

Rio Grande Citizens' Forum
November 8, 2006
Best Western Mesilla Valley Inn
Las Cruces, NM
*Tentative Meeting Notes

Board Members Present

Mike Fahy
Irene Tejada
Joe Groff
Lupe Garcia
Kevin Bixby
Alisa Jorgensen
Denise McWilliams

IBWC Staff Present

Tony Solo
Cesar Boisselier
Steve Smullen
Sally Spener
Enrique Muñoz, MxIBWC
Victor Guerrero, MxIBWC

About 18 additional members of the public attended.

Rio Grande Flood Control Issues

Henry Magallanez of Elephant Butte Irrigation District (EBID) had been scheduled to give a presentation about "Flood Control Dams Maintained by Elephant Butte Irrigation District." However, instead, Gary Esslinger of EBID, a former Dona Ana County Flood Control Commissioner, gave a presentation, "A Deadly Game of Russian Roulette" in which he discussed his personal perspective of conditions creating a flood risk along the Rio Grande in Southern New Mexico and the greater El Paso, TX area.

He described six perceived risk factors or "bullets" for flood control in the area as follows:

1) A 110-mile river reach in need of maintenance. He described a silted river bottom, narrowed channel, uncertified levees, etc. In his view, an island in the river just downstream of the Placitas Arroyo at Hatch contributed to that arroyo backing up and flooding Hatch. He also expressed concern about silt just downstream from Mesilla Dam and problems that could be caused by overbank flooding near Mesilla Dam. Uncertified levees are another concern for him. He stated that FEMA had just announced that the Rio Grande levees are not certified. Because they are not certified, Esslinger is concerned that they will fail if water runs against the levees. He expressed that overbank flooding where there are uncertified levees is a problem. During his presentation, he showed numerous photos of the overbank flooding that occurred during storms in 2005.

2) Flood control dams in need of rehabilitation. He noted that there are various dams in need of repair. Some are 50-year old structures that need rehabilitation, many were built for the 50-year flood. He stated that five of them are maintained by the IBWC; their flood flows go directly into the river. There are also 21 EBID-sponsored structures with direct flow into canals and drains and 27 Dona Ana County Flood Control Commission-sponsored structures that flow into farm land or EBID facilities. He expressed concern about inadequate funding and limited authority and jurisdiction of various agencies to do work on the dams. He showed photos of IBWC sediment control dams that, if they failed, would have caused a bigger flooding problem over the summer. He showed other dams with similar risk.

3) Privately owned dams in need of repair. He described dozens of private dams, dikes, and berms that are not designed to standards, putting nearby property owners at risk.

4) Wild arroyos without flood control. These arroyos have uncontrolled flood flows, some with significant volume, which deposit silt, debris, and trash. They have unknown water quality and are sometimes located near populated areas. He says a wild arroyo entering the floodplain came very close to breaking the river levee.

5) Canal and drainage system inadequate for dual purpose. Canals/drainage structures are operated at capacity during the summer irrigation season but this coincides with monsoon. It creates difficulties for operations when there is a full river and full drains with no place for the water to go.

6) Unrestricted growth, lack of adequate funding and authority and jurisdiction.

Based on these risk factors, he made some recommendations. These include:

- Establish a regional flood safety center.
- Reduce tension between greater flood risk and reduced storage capabilities below Caballo Reservoir. Develop a better understanding of flood risk versus the need to protect future water supplies. Develop aquifer storage and drainage facilities to accommodate flood flows.
- Develop a critical local weather monitoring system. Improve atmospheric modeling, flood forecasting, early-warning precipitation systems.
- Create a one-stop shop for flood control infrastructure needs and administration.
- Establish new management objectives for the Rio Grande Canalization Project. Develop new studies on flood control, irrigation deliveries, wildlife habitat, ecosystems, and river efficiencies to establish integrated benefits and trade-offs from improved management of any one of these objectives.
- Provide advice on technical decisions influencing the future river management to the USIBWC. Promote diverse interests in healthy river management that adequately addresses the historic nature, institutional framework, and technical function and processes for local water managers, environmental and recreational interests. Establish a safe harbor agreement for the protection of a future water supply for the region.

Denise McWilliams asked about the impact of the water conservation project whereby ditches

are being covered. Esslinger stated that 20,000 acre-feet of water has been saved so far. EBID is picking and choosing locations for these works and considering flood issues in the selection.

Sally Spener clarified the FEMA levee certification issue that was raised in Esslinger's presentation. She stated that the structural integrity of the levees is generally good and the levees can handle water on them so overbank flow does not pose the same risk as portrayed in the presentation. Potential freeboard encroachment or levee overtopping in limited areas results in non-certification for the entire levee system. It would not be accurate to state that USIBWC levees would fail if they got water on them. Esslinger expressed concern that the Rio Grande flood control levees could have been overtopped had the arroyo not overflowed at Hatch prior to reaching the Rio Grande.

Michael Fahy asked Esslinger to describe a safe harbor agreement, as mentioned in the presentation. Esslinger stated that it's a new initiative with IBWC input involving EBID, World Wildlife Fund (WWF), and Environmental Defense (ED) to come up with an agreement. Normally, a safe harbor is designed to protect property rights. Originally, it was designed for ranchers with collection ponds on their farms or ranches with endangered species. Farmers would be protected if endangered species came on their ponds. We are thinking of the same for the Mesilla Bosque Park, working with Fish and Wildlife, to develop a safe harbor because our drainage ditch provides water to the wetland at the bosque park. WWF is purchasing surface water rights to supply the water to the wetland. If that works well, we want to use it on the river so if we develop an ecosystem use of the river, the water would be delivered to that restoration area, too.

Steve Smullen stated that a kickoff meeting is scheduled for December for the hydrology/hydraulic study that USIBWC is doing with EBID, WWF, and ED to which different stakeholder groups will be invited. We will have a series of three workshops to look at how we can have environmental enhancements as well as delivery of irrigation water.

Kevin Bixby stated his agreement with Esslinger's recommendation that new management objectives be established that balance competing goals. He also agreed with the concern expressed about development in the floodplain, which increases flood risk. He stated that the idea for a regional network is excellent, too.

Effect of the 2006 Monsoon on Rio Grande Project Reservoirs

Bert Cortez and Wayne Treers, U.S. Bureau of Reclamation, gave a presentation on this topic.

Bert Cortez explained that prior to the monsoon, the Bureau was forecasting that next year's irrigation season would begin with less than 100,000 acre-feet (a/f) of water in storage, not even enough to start the irrigation season. This year's monsoon affected upstream and downstream areas of the Rio Grande and affected storage in the Rio Grande Project. In accordance with the Rio Grande Compact, New Mexico maxed out on credit water of 150,000 a/f so all extra water that came in was Project water for us to use.

Wayne Treers continued with the presentation. Earlier in the year, the water supply looked bleak

and low reservoirs were expected. Then we had a complete turnaround with July-October rains. On March 1, we had the lowest snow pack in the Upper Rio Grande basin going back 50 years of SNOTEL records. We had 93,000 acre-feet of runoff at San Marcial for March -July, about 16% of average. But then the monsoon hit. Most inflow to Elephant Butte came in as rainfall runoff during the summer. Most rain inflow came from upstream in New Mexico (not Colorado). Rio Puerco inflows near Bernardo, New Mexico also contributed to flows in the Rio Grande into Elephant Butte.

August inflow to Elephant Butte was nearly four times the long-term average. Total inflow August-October was 212% of average as opposed to 16% for March-July. We aren't out of the drought yet; 75% of water at Elephant Butte comes from spring snow melt runoff. During the prolonged drought of the 1950s, there was a similar circumstance wherein 1957 was a year of very high precipitation in the midst of a period of drought.

He showed graphs of Elephant Butte and Caballo storage for 2006 showing storage increasing due to summer storms when it had been predicted to go down during the summer due to irrigation releases.

At Elephant Butte right now, storage far exceeds what had initially been projected. Usable project water is 403,519 a/f. Per the Compact, if storage falls below 400,000 a/f, then New Mexico and Colorado cannot store water in upstream reservoirs. New Mexico gained a lot of credits and Colorado got some as well so there may be 189,000 a/f that the Rio Grande Project cannot use.

Total storage of about 500,000 a/f is expected at the end of the year. We will start out the next irrigation season with about 30% of a full supply based on storage and taking into account credit waters. A full supply is expected by May 2007 if runoff is normal. If we get 65-70% of normal runoff, we would still have a full supply.

The National Weather Service is predicting an El Niño pattern this winter, a weather phenomenon off South America in the Pacific Ocean. We tend to get better snow in an El Niño event. Right now, it looks good for good snow pack this winter. Snow is already starting out better than last year.

John Hernandez asked whether there had yet been any accounting of sediment into Elephant Butte reservoir during the monsoon. Treers responded that this has not yet been done. Hernandez also asked about the impact of the monsoon on Rio Grande silvery minnow spawn. Treers did not have information on this.

Recognition of Board Members

Acting Principal Engineer Steve Smullen expressed the Commissioner's appreciation for the Board Members who have completed their two-year term of service. He read the certificates of appreciation and presented them to the Board Members.

Sally Spener provided information about the Rio Grande Citizens' Forum application process.

All board terms have expired. The USIBWC is soliciting applications from members of the general public who are interested in serving on the Forum Board. Applications were made available at the meeting. They are also available on the USIBWC web page or by contacting USIBWC Headquarters. Deadline for applications is December 15, 2006.

Board Discussion/Suggested Future Agenda Items

Michael Fahy proposed Dr. Phillips of New Mexico Tech to discuss salinity in the Rio Grande Project area. Dr. Phillips has volunteered to do his presentation at the meeting in February.

John Hernandez suggested a presentation about global warming and climate change. The State of New Mexico put together an excellent report on global warming. He could provide the name of the author. Gary Esslinger mentioned Ann Watkins as a contact in the Office of the State Engineer who worked on a drought summit

Kevin Bixby proposed an update from USIBWC on the levee situation and how the agency plans to address the FEMA levee certification issue.

Denise McWilliams proposed that Gary Esslinger's talk be developed more to include cost estimates so the public could actually see the figures. Gary Esslinger indicated that the Office of the New Mexico State Engineer Dam and Safety Bureau is looking at the dams and costs for rehabilitation based on urban needs for dams originally built to protect farmland.

Joe Groff suggested a presentation regarding the merits of lining ditches versus not lining them. New Mexico State University is working on this. He has previously presented this to Sally Spener.

*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.