Southeast Arizona Citizens Forum
Nogales, Arizona

January 12, 2012

Tentative Meeting Notes

Board Members in Attendance

John Light
Alejandro Barcenas
Ben Lomeli
James Barr
John Ladd
Rosanna Gabaldon

USIBWC Staff in Attendance

Alison Lamb
Richard Balmes
Don Atwood
Gabriel Duran

Welcome and Introductions

Co-chair Alejandro Barcenas opened the meeting by welcoming everyone in attendance. Board members then introduced themselves. Members of the public then introduced themselves.

Santa Cruz Active Management Area (SCAMA) Water Storage Study

Alejandro Barcenas introduced Deborah Tosline from the Bureau of Reclamation . Ms Tosline then gave an overview of the SCAMA/Nogales Water Storage Study Appraisal Study. In 2006 an intergovernmental agreement (IGA) was created between the Bureau of Reclamation, City of Nogales, and Arizona Department of Water Resources with Santa Cruz County being a sponsor. Total cost was one (1) million dollars, with a 50% cost share, either money or in kind services. Cost share accounting and reporting is required. The appraisal level study consists of compiling existing data and information, planning and a problem statement, which can change in time as circumstances change. It can take up to 3 – 6 months to complete a problem statement. The typical duration of the Appraisal study is about two (2) years. The planning road map consists of identifying the problem, coming up with a long list of possible solutions, development of evaluation criteria, performing appraisal-level analysis of alternatives, comparing alternatives to create a short list, feasibility level analysis of the short list, selecting the final alternative and then the implementation of the alternative. She then discussed the problem statement for the Santa Cruz Active Management Area and the long list of alternatives. The criteria for evaluating the long list include: implementability (must also consider legal and institutional issues), effectiveness

(how close does it come to solving) and cost (come up with a cost per acre foot on each alternative to compare). They began development of a couple of alternatives:

A: Reuse pipeline (Nogales International Wastewater Treatment Plant outfall) with treated effluent and also came up with a potential route, and proposed main and lateral pipelines. Also looking at a slower way to recharge.

B. Replace groundwater use with treated effluent on existing turf (ie: watering of golf courses). She also discussed the legal and institutional issues with each alternative.

Tosline then concluded her presentation with the status of the project. They have compiled a database, prepared an outline of legal issues, developed a problem statement, compiled available hydrogeologic data into tables, prepared preliminary maps, and have begun to develop alternatives and assessment criteria. However due to lack of funding and congressional support there are minimal funds to continue work on the project. Current funding only supports the attendance of minimal meetings and some report preparation. There is insufficient funding to develop alternatives.

Co-chair Barcenas then opened the floor for questions:

Q: The concept of rain storm water harvesting is splendid but what about watershed improvements? And concerning the pipeline, about 85% of water [in that reach of the Santa Cruz River] is from effluent.
A. Regarding the reuse pipeline – that would fall into legal aspects that we would need to consider. Also, there are issues with all of the alternatives that were identified.
Q. You mentioned gravel pits, what types of improvements would be required to use them?
A. As excavation is done – issues would be storage capacity under the gravel pit.
Q. If the pit is already constructed what else would you need to do?
A. Maybe a downstream assessment, this is a feasible option as this is currently being done in other areas of the state.
Q. Would the pipeline be built on private land?
A. Yes, and there would need to be coordination with the landowners. The study is just brainstorming, nothing is set in stone. This is just the beginning of a long process.

<u>Update on Border Environment Cooperation Commission (BECC)/North American Development Bank (NADB) Projects in the Nogales Border Region</u>

Alejandro Barcenas then introduced the next presenter, Temis Alvarez, who gave the following presentation on BECC Projects:

This presentation will provide an update of projects in the Nogales Region. First of all, what is BECC and what do we do? BECC was established by the U.S. and Mexican governments in 1994 along with the North American Development Bank (NADB). They work cooperatively to certify and finance environmental infrastructure projects with the intent of improving the environmental and health conditions in the border region. Their jurisdiction is 100 kilometers on the U.S. side and 300 Kilometers on the Mexican side of the border. Projects beyond these areas may be eligible if they remedy a cross-border environmental or health problem. To support the development of these projects with planning, environmental and final design studies, BECC has two technical assistance programs: The Project

Development Assistance Program (PDAP), which is funded by the EPA, and a special program funded through the BECC's operating budget. Projects certified by BECC are financed by NADB or other financial institutions. Since its creation, BECC has provided $39.39 million in technical assistance grants, with 24.52 million going to 88 communities in the U.S. and 14.87 million going to 72 communities in Mexico. He then outlined the process of how projects get selected and funded, showed a map of the certified projects for the region, emphasizing Arizona. He stated that BECC also will provide technical assistance and training. They are starting to work with utilities doing energy audits. One of the problems in Arizona is that there are a lot of privately-owned utilities and they are not eligible for assistance. (If they are for profit).

The most dramatic improvements have been in Mexico. BECC feels that they are meeting the challenge and that it is also a pleasure to see the end results and how the people have been helped. He also stated that they cannot certify a project if the community doesn't accept it.

He then provided an update on the Los Alisos Wastewater Treatment Plant, explaining the capacity and process. This plant will serve 70,000 inhabitants in Nogales, Sonora with an estimated 20,308 connections and have an initial capacity of 5 million gallons per day (MGD). The cost of the project is 19.31 million dollars with the anticipated outcome being capacity to eliminate uncollected wastewater discharges (2.99 MGD). Construction of the treatment plant will handle excess flows that currently go to the treatment plant in the United States. The idea is to have enough capacity so that only the volume of Mexican sewage provided for in international agreements will come to the Nogales International Wastewater Treatment Plant (NIWTP) in Arizona. The Los Alisos plant will consist of two treatment modules (2.5 MGD treatment capacity each). It includes screening, grit separators, secondary treatment and disinfection as well as sludge digestion, thickening and dewatering.

Question: Will this plant be treating industrial waste?
Answer: None of the water going to Arizona or south should have any metals. The deadline to get their act together is when the plant comes online. That is when pretreatment should be enforced. Also if the sludge from this treatment plant doesn't meet criteria and is deemed hazardous, it will need to be disposed of as hazardous waste and the nearest location to accept that would be in Monterrey, Mexico.

Question: What is BECC's mechanism to keep heavy metals from coming into the United States?
BECC isn't involved in this aspect.
Back to presentation:
Los Alisos has been fourteen (14) years in the making. 95% complete on the treatment plant, 85% complete on the force main and 70% complete on the gravity feed.
This is a photovoltaic project and will be the first treatment plant in Mexico to be powered by solar energy.

<u>Update on Nogales Wash and International Outfall Interceptor (IOI) Projects</u>

Don Atwood from the IBWC gave an update on the Nogales Wash, flooding concerns, and planning concerns.

The IOI is actively eroding and deteriorating. The original structural strength of the pipeline has been compromised and the current rate of deterioration is unknown, meaning the remaining life of the pipeline can only be estimated. The reliability of this system is only as good as its weakest link. In August of 2011 we received proposals for the rehabilitation design of the IOI. IBWC is currently waiting

on funding agreements between the City of Nogales and the USIBWC. Current proposals include rehabilitation @ 30 million dollars which could either be slip lining or cured-in-pipe. Replacement at approximately 100 million dollars would consist of open cut and complete replacement of existing pipe.

Atwood then gave an update on origin of the Nogales Wash Basin and the different tributaries associated with it. From there he went to ownership of the IOI and the Nogales Wash, which belongs to the City of Nogales. He also provided current conditions of the IOI and the Wash and the various flood damage of 2007 and 2008. He touched briefly on the Comprehensive Binational Stormwater Management Plan. He concluded his presentation by touching upon the Nogales Wash Emergency Response Plan, Arizona Department of Emergency Management and the Crisis Action Team.

Questions:
Q: Are there any projects on the IOI/Outfall planned for 2012?
A. The Scope of Work has been completed for the project; however funding is currently the issue.

Master Planning

Gabriel Duran, from the USIBWC Master Planning Office in Headquarters then stood up and introduced himself and said that he would like to attend all of the Citizens Forum meetings. He congratulated BECC on the Los Alisos treatment plant project. He added that the Commission is a very proactive agency and gave a brief overview of the 1944 Water Treaty. Some of the things the Commission is looking at for the Nogales Office are a shelter for the belt press area and another entrance to the treatment plant.

Public Comment

Richard Searle: San Pedro Watershed Project - Coronado RCD (Resource Conservation District) received a grant about a year ago from the Arizona Department of Environmental Quality (ADEQ) to address the *E. coli* bacteria issue in the San Pedro River between Fairbanks and St. David. In 2006 from Hwy 82 to St David there was an exceedance of *E. coli.* The grant is to study and identify sources and address the issue. In 2011 initial sampling was done. The researchers are interested if the International Boundary and Water Commission could provide any type of assistance. They discovered that before the rains there was no *E. coli* but after the rains all areas had high *E. coli* counts. Genetic markers indicate that the source of *E. coli* was a combination of human and bovine. They continued to work further south to try to determine the source where they ended up sampling at the border during high flow events and *E. coli* exceeded there as well.

Future Agenda Items
Next meeting to be held in Cochise County on April 12.
Board members should e-mail Sally Spener with any suggested agenda items.

*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.