

Inner2Rio Grande Citizens' Forum  
May 2, 2007  
Las Cruces, NM

\*Tentative Meeting Notes

**Board Members in Attendance:**

Zay Clopton, New Mexico rancher  
Doug Echlin, Coronado Neighborhood Association  
Ed Fierro, El Paso Water Utilities  
Lupe Garcia, La Union Soil and Water Conservation District, Hispanic Farmers and Ranchers  
Joe Groff, Chihuahuan Desert Wildlife Rescue  
John Hernandez, Elephant Butte Irrigation District  
Alisa Jorgensen, Save the Valley  
Conrad Keyes, US Army Corps of Engineers consultant, Paso del Norte Watershed Council  
Terry McMillan, Texas Commission on Environmental Quality

**USIBWC Staff in Attendance:**

Ken Rakestraw  
Tony Solo  
Steve Smullen  
Sally Spener

**Mexican Section Staff in Attendance:**

Enrique Muñoz

**Others in Attendance:**

Inga Groff, League of Women Voters of El Paso  
Bob Aultman, Mesilla Valley resident  
Gretchen Aultman, Mesilla Valley resident  
Marvin Tessneer, Las Cruces Bulletin  
Dianne Mann, Canutillo pecan farmer  
Edgar Arias, NMSU student  
Geri Quisenberry, Paso del Norte Watershed Council  
John Diehl, Las Cruces resident  
Dolores Halls, American Association of University Women  
Mary Sanchez, NRCS  
Mike Gaglio, AMEC  
Barbara Kauffman, Rio Grande Council of Governments  
George Abernathy, Mesilla Park resident  
Sandra Abernathy, Mesilla Park resident  
Greg Bloom, Sen. Bingaman's office  
Gaea McGahee, Rincon resident  
Chris Canavan, New Mexico Environment Department

Peter Bennett, City of Las Cruces Public Works  
Bert Cortez, U.S. Bureau of Reclamation  
Woody Irving, U.S. Bureau of Reclamation  
Dan Townsend, Las Cruces resident  
Junelle Echlin  
John Nelson, Trustee of Mesilla  
Dan Lucero, farmer  
Steve Trowbridge, Las Cruces City Council  
Beth Bardwell, World Wildlife Fund  
Phil King, NMSU, EBID consultant  
S.D. Schemnitz, Southwest Consolidated Sportsmen  
Diana Alba, Las Cruces Sun-News  
Wayne Treers, U.S. Bureau of Reclamation  
J.D. Padilla, City of Las Cruces

#### 2007 Annual Operating Plan for Elephant Butte and Caballo Reservoirs

Wayne Treers, Hydraulic Engineer, U.S. Bureau of Reclamation, gave a presentation on this topic. He showed a map of the basin to indicate the mountains where snowpack is, where the water comes from, and where it is stored. Elephant Butte and Caballo Dams supply water for Elephant Butte Irrigation District, El Paso County Water Improvement District #1, and Mexico.

Winter started out with good snowpack. It peaked early in many parts of the basin. March was dry and warm. We are now looking at below normal runoff but it's still better than last year. Some mountain ranges melted out several weeks earlier than normal. He showed graphs of snowpack at various sites; in most cases, it melted off earlier than normal. Precipitation is better compared to last year.

April 1 runoff forecast is 46% of average for March through July at San Marcial. The February 1 forecast was nearly 100% runoff. Still, we are doing better than last year's forecast. Since 1996, we have only had two years of above-average runoff at Elephant Butte. That's why Elephant Butte is so low now. Last year's runoff was low in the spring but then monsoon flows caused runoff to be high in the late summer. The 12-month forecast shows no particular trend for precipitation but above-normal temperatures are forecast.

We will get flow for the first three weeks of May and then it will drop off. On March 26, we peaked out at the Butte, our high point for the year. We have been dropping since. We are looking at about 195,000 acre-feet in credit water for Colorado and New Mexico, which cannot be allocated to the Project. It belongs to them due to over deliveries by them under the Rio Grande Compact. There is also about 4400 acre-feet of San Juan Chama water that cannot be touched.

Usable project water today is 417,720 acre-feet. When we go below 400,000 acre-feet, the upstream states can no longer store water. Around May 8 we expect to go below that level.

Based on runoff, we think we will have 591,000 acre-feet to release, not enough for a full supply. We are going to need back-to-back above normal runoff for Elephant Butte storage to come back up. At Elephant Butte, we will be 15-16 feet higher for the

major holidays this summer but by Labor Day it will be 14 feet lower than last year. We are definitely still in a drought.

We started with an initial allocation of 39% of a full supply. We are now at 52%, greater than the final allocation last year which was just over 50%. We think we are going to be around 60-64% of a full supply for water users by the end of summer. We will draw Elephant Butte down to below 200,000 acre-feet by September. Irrigation from Caballo Dam began March 7 and will continue until September 15 (tentative).

Steve Smullen – What will storage be in September?

Wayne Treers – Just over 10% of conservation capacity at Elephant Butte. We will probably hover around that for several years until we get back to back above-normal runoff

Dan Lucero – Given the cyclical nature of water, have management practices changed in view of past history?

Wayne Treers – In 1980s we had a good supply but when we started reducing supplies in the 2000s, the users started switching crops, trying to do what they can to manage the short supplies they have.

George Abernathy – We have reduced the irrigation requirement now due to conservation practices by farmers.

Wayne Treers – Some crops such as pecans supplement with groundwater.

Councilor Trowbridge – What is your projected release this year?

Wayne Treers – We are looking at about 590,000 acre-feet.

Terry McMillan – Have you seen rains north of the dam recently?

Wayne Treers – There is some rain but it's unusual for this time of the year. With us trending to a La Niña pattern, we tend to get less precipitation during the winter. But La Niña is not a good predictor of summer precipitation.

Dan Lucero – In view of last year's rain and the flood damage, did you discuss any preparations for this year?

Wayne Treers – When we start to get flooding, we will cut our releases out of Caballo Dam. That's a typical operation for us to try to control flooding on the Rio Grande. The arroyo flooding is a local responsibility.

### Rio Grande Canalization Collaborative Project

Dr. Phil King, NMSU Associate Professor of Civil Engineering and Elephant Butte Irrigation District consultant, and Beth Bardwell, Program Officer, World Wildlife Fund, gave a presentation on this topic.

Dr. King gave a brief overview of the history of the Canalization Project as a water delivery and flood control project of the USIBWC. It covers 105 miles from Percha Dam, NM to American Dam at El Paso. It was built in the 1930s and 1940s. It is federal land extending from levee to levee. Maintenance has included regular dredging of the pilot channel. The historical river meandered but when canalized, they straightened it. Floodways are mowed for water conveyance efficiency and flood control.

About 70,000 acres are cultivated annually in southern New Mexico, about 20,000 irrigable acres are not cultivated in any given year. Alfalfa, cotton, and pecans are the main crops.

Beth Bardwell continued with the presentation. She explained that World Wildlife Fund is a conservation organization. The office in Las Cruces has the

Chihuahuan Desert as its area of interest. We focus on freshwater conservation. There were some unintended environmental consequences of the Canalization Project such as change in hydrology so we lost spring pulse flows while during other seasons flows were higher or lower, altered by storage and releases from the dam. We saw a change in the channel processes and geomorphology. Previously, the lay of the channel changed periodically, floodplains were created and eroded. But now there is very little movement of the channel across the floodplain. We have seen loss of diversified habitat in the river channel and loss of riparian habitat.

In the arid southwest, only 1% of lands are riparian. Riparian woodlands are an important habitat. The desert Rio Grande is one of only three large river habitats in the Chihuahuan Desert.

Our collaborative process came out of the Canalization Project EIS undertaken by USIBWC. Diverse stakeholder groups were interested in re-examining the preferred alternative. Conservation groups were not satisfied with proposed habitat enhancements. Farmers feared the presence of endangered species on restored lands could restrict water operation and management. Because of these concerns, USIBWC delayed issuance of its Record of Decision.

Members of the collaborative project are Elephant Butte Irrigation District (EBID), World Wildlife Fund (WWF), Environmental Defense, USIBWC, and a 30-member stakeholder group. Goals of the collaborative project – find an alternative operation and management paradigm to “fish versus farmer,” identify real world solutions to competing uses of water in a water-limited ecoregion, and integrate flood control and conveyance functions with habitat restoration.

New studies have been commissioned -- hydraulic, biologic, and legal analysis of Endangered Species Act so that we would have a way and mechanism of continued operations for EBID if endangered species are found.

We are using a model to determine at what flows we can inundate the floodplain to promote riparian habitat. We are looking at volume of flow, timing of the flows to coincide with native seed germination, and frequency of flows. We are also trying to quantify impacts of environmental flow on flood control and water supply and deliveries.

John Hernandez – You need to include water quality because if you inundate the floodplain, you increase e coli and salinity.

Ms. Bardwell continued that one aspect of the project is to consider flexibility under the Endangered Species Act. One option is a safe harbor agreement for water. We don't want to punish people for doing good deeds. For non-federal water right holders who voluntarily restore habitat, they should not be penalized. So the agreement sets out parameters where they agree to do certain things. Another option is the Section 10 Habitat Conservation Plan where mitigation habitat would be established.

Phil King then discussed the institutional framework to oversee transfers of water from existing water users to the environment. The idea is that marginal depletions for environmental activities can come from the project water supply that is acquired and allocated to an environmental management group. By means of a Special Water Users Association, a non-agricultural user that wished to start using project water, such as municipalities and public water utilities, can acquire and use surface water. Could a similar arrangement for environmental groups be done? They could keep an account and

deliver the water to the river. If the restoration affects the water supply, they acquire water rights through a market-driven process.

Right now the collaborative group has developed a scope of work for the U.S. Army Corps of Engineers technical work. A stakeholder meeting was held, baseline studies are being undertaken, and then another stakeholder meeting will be held.

Ed Fierro – Is there concern that the environmental groups will drive the water price up?

Phil King – That's less of a concern than the municipalities affecting water prices.

Beth Bardwell – We are looking at limited restoration sites within that floodway and we'll have a better idea where those areas may be after the baseline studies are completed. It might be from zero to 600 acres at the most.

Dan Lucero – In Florida they have the Kissimmee River, they are talking about unchanneling it again. So there are similar projects in other areas.

Beth Bardwell – There are similar project elsewhere, even upstream in the Rio Grande.

Councilor Trowbridge – What is the magnitude of your project?

Beth Bardwell – Through this modeling, we want to see where there are opportunities to inundate the floodplain to generate habitat, compatible with irrigation deliveries. I don't think there is a great deal of acreage where we will have that ability.

Councilor Trowbridge – The City of Las Cruces has leased 1800 acres of land and 2400 acre-feet of water for future purposes of establishing a surface water treatment plant. We are leasing it to farmers. Could you go to the City and have the City lease it to you for environmental purposes until the surface water treatment plant is established?

Phil King – It is possible it could go back to EBID constituents to include environmental groups.

Ed Fierro – Question about raising the water surface elevation or channel configuration to inundate the floodplain and the impact of this.

Phil King – You would have to design the flood capacity integrated with those kinds of changes in the structure of the river itself.

Beth Bardwell – Instead of elevating the water, you could shave down the floodplain.

### Rio Grande Flood Control Levees, Update on FEMA and IBWC Activities

USIBWC Acting Principal Engineer Steve Smullen gave a presentation on this topic. Our EIS analyzes alternatives for flood control improvements and environmental enhancements on the Rio Grande Canalization Project. Our goal is to reach a Record of Decision in order to implement flood control measures and environmental enhancements. All activities are subject to the availability of federal appropriations. He discussed levee terminology. Freeboard is the amount of insurance you have from the water surface elevation to the top of the levee. FEMA defines it as 3 feet. Other considerations are levee overtopping, erosion, and seepage through the levee.

Levee height is deficient for 38 miles in Doña Ana County for the 100-year flood, meaning there is less than 3 feet of freeboard. Approximately 8 of these miles have zero

freeboard and are subject to overtopping. About \$20 million is the estimated cost to raise levees in Doña Ana County.

He presented maps showing deficiencies in various portions of the project, noting potential levee overtopping in the Tonuco Bridge area. In the Las Cruces area, the flood is contained within the levees. Above Shalem Bridge and from Picacho to Mesilla Dam, the levees are deficient by one foot so there would not be overtopping in this reach. At Canutillo and Sunland Park, there are areas that would be overtopped.

Member of the Public - What is the condition of the levee in the reach from Picacho to Mesilla?

Steve Smullen – There is only 2 feet of freeboard so they would have to be raised one foot to meet the FEMA criteria. There is an issue at Canutillo because on the east bank, the railroad embankment is the levee. In Sunland Park, there's only a levee on the north side of the river. He presented a slide showing distances and cost estimates to raise the levees in various reaches in Doña Ana County.

He then presented proposed levee raising in the Canalization Project in El Paso.

FEMA has released the draft maps for Doña Ana County. The El Paso draft maps will be out in 2-3 weeks. Doña Ana County has their FEMA maps on the county web page. FEMA requires levees to contain the 100-year flood with 3 feet of freeboard. We notified FEMA last year that we could not meet that requirement. The Rio Grande levees in the United States did not overtop in 2006 in spite of high flows. FEMA maps the flood risk as if the levee did not exist at all. Doña Ana County will have a meeting May 16 after which there will be a 90-day appeal/protest period. We have proposed to FEMA that they look at a different procedure to develop the maps. They have a very simplistic approach that does not take into account the levees in place attenuation, etc. It tends to overestimate flood risk. It puts more people in the flood plain than should be in the flood plain. He showed some FEMA maps showing inundation near the river at Picacho Bridge. Below Las Cruces, almost the entire valley is shown to be in the floodplain. FEMA takes the model we give them, then uses the water surface elevation provided and assumes the levees are not in place. So if the valley is at an elevation of 90 and the water surface elevation is 100, it shows all areas below 100 as inundated, no matter how far they are from the river.

Our priority for work is levee reaches subject to overtopping/failure in urban areas. We will work with FEMA and recommend map revisions based on our FLO 2D model, a more sophisticated hydraulic model than that used by FEMA. It may require additional funding to do all the needed modeling. A partial levee certification (Picacho to Mesilla Bridge) is being considered contingent on funding. It's only one foot deficient. Depending on funding, we could do that work. We are doing a similar partial certification in El Paso County soon.

We did some sediment removal and are proposing additional sediment removal at arroyos in out years using recurring operation and maintenance funding. To raise the levees would be a separate appropriation for construction.

He then discussed levees in the Rio Grande Rectification Project. The Rectification Project has the same basic configuration as Canalization but it has an extra component in that it was done with Mexico as a boundary stabilization project. It has levees on both sides/in both countries.

Levee height is deficient for 46 miles in the Rectification Project in Texas; this includes 11 miles of overtopping, mostly in the extreme lower reach. The estimated cost to raise the levees is \$34 million.

He showed maps of areas with less than 3 feet of freeboard in the Rectification Project. The downstream end of the Rectification Project is where the overtopping occurs, not in urban areas.

Wayne Treers - Would there be overtopping in Mexico, too?

Steve Smullen - We don't yet have results from the U.S. Army Corps of Engineers FLO 2D model for the Rectification Project but I expect that it would show overtopping in Mexico, too.

He presented a list of reaches that need to be improved and approximate construction costs, including the area from the end of the Chamizal to Old Riverside Dam, a 7.4-mile reach. We have crews and material for doing this work; it's essentially a levee capping project. It's a highly urbanized area next to the Border Highway. The estimated completion is about 9 months at a cost of \$1-1.5 million. The Environmental Assessment is online. Burrowing owl survey and relocation was completed in April. Release of Draft Programmatic EIS is scheduled for May 2007 to cover the Rectification Project and other USIBWC flood control projects in the border region.

A big issue from the August flood was the amount of sediment in the Chamizal Project reach. We are trying to initiate work this year. Conveyance in the Chamizal is very limited. The river channel is very narrow and vegetated. We need to do something. We are working with Mexico to try to come up with an alternative to improve conveyance. We met with the Mexican Section of the Commission and we are developing a joint plan for sediment removal and levee improvements.

John Hernandez - We've lost FEMA certification for the levees. What does that mean in terms of flood insurance?

Steve Smullen - I've heard that it costs \$400 - \$1000 per residential unit/year. It would be required for homeowners with federally-backed mortgages.

Someone in the audience commented that the price cited is the cost per \$100,000 assessed value.

John Hernandez - How many homes are affected?

Steve Smullen - An article said that Doña Ana County estimated 3,000 homes or properties would be affected.

John Hernandez - Has 3 foot freeboard always been the criteria?

Steve Smullen - To my knowledge it has. They will accept 2 feet of freeboard. But you have to justify it more.

John Hernandez - Has the volume of the 100-year flood increased in the latest calculation?

Steve Smullen - It changed but not significantly.

Member of the Public - What political event precipitated this?

Steve Smullen - FEMA got funding to update the flood insurance rate maps nationally.

Member of the Public - This is a financial hardship.

Greg Bloom - If you're not in a flood area right now and you end up being in one, if you purchase insurance before the final maps are accepted, you would be buying your insurance at a much lower rate. Once the new maps come out, you would be

grandfathered in at the old price. We want people to know this. Sen. Bingaman was here last month and he was at the levees with USIBWC Commissioner Marin to look at the levees. We are trying to get an earmark in the budget to get the money needed for New Mexico.

Marvin Tessner – What about the structure? Is that deficient?

Smullen – We are talking about being deficient in height. The structure is pretty good.

Wayne Treers – Have you asked Congress for this money already?

Steve Smullen – We have provided the information. The Congressional offices have requested funding. It's up to Congress and the President to appropriate.

Member of the Public – Does people driving on the levees compromise the integrity of the levee?

Steve Smullen – The levee is still sound but it could wear it down.

Member of the Public - Am I going to be paying because there's no maintenance on the levees?

Steve Smullen - We do levee maintenance. It's purely a height issue.

#### Paso del Norte Watershed Council, Watershed Restoration Grand Announcement

Geri Quisenberry, Grant Coordinator, Paso del Norte Watershed Council, discussed this project. There is an excess of e coli or fecal coliform so we have funding (a 319 (h) Watershed Restoration Grant) to have a stakeholder-driven project covering the Rio Grande from Percha Dam to the New Mexico-Texas state line. Phil King is the data inventory consultant on this project. We are in the preliminary process. But we are trying to get a base of stakeholders involved. The goal of the project is to develop best management practices. It is a non-regulatory, stakeholder driven, voluntary approach to addressing non-point source impacts to water quality -- a goodwill incentive to clean the waters up. She brought handouts to the meeting with additional information. The best way to get involved is to start attending the meetings. We had a stakeholder meeting last week for the 319 grant project. To stay involved, e-mail her at [gquisenberry@nmda.nmsu.edu](mailto:gquisenberry@nmda.nmsu.edu) or contact the Paso del Norte Watershed Council. The next meeting is June 1 at the NMSU campus.

#### Public Comment

Mr. J.D. Padilla of the City of Las Cruces stated that the FEMA flood zone maps are on the Doña Ana County and City of Las Cruces web sites. The maps themselves are also available for viewing by the public at the Doña Ana County Center, at City of Las Cruces offices, and in the library.

There was no further public comment.

#### Board Discussion/Next Meeting/Suggested Future Agenda Items

There was no additional board discussion.

Alisa Jorgensen announced that the next scheduled meeting is either the week of July 30 or August 5 in El Paso. She opened up the meeting to suggestions for future agenda items.

John Hernandez – Would like to see someone from each of the Congressional offices who are involved to see what they would like to accomplish for their goals regarding the levee/flood control issue.

Steve Smullen - A stakeholder meeting for the collaborative process is expected in June or July. Perhaps at the next meeting in Las Cruces we could present more information about opportunities for environmental enhancements.

Ed Fierro – Wants somebody from FEMA to explain the methodology for preparing the flood maps.

Steve Smullen – There will be a public meeting on May 16 at the Doña Ana County building on Motel Blvd. at 6:00 pm. FEMA will be there.

Alisa Jorgensen – There was a concern in Canutillo and the Upper Valley with the flooding, the levees, and the railroad embankments. We would like to hear about that, too. We would be interested in more information about flood insurance. There are two types of policies - structural and contents policies. Would both be grandfathered in?

Conrad Keyes – Suggests getting an insurance person to come. Like USAA.

Dan Lucero- Would like to continue to get updates on the water supply.

Wayne Treers - There would be an update on the water supply by the next meeting in late July/early August. He could attend to discuss it.

Sally Spener – El Paso Water Utilities desalination plant is under construction. Perhaps a presentation about the plant would be of interest.

Ed Fierro – The plant is on schedule for completion in summer or fall.

Joe Groff - The advantages and disadvantages of earth ditches versus concrete canals. (Sam Fernald at NMSU has done work on this)

Zay Clopton - Mentioned that Mr. Moody with the Border Patrol in Deming could possibly speak about infrastructure at the border.

\*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.