

**RIO GRANDE CITIZENS FORUM**  
**Canutillo Independent School District--Admin Office**  
**El Paso, TX**  
**July 11, 2019**  
**\* Tentative Meeting Notes**

**Board Members in attendance:**

Blanca Trout, Canutillo Independent School District  
Danny Chavez, Hudspeth County Conservation and Reclamation  
Mark Calamia, National Park Service  
John Unruh, Retired, U.S. Geological Survey  
Philip Partridge, Outdoor recreation enthusiast  
Yvonne Curry, Conde, Inc.

**USIBWC Staff in attendance:**

Rosie Montes, Upper Rio Grande Area Operations Manager, USIBWC  
Lori Kuczanski, Public Affairs Officer, USIBWC

**Members of the public in attendance:**

10 members of the public were in attendance.

**Welcoming Remarks:**

The meeting began at 6:40 p.m. due to the rain event in El Paso. Blanca Trout made opening remarks. The meeting began with the first presentation by Leslie Grijalva, Environmental Protection Specialist, USIBWC.

**[Water Quality in the Upper Rio Grande: Annual Water Quality Update and Basin Advisory Meeting](#)**

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 the 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—9 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.

#### Slide 5

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 environmental 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.

#### Slide 7

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 Network. All partners use TCEQ sampling procedures and an accredited laboratory for analysis.

#### Slide 8

Ms. Grijalva presented maps showing the location of 2019 monitoring sites. The 2019 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. The red dot indicates a monitoring station. There are about 90 stations for 1,200 miles of river.

#### Slide 9

2019 Upper Rio Grande Monitoring sites. There are 12 sites in El Paso and surrounding area. Sites are monitored on a quarterly basis, and some are monitored on a monthly basis.

#### Slide 10

2019 Upper Rio Grande Monitoring Sites. There are 26 sites from Presidio to Del Rio, and 2 sites along the Pecos River. Stations are in a wild and scenic area; therefore, they are monitored quarterly.

#### Slide 11

##### Monitoring Stations

Stations are selected to represent a stretch of river. It also captures a change of stream characteristics (below a wastewater outfall or below a dam, or upstream and downstream of an agriculture drain). Stations are monitored on various schedules. Grab samples are done semi-annually, quarterly and monthly, and are routine. There is continuous monitoring (flow and/or water quality) that is performed at IBWC gaging stations (33 on the Rio Grande, 2 on the Pecos, and 21 on smaller creeks and tributaries), TCEQ Continuous Water Monitoring Stations (21 on the Rio Grande, 10 on the Pecos, and 3 on smaller tributaries), and gaging stations managed by the irrigation districts.

#### Slide 12

Monitoring covers conventional parameters, including pH, Dissolved Oxygen (DO), temperature, specific conductance (an indicator of salinity), salts, nutrients, and microbiological. Microbiological testing is on Fecal Coliform, or E. Coli. Other parameters are done on a case-by-case basis and include metals in water

and sediment, organics in water and sediment, and aquatic habitat assessment, including macroinvertebrates.

#### Slide 13

##### TCEQ Continuous Water Quality Monitoring (CWQM)

20 CWQM stations in the Upper Rio Grande Basin. The water temperature, pH, specific conductance, water level, Total Dissolved Solids (TDS), and Dissolved Oxygen are taken. There are 8 sites along the Upper Rio Grande. There are 12 sites along the Pecos River.

#### Slide 14

##### Draft 2016 Assessment Integrated Report

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. The assessment of the water quality data collected is called the Integrated Report and is where we get the 303(d) list. 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 can be found at: TCEQ Impaired Waters List:

<https://www.tceq.texas.gov/waterquality/assessment>

#### Slide 15

What's the Difference (Integrated Report vs. Standards)?

Standards are the goal for quality of streams, rivers, lakes and bays in the state.

The IR determines whether the water body is meeting this goal.

Both the assessment of the data and the development of the standards is done by TCEQ.

We just collect the data.

The 2016 303(d) List was adopted by the TCEQ on October 17, 2018 and is still in draft. Once the state approves it, the U.S. Environmental Protection Agency (EPA) will review it; it must then be approved by the EPA.

EPA individually reviews and approves proposed revisions on a case-by-case basis. May approve certain things but not others.

Draft 2018 and 2020 Integrated Reports are currently being worked on.

The 2018 Texas Water Quality Standards were adopted by the Texas Commission on Environmental Quality on February 17, 2018.

Effective for all state permits.

They have not been approved by the EPA at this time.

Until approved by the EPA, the 2014 standards still apply to all Federal permits (2010 standards for primary contact recreation)

#### Slide 16

The draft 2016 Integrated Report assessment lists 8 out of the 14 established segments for the Rio Grande as impaired. The number 1 problem is bacteria.

2016 assessment lists the following segments as impaired:

2304: Rio Grande Below Amistad Reservoir, bacteria

2306: Rio Grande Above Amistad Reservoir, sulfate, total dissolved solids

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  
2312: Red Bluff Reservoir, chloride, sulfate  
2313: San Felipe Creek, bacteria  
2314: Rio Grande Above International Dam, bacteria

#### Slide 17

Draft 2016 assessment lists concerns for 11 segments:

2301, Bacteria, chlorophyll-a, depressed dissolved oxygen  
2302, Ammonia, chlorophyll-a, depressed dissolved oxygen  
2303, Toxicity in water  
2304, Ammonia, toxicity in water  
2306, Chlorophyll-a, fish kill report  
2307, Ammonia, chlorophyll-a, depressed dissolved oxygen, nitrate, total phosphorus  
2308, Ammonia, chlorophyll-a, total phosphorus  
2310, Harmful algal bloom/golden alga  
2311, Bacteria, chlorophyll-a, depressed dissolved oxygen, harmful algal bloom/golden alga  
2312, Depressed dissolved oxygen, harmful algal bloom/golden alga  
2314, Ammonia, chlorophyll-a, nitrate

#### Slide 18

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

#### Slide 19

Impairments and Concerns in the Upper Rio Grande were shown on a map.

#### Slide 20

She showed a table of draft 2018 Water Quality Standards for various segments of the Rio Grande, covering such parameters as bacteria, and Total Dissolved Solids, among others.

#### Slide 21

The main Rio Grande water quality issues are:

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

Slides 22-27 present a series of graphs showing monitoring results at various stations in the El Paso area dating back to 2014.

#### Slide 28

Concerns in the Rio Grande near El Paso.

Routine monitoring still shows high levels of bacteria in the El Paso area.

Specifically, around the Sunland Park, NM/ El Paso, TX area

Some stations have shown bacteria levels of up to 24,000 cfu (colony forming units)

Higher when flows are low, but there have been instances of high levels even when there is water in the river from releases, rain, etc.

#### Slide 29

On a positive note, the CRP has many activities aimed at promoting environmental awareness.

CRP participates heavily in events put on by the El Paso Water Tech2O Center and local schools and works with Texas Parks and Wildlife Department (TPWD), the City of El Paso, and the El Paso Zoo.

Staff is trained in different environmental education curriculums, such as El Project WET, Project WILD, Project Learning Tree, and Texas Stream Team.

The USIBWC's Adopt-a-River Program was created to assist with the issues of trash in and along the Rio Grande. CRP also works with local higher learning institutions (UTEP and EPCC locally).

#### Slide 30

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.

Slide 31 presented a map of the adopted river sections in the El Paso-Las Cruces region.

#### Slide 32

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.

#### Slide 33

Additional information, such as data, maps, and publications, is available on the CRP website at [www.ibwc.gov/CRP/Index.htm](http://www.ibwc.gov/CRP/Index.htm).

#### Questions and Answers

Q: Are there natural solutions to help purify the Rio Grande, such as natural charcoal?

A: Wetlands are a natural source of filtration. Aeration will also help with low dissolved oxygens but not bacteria.

Q: Have there been any violations in the last 5 years here?

A: Yes, Sunland Park Water Treatment Plant was fined for permit violations.

Q: Are we finding where the water gets polluted and where the quality of the water gets bad? A: We work with the State when issues are identified, and we work with our Mexican Section of the International Boundary and Water Commission, known as CILA, to address pollution problems. The river is monitored from Colorado to Texas by the respective State agencies and the EPA.

Q: Who paid for Elephant Butte dam?

A: The Bureau of Reclamation (federal government) paid for the dam. It was also mentioned that Elephant Butte Irrigation District (EBID) meets on the 2<sup>nd</sup> Wednesday of every month in Las Cruces.

### **10-Year Implementation of the Record of Decision and Future Activities for the Rio Grande Canalization Project**—Gilbert Anaya, Division Chief, Environmental Management Division, USIBWC

Mr. Anaya gave a presentation overview.

The Rio Grande Canalization Project was constructed in the early 1940s. It is 105 miles from Percha Dam to the American Dam in El Paso. The rectified channel is within a floodway. It facilitates the Rio Grande water deliveries under the 1906 Convention with Mexico.

About 15 miles of river that meandered were straightened, such as the Jundt Cutoff in the Sunland Park area. In the 1990s stakeholders began expressing concerns that the river corridor was not being sustainably managed, and USIBWC management actions were adversely impacting wildlife. USIBWC embarked on an Environmental Impact Statement process which took 10 years. The USIBWC signed the Record of Decision (ROD) in 2009 with a 10-year implementation timeframe. The ROD included certain environmental measures, such as habitat restoration, establishment of an environmental water program, and cessation of mowing in some areas.

#### Stakeholder Involvement

Stakeholder involvement was initiated in 1999 and USIBWC has involved key stakeholders throughout the implementation process. Participants include irrigation districts, local elected officials, environmental groups, federal agencies, such as Bureau of Reclamation, U.S. Fish and Wildlife Service (USFWS), and the Army Corps of Engineers, and USIBWC staff in Engineering, Environmental, and Operations Divisions.

#### Habitat Restoration

Originally there were 30 sites targeting a variety of habitat types. USIBWC ended up implementing 22 sites totaling over 500 acres, with aquatic habitat sites currently under evaluation.

#### Restoration Accomplishments from 2009-2019

Here's some highlights of the accomplishments for habitat restoration over the 10-year period. Notably, USIBWC, via partners and contractors, planted over 109,000 trees and irrigated 5 sites with almost 48 acres of acquired Elephant Butte Irrigation District (EBID) surface water rights.

#### Collaboration for Restoration Work

The work on habitat restoration would not have been possible without collaborative partnerships. USIBWC partnered with USFWS to implement 9 habitat sites that targeted endangered species habitat.

#### Collaboration on Biological Surveys

USIBWC partnered with Reclamation to conduct threatened and endangered species habitat surveys.

#### Collaboration with Irrigation Districts

USIBWC partnered with the irrigation districts on establishing the environmental water program, creating and irrigating habitat, drafting and reviewing river management plans, and establishing priorities for channel maintenance.

#### Broad Canyon Arroyo Site near Radium Springs

He then presented a series of slides showing changes at the Broad Canyon Arroyo Site near Radium Springs, New Mexico, including a photo from 1940 before the sediment dam was constructed on the arroyo. Conditions at the site in 2011 were monotypic saltcedar. USFWS removed the mature saltcedar by excavating the entire plant and its roots in March of 2012. The site was cleared of nonnative saltcedar by May 2012. USFWS conducted prescribed burns to eliminate the debris piles. Planting of native trees began in 2012 along the bank. Tree planting activities were increased in 2013 after the prescribed burns. This method of planting requires an auger to drill holes about 8 to 10 feet down in the ground to water, where long cut branches of willows or cottonwoods are put and then the hole is backfilled. The “poles” will develop roots if the end is in moist or wet soil. Photos were also presented of harvesting of tree poles with USFWS in February 2016 to be planted at the Rio Grande restoration sites. Work is labor intensive to plant poles, requiring that they be harvested and cleaned prior to planting. In 2013, the lower terrace was filled with densely planted willows to create habitat for southwest willow flycatchers (an endangered bird species). Within the first year, the poles began sprouting. Within two years, the poles began to thicken and grow denser. Three years after planting, the poles are 20 feet tall. Goodings Willows, Cottonwoods, and Coyote Willows are thriving along the Broad Canyon Arroyo.

#### Leasburg Extension Lateral Wasteway #8 Restoration Site is in north Las Cruces, NM.

He showed a series of photos depicting the evolution of work at this site. Prior to the restoration work, USIBWC would mow this site annually with the exception of a strip along the bank that was set aside to grow in the late 90s as a “Green Zone”. Plantings began in 2011 at this site but ramped up in 2013. This area has dense willows and cottonwood plantings for flycatcher habitat. Groundwater well #2 was constructed in 2013. This site was the first site to receive irrigation water. The event was so historic that USIBWC coordinated a ceremony with the partners, water rights sellers, representatives from the elected officials, and other stakeholders to commemorate the irrigation. Within the same year that the site received irrigation, native grasses and understory came into the site. The photos covering several years show how the trees have grown and become established at the irrigated site.

However, a fire at the site in late 2017 led USIBWC to ramp up efforts for enforcement agreements with local law enforcement agencies. Trees are recovering from fire by sprouting from offshoots throughout the site. Willows are thriving, actually, and density of plantings may have been improved by the brush fire.

#### Biological Opinion

Under the ROD, USIBWC consulted with USFWS under the Endangered Species Act in 2011 and again

in 2017 for possible impacts on the endangered flycatcher resulting from USIBWC actions. USFWS decision documents, called Biological Opinions, laid out requirements that USIBWC must follow to protect the listed species. In 2012, USFWS required that USIBWC establish 53 acres of habitat, whereas in 2017 USFWS limited the amount of habitat USIBWC could adversely impact. One requirement from the 2012 Biological Opinion was to transplant vegetation from areas with suitable habitat. USIBWC contractors did that for the first time in 2018 as shown in a series of photos. Transplanted willows were removed with about 1 foot of soil and roots and transported with heavy machinery. The bucket of willows was transplanted into trenches about 8-10 feet deep to water or moist soil. Transplanted island willows several months later shows great success. This method has had nearly 100% planting success.

#### Aquatic habitat

USIBWC is currently working with contractors to evaluate locations for aquatic habitat (below Courchesne Bridge). The Draft Environmental Assessment is open for public comments. Several sites have potential to create or enhance wetlands and other sites have potential to create fish habitat.

#### Channel Maintenance Study

On a different note, the ROD required that USIBWC evaluate dredging and channel maintenance activities, so USIBWC had a Channel Maintenance Alternatives study done. A number of alternatives were proposed, and USIBWC constructed sediment basins at Thurman I and II in 2019, shown here. USIBWC also has a number of other positive channel maintenance activities.

#### Channel Maintenance Activities

USIBWC surveyed 160 cross sections in 2017 with plans to update models. Initiated the sediment Control Initiative Federal Workgroup. Worked with stakeholders to establish priority areas for sediment excavation. Contracted removal of sediment FY 19  
During the 2018-2019 non-irrigation season, USIBWC removed more sediment than we have in decades (over 420,000 Cubic Yards)

#### River Management Plan (RMP)

River Management Plan incorporates all commitments from the ROD

RMP describes:

Restoration work

Environmental water transaction program

floodplain management

endangered species management

mow/ no mow areas

levee maintenance and other operations

channel maintenance work

Finalized December 2016, and draft update in November 2018 will be finalized late 2019

More information can be found at: [https://www.ibwc.gov/EMD/Project\\_Documentation.html](https://www.ibwc.gov/EMD/Project_Documentation.html)

#### Final ROD report

Final Report on the Ten-Year Implementation of the Record of Decision 2009 to 2019

Includes more photos of restoration activities and documents in more detail the previous topics

[https://www.ibwc.gov/EMD/Project\\_Documentation.html](https://www.ibwc.gov/EMD/Project_Documentation.html)

## Future Work

Draft Environmental Assessment for Aquatic Habitat—Comments due July 22, 2019

USIBWC will implement 2 to 4 sites targeting creation of aquatic habitat

Draft Environmental Assessment for River Management Plan (RMP) —Comments due August 5, 2019.

USIBWC will continue implementation of RMP as well as other alternatives for channel maintenance, restoration, and recreation.

Information will be posted on our website or you may contact Elizabeth Verdecchia at 915-832-4701 or [elizabeth.verdecchia@ibwc.gov](mailto:elizabeth.verdecchia@ibwc.gov)

## **Questions and Answers:**

Q: Where do you dispose of the sediment?

A: We have disposal sites with landowners and farmers, the sheriff's posse, etc., and it's free! It's free of contaminants. Contact Area Operations Manager Rosie Montes for more information.

Q: Will aquatic habitat become part of the River Management Plan?

A: Aquatic habitat will not become part of the RMP. It will be incorporated as a site as part of the RMP under restoration activities.

Q: Will IBWC recreate aquatic habitat by re-establishing the meandering part of the river?

A: No, we can't go back to the meandering river.

Q: Have birds returned to the area?

A: Yes, the Southwestern Willow Flycatcher has returned.

Q: Does IBWC allow the use of the river, to include biking, walking, and rafting?

A: Yes, we allow the use of biking and walking along the river. Rafting events and large events need to be permitted for a number of reasons.

## **Public Comment:**

None

## **Board Discussion**

### **Suggested Future Agenda Items**

Enforcement on water quality of the river. Possibly have the EPA or TCEQ (Region 6) give a presentation.

-Humanizing the river again. Historical and cultural uses of the river. Local culture and archaeology. Include the culture, history, and prehistory of the entire lower Rio Grande, that includes Mesilla Valley, El Paso and Juarez.

-Franklin Canal—El Paso County Water Irrigation District #1 and/or the City of El Paso Water Rescue Team for the canal.

The next meeting will be October 10, 2019 in Las Cruces, NM.

8:30 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.