

Rio Grande Citizens' Forum
Best Western Mesilla Valley Inn
Las Cruces, NM
June 4, 2008
*Tentative Meeting Notes

Board members in attendance:

Doug Echlin, Coronado Neighborhood Association
Conrad Keyes, Jr., Paso del Norte Watershed Council
Terry McMillan, TCEQ
John Hernandez, consulting engineer
Lupe Garcia, Hispanic Farmers and Ranchers

Members of the public in attendance:

Wayne Treers, Reclamation
Ed Hiraes, U.S. Border Patrol
Junelle Echlin
Carlos Rincon, EPA
Calvin Chavez, Office of the State Engineer
Woody Irving, Reclamation
Chris Brown, NMSU
Fernando Ceden
Leticia Segovia, Doña Ana County Flood Commission
Ed Armstrong
Scott Armstrong, Bohannon Huston
Girisha Ganjegunte, Texas A & M
Jack Diehl
Jesus Morales, EBID
Al Betancourt, Viva Environmental
Rafael Ramirez, Border Patrol
Michael Clelland
Greg Bloom, Office of Senator Bingaman
Tisa Gabriel, New Mexico State Land Office
Hilary Brinegar, New Mexico Department of Agriculture
Michael Fies, U.S. Army Corps of Engineers
San Miguel resident
George Abernathy
Jennifer Montoya, Bureau of Land Management
Susie Rossmann
Zhuping Sheng, Texas A & M University
Chris Almy, Zia Engineering
Heidi McIntyre, Texas Commission on Environmental Quality
Rasool Ahadi, Office of the State Engineer
Sue Watts, Paso del Norte Watershed Council
Marvin Tessneer, Las Cruces Bulletin
Kevin Bixby, Southwest Environmental Center

Mike Landis, Reclamation
Lorenzo Arriaga, Reclamation
Francisco U., Zia Engineering
Mike McAdams, Reclamation
William Little

USIBWC staff in attendance:

Raymundo Aguirre
Wayne Belzer
Hayley Goodstein
Al Riera
Tony Solo
Sally Spener

MxIBWC staff in attendance:

Enrique Muñoz

Welcome and Introductions

Citizens' Forum Co-Chair Conrad Keyes called the meeting to order. He asked the board members to introduce themselves and then he asked the members of the audience to introduce themselves.

Comprehensive Plan for Rio Grande Flood Control Levees, Southern New Mexico and El Paso

Raymundo Aguirre, Civil Engineer, USIBWC, gave a presentation on this topic. On the Canalization Flood Control Project Levee Rehabilitation, the USIBWC has divided the project into three reaches:

Hatch/Tonuco Bridge Levee – 36 miles of levee

Mesilla Valley Levee – 46 miles of levee, Mesquite Road to Selden Canyon

Canutillo Levee/Floodwall – 48 miles of levee

The levees are not continuous. There are gaps at high ground.

The USIBWC had done preliminary work on these three reaches. On Hatch/Tonuco, we just completed geotechnical investigations. For Canutillo Levee/Floodwall, geotechnical work was recently completed in that area. Mesilla Valley Levee is where we have concentrated most of our efforts. We started on that reach earlier than the other reaches. We have completed the geotechnical investigations and we contracted with the geotech consultant to give us design recommendations. We are in the final process of contracting for material and equipment. We have scopes of work and proposals for construction and materials testing.

Estimated construction costs are as follows:

Hatch/Tonuco Bridge \$63.9 million. We don't yet have a design so the numbers are not very hard, they are preliminary.

Mesilla Valley \$49.8 M.. We have done more work in this area. This estimate has a higher degree of certainty.

Canutillo \$75.3 M. We have an estimate of approximately this amount.

These costs are higher than numbers you may have previously seen here. The geotech results were that the levees needed considerably more work than what we anticipated. So the costs are higher than initial estimates.

This fiscal year, there was a concentrated effort by Congress to fund levee work. The FY 08 appropriation (+ carryover from FY 07) for New Mexico was \$11.8 million. To date, \$2.4 million has been spent on geotech work and purchase of material, leaving a balance of \$9.4 million in FY 08 funds.

In Canutillo, there's a stretch without a levee. Instead, there is a railroad embankment which we have considered a flood containment structure but we need to have our own structure. The USIBWC has limited right of way so a floodwall would be the preferred option.

For the Mesilla Valley and Hatch/Tonuco, the work will be similar. For the Mesilla Valley, we have the existing levee with a high sand content; there are concerns about seepage and under seepage so we have a design that will help in reducing those characteristics. It is planned to put a plating material on the sides and top of the levee. The proposal is to place 2 feet of engineered clay-containing material on the side of the levee. On top, we would place a minimum of 1.5 feet of the engineered material and then 0.5 foot of surfacing material, also known as flex base. This will also take care of the needed height for levees that are deficient by 2 feet or less. Other segments will require more material on the crown. We will start on this work in July. On the land side, we have issues with available right of way. The plan to spend the currently-available funding is to rehabilitate 10 miles of levee in the Mesilla Valley.

Principal Engineer Al Riera clarified that the length rehabilitated could vary based on the bids for materials. USIBWC expects to complete 8-12 miles.

John Hernandez – Is there any channel dredging associated with it?

Aguirre – Just the typical maintenance that we do.

Tony Solo – There's no channel work as part of this project. We have some arroyo mouth clearings but not channel work.

Hernandez – Concern that we need to dredge in the channel so that we don't have trouble. I hope that the IBWC takes into account the need for dredging of the channels.

Aguirre – We are conscious of that situation. Just below the El Paso area, we are about to start removing sediment from the channel between American Dam and upstream of the Chamizal channel.

Mike Landis pointed out that the FEMA standard is for 3 feet of freeboard for the 100-year flood. This could translate into 6 inches of freeboard for the 250 year flood. He pointed out that during the big storm/flood of 2006, the Rio Grande flood control levees were not overtopped. By some estimates, the 2006 flood was of greater magnitude than the 100-year flood, perhaps it was even a 200-year flood. He expressed concern that FEMA may require residents to purchase flood insurance based on less than 3 feet of freeboard for the 100-year flood.

Aguirre – Our basis for this design is a hydrology and hydraulics study that we did a few years ago in conjunction with the U.S. Army Corps of Engineers. We are using that study to establish the necessary elevation of the levees. It's a very good model. Freeboard gives us a factor of safety and an opportunity to contain higher floods.

Leticia Segovia, Doña Ana County Flood Commission – So after you finish those 10 miles, will you certify the levees to FEMA?

Aguirre – We don't know how FEMA will respond. Our intent is to certify as we rehabilitate those levees.

Segovia – Our agency is responsible for enforcing the flood maps, which are in a state of flux. We asked FEMA for a study of the flood frequency because we would really like to know. We were not able to get it from FEMA.

Hernandez – Will there be some construction work out on the floodplain in between the levees?

Aguirre – These costs are based on commercially-produced material that would be purchased and brought in. We looked at a mix of local material with cement but we discarded this option.

Question - Have you done a risk-based assessment?

Aguirre – We are basing this on the FEMA standard requiring 3 feet of freeboard for the 100-year flood.

Hernandez – Two water quality concerns in this area are E. coli and salinity. Construction needs to be done with care so as not to push that out in the river. The other concern is salinity that is built up in the salt grasses or salt flats. He expressed concern about the impact of work between the levees in those salt flat areas.

Aguirre – We are conscious of it and will plan accordingly.

Record of Decision for Programmatic EIS for Long-Term Improvements to USIBWC Rio Grande Flood Control Projects along the Texas-Mexico Border

Wayne Belzer, Environmental Engineer, USIBWC, gave a presentation on this topic.

The Rio Grande Canalization Project Environmental Impact Statement (EIS) was completed in July 2004 but the Record of Decision is on hold pending further stakeholder input and technical evaluations. USIBWC contracted with the U.S. Army Corps of Engineers as our technical advisor to conduct studies and coordinate stakeholder input via workshops. In the EIS, the HEC-RAS model was used. They are now working with the better FLO-2D model.

The Corps of Engineers has identified 20 restoration sites, target habitats, and project footprint. They are developing restoration prescriptions, estimated costs, and excavation quantities. Two stakeholder meetings were held. A third is planned for later this summer. He gave an example of an oxbow restoration as an opportunity for restoration.

Regarding the status of the Canalization EIS, the USIBWC needs to complete the collaborative study, formalize water rights safeguards with Elephant Butte Irrigation District, and identify willing landowners and potential water rights. The goal is to issue the Record of Decision (ROD) by no later than August 2009. Due to time limitations in federal rules, the ROD needs to be issued in 2009 so as to avoid the need to undertake a supplemental EIS.

The Programmatic EIS (PEIS) is intended to give USIBWC a base document we could tier off of and work from so we can get these projects done with less cost and time. It covers our other flood control projects including Rio Grande Rectification, Presidio, and Lower Rio Grande.

The PEIS evaluated 3 action alternatives, including:
Enhanced Operations and Maintenance
Integrated Water Resources Management
Multi-Purpose Project Management, which builds on the elements of the first two alternatives but added in recreational work and more involved levee work.

The PEIS also looked at our requirements under the treaties for flood protection, boundary delineation, and deliveries of waters.

The Final PEIS was completed in January 2008. In February, Commissioner Marin signed the Record of Decision selecting the Multipurpose Project Management Alternative. The goals of this alternative include multi-purpose use of the projects for recreational and environmental enhancements.

Update on Request for a Groundwater Discharge Permit that May Impact Rio Grande Water Quality

John Hernandez, a Consulting Engineer from New Mexico, gave a presentation on this topic. Dr. Hernandez reported the following:

In April 2007, a dairy owner planned to move to a site located on Percha Creek, about 2 miles above the bridge on I-25 that goes over Percha Creek. The owner applied for a groundwater permit. The New Mexico Environment Department (NMED) indicated they were going to approve the permit, noting that the application met the regulatory requirements. Nearby residents raised objections. As a result of local concern, a public hearing was scheduled. Reclamation came forward to oppose the permit due to potential impact to the quality of water in the river and the safety of Percha Creek and Caballo Reservoir, and to protect their water users downstream including the Elephant Butte Irrigation District (EBID), City of El Paso, Mexico, and water users in Texas. During this process Reclamation gave data that floods on the order of 20,000 cubic feet per second (cfs) had come down Percha Creek often in the past. By comparison, the 2006 flood on the Rio Grande was about 10,000 cfs. The dairy proposed to irrigate 52 acres of their land, with waste-water from some 2,000 cows. They were going to irrigate with green water, the water they use to wash the cows. This has manure on it. We believe the likelihood of flooding of their irrigated land was highly probable. That 52 acres is next to Percha Creek.

A hearing was held in November 2007. By the dairy's calculations, the 100-year flood was 17,000 cfs. With their 100-year flood model, 80 percent of the farm land would be flooded. Reclamation put in a post-hearing submittal, which included some of the material prepared by Dr. Hernandez, indicating a high probability of a flood across the irrigated land resulting in contamination with E. coli from the manure and by nutrients. EBID put in a post-hearing submittal although they didn't formally join the case. The dairy entered a motion to deny the post-hearing submittals by Reclamation and EBID and the hearing officer did not allow these submittals. E. coli contamination is already high in the Rio Grande and the river cannot tolerate more. This is a serious issue due to crops that are eaten raw. The hearing officer recommended that the permit not be approved. Ron Curry, NMED Secretary, denied the permit. The dairy has issued an appeal of the Environment Secretary's decision to the New Mexico Water Quality Control Commission. We encouraged IBWC to become a party in this matter. Contamination of the Rio Grande is a serious concern to Texas, too. It is an important

issue for downstream farmers because of water quality. Opponents to the permit have asked for another hearing.

2008 Annual Operating Plan for Elephant Butte and Caballo Reservoirs

Wayne Treers, Bureau of Reclamation, gave a presentation on this topic.

We are in the midst of a really good runoff this spring. The La Niña pattern, cooler sea surface temperatures off of South America, set in early, which generally makes it dryer in this region. We started out early in the winter with very little snow. Then there was good snowfall for December, January, and early February. Then La Niña set back in. Earlier in the winter, snowpack was up to 190% of average. Some key Snotel sites in Colorado and New Mexico were well above average.

The May 1 forecast for San Marcial, which feeds into Elephant Butte Reservoir, projected runoff of 121% of average for March to July. Last year it was 45% of average. Preliminary numbers for the June 1 forecast continue to show good runoff although the forecast is down slightly from the May 1 forecast. We've been in a long-term drought since 1996. Just two years since then have been above average.

He provided a handout showing projected runoff of nearly 700,000 acre-feet at San Marcial, 121% of average. There are no clear projections for precipitation for the monsoon nor for upcoming winter snowfall.

Right now, Elephant Butte Reservoir is 31% of full. By early July, it will peak at 686,000 acre-feet of storage. Caballo Reservoir is a little over 20% of full today. It will peak around June 16 at about 50,000 acre-feet.

We are looking at 132% of average runoff (March to July regulated forecast) at San Marcial, enough to release a full supply to water users on the project. The new Operating Agreement for the Rio Grande Project lets them carry over water so there is an incentive for them to conserve water. Although we will issue a full supply allocation this year, I doubt EBID and El Paso County Water Improvement District #1 will use their full allocation this year. We really haven't seen these storage levels at Elephant Butte since 2002. This is also good for recreation in the reservoir. We expect Elephant Butte to be 15-20 feet higher for the summer holidays than last year. For next year, projected storage shows little change as compared to this year, assuming average precipitation. At Caballo, storage will be 10,000 acre-feet by the end of the season.

The allocation right now is 74% of a full supply. We'll be at 90% next week and by July we expect to make a full allocation for water users.

Zhuping Sheng – How much water do you expect the irrigation districts to save with the new agreement?

Treers – It allows them to carry over that unused amount that they don't order each year. The acreage under irrigation hasn't changed. They might each save 50,000 acre-feet but that will depend on the monsoon and its effect on water orders. The incentive for conservation is to have more water for the next year.

Public Comment

There was no public comment.

Board Discussion

There was no additional board discussion.

Suggested Future Agenda Items

The next meeting will be September 8, 6:30 p.m. at USIBWC in El Paso.

Keyes – What EPA is doing in the El Paso area, especially related to border water quality.

Riera – Update on the levee work, silt removal work this year, including Mexican work. During the last couple of meetings, we've had questions about FEMA. We could try to have someone from FEMA talk about the issues.

Member of the Public – El Paso or Las Cruces surface water treatment plants during winter flow.

Hernandez - Transboundary groundwater studies. Karl Wood of the Water Resources Research Institute (WRRI) is in charge of that for New Mexico.

Zhuping Sheng – For the transboundary groundwater study, three states and USGS are working with USIBWC and the Mexican Section. There is a stakeholder meeting June 11 in El Paso.

Riera – We could talk about the Transboundary Aquifer Assessment Act and what the USGS and WRRI are trying to do. We are in the process of working with Mexico but it's early to talk about the interaction between the two. But they can certainly talk about the U.S. side.

Carlos Rincon – The La Paz Agreement established the framework for U.S.-Mexico Work Groups. It's celebrating its 25th anniversary. The National Coordinators Meeting will be in Cd. Juarez September 3-5 right before your next meeting. All of the Work Groups, including the Water Work Group, have been challenged to identify a focus for the next years after 2012. That group from that meeting will have something to report; IBWC, EPA, and Reclamation are all part of that Work Group. It could be part of the suggested presentation from EPA.

Belzer – Annual Update of the Clean Rivers Program.

Riera - An update on the SBI border fence in the El Paso area.

Agent Hiraes of the Border Patrol indicated that by September, there should be good progress on the fence. It is scheduled to be completed by December 31, 2008.

*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.