

## MEETING NOTES

### Upper Colorado River Basin, Texas Clean Rivers Program

Water Quality Advisory Committee Meeting

April 5, 2023

#### **1. Welcome & Introductions**, Nancy Blackwell, Chairperson, UCRA

Blackwell welcomed everyone to the meeting and asked those in person and online to introduce themselves.

#### **2. Water Quality Reports**, Scott McWilliams, General Manager, UCRA and John Burch, Water Quality Supervisor, Aquatic Biologist, CRMWD

McWilliams reviewed inflows and discussed the recent water level trends in Twin Buttes, Lake Nasworthy, OC Fisher and Oak Creek. He spoke about the more recent chloride impairments in O.C. Fisher, which he said is likely caused by evaporation and low water levels.

Burch provided an overview of the various water systems, pulling up lake level graphs and discussing current lake levels, addressing the effects that the weather has had on those levels. He showed the CRMWD service map, giving an overview of the water systems and discussing the loss of water due to evaporation. Multiple web water quality/quantity resources were used for reference.

Burch discussed the Texas RRC Environmental Clean Up program, exploring their web portal and showing participants what is available. Burch stated that this is a state funded plugging program and that there were 1068 wells plugged in FY22. Federal funding became available in 2023 and 868 wells have been identified, with 321 wells plugged to date.

A question was asked regarding what happens when wells are plugged, and discussion ensued. It was explained that cement is pumped down the casing and depending on how deep it is, several intervals may be plugged. One issue is that sometimes washouts occur during drilling. The annulus between the casing and rock is too big to fill with cement. Burch stated that anything underground can be a problem. McWilliams added that there are many unreported wells from the 1950-60's.

Burch said that CRMWD's Raw Water Production Facility is in its tenth year, working on their third permit. The facility has been re-named the *John W. Grant Raw Water Facility*.

Lake level details and interactive resources may be found here: <https://www.crmwd.org/lake-levels/>

Water Quality Reports may be found here: <https://www.crmwd.org/news/current-water-report/>

TWDB website waterbody data: <https://www.waterdatafortexas.org/reservoirs/statewide>

RRC Cleanup Information: <https://www.rrc.texas.gov/oil-and-gas/environmental-cleanup-programs/>

#### **3. Integrated Report Status & Updates**, Robin Cypher, Water Quality Assessor, TCEQ

Cypher described a 2024 conceptual timeline of the TCEQ water quality data assessment process. Data is compiled from river authorities and other sources, which includes TPWD Fish Kill Reports. They are currently gearing up for the 2024 Integrated Report.

McWilliams asked how many people work on this at TCEQ and Cypher stated that there are eight staff members. They used to do everything by hand, but electronic tools now reduce time.

Current Texas Integrated Report is available on TCEQ's website:

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

#### **4. Concho River Project Water Supply & Infrastructure Improvements**, Andy Vecellio, Water Utilities Assistant Director, COSA

Vecellio discussed the status of the direct re-use project which is currently in the permitting phase.

McWilliams asked if the recovery permit has also been submitted. Vecellio said that both the recovery permit and the discharge permit have been submitted.

More information on COSA's Concho River Project can be found on their website:

<https://www.cosatx.us/departments-services/water-utilities/concho-river-water-project>

#### **5. UCRA NPS Project Updates**, Scott McWilliams

##### **Brady WPP Implementation**

The implementation phase of this project was completed in February. Unfortunately, there was not a lot of rainfall for data collection though the results acquired were favorable. TCEQ is finishing up with the project review. UCRA received grant funding for the next phase of implementation, which will begin in September of 2023.

Additional information is available on the project webpage: <https://www.ucratx.org/brady.html>

##### **North Concho River Bank Stabilization Project**

UCRA, with the City of San Angelo, will be constructing an erosion mitigation structure along an 1100ft expanse of the North Concho riverbank. Construction is currently on hold, awaiting generation and approval of a CLOMR through FEMA. UCRA will be conducting monitoring pre- and post-construction.

Additional information is available on the project webpage: <https://www.ucratx.org/bank-stabilization>

#### **6. Basin Summary Report 2023**, Aaron Richter, Water Quality Coordinator, LCRA

Richter discussed the Basin Summary Report (BSR), which is published every five years and is a deep dive into data collected by the Texas Clean Rivers Program. Data is given to stakeholders to make decisions and prioritize actions needed and is also used to identify sources of impairment. The group was shown the analysis methodology which includes temporal trends and spatial comparisons. Richter showed a basin map, discussing impairments, concerns and data trends. He concluded with a summary and a look at the next steps.

Discussion followed regarding the difference between concerns and impairments. The presence of *E. coli* bacteria in E.V. Spence Reservoir and how it is tied to the uppermost station, which hydrologically functions as a river site due to low reservoir levels. The need to look at all parameters and how it affects the assessment was discussed. Cypher commented that it might be beneficial to add a second axis for temperature and time of day when samples are collected. She stated that maintaining the same routine can lead to data that is not truly representative of the water body, e.g., always sampling the same site early in the morning. She also stated that it would be helpful to mix up the order of time of day. TCEQ assessors only get a snapshot from which to characterize a system.

One participant commented that feral hogs are a potential source of *E. coli* and that he has witnessed water quality improvement in response to controlling feral hog populations.

Richter said that the next step in the BSR process will be Stakeholder review and to let him know if anyone wants to be a reviewer. He will need comments by the end of the day on Friday, 4/15/23. The report should be finished in May.

## **7. Break/Group Picture**

## **8. Community Outreach Initiatives**, Charlotte Anderson, Executive Director, *Keep San Angelo Beautiful*, *COSA*

Anderson talked about the KSAB mission and provided the results from the Annual Report. Highlights from 2022 included: annual cleanup events, tire drive, hazardous waste collection events and education and outreach programming. KSAB has been a Keep Texas Gold Star Affiliate for three years.

Upcoming activities include the Augmented Reality Art Project and a hazardous waste event on May 6, 2023.

More information on KSAB and volunteer opportunities:

<https://www.cosatx.us/departments-services/neighborhood-family-services/keep-san-angelo-beautiful>

## **9. Sportfish Population Monitoring and Angler use of OH Ivie and EV Spence Reservoirs & Golden Algae Updates**, Lynn Wright, District Fisheries Biologist, Inland Fisheries Division, *TPWD*

Wright gave a brief update on golden algae, stating that this year is looking good and cell counts have been low.

Based on creel surveys conducted via interviews with anglers, most Largemouth Bass are catch and release with small numbers of bass actually harvested. A very large economic impact coincides with the Trophy Bass being caught on O.H. Ivie reservoir. Seventeen share lunker bass (greater than 13 lbs.) have been caught thus far in 2023.

Water levels drive much of what TPWD sees. In 2018, area lake levels increased in response to abundant rains and there was a big spike in fish populations, with high catch rates in 2019. Challenges arise because lake levels follow fluctuations in rainfall and drought conditions continue to affect water levels for extended periods. However, Wright mentioned that long durations of drought are being followed by large rainfall events in a cyclical manner, displaying a pattern in temporal observations.

Wright was asked if they still stock fish in certain reservoirs, and he said while they do, it depends on available habitat and water levels.

## **10. Native Mussels News & Updates**, Lisa Benton, *LCRA*

Benton stated that in 2021 four native mussel species were proposed for listing under the Endangered Species Act, which included proposed critical habitat designations. LCRA has worked with U.S. Fish and Wildlife Service (with review and input from TPWD) on a Candidate Conservation Agreement with Assurances (CCAA) to protect mussels and their habitats in the Colorado River basin. The CCAA is still in draft form and is pending USFWS approval. Drought continues to be a challenge.

Zebra mussel populations now exist in O. H. Ivie and all of the Highland Lakes reservoirs. Population numbers fluctuate from year-to-year and season-to-season in each reservoir. Another invasive species, quagga mussels, have been found in Amistad Reservoir. They have the ability to colonize not only the shallow oxygenated zones like zebra mussels but can handle lower oxygen conditions and colonize at greater depths. Texas Parks and Wildlife Department and local partners continue to monitor for invasive mussels.

**11. Emerging Water Quality Issues**, Scott McWilliams and Lexi Woods, Environmental Specialist, UCRA

McWilliams introduced the topic of PFAS. PFAS are a group of manufactured chemicals that have been used in industry and consumer products since the 1940s because of their useful properties. There are thousands of different PFAS, some of which have been more widely used and studied than others. There is a wide opportunity for exposure in varying degrees and McWilliams explained the process by which they can impact us.

The EPA has proposed standards for PFAS exposure and is taking this matter very seriously. Regulations for PFAS has been fast tracked as this is happening all over, particularly at military bases. There are some local concerns in regard to Goodfellow Air Force Base (GAFB). COSA will eventually have to address this issue as drinking water standards will likely change as more information is discovered.

PFAS that are present in the water column can bind to degraded plastic compounds, such as secondary microplastics. These microplastics will be available to filter feeding organisms and fish as unintentional food sources. If ingested, the plastics can have negative impacts on organismal function and reproduction. Much research is currently being done to assess the extent of microplastic and PFAS exposure effects to fauna in aquatic environments.

Discussion ensued regarding mitigation through various treatments. Reverse osmosis & carbon filters have been shown to remove PFAS in water. Carbon treatments are extremely expensive. Research is being conducted to see if potential bacteria or fungus could degrade PFAs, but more research needs to be done before mitigation strategies can be developed.

**12. Comments, Discussion & Dismissal:**

There was no further discussion or questions. McWilliams thanked everyone for participating both in person and online, especially those presenting, and the meeting was concluded.

## **List of Acronyms**

UCRA – Upper Colorado River Authority  
CRMWD – Colorado River Municipal Water District  
RRC—Railroad Commission  
TWDB – Texas Water Development Board  
TCEQ – Texas Commission on Environmental Quality  
TPWD – Texas Parks and Wildlife Department  
COSA – City of San Angelo  
NPS – Nonpoint source  
CLOMR – Conditional letter of map revision  
FEMA – Federal Emergency Management Agency  
LCRA – Lower Colorado River Authority  
BSR – Basin Summary Report  
KSAB – Keep San Angelo Beautiful  
CRP – Clean Rivers Program  
BSR – Basin Summary Report  
PFAS – Per- and Poly- fluoroalkyl Substances  
EPA – Environmental Protection Agency  
GAFB – Goodfellow Airforce Base

## Upper Basin CRP 2023 WQAC Meeting Attendees

Scott McWilliams	UCRA, San Angelo
Ellen Groth	UCRA, San Angelo
Lexi Woods	UCRA, San Angelo
Nancy Blackwell	UCRA, Ballinger
Lisa Benton	LCRA, Austin
Zoe Nichols	LCRA, Austin
Aaron Richter	LCRA, Austin
Jason Woods	ELS Labs, Austin
Kelly Kukowski	ELS Labs, Austin
Robin Cypher	TCEQ, Austin
Kiran Freeman	TCEQ, Austin
Cain Cline	TCEQ, Region 8, San Angelo
Lynn Wright	TPWD, San Angelo
Blake Thornton	TPWD, San Angelo
Jennifer Bronson-Warren	TPWD, Waco
John Burch	CRMWD, Big Spring
Allison Strube	CRWMD, Big Spring
Andy Vecellio	COSA, San Angelo
Charlotte Anderson	COSA KSAB, San Angelo
Kyle Wright	NRCS USDA
David Villareal	Texas Department of Agriculture, Austin
Leon Braden	Lipan-Kickapoo Water Conservation District
Stephen Hoelscher	Citizen