

Rio Grande Citizens Forum
January 16, 2013
Elephant Butte Irrigation District Board Room
Las Cruces, NM
*Meeting Minutes

Board Members in attendance:

John Cordova, Jobe Materials
Travis Johnson, Travis Johnson Law Firm
Conrad Keyes, Jr., Paso del Norte Watershed Council
Sal Masoud, Del Rio Engineering
Danny Chavez, Hudspeth County Conservation and Reclamation District
Dale Reinhardt, Town of Clint, TX
John Balliew, El Paso Water Utilities

USIBWC staff in attendance:

Hayley Goodstein
Andrea Glover
Guillermo Martinez
Tony Solo
Carlos Peñ
Sally Spener
Flavio Apodaca

Members of the public in attendance:

Chris Brown, Paso del Norte Watershed Council, New Mexico State University
Ryan Ward, MDA
Woody Irving
Mrs. Johnson
Chris Canavan, New Mexico Environment Department
Paul Dugie, Doña Ana County Flood Commission
Zack Leubin, Elephant Butte Irrigation District (EBID)
Maggie Ballenger, resides near Mesilla Dam
Alberto Huerta, engineering firm
Sandra Reinhardt, Town of Clint Council
Joan Woodward, lives by levee
Renee Morris
Hillary Brinegar, co-chair. Paso del Norte Watershed Council
Rose Cardenas
Tom Simpson, farmer in North Valley
Erin Ward, Water Resources Research Institute at New Mexico State University
Jake Rollow, Sen. Martin Heinrich's office.
Mr. and Mrs. Jamison, Upper Valley residents

Federal Emergency Management Agency (FEMA) Internal Watershed Studies

Paul Dugie, Dona Ana County Flood Commission Director, explained that for FEMA levee certification, we have to do an internal watershed study to see how they are impacted by the levees. We had a meeting this week with participation by USIBWC, the Flood Commission, and others. USIBWC gave an update on their certification for Rio Grande levees, stated they are waiting for their "as-builts" levee drawings to submit to FEMA. One of the FEMA requirements is that the levees have to tie in to high ground. The criteria for certification is levees must be high enough to contain the 100-year flood with additional height above the 100-year watermark. There are criteria did not come in until after the USIBWC started its process. Once the tie ins are determined, we will determine where we need the internal watershed study. FEMA had previously had a simplistic modeling approach and Congress told them it was not acceptable. So about a year ago, they proposed 5 different studies and opened it up for comment across the United States. Nothing can move forward until Congress and FEMA can come to agreement on how we are going to study the river system with the levees. Congress may not move quickly on this. FEMA cannot give a time frame. We are still in a holding pattern. City and County have studies done 9 years ago, which are becoming obsolete in some aspects. Please call 575-525-5558 with any questions. Anyone on staff can give you flood zone information about the effective Flood Insurance Rate Maps (FIRMS) and the last version we received from FEMA. We have maps on the web site and in the office.

Public- Can a person buy flood insurance if not in a flood zone?

Paul Dugie – New Mexico allows other underwriters. Some will not sell outside a special or high flood hazard area and may be limited to just a couple of houses per block. FEMA will sell to you at any flood zone.

Public– Is everyone in a flood zone required to have flood insurance?

Paul Dugie – It's recommended unless you have a federally insured mortgage, in which case it's required if you are in a high-hazard area.

Sally Spener – What are the areas you are most concerned about?

Paul Dugie- Where the gates are, because they have not been sized. The reason for the levees' existence is to keep floodwaters from inundating the land side so gates have to be closed when river is at flood stage. But we have Caballo and Elephant Butte Dams upstream and we can shut them off and let the internal watersheds drain. Not all arroyos have a gate provided for them so we have to determine the flooding area of that water until we can identify a way to get the water through or over the levee. We need to find out which ones are certifiable first, that tie into high ground. But when you come to bridges, the Department of Transportation will have to raise the bridges.

Sal Masoud– So as long as FEMA has not issued those maps, you cannot commence those studies, you don't know where to begin.

Guillermo Martinez (USIBWC) – Where the levees tie in near the Department of Transportation roadways, the elevation of the levee is pretty much at the elevation of the roadway. We should have three feet of freeboard at the levee.

Andrea Glover (USIBWC) – On the roads that don't, we have put floodgates in.

Paul Dugie – USIBWC only has a certain right of way, if they want to say the end of the levee system won't fail and get water behind it; then we can certify it. I don't know any engineer willing to stick out their neck.

Guillermo Martinez– We could not tie in to high ground in some areas because it's outside of our right of way. So the property owners or agency that owns that particular segment would be responsible for certifying the levee or reconstructing it to FEMA standards.

Conrad Keyes– What is maximum depth of the 100-year flow at the bottom or top of the freeboard?

Andrea Glover- Levees are at least 3 feet above the 100 year flood flow. It varies from section to section. In some areas the levees are over 10 feet high.

Conrad Keyes– For the 100 year flood, how many arroyos are identified in the FLO 2D model? So if all the gates are open, most likely we don't have too much problem on the interior floodways?

Andrea Glover – It depends on the arroyo.

Paul Dugie – It is not a simple model.

Conrad Keyes – Are all the gates owned by the same entity?

Paul Dugie – No. it could be private or governmental entities.

Sal Masoud – Who determines who closes the gates? Are the gates only closed during the 100-year flood?

Tony Solo (USIBWC) – We close when floodwaters reach to 60% capacity of the levee system.

Paul Dugie – If the Rincon Arroyo floods, it's too big to gate.

Danny Chavez – For the model, what data are you using?

Guillermo Martinez – A consultant ran the model, some of it was LIDAR data. The other information was from Doña Ana County.

Paul Dugie – We ran LIDAR in 2004 in the county. So we had 2004 aerial photography and the model was run in 2004/2005.

Sal Masoud – So you cannot start the studies until FEMA issues the maps?

Paul Dugie – There are several pieces of the puzzle – construction is completed, you have as-built drawings and certification that it ties into high ground, adequate freeboard, O&M manual, geotechnical studies, etc. Once we prove that levees physically meet the criteria then it falls to the local government for the internal watershed studies. Funding sources are the Flood Commission; New Mexico Water Trust Board, which has grants and loans; Colonias Initiative Funds; or New Mexico Legislature or federal funds.

Sal Masoud – So once you do that then FEMA can accredit.

Paul Dugie – There has to be one study done for every gate.

Public– How did IBWC come to the conclusion of where the flood areas are? We have 7 neighbors, we've lived there over 60 years and we have never had a flood there.

Guillermo Martinez – If you live outside of the levee, it is outside of our right-of-way.

Public— Every time we try to get information on where we stand, they tell us to call El Paso. I want to know why my land is now but never used to be a flood land.

Paul Dugie – The levee system was constructed in the 1930s. FEMA did not exist until the 1970s and then in the 1990s or 2000s they said you have to do these studies.

Public- They cannot borrow money to fix their houses, they are told it's in the floodplain and they can't get funds to help.

Public- What percentage of the levee is currently certifiable?

Paul Dugie – That is unclear and that is what our meeting was about. We are having monthly meetings with FEMA and their consultants. It is a confusing process, but FEMA is trying to get this done so we can move on.

Guillermo Martinez – The IBWC is going to start turning in our levee certification packages to FEMA. At this point in time, nothing has been accredited.

Paul Dugie – And nothing will be done until FEMA and Congress act.

Andrea Glover – In Doña Ana County, except one mile around Calle del Norte and I-10, we are going to rework that section of levee, everywhere else in Doña Ana County the levee construction is done. Levee construction in Dona Ana County covers about 90% of the levees in the county.

Guillermo Martinez and Paul Dugie– There is a difference between certification and accreditation. USIBWC certifies levees and then FEMA determines which are accreditable and then it comes to local agencies to do internal watershed studies.

Public- When they started to work on the levee roads, they closed the gates and we cannot use the levee roads. They did not notify us that they were going to block access to the road/Mesilla Dam crossing. They said they were going to notify the community but they did not.

USIBWC – We will check to see if our contractors were doing what they were supposed to and, if not, we can take that up with them.

Andrea Glover – The Mesilla Dam area should be open tomorrow or next week.

John Balliew – On interior drainage, El Paso is going to be ready when IBWC is ready.

Update on Water Quality Focused Planning Project in the Lower Rio Grande in New Mexico

Chris Canavan, New Mexico Environment Department, gave a presentation on this topic.

The Paso del Norte Watershed Council received grants in 2006 and 2010. Water quality sampling has been performed and stakeholder meetings were held. The project area is from the Texas-New Mexico border to just below Caballo Dam. *E. coli* bacteria has been identified as a pollutant. It enters the environment via feces of warm-blooded animals. Most strains of *E. coli* are not harmful to humans. It is used as an indicator of fecal contamination. Potential diseases from it are hepatitis A and dysentery. There are various elements of a watershed plan, such as identifying causes and sources of pollution, identifying financial assistance, education, monitoring, etc. This presentation will focus on identification of causes and sources. Monitoring is being done and we want to know when it is occurring, where, and under what conditions. We also wanted to look at hot spots in a 105-mile stretch of the river. In 2008, the monitoring focused on sampling stormwater and found *E. coli* concentrations from just above the regulatory limit to very high concentrations.

In October, there were three sampling events and there were no exceedances of the criteria. Limited sampling indicated stormwater runoff has a significant role in increasing concentrations. No clear patterns could be determined. So in 2009, more studies were done, 7 river stations and 8 drains were chosen. There were some exceedances both storm related and not storm related. There was stormwater sampling that showed exceedances in drains.

In 2010, there were storm events with elevated *E. coli* levels. A graph of river flow and *E. coli* concentrations showed a strong correlation between stormwater runoff and higher concentrations of *E. coli* although not all *E. coli* exceedances were stormwater related. Mesquite Drain and East Drain were considered problem areas.

From January 2009 to December 2010, only 8 percent of samples exceeded the criteria. Anthony Bridge sampling revealed a pattern of *E. coli* concentrations not related to stormwater runoff. The next step was to do microbial source tracking. We had identified hot spots around Anthony Bridge, and around Sunland Park, Mesquite and East Drain. They did sampling at these areas and at Leasburg.

What were the results? For the Rio Grande at Anthony, the sources were identified as: bird 35%, livestock 27%, wildlife 14.9%, 6.8% unknown, 10.8% pets, and 5.4 % sewage. For the East Drain: 13% sewage, 28% bird, livestock 31%, wildlife 11%, unknown 10%, pets 7%.

If you want to eliminate pollution, it's helpful to know where it's coming from. So, for example, you might not want to use funds to eliminate pet waste if other types of sources predominate.

We know we have problems with some of the wastewater treatment plants, such as Sunland Park, which has been in an out of compliance for several years, or at Vado.

Conclusions: Impairment from *E. coli* is highly associated with stormwater runoff, with exceptions occurring near Anthony and Sunland Park. The project demonstrated that drains at the bottom of the watershed are contributing to the *E. coli* problem, which may also be related to Sunland Park and Vado wastewater treatment plants.

Current Efforts: Data analysis is complete, a partial draft of the watershed plan has been prepared, and a final draft will be ready in June 2013.

Carlos Peña – You indicate there are problems in Anthony and Sunland Park. What is the impact on Texas?.

Chris Canavan– The river going into Texas is impaired for *E. coli*.

John Balliew – The stream standard is different in Texas, you can have less bacteria and be impaired in Texas. We have conducted other studies and concluded that Sunland Park wastewater treatment plant contributes to the bacteria problem in Texas. From a drinking water standpoint, our treatment plants are robust and can take care of removing bacteria. At some point in time, something has to be done about the bacteria. We have other issues like nitrogen, phosphorous, and salt problems.

Public- Did you identify any of the toxic *E. coli*?

Chris Canavan– No.

Public– What about flesh-eating bacteria?

Chris Canavan – Have not heard about it.

Public– Can you identify some of the measures?

Chris Canavan– A lot of it is associated with stormwater management. If you keep flow in the uplands, you slow the flow and it can percolate in the ground before it gets to the river. At a meeting about a year ago, we talked about low-impact development, green infrastructure. The drains run just west of dairy row. The irrigation district did some sampling. They are required under their NPDES permits to manage their waste certain ways. Recommendations are looking at ways to deal with that. People also have corrals or livestock in the arroyos or river.

Public Comment

Juan Garza, El Paso, TX -- I have looked at levee plans for the lower Sunland Park area. My concern is there is an old refinery that existed along the levee called the Brickland Refinery. As the river meanders around El Paso Electric and there are plans to build concrete walls, the river might meander onto the old refinery site and cause erosion and release contaminants into El Paso's water source. I don't know what you are planning to do at that site.

Andrea Glover- In general, I know they are working with our environmental department on remediation. We have done a lot of testing and that's part of the ongoing design, is incorporating the testing and results.

Juan Garza-- I have met with the engineer who shared a lot of good information, including soil studies. I would like to know the management plan to dike it off or if it's going to be released to the river.

Carlos Peña – There is some information in the environmental assessment. When we do the design, we are going to use that information to make a good decision.

Guillermo Martinez – Valentin Arzola is the USIBWC engineer working on this.

Juan Garza – I would like to offer some more comments once the design is completed. I have met with Valentin, he's done an excellent job.

Jim Jamison – I live in El Paso and I wanted to know what progress has been made on the Country Club Bridge flood gates there. It's still very, very noisy.

Carlos Peña – I spoke today with the Principal Engineer John Merino, and Jose Nuñez, head of Engineering Services. His staff looked at all the information, technical specs, and they are putting together some options for that to be completed shortly. After they have the options, they will present it to the Commissioner for a final decision. It will have to be a policy decision about which option to select.

Andrea Glover – Principal Engineer John Merino hopes to have a decision by Friday.

Mrs. Jamison – We want to reassert our concern and voice our protest. Thank you for following up.

Suggested Future Agenda Items

1. Carlos Peña – Levee Update.
2. Conrad Keyes – Water budget study.
3. Conrad Keyes – Interior drainage study of EPWU

John Balliew – We can do update on our stormwater projects. We will not have the study then.

4. Carlos Peña – We will have more information about reservoir level at Elephant Butte.

Next meeting scheduled for Wednesday, April 17, at the USIBWC in El Paso, TX.

*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.