

**Southeast Arizona Citizens Forum  
Green Valley Elks Lodge  
Green Valley, Arizona  
June 15, 2017  
\*Tentative Meeting Notes**

**Board Members in Attendance:**

Rosanna Gabaldon, Arizona State Rep – LD2 and Citizens Forum Co-Chair  
Marty Jakle, Friends of the Santa Cruz River  
Ben Lomeli, U.S. Bureau of Land Management and Friends of the Santa Cruz River  
Lee Jacobs, Utility Director, City of Nogales  
Ann Marie Wolf, Sonoran Environmental Research Institute, Inc. (SERI)  
Luis Ramirez, Ramirez Advisors Inter-National, LLC.

**USIBWC Staff in Attendance:**

John Light, USIBWC Nogales Area Operations Manager and Citizens Forum Co-Chair  
Lori Kuczanski, USIBWC, El Paso  
Alison Lamb, Administrative Services Clerk, Nogales Field Office

**Members of the Public in Attendance:**

Judy Lynn, Arizona Department of Emergency and Military Affairs  
Ruben Reyes, Representative Grijalva's Office  
Jim Smith, Green Valley Elks Lodge  
Lily Smith, Green Valley Elks Lodge  
Alex Modehn  
Dan Offret  
Joel Mora  
Julie Katsel, Senator Flake's Office  
Alejandro Barcenas, City of Nogales  
Keith Nelson, Arizona Department of Water Resources  
Olga Ephstein, Arizona Department of Water Resources  
Sherry Sass, Friends of the Santa Cruz River  
Evan Canfield, Pima County Flood Control  
Philbert Baily, San Xavier District  
Edna Mendoza, Arizona Department of Environmental Quality

**Welcoming Remarks:**

At 5:00 pm Rosanna Galbadon, Co-Chair, convened the Citizens Forum meeting and called the meeting to order. Ms. Gabaldon went over the purpose of the board, which is to promote the exchange of information between the United States International Boundary and Water Commission and the community regarding Commission projects and related activities in Pima, Cochise and Santa Cruz Counties. Board members and attendees introduced themselves. She thanked the Green Valley Elks Club for agreeing to have the meeting at their facilities. She then introduced the first presenter, Olga Ephstein, Arizona Department of Water Resources.

**Presentation One: ADWR Groundwater Modeling & Data Collection Efforts within the Santa Cruz Active Management Area, Olga Ephstein, Hydrologist, Arizona Department of Water Resources (ADWR):**

Ms. Ephstein began her presentation by stating what her talking points would be about – first by giving a brief overview of the Santa Cruz Active Management Area (AMA) as seen through the eyes of the

Arizona Department of Water Resources (ADWR) and a little about the hydrology with the two groundwater models. She provided a little more context about what the department has been doing with these models in the past few years and what kind of activities one might expect to see from the department in the next few years. In addition to the efforts in the office, ADWR also has a very large dedicated crew in the field, collecting field measurements of groundwater and surface water. Ms. Ephstein provided a few updates on that work as well and finally will wrap up with what the department plans for the next couple of years.

The Santa Cruz AMA was formed in 1994, when the legislature and the department both recognized the need to create a new management, recognizing that there were some physical and social and political differences in the Santa Cruz AMA that made it somewhat different from the Tucson AMA. The Santa Cruz AMA was carved out of the somewhat larger Tucson AMA. When the AMA was created, it was created with dual goals, the first of which was to maintain safe-yield conditions and the second was to prevent local water tables from experiencing long-term declines.

In 1997, ADWR began its long-term field monitoring activities within in the AMA area and those field activities are useful just because they are the baseline for helping us understand what is going on within the AMA in respect to hydrology and it has also been informing a set of regional ground water flow models. It began in 1997 and has been updated and improved since then. At a very high 10,000 ft. level some of the important aspects of the Santa Cruz AMA are how we divide the fluxes into and out of the management area. So, in terms of inflow or sources of water that contribute to the aquifers, we have natural streamflow from the Santa Cruz River itself and treated effluent from the Nogales International Wastewater Treatment Plant (NIWTP). Along the tributaries on the mountains on the east and west of the valley side additional recharge and incidental agricultural recharge occur so this can eventually make its way down into the aquifer. Finally, along the U.S. and Mexico border we have some subsurface flow into the AMA. The outflows, we see a lot of similarities, in the south we have a lot of inflow from Mexico into the AMA. In the north, the outflow leaves the Santa Cruz AMA and enters the Tucson AMA. We also have losses to the outflow because of seasonal evapotranspiration. We also have agricultural, municipal, industrial and domestic pumping. Finally, there is seasonal discharge from the aquifer to surface water of the Santa Cruz River.

Starting at the south and moving north as the river flows, we have the first model, which we call the micro-basin one. This is 14 river miles from the US-Mexico border to the NIWTP, and covers 1/8 X 1/8 of a mile model grid. Immediately adjacent we have the North Santa Cruz Active Management Area (SCAMA) model; it's a little bit larger at 27 river miles from the treatment plant to the Elephant Head Bridge, and covers 1/4 X 1/4 mile model grid. In regards to the micro-basin model, you can think of it as four small basins in a series along a narrow valley from the border to the NIWTP. Ms. Ephstein went over the Kino Springs hydrograph data which shows depths to water and the measurement dates. In terms of where this model is right now and where we are going to be taking it in the next few months, we have been working on updating the data through the end of water year 2016. Although the presentation shows updated data through water year 2015, we now have data from 1997 – 2016 captured. Ms. Ephstein went over the Northern Santa Cruz AMA model, showing hydrograph data for this model as well. It is updated through water year 2016 (which ends October 2016). Some of the field work that has been going on since 1997 includes quarterly sampling on 24 index wells located throughout the Santa Cruz AMA. They are sampled quarterly and this data is publicly available thru ADWR's Groundwater Site Inventory database (<https://gisweb.azwater.gov/waterresourcedata/GWSI.aspx>). Planned modeling updates include: complete calibration of existing models using 20+ years of transient data and to merge micro-basins and SCAMA models; expand model domain to Potrero Canyon. ADWR is working towards releasing Santa Cruz AMA fourth management plan which will cover the period of 2010 – 2025. Hoping it will come out for public release sometime in 2018.

Ms. Gabaldon called for questions, with questions from the board first, then the public. She asked that questions/comments to please be limited to one minute to accommodate all questions and comments.

**Questions:**

Q) With only four wells on the west side of the river, how do you feel about the calibration of that?  
A) We will be looking at the wells to see which ones are redundant, where we need more coverage and if there are available wells which we can look at and get that information. Maybe we don't need a dense cluster of wells together, if our hydrology is very similar maybe we can go out further. So, you might see changes to the charts in the future.

Q) Going back to the hydrograph you showed by Kino Springs, it showed a lot of peaks and valleys, now the peaks are caused by flooding recharge, right? What causes the valleys and is that like outflow through groundwater, or what causes the loss?

A) I would like to think that yes, because these are very small basins they fill very quickly by that flood recharge pulse but they are connected so the water flows out to the next basin until it's entirely out of the micro basin and into the northern basin.

Q) So, it's gravity flow that is taking it out of the micro-basin?

A) Yes, there is not too much pumping.

Q) How do you measure the depth of the well?

A) There are a few telemetry wells, so those are recorded in intervals using radio telemetry so no field personnel are required. Others are done manually by field personnel, who basically take a long measuring stick and measure from the top until they reach water.

Q) Is this mapping or modeling going to come up with better recommendations on what to do, or how to manage it?

A) Yes.

Q) Do you think there is enough water to support one (1) million more people to come to the area?

A) That's a tough question, I would guess no, but that is just my opinion, so don't hold me to it.

Ms. Gabaldon stated that Gov. Ducey will be starting two new water groups, so please send her any questions that you have so that she can present them to her staff and minority leader and they can ask those questions.

Q) USGS has done some studies in the past, would you incorporate some of that information into the groundwater models?

A) Yes, absolutely, we have been in contact with USGS and we have used some of their surface water data.

**Presentation Two: Coordination between Neighboring States: The Arizona-Sonora Environmental Strategic Plan, Edna Mendoza, Director, Office of Border Environmental Protection, Arizona Department of Environmental Quality (ADEQ):**

Ms. Mendoza started her presentation by thanking everyone for the invitation. Ms. Mendoza went over the overview of what her office is in the Arizona Department of Environmental Quality.

The Office of Border Environmental Protection is under the office of legislative affairs which reports to Amanda Stone. What the office does as a team is work on various multi-media issues. Air quality, water

quality and waste management. We assist the divisions with cross border type of issues or concerns.

The objective of the Arizona-Sonora Environmental Strategic Plan is to have one guide for the Arizona-Sonora border region so that the various organizations that support binational collaboration can maximize the effectiveness of resources.

Funding comes from EPA grant money to ADEQ, there are certain pieces of those grants that are designated for the border area. ADEQ functions with binational and border-related organizations, such as the Border 2020 Environmental Program, and supports the environmental water committee.

Ms. Mendoza also wanted to provide a brief overview of Border 2020 – EPA along with States and tribal governments developed this 8-year program. It contains five (5) goal areas and six (6) fundamental strategies. There are regional groups that are tasked with developing two (2) year action plans to implement projects and activities along the border area. Our area is the Arizona-Sonora Regional Workgroup. Depending on agency or program that people work with, there are different definitions of what the border zone is, so we go with what the EPA definition is for Border 2020 for border activities.

The 1983 La Paz Agreement between the United States and Mexico established a border zone that extends 100 kilometers on either side of the international boundary. Other partnering institutions are supportive of the Border 2020; agencies that fund some of the larger infrastructure projects are the Border Environment Cooperation Commission (BECC) and the North American Development Bank (NADBank). They include the southern border up to 300 kilometers south of the international boundary. We have co-chairs that preside over our branch of the task forces. The co-chairs for EPA Region 9 is the land division director and for ADEQ it is the Director of the agency (or his designee). We also have our counterpart agencies in Nogales Sonora.

Task forces that we have are air quality, water quality, waste management/ enforcement and emergency preparedness and response. The reason we have waste management and enforcement is because when the task forces were created there were a lot of issues regarding hazardous waste types of issues/concerns. Enforcement people have separate meetings so if there is an enforcement-related issue then those folks can meet separately so they can discuss those concerns in a non-public setting.

This plan was developed through a series of conference calls, workshops and individual consultations. Two multi-agency workshops were held in Tucson (September 13-14) and Hermosillo (November 1) to discuss the development and selection of key projects; criteria for considering these projects and to prioritize the projects. These sessions included four working groups (air, water, waste and wildlife). There was discussion on potential projects and identification of project impacts and implementation. The groups then voted on projects and the prioritization of projects. There are 15 strategic projects that were selected as high-priority projects and address a range of issues within the areas of water, air, waste management and wildlife. They will be implemented between 2017 and 2021.

In addition, there are 14 projects for future consideration. There priority projects are laid out and explained in the Power Point presentation that was shown. It was mentioned that Cananea, Sonora would like to build a wastewater treatment plant.

One of the things that we have done was pick up trash along the border. We picked up 29 tons on the U.S. side and 4 tons on the Sonora side.

**Questions:**

Q: I understand that there was an application for a grant regarding the stormwater retention basins?

A: Yes, and hopefully we should have a decision by the end of the month.

Q: With budget cuts, will you see a reduction in funding?

A: Probably. Ms. Gabaldon then responded that the Governor provided more money to ADWR than ADEQ and she will work towards getting more funding for ADEQ for this.

**Public Comment:**

It was stated that Henry Darwin from ADEQ is now the Chief of Operations for the EPA in Washington DC.

A question regarding the International Outfall Interceptor (IOI) process, what is the status and the next step for rehabilitation of this pipeline?

Answer: Next week there is a stakeholders meeting, still working on the cost share portion and yes, that is something that we can have as a future agenda item.

Question – Are there any plans to prevent drugs, etc. coming thru the IOI? Can this be a possible topic at future meeting?

Answer: Yes, it can be a topic at a future meeting.

**Board Discussion/Suggested future agenda items:**

Next meeting to be held in Santa Cruz County. Would like to possibly hold it at the community center in Tubac. Please submit suggested meeting sites to Rosanna Gabaldon

Future agenda items suggested:

Update on the IOI and the Nogales Wash – including preventing drugs, etc. coming thru the IOI.

Update on storm water underground tunnels, update by the Mexican Section of the IBWC.

Ms. Galbadon stated that Amanda Stone also has a couple of ideas that she would be willing to present, such as a presentation on the small water systems fund and the 5-year strategic plan for Arizona and Sonora environment plan.

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.