



MEETING MINUTES

UPPER NECHES RIVER BASIN STEERING COMMITTEE MEETING

Thursday, July 23, 2020 10:00 AM

Online via Webex

Attendees:

| | |
|------------------|--|
| Jeremiah Poling | Angelina & Neches River Authority (ANRA) |
| Carla Ethridge | Angelina & Neches River Authority (ANRA) |
| Allison McElroy | Angelina & Neches River Authority (ANRA) |
| Becca DuPont | Texas Commission on Environmental Quality (TCEQ) |
| Lucas Gregory | Texas Water Resources Institute (TWRI) |
| Anna Gitter | Texas Water Resources Institute (TWRI) |
| Mandi Gordon | Environmental Institute of Houston |
| David Villarreal | Texas Department of Agriculture |
| Manuel Martinez | Texas Department of Agriculture |
| Jeff Lauman | Railroad Commission of Texas |
| Adam Whisenant | Texas Parks and Wildlife Department |

I. Welcome & Introductions

Mr. Jeremiah Poling, with Angelina & Neches River Authority (ANRA), welcomed everyone to the meeting and began with a brief overview of discussion topics on the agenda. He explained the operations of ANRA and its structure.

II. Overview of the Clean Rivers Program

Mrs. Carla Ethridge, with Angelina & Neches River Authority provided a brief history of the Clean Rivers Program (CRP), noting its funding sources and purpose. ANRA's CRP budget by category was presented and it was noted that the FY 2018-FY 2019 contract was extended through FY 2021 and extra funding was received from TCEQ for this purpose. This was reflected in a table with a budget breakdown for the full contract period.

III. Updates to ANRA's Water Quality Monitoring Program and The 2019 Basin Highlights Report

Mrs. Carla Ethridge, with ANRA, spoke about ANRA's Clean Rivers Program water quality monitoring for the upcoming fiscal year. Currently, ANRA monitors 37 stations for conventional parameters, bacteria, and field parameters. ANRA is now collecting Chlorophyll-a and Pheophytin, as well as Total Kjeldahl Nitrogen at every site they monitor. ANRA is working to bring Chlorophyll-a and Pheophytin analyses in-house for FY 2021 in order to control costs incurred due to the current outsourcing of these analyses.

Mrs. Ethridge also gave a summary of the 2020 Basin Summary Report for the Upper Neches Basin. She shared that the historical and current water quality data of the Neches River Basin includes elevated bacteria levels, depressed dissolved oxygen, mercury and dioxin in edible fish tissue, and quite a few concerns for nutrient levels. A summary of water quality trends was also presented.

IV. Update on Kickapoo Creek Watershed Characterizations Project

Mr. Jeremiah Poling, with ANRA, shared the Kickapoo Creek Watershed Characterization presentation on behalf of Leah Taylor from the Texas Institute of Environmental Research (TIAER) Mr. Poling discussed the project that TIAER is working on in the Kickapoo Creek watershed north of Lake Palestine. Kickapoo creek is on the list of impaired waterbodies due to elevated bacteria levels. There is also a need for additional Dissolved Oxygen data. TIAER performed a recreational use attainability analyses (RUAA) in 2014 in which TCEQ determined that the existing bacteria standard of Primary Contact Recreation-1 (PCR-1) was appropriate. The purpose of this is to better assess the watershed, and attempt to identify sources of pollution, and also educate and engage local stakeholders. TIAER is monitoring nine sites in the watershed monthly for standard parameters, and three of those sites are also being monitored for 24 hour Dissolved Oxygen. The first stakeholder meeting was held March 3, 2020 in Brownsboro, TX. There were 12 stakeholders in attendance who had several questions regarding bacteria sources. One of the next steps for this project is to begin working on a project proposal for a watershed protection plan.

V. Water Quality Updates in the Neches River Basin [Addressing bacterial impairments on tributaries of the Middle Neches (Jack Creek, Cedar Creek, Hurricane Creek, Biloxi Creek) and the Angelina River Watershed Characterization]

Ms. Anna Gitter with Texas Water Resources Institute (TWRI) presented updates on the Middle Neches total Maximum Daily Load (TMDL) project and the Angelina Watershed Characterization project. The Middle Neches TMDL project includes Jack Creek, Cedar Creek, Hurricane Creek, and Biloxi Creek, all of which are impaired for E.coli bacteria. TWRI is currently working on the Technical Support document and plans to begin working

on the Draft TMDL later this year. To date, two public meetings have been held; one of those being in November of 2019 and the most recent being an online meeting in July of 2020. Ms. Gitter then provided an overview and update for The Angelina River Watershed Characterization project which started in 2017. Four segments of the Angelina River are impaired for not meeting the primary contact recreation bacteria standard. This project was recently extended. The goals of the extension are to conduct supplemental monitoring on Mud and West Mud Creeks to increase the understanding of the water quality in those impaired portions of the watershed. The project is still in the Watershed Characterization stage, which includes collecting water quality data and working on creating the characterization report. TWRI and ANRA plan to initiate stakeholder meetings in the winter/early spring.

VI. Implementing the Attoyac Bayou Watershed Protection Plan (WPP) (Attoyac Bayou watershed On-site Sewage Facility Repair and Replacement and Attoyac Bayou Best Management Practice (BMP) Effectiveness Monitoring)

Dr. Lucas Gregory, with TWRI spoke about two projects which are implementing the Attoyac Bayou WPP. The WPP effort started almost 11 years ago and the WPP was accepted by the EPA in 2015. One of the issues in the watershed identified by the WPP as needing attention was failing and non-existent On-Site Sewage Facilities (OSSFs). The first project discussed was a WPP Implementation and Water Quality Monitoring project. The goals of the project are to engage stakeholders and provide implementation activity updates, such as evaluating the number of OSSFs repaired and replaced, water quality management plans, feral hog management, and the water quality as a whole. Education and Outreach programs have been conducted in and around the watershed. Water quality monitoring for this project is conducted at five sites monthly by Stephen F. Austin State University.

Dr. Gregory also spoke about Water Quality Management Plan Development by the Nacogdoches Soil and Water Conservation District (SWCD). The SWCD assists landowners in developing water quality management plans for agriculture and forestry operations within the watershed. The goals of these efforts are to provide technical assistance to ag producers, reduce the E.coli loads coming from these areas, and provide education on water quality for stakeholders.

Dr. Gregory spoke about the OSSF Remediation and Replacement Program in which the goals are to reduce E.coli loadings through OSSF repair and replacement, promote proper OSSF functions and repair or replace at least 15 failing systems. There have been about 40-50 systems replaced in the watershed thus far when taking in account previous projects. There are proposed continuation projects for OSSF Remediation and Replacement as well as the Implementation Facilitation and Water Quality Monitoring Continuation.

VII. La Nana Bayou WPP Development Project Update

Dr. Gregory spoke about projects in the La Nana Bayou watershed. La Nana Bayou has a bacteria impairment on all three assessment units. A watershed characterization project was completed last year. As part of that characterization, ANRA collected data monthly on three sites on La Nana Bayou for one year. That sampling was completed in February of 2019. TWRI and ANRA also collected bacteria samples across the watershed in two larger scale sampling events in 2018. 25 sites were sampled on a single day for exploratory purposes in the spring, and 75 sites were sampled on a single day for investigative purposes in the winter. Funding has been secured for a project to develop a La Nana Bayou Watershed Protection Plan. That project has an anticipated start date of September 1, 2020. The next steps will be to form a Watershed Stakeholder Group, begin the planning process, and attempt to have a plan developed and accepted in 2022.

VIII. Conservation Updates: Texas Freshwater Mussels and the Alligator Snapping Turtle

Ms. Allison McElroy spoke about ANRA's efforts in regards to conservation and mitigation of endangered species. ANRA is a part of the East Texas Aquatic Workgroup that keeps them in contact with the Texas Comptroller's Office and other River Authorities, as well as working with Texas Parks and Wildlife Department (TPWD), U.S. Fish and Wildlife Service (USFWS), and universities such as Stephen F. Austin State University (SFASU) and the University of Texas at Tyler.

Ms. McElroy spoke about 2 species of native freshwater mussels, the Louisiana Pigtoe, and the Texas Heelsplitter which are currently protected in Texas and are candidates for federal protection via the Endangered Species Act (ESA). A species status assessment (SSA) has been drafted by the USFWS and ANRA contributed comments during this process. A portion of both of these species ranges are within the Neches River Basin.

Ms. McElroy also spoke about the Alligator snapping turtle, found throughout East Texas, in all of the Neches River Basin as well as several surrounding river basins. This species is currently listed as threatened in Texas and is a candidate for federal listing via the ESA. Demographics and population size for this species is not as well understood in Texas so further research is needed. SFASU is conducting a baseline study with TPWD to collect basic alligator snapping turtle demographic data. ANRA is working with TPWD to raise awareness about the status of this species in Texas and will continue to look for more ways to be involved.

IX. Conservation Updates: Western Chicken Turtle, eDNA

Ms. Mandi Gordon with the Environmental Institute of Houston spoke about the western chicken turtle and the use of the Environmental DNA Detection (eDNA) technique in their ongoing study. The western chicken turtle is a smaller species of turtle with a historic range throughout all of east Texas, typically found in ephemeral or digressional freshwater wetlands. Ms. Gordon spoke about the defining characteristics and demographics of this species, including their short life spans, small population size, long necks, thick yellow bars on rear legs, and smooth shells. The eDNA technique is being used in data collection for the western chicken turtle. This technique is less invasive than traditional trapping techniques, is used across a wide range of vertebrate, especially

difficult to find species and is useful for cryptic or seasonally active species. The goal of this study is to sample 87 sites throughout the historic range using a randomized site design and a combination of sample types including ambient water samples, suspended sediment, and soil samples. So far in 2020, there have been 27 sites sampled with eDNA detections at 4 sites (15%) with one of these sites being within the Neches River Basin. There are 60 eDNA sites remaining to be sampled with 12 of these being within the Neches River Basin. Intensification of efforts at sites with positive eDNA detections is planned for next season, which will include the addition of other sampling methods.

X. Open Discussion for Steering Committee Member Recommendations and Concerns

An opportunity for open discussion by the group was provided.

The meeting was adjourned at 11:28 AM.