RIO GRANDE CITIZENS FORUM USIBWC Headquarters El Paso, Texas July 13, 2017 * Tentative Meeting Notes

Board Members in attendance:

Walton Low, U.S. Geological Survey hydrologist (retired), Lower Rio Grande Regional Water Plan, and Citizens Forum Co-Chair John Balliew, President/CEO, El Paso Water Yvonne Curry, American Society of Civil Engineers Suleiman Masoud, Del Rio Engineering, El Paso Association of Builders Board of Directors Conrad Keyes, Jr. Chair, Paso del Norte Watershed Council, New Mexico State University Emeritus

U.S. Section, International Boundary and Water Commission (USIBWC) Staff in attendance:

Edward Drusina, Commissioner Carlos Peña, Principal Engineer Jose Nuñez, Principal Engineer Michael Landis, Civil Engineer Dr. Padinare Unnikrishna, Chief, Engineering Services Division Gilbert Anaya, Chief, Environmental Management Division Kelly Blough, Environmental Protection Specialist Leslie Grijalva, Environmental Protection Specialist Sally Spener, Foreign Affairs Officer Lori Kuczmanski, Public Affairs Officer

Members of the public in attendance:

John Sparks, Arcadis (Consultant) Clinton Swearingen, Arcadis Woody Irving, Bureau of Reclamation Jose Muñoz, GMES Jose Andres Muñoz, GMES Mariana Chew, Congressman Pearce's Office Juan Vincente Duran, El Paso Water Stormwater Robert Kimpel, Hudspeth Country Farmers Zack Libbin, Elephant Butte Irrigation District Richard Teschner, Friends of the Rio Bosque Chris Canavan, New Mexico Environment Department Earl F. Burkholder, retired teacher New Mexico State University, and Global Cogo, Inc. Chad Cadwallader, U.S. Border Patrol/PMO Charles Taylor, El Paso Independent School District Larry Oeth, VXTX, Inc. Jalal Rastegary, New Mexico State University Steve Teran, El Paso Water Stormwater Kevin Floyd, University of Texas at El Paso Karina Rivera, U.S. Representative Will Hurd's Office Kelly Rodibaugh, Texas Commission on Environmental Quality Jorge Castillo, Parks and Recreation

Jose Hernandez, H20 Terra Delbert Humberson, U.S. Geological Survey Carlos Rincon, US Environmental Protection Agency

Welcoming Remarks:

At 6:30 PM, Citizens Forum Co-Chair Carlos Peña convened the meeting. He welcomed the group, and asked Commissioner Drusina to say a few words.

Commissioner Drusina thanked everyone for coming. Commissioner Drusina said the Commission is working on a new Minute for the Rio Grande Valley. The Commission wants to consider the water that is falling in the Rio Grande Basin and try to come up with a way to get predictable deliveries of water from Mexico to the United States down to the Lower Rio Grande Valley. The Commission is using science and engineering to analyze the basin and our engineers have been working on a plan for water deliveries. This is a big, big step.

We are working on the next step of Minute 319—the Colorado River Minute. We are taking significant steps to move towards a new Minute that helps both the United States and Mexico to conserve water in a responsible way to respond to a drought.

Moving west in San Diego, the population growth along the border is certainly having an impact on the water and wastewater systems in Mexico. We are working with the government of Mexico, the State of Baja California, and the City of Tijuana to do some major improvements to their sanitary sewer systems. They've had some ruptures that have dumped millions of gallons of sewage into the Tijuana River that has flowed across to the United States, negatively impacting U.S. residents. Even though we have an international wastewater treatment plant in San Diego, the growth along the border has caused problems for us to be able to contain those spills.

The Commission has a good budget this year. For next year, it's going to be a different picture as the Administration works to be able to balance that budget; it means most agencies will see cuts.

The Commission is looking strong today, and I've got confidence that we'll be continuing to do a great job for the border communities for the next 100-160 years.

The Commissioner thanked the Citizens Forum for the work they do.

Mr. Peña asked the Board Members to introduce themselves. Afterwards, Mr. Peña asked the audience to introduce themselves and their affiliation

Gilbert Anaya, Chief, Environmental Management Division, USIBWC announced there will be a meeting July 18, 5:00 p.m. at the Village of Vinton, City Hall, to allow for public comment for the Environmental Assessment of Rio Grande flood control levee improvements in the area. USIBWC sent out notices, and the information is also available on the USIBWC website.

Mr. Peña introduced the first speaker, Ms. Leslie Grijalva.

<u>Presentation One – Annual Update on Water Quality for the Rio Grande and Clean Rivers</u> <u>Program – Leslie Grijalva, Texas Clean Rivers Program, USIBWC</u>

Ms. Grijalva gave a brief background on the history of Clean Rivers Program (CRP) and what she will be covering, along with her contact information.

The IBWC began routine water quality monitoring after 1977 Joint Report of Engineers, and in 1991 the Texas Legislature passed the Texas Clean Rivers Act. In 1998, the Texas Commission on Environmental Quality (TCEQ) partnered with the USIBWC due to the bi-national nature of the Rio Grande. In 2017, the monitoring sites along the Rio Grande included 94 total sites

- 1. CRP-67 sites
- 2. TCEQ—37 sites
- 3. U.S. Geological Survey (USGS)—2 sites
- 4. Shared—10 sites

The Texas Clean Rivers Program is a state-fee funded program. Permit holders and water dischargers pay a fee. Every major basin in Texas has a Clean Rivers Program (CRP). CRP involves a group of federal, state, and local organizations that have an interest in the health of our state's streams, rivers, and lakes. The USIBWC Clean Rivers Program collects water quality data from the Rio Grande and Pecos Rivers. We then use that data to identify and evaluate water quality issues, establish priorities for corrective actions, and work to implement those actions.

About 80 percent of the CRP activities involve water quality monitoring which is done monthly, quarterly, or as part of special studies. The CRP also does water quality assessments, and publishes results in publications. An Annual Basin Highlights Report and a 5-year Basin Summary Report are recorded. This is an in-depth analysis which includes trends and statistics. The CRP does outreach, such as environment education and public participation through Basin Advisory Committee meetings. Some events include attending health fairs, Earth Day events, or anything to educate the public on the CRP. CRP participates every year in the El Paso Water Festival, and river clean ups of the Adopt-a-River program.

Partners in the Upper Rio Grande help monitor, collect, and analyze samples. Partners include: USIBWC Field Offices in El Paso and Presidio, University of Texas at El Paso (UTEP), El Paso Community College (EPCC), El Paso Water (EPW), TCEQ El Paso Field Office, Big Bend National Park, Big Bend Ranch State Park, TCEQ Continuous Water Quality Monitoring Program. All partners use TCEQ sampling procedures and an accredited laboratory for analysis.

Ms. Grijalva presented maps showing the location of monitoring sites.

The 2017 Upper Rio Grande Monitoring Sites include 27 sites from Presidio to Del Rio, 2 sites along the Pecos River, and one site at Kokernot Springs in Alpine. There are 12 stations in El Paso and the surrounding area.

TCEQ Continuous Water Quality Monitoring (CWQM) has data available at <u>www.texaswaterdata.org</u> They have 16 CWQM stations along the Rio Grande Basin. Two are above and below the Rio Conchos—they may go away due to funding. It's very expensive to maintain. States are required by the Clean Water Act to "assess" the health of the river basins, determine water quality standards, and determine whether the water bodies meet these established standards, Water bodies not meeting state water quality standards are listed on the impaired waters list (303d list)

*Impairments mean not meeting standards

*Concerns mean near non-attainment of standards, or issues with parameters where standards don't exist

Most Rio Grande impairments are for bacteria or salinity. More information on the TCEQ Impaired Waters List can be found at: <u>http://www.tceq.texas.gov/waterquality/assessemtn/305_303.html</u>

The 2014 assessment lists 9 out of 14 established segments for the Rio Grande as impaired.

- 2302: Rio Grande Below Falcon Reservoir, bacteria
- 2304: Rio Grande Below Amistad Reservoir, bacteria
- 2305: International Amistad Reservoir, chloride, total dissolved solids
- 2306: Rio Grande Above Amistad Reservoir, chloride, sulfate, total dissolved solids (Big Bend area)
- 2307: Rio Grande Below Riverside Diversion Dam, bacteria, chloride, total dissolved solids
- 2308: Rio Grande Below International Dam, bacteria
- 2311: Upper Pecos River, depressed dissolved oxygen
- 2313: San Felipe Creek, bacteria
- 2314: Rio Grande above International Dam, bacteria

The 2014 assessment lists impairments in the El Paso area at station 2308, which is impaired for bacteria; this is a new impairment. Station 2314 is also impaired for bacteria.

The 2014 Texas Water Quality Standards were adopted by the Texas Commission on Environmental Quality on February 12, 2014. They are effective for all state permits. However, since they have not been approved by the EPA at this time. The 2010 standards still apply to all Federal permits.

Ms. Grijalva presented a table showing the Draft 2014 Water Quality Standards.

She also showed color-coded maps of the Rio Grande basin indicating the areas of impairment and concern. Most of the impairments are for bacteria or total dissolved solids.

She explained that the main Rio Grande water quality issues are:

*Bacteria *Nutrients *Salts *Depressed Dissolved Oxygen *Fish Kills *Illegal discharging *Trash *Exotic species

She then presented a series of photos documenting these issues.

Concerns from the El Paso reach of the Rio Grande include high levels of bacteria, specifically around the Sunland Park, NM/El Paso, Texas area. The CRP has alerted the New Mexico Environment Department (NMED) and TCEQ Region 6 of the problem. We are working together to find a solution to the problem and monitoring continues.

A fish kill was noticed in Sunland Park, New Mexico on January 12, 2017. The CRP was out with El Paso Community College (EPCC) and came upon a large fish kill in the river at Sunland Park, New Mexico. The CRP and USIBWC Environmental Management Division staff returned that afternoon to do a full count and collect water samples. The dead fish began about ¹/₄ mile upstream of the bridge at Racetrack Drive and McNutt Road, and continued about ³/₄ miles downstream of the bridge. The staff counted about 560 dead or dying fish in a one-mile stretch of the river. The dead fish were mainly catfish, but carp, minnows, and tadpoles were observed. The water was very foul smelling and a dark gray color. Water samples were taken andthe results showed high chemical oxygen demand (COD) and biochemical oxygen demand (BOD) levels. The staff was unable to collect bacteria samples due to holding time restrictions, however, routine samples taken earlier that week slightly downstream showed high bacteria levels. An Environmental complaint was filed with NMED.

Nutrient Criteria

The EPA has mandated that states create Numeric Nutrient Criteria and TCEQ is tasked with this. USDA 2010 report estimates 65 percent of farmers are not optimizing nutrient management

USIBWC's Adopt-a-River Program is also part of our outreach program. The community groups adopt a 2-mile stretch of river for 2 years. They commit to doing 2-3 cleanups per year. It's a very easy process: the community groups leave trash bags on the levee and IBWC picks up and disposes of the trash. Signs are installed in the adopted section acknowledging the community group's Adopt-a-River section. There are sections in New Mexico still available for adoption.

To coordinate adopting a river section, contact Leslie Grijalva at 915-832-4770, or Liz Verdecchia at 915-832-4701

The CRP is partnered with El Paso Community College (EPCC) Service Learning Program, which integrates community service or special projects into the professor's curriculum. Students have helped the CRP by analyzing data and making graphs, entering data, helping during a river clean-up, and helping with water sampling.

RISE (Research Initiative for Scientific Enhancement) Program is aimed at providing underrepresented students research opportunities and encourage them to pursue graduate degrees and biomedical research. Students come with CRP staff and collect water samples.

Also, the University of Texas at El Paso (UTEP) Biology and Environmental Science classes collect samples for the CRP. Students gain experience in the field and in water collection techniques CRP staff provide training in the field and with water quality monitoring equipment. Ms. Grijalva stated the CRP is very proud of the work they have done. They have students (undergrad and graduate students) doing research and it's very much needed. The CRP provides the water and sediment samples. They are always looking for students to help!

Additional information, such as data, maps, and publications, is available on the CRP website at www.ibwc.gov/CRP/Index.htm.

Questions and Answers:

Q: Will the results of the drinking water survey that identified wells within a one mile radius of the site and encompasses part of Mexico be furnished to the Mexican Section?

A: Yes, it can be. The reason there are no wells identified with the Mexico portion of the radius is that this effort is directed by Texas Commission on Environmental Quality (TCEQ) protocol and their authority stops at the border.

Q: It was stated that some of the irrigation wells within the survey radius are not at risk as they are up gradient of the site of contamination. It is possible with heavy pumping that wells up or cross gradient could be vulnerable to contamination from the site. Has this been considered?

A: We'll look into it.

<u>Presentation Two: The Boundary Preservation Project—Kelly Blough, Environmental Protection</u> Specialist, USIBWC

The Boundary Preservation Project is the reach of the Rio Grande and international boundary that extends approximately 198 river miles from the end of the Rectification Project at Fort Quitman to Haciendita, Texas, located immediately upstream of the Presidio Flood Control Project. This is a very isolated area with no crossings in this reach. There are eight canyon reaches totaling 30 miles, 40 named arroyos; 22 in Mexico and 24 in the United States. There are 56 prominent sediment cones with a cluster located below Indian Hot Springs.

The field conditions include the reduction of historical flows led to sedimentation, increased vegetation, and an undefined channel and boundary.

Flooding during high flows resulted in significant river and boundary migration.

The 1970 Treaty and Minute 262 (1979) was a joint decision that restoration and preservation of the channel was needed to preserve the character of the boundary and prevent separation of large tracts from one side to another.

In 1978, the Environmental Impact Statement (EIS) evaluated three basic alternatives:

-No action to be taken

-Install monuments in lieu of a river boundary

-Restoration and preservation of channel with mitigations was the preferred alternative

Arizona State University was contracted to complete vegetation mapping, ecological impact modeling, and cultural and endangered species surveys.

The work was to be shared equally in alternating reaches by both USIBWC and the Mexican Section of the IBWC to restore channel capacity of 500 - 600 cubic feet per second (cfs).

Mitigations included:

- 1. creation of 10 ponds (25 acres total) to provide wetland habitat
- 2. pipe connections from river to 295 acres of adjacent wetlands
- 3. clearing and reseeding floodway with grasses, forbs and spoil mounds with shrubs

The plan was to clear the river channel to a certain depth and width, and to manage vegetation along it. Due to field conditions, work was delayed and alternative methods such as draglines were used resulting in significant deviation from the EIS including failure to maintain vegetated fringe and reseed, production of more spoil than anticipated and work during bird breeding season.

In1983 at 25% completion, the public concern mounted and the Audubon Society and other EIS stakeholders filed suit against the IBWC.

In 1984, an additional Environmental Assessment was completed with the decision to only use in house resources, minimize the use of dragline, improve scheduling and increase oversight.

In 1988, a Consent Judgement was signed which included a 5 year work plan and requirement for oversight by a "qualified biologist" agreed to by all parties. The qualified biologist was Dr. Omart, from Arizona State University.

He showed photographs of work being performed in the river channel using heavy equipment.

What was implemented? The mitigations were completed including 12 ponds (33 acres) and 183 acres acquired for wetlands and additional features such as cattle fencing and wildlife huts.

In 1993, the Consent Judgement 5 year work plan was completed and IBWC informed stakeholders that it was forced by high flows and competing priorities to apply resources elsewhere. This was the last significant work that was done in this area.

In 2002, a permit was issued for regrading the confluence of Brooks Arroyo and the Rio Grande above Indian Hot Springs at Talley Ranch.

He showed aerial photographs with one of the ponds in 1996 and in 2016, in which the pond appears to have dried.

Further studies are being done on this reach. In 2001, USIBWC's Dr. Michael Landis did his Ph.D. thesis on proposing a dam for storage of winter flows for June releases that would aid in the restoration and preservation of this reach of the river by more closely mimicking the predevelopment hydrograph of the river. Mr. Blough stated there is still academic interest in this area.

In 2017, the Texas Commission on Environmental Quality (TCEQ) sponsored a U.S. Army Corps of Engineers (USACE) study that produced updated maps and reports of environmental and hydrologic conditions for stakeholder use. It considered a preferred alternative for management via a systematic watershed approach. Another alternative was to select single confluences for demonstration projects to be replicated at other reaches of the Rio Grande. And lastly, consider channel improvements at sites of greatest sediment accumulation.

Where are we today? The condition of much of the channel with respect to sediment plugs and debris dams is not known. The status of mitigation sites is not known. The pond locations have been imported into our GIS system. The impact of the tamarisk beetle, which was imported to control salt cedar, is apparent, but not quantified. Upstream, flooding in the area of the Rio Grande known as the lower Rectification reach due to sediment build up downstream in the upper Boundary Preservation segment of the Rio Grande is a continuous problem.

Questions and Answers:

Q: Is there any future work planned or proposed to provide a pathway for the water to get through? A: No.

Public Comment

There was no additional public comment.

Board Discussion/Suggested Future Agenda Items

The next meeting will be October 12, 2017, at Las Cruces City Hall in La Cruces, NM. Suggested topics for the next meeting:

- Presentation on recent Commission Minutes (suggested by Keyes)
- Recent actions by Reclamation (Record of Decision for the Rio Grande Project operating plan). Could be presented by Reclamation's Bert Cortez.
- Supreme Court litigation involving Reclamation, Elephant Butte Irrigation District (EBID) and Texas. It was suggested that potential speakers could be EBID attorney, Bert Cortez of Reclamation, Reclamation attorney, representative of the State of Texas.
- Salt cedar beetle (Zack Libbin of EBID has some contacts on this topic).
- Restoration projects along the Rio Grande

7:45 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.