

RIO GRANDE CITIZENS FORUM
City of Las Cruces Council Chambers
Las Cruces, NM
April 13, 2017
*** Tentative Meeting Notes**

Board Members in attendance:

Danny Chavez, Hudspeth County Conservation and Reclamation
Gill Sorg, City of Las Cruces, City Council
Ray Spears, Captain, Game Warden, Texas Parks and Wildlife Department
Suleiman Masoud, Del Rio Engineering, El Paso Association of Builders Board of Directors
Walton Low, U.S. Geological Survey hydrologist (retired), Lower Rio Grande Regional Water Plan
Technical Advisory Group
Conrad Keyes, Jr., Chair, Paso del Norte Watershed Council, New Mexico State University Emeritus
Department Head and Professor of Civil Engineering

USIBWC Staff in attendance:

Jose Nuñez, Principal Engineer, USIBWC
Tony Solo, USIBWC Area Operations Manager
Sally Spener, Foreign Affairs Officer, USIBWC
Lori Kuczanski, Public Affairs Officer, USIBWC

Members of the public in attendance:

Charles Taylor, El Paso Independent School District
Bert Cortez, U.S. Bureau of Reclamation
Brad Kirksey, Freese and Nichols, Inc.
Joel Mora, Arcadis
David Morris, resident
Woody Irving, Bureau of Reclamation
Rene Blizzard, resident
Earl F. Burkholder, retired teacher New Mexico State University, and Global Cogo, Inc.
Gregory Smith, City of Las Cruces
David Juarez
Ben Stewart, Stantec
Bruce Jordan, USACE, Albuquerque District
Barney Sugarman, Mesilla Hills Roadman Association
Stephanie and Fernando Cadena, residents
Jose Rodriguez, Hunt Institute and UTEP
R. Kimpel, resident of Socorro
Jennifer Montoya, Bureau of Land Management

Welcoming Remarks:

At 6:30 PM, Citizens Forum Co-Chair Jose Nuñez convened meeting on behalf of co-chair Carlos Peña who was absent due to a scheduling conflict. He welcomed the group, introduced board members and let the audience introduce themselves. Jose Nuñez read out loud the agenda that was distributed to all citizens at the meeting. Mr. Nuñez then stated the first presenter would start.

Presentation One – Reclamation Rio Grande Project 2017 Water Conditions and Operations – Bert Cortez, Special Assistant to the Area Manager, U.S. Bureau of Reclamation

Bert Cortez began by saying the conditions of the river basin are looking good, and that includes Elephant Butte and Cabello Dams.

Mr. Cortez showed slide two, a map of the Rio Grande Basin; water is stored at Elephant Butte. The next map is of the 2 reservoirs; Elephant Butte Reservoir and Cabello Dam and the 3 valleys we irrigate.

Mr. Cortez outlined the first thing we look at is the snowpack. He stated so far we are doing well and the averages are above average, and are falling just a little. The Upper Rio Grande Basin slide shows the 30 year average precipitation in light red. The Wolf Creek Summit area is above average for snow-water equivalent and precipitation. The snowpack shows we are above average. We've had a pretty good year and it's starting to level off.

To get an idea of future conditions we look at El Niño/Southern Oscillation (ENSO). As of March 9, 2017, the ENSO Alert System Status is not active. Overall, this slide is telling us that ENSO-neutral conditions are favorable to continue through at least the Northern Hemisphere spring 2017, with increasing chances of El Niño development in the fall. El Niño generally means better precipitation. Most models show we will go into an El Niño situation later in the year.

The projections for April, May, and June are hotter than normal, with an average amount of precipitation.

As of April 5, 2017, water storage at Elephant Butte Reservoir is 324,746 acre-feet (af), which is below where we were last year on storage conditions. We started with lower storage but we are catching up. We are getting an increase of flow even though we've been releasing water since March 31. Water storage at Caballo Lake is 74,365 af.

The March 2017 forecast for Elephant Butte historical inflow is about 670,000 af, which is above the 30 year average, so we are looking really good.

Elephant Butte Irrigation District (EBID) will start receiving water April 15. El Paso County Water Improvement District #1 started receiving water April 4 and Mexico started to receive water on April 10. When EBID comes on, we'll have everyone on.

With the water allocations looking good for the year, it's projected the El Paso district may irrigate until the end of September.

We only allocate what we have in storage. As of yesterday, we are now at 48 percent of a full allocation. The February allocation was 32.81% of a full supply. Hopefully we can update this and increase the allocation as spring inflows to the reservoir continue

In summary, total storage for the Project is 110,222 acre-feet lower than it was the same time last year. Usable Project storage is 102,845 acre-feet less than it was at the same time last year. But the streamflow forecast for March at San Marcial is 131% of average. It only took 2.5 days to deliver water to El Paso as opposed to 4-5 days in recent years. This shows we are getting good efficiencies in our deliveries this year. All models indicate that La Niña will weaken, with a transition to ENSO-neutral during the late spring or early summer

Jennifer Montoya – Why were conveyance losses less this year?

Cortez - Soil conditions were pretty wet below the surface. The water arrived faster and more water arrived.

Presentation Two – [2016-2017 Sediment Removal Activities](#)—Tony Solo, Area Operations Manager, Upper Rio Grande Field Office, USIBWC

Tony Solo gave a presentation on de-silting activities in the Rio Grande in the greater El Paso-Las Cruces region. The goals and objectives are to maintain efficient water deliveries to U.S. irrigation districts, municipalities, and Mexico, as well as improve operations at diversion dams and increase flood control capability.

If we were to take no action to remove sediment, the impacts would be reduced channel carrying capacity, reduced water delivery efficiency and it would create backwater conditions, causing high water table and drainage problems for farmers. It could also lead to instability of the river bank. Bank failure and lateral migration may impact maintenance roads and may impact flood protection levees. At diversion dams the carrying capacity of irrigation canals is reduced with an increase in sediment loads.

Channel maintenance activities include bank stabilization using rock riprap and woody vegetation, arroyo sediment removal, arroyo realignment, and river channel sediment removal.

The 2016-2017 sediment removal sites and volume excavated in cubic yards (CY):

Rincon Siphon	952 CY
Rincon Arroyo	8,581 CY
Reed Arroyo	5,945 CY
Tonuco Drain	15,660 CY
Horse Canyon	11,508 CY
Canutillo Bridge	4,616 CY
American Dam	30,000 CY
International Dam	20,000 CY
Fort Quitman	15,000 CY
Guayuco Arroyo	34,372 CY
Total: 146,634 CY	

The above table is sediment removed to date. Work continues and additional volumes of sediment are being cleared.

The presentation included a series of “before” and “after” photos where sediment has been removed. The Rincon Arroyo deposits large amounts of silt on a yearly basis. The opposite bank was eroded and if this had continued, it could have affected the levee. During the 2015-2016 non-irrigation season, we removed approximately 40,000 cubic yards of material. During the 2016-2017 year, we removed an additional 8,581 cubic yards.

At the Reed Arroyo site, 11,500 cubic yards of material was removed. We removed an island protruding into the river.

Last year, approximately 50,000 CY of material was removed from the Tonuco Drain. This year, 15,660 CY was removed. This is an area where there have been complaints of high water table.

Horse Canyon had 11,500 CY of material removed. The arroyo was perpendicular to the river and affected the opposite bank, causing erosion near the railroad tracks.

At the Canutillo Bridge, we removed an island that was partially blocking the flow of water underneath the bridge. We removed approximately 4,600 CY of material.

To perform the dam inspections that are undertaken every five years, it was necessary to remove all the silt from the upstream and downstream aprons of the dams. We removed 30,000 CY of material at American Dam, and 20,000 CY of material at International Dam.

Removal of silt at the Fort Quitman site was done to improve the ability to accurately measure flow at the Fort Quitman gaging station. Approximately 15,000 CY of material was removed.

Guayuco Arroyo had 34,372 CY of material removed from this site.

A project initiated this year was in the Boundary Preservation Project – Arroyo Los Fraile, located 2 miles south of Little Box Canyon. In the Arroyo Los Fraile area, sediment completely blocked the river. Approximately 20,000 cubic yards of silt was removed to clear the blockage while approximately 60,000 cubic yards was removed upstream of the blockage. UWIBWC has obtained a disposal site for this work from one of the local farmers.

In the Rio Grande Rectification Project in the Little Box Canyon area, there was flooding caused by sediment plugs of the lower portion of the Rectification Project. Tony Solo stated this area was very challenging to clear.

The average amount of silt removed by the Upper Rio Grande Field Office personnel the last two seasons was close to 160,000 cubic yards per year. Per the Tetra Tech Sediment Transport Study, the amount of silt entering the river in the Canalization Project is 409,000 cubic yards per year. This does not include the Rectification Project which probably contributes at least another 200,000 cubic yards per year.

The pictures of Mesilla Dam in April 2016 compared to the picture in February 2017 (right) shows the accumulation of silt in one year. The biggest problem for silt removal is finding deposit sites. The sediment disposal sites are as follows:

Owner	Location
Osvaldo Garcia	Arrey, N.M.
Lack Farm	Rincon, N.M.
Ted Horner	Horse Canyon, N.M.
Sheriff Posse	Sunland Park, N.M
Wayne Talley	Sierra Blanca, TX

There are 12 additional sites in the process of being acquired for silt removal.

Questions and Answers:

Question: What percentage of silt are we removing?

Solo: Last year we removed 160,000 cubic yards

Question: So the river is going higher? Above the original grade?

Solo: Yes.

Question: So could the river spill out over the levees?

Jose Nuñez: We have increased levee height by at least three feet.

Question: How soon do you need to re-visit priority sites?

Answer: We are doing that now. Most sites are near bridges and near sandbars. In addition to the bridges, the Tetra Tech Study identifies nine sites that require remediation – that could be silt removal, riprap replacement.

Public Comment

R. Kimpel: If I drive on the levee and damage the structure, I’m sure I’d receive a bill for damages. Does Border Patrol pay IBWC for the levees?

Jose Nuñez: We have an agreement that they must provide flex-base material to prevent erosion on top of the levee then USIBWC spreads it.

R. Kimpel: At the Guayuco Arroyo, could you run the arroyo to abandoned farms rather than to the river? The government could condemn the farms.

Solo: We would have to look at that from an environmental and engineering standpoint.

Board Discussion/Suggested Future Agenda Items

- Boundary Preservation Project Design
- Clean Rivers Program for the July meeting
- USIBWC Safety and Security—Who and what the USIBWC safety and security department is, and what they do from a security standpoint (Suggested by Ray Spears)
- Las Cruces 40-year Water Plan by City of Las Cruces utilities (suggested by Gill Sorg)
- Salt Cedar Beetle

The next meeting will be July 13, 2017 at USIBWC Headquarters in El Paso, Texas. 7:15 meeting adjourned.

*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.