

**RIO GRANDE CITIZENS' FORUM**  
**Monday, September 8, 2008**  
**6:30 - 8:30 P.M.**  
**USIBWC Headquarters**  
**4171 N. Mesa St., The Commons, Building C**  
**El Paso, TX 79902**

**AGENDA**

- Welcome & Introductions – Al Riera, USIBWC, Citizens' Forum Co-Chair
- Paso del Norte Watershed Council Update – Chris Brown, NMSU, Chair, Paso del Norte Watershed Council
- Upper Rio Grande Water Operations Model: Current Status of RiverWare Model for Simulation of the Rio Grande Flow for the Rio Grande Project – Zhuping Sheng, Texas A & M University
- Rio Grande Flood Control Improvement Projects – Raymundo Aguirre, Civil Engineer, USIBWC, and Gilberto Elizalde, Principal Engineer, Mexican Section IBWC
- Texas Clean Rivers Program for the Rio Grande, Water Quality Monitoring – Elizabeth Verdecchia, Environmental Protection Specialist, USIBWC
- Public Comment
- Board Discussion, Suggested Future Agenda Items

Note: The next meeting will be Thursday, December 4 in Las Cruces, NM.

If you have a disability that you wish to self-identify confidentially that requires accommodation, please advise us ahead of time. For more information, call 915-832-4175 or e-mail [sallyspener@ibwc.gov](mailto:sallyspener@ibwc.gov)

Rio Grande Citizens' Forum  
September 8, 2008  
USIBWC Headquarters  
El Paso, TX

\*Tentative meeting notes

Board Members in attendance:

Zay Clopton, Victorio Ranch  
Doug Echlin, Coronado Neighborhood Association  
John Hernandez, EBID  
Alisa Jorgensen, Save the Valley  
Ed Fierro, El Paso Water Utilities  
Conrad Keyes, Paso del Norte Watershed Council  
Joe Groff, Chihuahuan Desert Wildlife Rescue

Mexican Section staff in attendance:

Gilberto Elizalde  
Enrique Muñoz  
Ramiro Lujan

USIBWC staff in attendance:

Raymundo Aguirre  
Hayley Goodstein  
Al Riera  
Wayne Belzer  
Sally Spener  
Elizabeth Verdecchia  
Carlos Peña  
Tony Solo  
Rita Crites

Members of the Public in attendance:

Zhuping Sheng, Texas A & M University  
Lorenzo Arriaga, Reclamation  
Kent Waggoner, TCEQ  
Sylvia Waggoner  
Greg Bloom, Office of Senator Bingaman  
Inga Groff, League of Women Voters of El Paso  
Woody Irving, Reclamation  
Mike Landis, Reclamation  
Chris Brown, Paso del Norte Watershed Council, NMSU  
Marie Eichelmann, Save the Valley  
Cesar Limon, Reclamation  
Hilary Brineger, Paso del Norte Watershed Council, New Mexico Dept. of Agriculture  
Mario Saavedra, Texas Department of Agriculture

Sharon Thomas, Las Cruces City Council  
Dan Townsend, Las Cruces resident  
Miguel Peña  
Philip Partridge, river enthusiast  
Mary Sanchez, Natural Resource Conservation Service, Las Cruces  
Irene Mortensen, U.S. Border Patrol  
Brian Hanson, U.S. Fish and Wildlife Service  
Ari Michelsen, Texas A & M University  
Beth Bardwell, World Wildlife Fund

### Paso del Norte Watershed Council Update

Chris Brown, Chair, Paso del Norte Watershed Council, gave a presentation about various activities and projects of the Watershed Council. The Paso del Norte Watershed Council is an advisory body to the New Mexico/Texas Water Commission.

Coordinated Database & GIS Project - The goal is to use GIS tools to provide access to a wide range of data via web-based access and GIS interface. There is a functional web portal via links from the New Mexico Water Resources Research Institute (Wri.nmsu.edu); this links to the Paso del Norte Watershed Council and the database project. Approximately 250 users were consulted in development of the project through a formal user needs survey, and their input was very helpful in guiding project work. The GIS database provided the foundation for advanced modeling activities, such as the Upper Rio Grande Water Operations Model (URGWOM) and groundwater-surface water interaction modeling.

Clean Water Act 319 Project Water Quality Grant - Through this program EPA provides money to the states and then the state funds the Watershed Council. There was stakeholder outreach as part of this, and various entities cooperated. The outcome of this was a Watershed Restoration Action Strategy (WRAS). The focus is on nonpoint source pollution abatement and recommendations on what stakeholders in the area can do. It will be released once it is approved by EPA. Recommendations include Best Management Practices to reduce discharges. Additional funding is being pursued for continuation of the WRAS but it's a difficult budget year right now.

Future activities of the Watershed Council include enhancing the Coordinated Database and GIS Project to add more components, including the modeling component and flood modeling. Continued research into surface water and groundwater interactions is another activity. The Watershed Council is also waiting for the next funding cycle to work with the 319 (d) program to advance specific Best Management Practices. There is also interest in the larger ongoing discussion concerning river restoration ideas in the basin. We see the Commission's role as very important to this.

Woody Irving, Reclamation - How much is the grant?

Hilary Brinegar of the Paso del Norte Watershed Council responded that the first round of funding was \$140,000 with a 50% match from supporting funders. It is unknown how much second-round funding may be available.

### Upper Rio Grande Water Operations Model (URGWOM): Current Status of RiverWare Model for Simulation of the Rio Grande Flow for the Rio Grande Project

Dr. Zhuping Sheng, Texas A & M University, Texas AgriLife Research Center at El Paso, Paso del Norte Watershed Council, gave this presentation.

URGWOM started in 1996 with federal agencies in order to develop a unified water operations model for the Upper Rio Grande basin to assist water managers. URGWOM uses RiverWare software to develop a numeric model to look at flow in the river or storage in the reservoirs. Key elements of the model are: reach, reservoir, stream gage, groundwater, and historic data. It simulates physical properties. There are operational rules, demand, etc. that are considered.

The model has been designed for forecasting, accounting, water operations, and planning for the Rio Grande above Elephant Butte Dam. For areas below Caballo Dam, the model is now just looking at flood control purposes.

So far, work has included preparation of the coordinated database for model development. Two technical reports address what data is covered. A Reclamation 2025 grant provided for enhancement of the water monitoring network.

For the Rio Grande Project area, it is a flood control planning model. We have enhanced groundwater-surface water interaction in the model. We can simulate drain-groundwater-river water interaction with this model by incorporating groundwater objects.

He then presented slides of RiverWare Simulation Results for the Rio Grande at various locations. When drains are simulated, there are more errors; it is much less accurate than river simulation.

What's next? Enhancement of the RiverWare model for flood control. Potential for assessment of the new operating agreement for the Rio Grande Project, which can assist in delivering water more efficiently. Water quality assessment for salinity management; currently work on salinity assessment is underway. We want to use the model to simulate water quality, especially for water operations.

### Rio Grande Flood Control Improvement Projects

Gilberto Elizalde, Principal Engineer, Mexican Section, International Boundary and Water Commission, discussed Rio Grande flood control improvement activities being undertaken or planned by Mexico in the El Paso-Juarez region.

Per IBWC Minute 313, works are being done from American Dam downstream through the Juarez Valley, a length of 146 kilometers. Responsibility for maintenance in this reach has been divided between the two Sections of the Commission. Based on those agreements, the Mexican Section scheduled various works for 2008.

Sediment removal and bank clearing is being conducted for 5.9 km from American Dam to the start of the concrete-lined river channel. Also, sediment removal and bank clearing is planned this year for a 17.6 km reach from the Island Grade Control Structure to kilometer 65 in the Juarez Valley. Rehabilitation of 25 km of Mexican levee is also planned as well as topographical surveys to determine the volume that the Mexican levees can convey.

The Mexican Section is responsible for sediment removal from American Dam to International Dam. The reach from International Dam to the Chamizal concrete channel corresponds to the U.S. Section; nevertheless, the Mexican Section is doing the work. Sediment removal between American Dam and the lined channel is 49% complete. From International Dam to the Chamizal concrete channel, work is 70% complete. He showed photos of the work.

He also discussed sediment removal in the Juarez Valley between the Alamo Grade Control Structure and the old Riverside Dam site. Six km of work is almost done. In the adjacent 6-km segment, work is 47.8% done. Another 5.6-km segment is 89% done. A total of approximately 400,000 cubic meters of sediment has been removed from these three segments. The works are designed to improve the conveyance capacity in this segment of the river.

Mexico's National Water Commission (Conagua) is improving the levee. There are three contracts to undertake this work. We are 43 % done for work being undertaken on two segments -- a 13.5-km segment and an 11.5-km segment. They will also be doing the topographic survey. There is also maintenance and repair work underway for the grade control structures - Alamo, Tornillo, and Island . After the 2006 flood flows, sediment accumulated at these structures. We are also clearing vegetation along the Mexican riverbank and levee. There is also sediment removal work at the Navarrete Arroyo-Rio Grande confluence.

These works are being undertaken per a multi-year plan of Conagua for 2007-2010 with a total 4-year budget of 130,672,750 pesos.

Kent Waggoner, TCEQ - What do you do with the sediment that is removed from the project?

Elizalde - The material in the river is compacted. It is moved 3 km to areas where they can fill in the land. It is harder and harder to find areas where we can deposit the sediment.

### Rio Grande Flood Control Improvements Projects

Raymundo Aguirre, USIBWC Civil Engineer, discussed flood control improvement projects being undertaken by the U.S. Section.

We have divided the Rio Grande Canalization Project into three sub-reaches. He noted the length of levees that require rehabilitation in each reach:

Hatch/Tonuco Bridge segment – 36 miles of levee to be rehabilitated

Mesilla Valley – 46 miles in length needs rehabilitation work

Canutillo Levee/Floodwall – from American Dam to Vinton Bridge, 48 miles. In this area we need to rehabilitate parts of the levee and construct a brand new levee in some areas where, at present, we do not have a levee.

We have started work on the Mesilla Valley levee where construction is ongoing right now. The Fiscal Year (FY) 2008 appropriation plus carryover from FY 2007 gave us \$11.8 million for the Mesilla Valley. Of that, we have applied the full amount, although we have not constructed the full length requiring work. We have purchased material and have money pending to be spent on the construction crews.

We are also proposing to do work on the El Paso Upper Valley levees. We have dedicated \$1.9 million for that effort. We have already applied that \$1.9 million in purchasing materials and setting aside money for operation of the construction crews.

Out of this funding, we have limited amounts we can do in FY 08 and 09. In the Mesilla Valley, we identified a total of 46 miles requiring rehabilitation. With the present funding, we are going to cover 21 miles in the Mesilla Valley. The work that we are doing for this portion of the levee consists of plating the levee and raising the levee where it is necessary. For the Canutillo-El Paso levee, we will cover approx. 2.1 miles.

Present status of Projects: For the Mesilla Valley levee, we have built 1 mile of the toe of the levee plating. We have done 0.2 mile of the plating of the slope and top.

On the Rio Grande Rectification Project, in the reach from International Dam to Riverside Dam (in El Paso), we raised the levee in its full length of 15 miles in 2007 and we are now working a special site, the Hart's Mill Wasteway, which requires rehabilitation. That is 75% complete. The levee raising is 100% complete for that reach.

Member of the Public – What is the plating?

Aguirre – Given the composition of the present levees, the geotechnical report indicated we needed to make them more impermeable; the most efficient way was to cover the present levee with 2 feet of material that would give us a good degree of impermeability. It's a clayish material.

Member of the Public– When will work on Upper Valley levee start?

Aguirre – About mid-October of this year, mostly near Country Club Road. We are not working in the Canutillo area itself. We are concentrating south of there.

Riera – The first phase of the Upper Valley area is the east levee upstream of Country Club Road and we will work upstream to Canutillo. We will work on a couple miles there and then work downstream from Country Club Road.

Kent Waggoner, TCEQ – Will the border fence have an impact on levee projects?

Aguirre – In this area, the fence is mostly off of the levee.

Ed Fierro, EPWU – Will this work in the Upper Valley certify the levees for flood control?

Riera – All the work we are doing on the levees is to meet the FEMA certification requirements. We have to run through a checklist to meet FEMA requirements. Our priority is to get the levees to the height and the structural integrity required.

Member of the Public – Can the silt be used to build the levees up?

Aguirre – Typically not. It would have to be mixed in with other materials. It is inefficient to try to mix the material onsite. We have decided to use commercial source material.

Member of the Public - Will silt be removed?

Aguirre – In this levee work, we are not removing material. We mostly bring in material.

Member of the Public – Years ago they would dredge.

Riera – That's not one of the areas where we are concerned about silt. The silt work is downstream of there as presented by Engineer Elizalde.

Greg Bloom, Office of Senator Bingman – Sen. Bingaman has requested \$20 million in FY 09. We had thought the total project cost would be \$20 million but that was before the geotechnical analysis showed that additional structural improvements were needed. Are you still expecting the work to cost in the \$100 million range?

Riera – Yes. That’s about right. We are doing the east levee first to protect the more populated areas.

#### Texas Clean Rivers Program for the Rio Grande, Water Quality Monitoring

Elizabeth Verdecchia, Environmental Protection Specialist, USIBWC, gave a presentation about the Texas Clean Rivers Program for the Rio Grande. She began by showing a short video describing the Texas Clean Rivers Program (CRP). The video provided the following background information: CRP is overseen by the Texas Commission on Environmental Quality (TCEQ). The goal is to protect and maintain water resources and improve the quality of water in each Texas basin. CRP works with partners to do the monitoring and has stakeholder involvement. It is funded by fees Texans pay for water and wastewater services. There is also in-kind support from basin stakeholders. CRP has stringent protocols, standardized monitoring practices, and uses certified labs to ensure consistent quality/results.

Ms. Verdecchia then continued with her presentation. We normally have our CRP Basin Advisory Committee meetings in conjunction with the Citizens’ Forum meeting. CRP started in 1991 and in 1998 the partnership between the Texas Commission on Environmental Quality (TCEQ) and USIBWC began; USIBWC runs the CRP for the Rio Grande basin under contract with TCEQ. Over 80 monitoring sites on the Rio Grande are monitored by a variety of partners.

In the reach from the New Mexico border to Amistad Dam, there are 26 monitoring sites, more than half of which the CRP is responsible for. She showed a map of stations where data are collected. Every two years, TCEQ assesses impairments on the river. We collect the data that allows them to do the 303 (d) list of impaired segments. There have been no impairments added or delisted since last year.

The first impairment is from Anthony Drain to International Dam due to high bacteria. Downstream of the Chamizal, we have impairments due to bacteria, high chloride, and total dissolved solids (TDS). Farther downstream, there is impairment due to high chloride and TDS. Below that, the impairment is chloride and TDS. In the Presidio area, high bacteria is the concern. Detailed information about the impairments is available in CRP publications and on the web site.

CRP is also responsible for the water quality assessment and publications. CRP has a publication with technical data and trends, the 5-year Basin Summary Report.

CRP can also conduct a special study or assist in a study to identify sources or characterize contamination. We also do outreach and education.

There have been personnel changes at the CRP. Current staff are:

Program Manager – Elizabeth Verdecchia

Quality Assurance Officer - Leslie Grijalva

Student Clerk – Rhonda Roberson

New TCEQ Program Manager – Bethany Ansell

There are various new program activities. CRP will do another year of pesticide monitoring. We have a special study of the Pecos River through Texas A & M. We would like to be more involved in environmental education and outreach. We are projecting a little bit of excess money and would like to offer it in the form of small project grants. We have a Request for Proposals for small projects. The grants could

fund work in two areas – 1) water quality special studies where funds could be used to pay laboratory fees or ship lab samples and 2) environmental education, outreach, equipment, and materials. She provided copies of the grant application; the deadline is February. For more information or to request an application, contact: elizabethverdecchia@ibwc.gov

The Clean Rivers Program for the Rio Grande web site is: <http://www.ibwc.gov/Organization/Environmental/CRP/Index.htm> The web site has monitoring data.

Lorenzo Arriaga, Reclamation – Would it be possible to look at salinity contributions to the Rio Grande from deep water aquifers?

Verdecchia – That would be an interesting study.

Zhuping Sheng – Texas A & M research team is looking at a Pecos River project to identify sources of salt. Groundwater discharge back to the river causes salinity in the Pecos River, which then discharges into the Rio Grande. As part of Rio Grande salinity management project, which just started, we are putting together a project to look at salt.

Zay Clopton, rancher – We had a presentation at a previous Citizens' Forum meeting by a professor who identified areas above El Paso where there was salt water intrusion from way down deep.

#### Public Comment

Mr. Partridge addressed the issue of public access to the river during levee construction, particularly in the Country Club Road area. He also discussed levee/river access more generally. He noted that the gates on the levee did get opened near the new bridge at Sunland Park; however, when the river reached the floodplain, they closed the gate. He stated that people were climbing over the gate to get in. How does the public know when the gate is/is not going to be open? He also stated that sometimes the gate is opened or closed at Borderland. He also expressed concern about water quality. When there are high bacteria levels, is there a way the public knows they should not touch the water?

Principal Engineer Al Riera responded that the Texas Commission on Environmental Quality could provide more guidance about when it is or is not safe to have contact with the water. USIBWC tracks water quality but it's a state function to warn the public. He added that the levee is closed to vehicles in order to prevent four-wheel drive vehicles or other vehicles from gaining access.

Acting Division Engineer for the Operations and Maintenance Division, Tony Solo, stated that typically the gates on the levees are closed. Public safety entities have keys and may open them periodically. The main concern is liability in the event of incidents involving four-wheel drive vehicles. However, the river park is an area that is designated as open to the public.

Mr. Partridge expressed concern about the lack of notice about whether it is okay to access the area or not. He expressed concern about the posting of "No Trespassing" signs along the river/levees. He quoted from a published article where someone stated she could no longer go to the river to fish with her father because the area is posted "No Trespassing."

A member of the audience mentioned that river access is provided at the river park in the Upper Valley. There is also Valley Creek Park on Upper Valley Road. You can park there and walk to the river.

Mr. Riera stated that USIBWC will meet with Mr. Partridge to see if his request for pedestrian access can be accommodated.

Mr. Partridge expressed additional concern about the lack of safe parking for public access sites.

Dan Townsend – Has there been any modeling of groundwater-surface water impact for the upcoming Juarez pipeline out of the Mexican portion of the Mesilla Bolson? Carlos Slim is building it to serve Juarez. 1 million liters per second is the initial draw on the aquifer. The project should be done by the end of 2009.

Riera – There was a binational effort to model the aquifer. Not sure if that project was considered. In the U.S., groundwater is a state responsibility so the states may have information on this. We will see if we have any information.

#### Suggested Future Agenda Items

John Hernandez – We could have Alfredo Granados from Juarez and someone from NMSU as well as the people involved in building the pipeline give a presentation about it. It would be of interest to have a presentation about it. El Paso Water Utilities does have information about it and has made some estimates related to it.

Conrad Keyes – Suggest a presentation about new stormwater management plans for El Paso and Las Cruces area. Another suggested agenda item is the water right adjudication in New Mexico; Judge Valentine's office might be able to do this. Another topic is New Mexico water quality.

Next meeting is in Las Cruces on Dec. 4, location to be announced.

\*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.