is also building a treatment plant (Los Alisos) which will result in less flow coming to the United States and should see a reduction in the industrial pollution. The Mexican plant should be online sometime during the summer of 2012. The ultimate goal is to protect the river.

Questions:

Ben Lomeli summarized the challenges in disposal of biosolids (cost) and the impacts on downstream water users, the need for pretreatment as the real solution and the need to work together locally. IBWC/CILA needs to step up to the plate at the local level rather than federal to federal.

Peña - The idea is to go after this with monitoring and resources to determine the source of the contamination. Agree that it is easier to treat at the source rather than at the treatment plant.

Lomeli: We haven't seen the involvement from CILA, so we are going to rely more on the IBWC.

Peña: CILA coordinates with the local utility to encourage them to respond.

Q: Does the cadmium go out in water or solids?

A: Both - maybe 60 – 80% in biosolids, the remainder in the effluent.

Q: If Mexico takes back the sludge, do we know what they will do with it?

A: Possibly land apply or take to a landfill.

Q: There is lots of talk about the metals source coming from Mexico; is there any possibility of any coming from the United States?

A: Most of the metals come from plating type industries. I don't think there are any of these in the Nogales, AZ area. We have not seen anything in any laboratory results that would indicate a U.S. source.

Q: How many cities in the United States treat wastewater from both countries?

A: Nogales, AZ and Nogales, Mexico are the only ones that I am aware of that treat sewage from both countries on the US side.

Q: Is there a possibility of having a binational pretreatment program?

A: We have not really talked about that, could just be more red tape. I think we will see a difference once the Los Alisos plant is up and running.

Q: If cadmium is the number one issue, what is the number two problem?

A: We do see hits on all the industrial metals; however cadmium is the chronic one. Our current problem is flow. We are currently treating 16 million gallons/day (mgd) while the plant design is 14.74 mgd.

Q: How big a problem is infiltration?

A: It is a problem – we anticipate 1-3 mgd of infiltration during the dry season.

Q: What is the targeted amount of sewage to be treated at the Los Alisos Plant?

A: Between 5-6 mgd.

End of questions.

Board Discussions

The board discussed the selection of a Citizens Forum Co-Chair. One is usually the USIBWC's Area Operations Manager and one member from the board. There currently are two persons interested – Ben Lomeli and Alejandro Barcenas. Both spoke regarding their qualifications for being co-chair. Board members wanted to hear from the candidates and then e-mail their vote to USIBWC Public Affairs Officer Sally Spener.

Board member John Ladd had a couple of items he wanted to bring up, transboundary flows at the sierra delta and that the new garbage dump in Naco, Sonora was on fire. Not sure if the is landfill is lined or where the bulldozer is that the IBWC donated to them. It seems to be a pretty substantial fire.

John Light stated that he would contact CILA to see why the dump is burning and the location of the bulldozer. Another issue John Ladd brought up was that the previous week there was someone doing an impact study in the 60-foot federal easement along the border related to the proposal for 7 ½ miles of fence west of Naco. The reason they want to redo the landing mat fence is because Border Patrol agents cannot see through it. He cannot get any information from Border Patrol regarding this. He is concerned that the new fence won't be any more effective than the existing one.

Board Member Jenny Neely asked is there a way IBWC could somehow get information on what is happening on the border and communicate this with the stakeholders. Peña stated that USIBWC does coordinate with CBP on a monthly basis regarding projects that affect IBWC directly. DHS usually gives plans to us for review with only a 72-hour turnaround time. The documents are usually 450 + pages.

John Light – The next meeting is scheduled for July. We can bring these topics up for Cochise County.

It was suggested to have the meeting in Naco at the Cochise County Building and to possibly get someone from Border Patrol to give a presentation. Jenny Neely would also like to give a presentation at the next meeting. It was also suggested to plan a tour of the San Pedro River (it would possibly be a 2 ½ hour tour). Suggested date for the next meeting July 14th. It was suggested to get on a schedule, like the third Thursday of the month for the meetings.

Other suggestions for future agenda items:

International Outfall Interceptor and its state of disrepair. Also flooding issues along the Nogales Wash.

Meeting adjourned.

*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.