**LCRA WATER QUALITY ADVISORY COMMITTEE MEETING**

Wednesday, April 19, 2017

LCRA Redbud Center, 3601 Lake Austin Blvd, Austin, TX

**Welcome and Introductions**

The annual meeting of the Clean Rivers Program (CRP) Colorado River Basin Water Quality Advisory Committee (WQAC) was held Wednesday, April 19, at 1:00 p.m. at the Lower Colorado River Authority (LCRA) Redbud Center, 3601 Lake Austin Blvd., Austin. Lisa Benton, LCRA CRP coordinator, welcomed the 23 attendees, and asked them to introduce themselves and state their affiliations.

**LCRA CRP Overview –** *Lisa Benton, CRP Coordinator, LCRA*

Benton provided historical background information on the Clean Rivers Program and the roles of the various stakeholders, including the Upper Colorado River Authority (UCRA) and the City of Austin (CoA). She stressed the importance of data collection, quality assurance, and data management, and how the Water Quality Advisory Committee helps guide resources to gather and assess water quality information to identify and address water quality issues throughout the basin. Benton presented a new watershed map developed by LCRA to better align with TCEQ segments described in the Basin Summary Report. She also discussed the supporting role that LCRA’s Water Quality Protection programs play in efforts to ensure surface waters of the Colorado River basin meet water quality standards to support existing and designated uses.

Benton then presented an overview of the draft 2016 Integrated Report and assessment of water quality in the Lower Colorado River Basin below O.H. Ivie Reservoir. Twenty-two segments are listed as impaired as either category 4 or 5; three segments were de-listed; and no new listings were reported.

Discussion was held, with explanation from City of Austin Watershed Protection Scientist Mateo

Scoggins, on how biological and water quality monitoring data is collected and averaged over a 10-year

period, so listings may change by continued monitoring and/or new data collection over time.

Examples were also shared on how water quality data may be used to identify and address problems. One example discussed was the impairment for dissolved oxygen (DO) on Lake Austin that was remedied by installation of aerators to mitigate low oxygen cold water releases from Mansfield Dam into Lake Austin.

**Llano River Watershed Alliance –** *Tyson Broad, Watershed Coordinator, Texas Tech Junction*

Tyson Broad was introduced and presented about the Watershed Protection Plan for the Upper Llano River. The plan is unique because it is a proactive effort to protect the Llano River. Most watershed protection plans are reactive and adopted in order to address impairments that have already occurred. Broad discussed the geography, hydrogeology, and historic land uses of the Llano River. He also invited Water Quality Committee members to participate in the annual 700 Springs Ranch tour on the South Llano River on April 29, 2017.

**Texas Comptroller’s of Public Accounts (TX CPA) Central Texas Mussel Research Program -**

*Meghan Hope, (Tx CPA)*

Meghan Hope was then introduced. She gave an overview of the freshwater mussels in Texas that are being considered for listing under the Endangered Species Act. Hope spoke about the U.S. Fish and Wildlife Service 12-month finding that outlined potential threats to the species. She then spoke about the Tx CPA funded research conducted by Texas State University. Hope explained that a stakeholder process and decision-making framework will be used to evaluate threats, identify conservation measures, and develop programs to fund and implement voluntary conservation efforts. The meetings are held on a monthly basis, with the July meeting focusing on water quality issues.

**Open topic roundtable discussion**

After a short break, the meeting reconvened with presentations by City of Austin Watershed

Protection staff with open roundtable discussion.

* + **Lake Austin Mussel Survey** – *Liz Johnston, City of Austin Watershed Protection*

Johnston discussed CoA’s recent freshwater mussel survey that was conducted during a planned drawdown of Lake Austin in January 2017. She gave a brief history of findings from the last survey during a drawdown in 2011 in which 3 species were found, and explained the methodology of revisiting 2011 monitoring sites and basis for new 2017 sites, with an overview of the recent survey results. Six new species were discovered in the 2017 survey, along with the 3 species originally documented in 2011. CoA will work on future survey policy considerations such as the number of years between drawdowns; the rate and depth of drawdowns; recovery monitoring; and survey opportunities for dredging requests.

* + **Dripping Springs Permit Update** – *Chris Herrington, City of Austin Watershed Protection*

Herrington gave a presentation on wastewater disposal options and regulatory framework in Texas. He explained a proposed permit application by the City of Dripping Springs to discharge treated wastewater (effluent) into Onion Creek in segment 1427 of the Colorado River watershed. Herrington discussed the sensitivity that oligotrophic hill country streams have to nutrient inputs and how they respond with algal blooms and changes in trophic status. He explained that Dripping Springs plans to beneficially reuse most of the effluent for irrigation to minimize the need to discharge. CoA performed water quality modeling that demonstrates potentially adverse impacts to the water quality in Onion Creek depending on the volume of discharge and level of treatment of the effluent. Several agencies and individuals are working on negotiated terms to be included either in the proposed TCEQ permit or as a settlement agreement to ensure Onion Creek is not degraded by Dripping Springs’ proposed wastewater discharge. Brent Lyles with the Colorado River Alliance asked for clarification whether the analysis was based on reuse reducing the discharge volume. Tyson Broad asked how far downstream the modeling results showed algal blooms, and Herrington replied it could be several miles if the entire permitted volume were discharged. Susan Meckel, LCRA Water Quality Protection explained that the regulatory framework is a statewide process, and that LCRA reviews permits in the Colorado River basin and works to ensure the best available agreed-upon science is incorporated into permits or negotiated agreements to protect water quality in sensitive areas. Herrington also gave a brief overview of different legislative bills currently under consideration during the 2017 session to address protection of hill country streams, and incentivize land disposal of effluent instead of direct discharge to waterways.

* + **Other stakeholder input/questions**

In the interest of time, other discussion was not held at this time, and the meeting proceeded to the following presentations; however other agency and organization updates were shared at the end of the meeting including:

Brent Lyles, Colorado River Alliance, announced that their organization received a Texas Environmental Excellence Award for their traveling [Mobile River](http://coloradoriver.org/newsite/our-programs/redbud-educational-program/texas-colorado-river-mobile-learning-experience/).

Melinda Chow, Austin Youth River Watch (AYRW), invited everyone to attend the “Take Me to the River” fundraising event to be held on June 1, 2017 at the Mexican-American Cultural Center with proceeds to benefit the AYRW youth development and environmental stewardship programming. Chow also invited WQAC members to volunteer on water quality monitoring runs with AYRW.

Adam Comer, also with AYRW, announced that bald cypress seedlings are available for anyone who could use them.

Tyson Broad invited everyone to attend the Watershed Steward training scheduled for May 6, 2017 in Junction.

Texas State University will be hosting a fish identification workshop May 24-25, 2017.

**Drought Effects on Lake Austin’s Biophysicochemistry** – *Brent Bellinger, City of Austin*

*Watershed Protection*

Bellinger presented information about his study that documents the changes to Lake Austin as it transitioned from lotic to lentic conditions during the recent drought. Bellinger studied variations in temperature, stratification, algal mass, occurrence of cyanotoxins, clarity, and changes in vegetation. And he also examined date prediction for algal blooms and bloom duration probability. Future work will include studies with high frequency monitoring of nitrate, ammonium and temperature; cyanotoxins; and model development with new data. Brent offered to provide WQAC members with a copy of his study upon request.

**Invasive Aquatic Vegetation Management Update** – *Lisa Benton*

Benton explained that LCRA manages nuisance aquatic vegetation that has the potential to impact water management operations, and gave an update on ongoing efforts to control hydrilla in Lake LBJ. She also gave a brief overview of LCRA’s aquatic vegetation management program that includes timeframes for treatment based on geographic zones. More information can be found at lcra.org/waterweeds.

The meeting concluded at 4:00 p.m.