



LCRA WATER QUALITY ADVISORY COMMITTEE MEETING MIDDLE COLORADO RIVER BASIN

March 26, 2026 | 9 a.m.
LCRA Redbud Center, 3601 Lake Austin Blvd, Room 108,
and Microsoft Teams

Welcome and Introductions

The Lower Colorado River Authority Clean Rivers Program (CRP) meeting of the Middle Colorado River Basin Water Quality Advisory Committee (WQAC) was held March 26, 2026, at 9 a.m. via Microsoft Teams and in-person at the LCRA Redbud Center. LCRA's Lisa Benton and Bryan Cook welcomed participants and gave overview of the agenda, and historical perspective of CRP and LCRA programs. In-person participants introduced themselves. WQAC stakeholders consisted of a total of 45 in-person attendees and 12 online attendees.

Stakeholder Affiliations

- Bull Creek Foundation
- City of Austin - Watershed Protection Department
- Colorado River Land Trust
- Colorado River Alliance
- Colorado River Watch Network
- Texas Master Naturalist
- Environmental Lab Services
- Get Fertilizer Wiser
- Great Springs Project
- Keep Smithville Beautiful
- KUT News
- Lower Colorado River Authority
- LCRA Environmental Laboratory Services
- PODER
- Resident



- Environmental Stewardship
- Shoal Creek Conservancy
- Simsboro Aquifer Water Defense Fund
- Texas Commission on Environmental Quality
- Texas Parks and Wildlife Department
- University of Texas at Austin
- University of Texas at Austin Institute for Geophysics

Presentations¹

The Life Cycle of a Water Sample – Zoe Nichols, LCRA Water Quality Protection

Nichols explained the process for collecting, analyzing, submitting, and publishing results for water quality data through CRP.

Questions/Discussion

- *How are recreational use concerns communicated to the public?*
 - *Answer:* Impairments and concerns are listed in the Texas Integrated 303d list and are described in LCRA Clean Rivers Program basin reports. They are also detailed in any water bodies subject to bacteria TMDLs. Bacteria must be incubated 24 hours before results can be analyzed and published so use of best judgement is advised.
 - *Additional follow-up information:* Texas Department of State Health Services has the authority to notify or close water bodies due to human health hazards/concerns. More resources for safe recreation can be found here: [Recreation and Safety - LCRA - Energy, Water, Community](#)
- *How is cyanobacteria testing done and how are results communicated to the public?*

¹ Copies of presentations are available at <https://www.lcra.org/water/quality/texas-clean-rivers-program/public-outreach/>



- *Answer:* [This topic was pinned for the open discussion portion of the agenda. More information on cyanobacteria (also known as blue-green algae) can be found on LCRA's webpage <https://www.lcra.org/water/quality/algae-in-the-highland-lakes/>. A follow-up with the stakeholder asking the question was sent to ensure they received the information they needed.]
- *Additional follow-up information:* The City of Austin also has a webpage explaining algae monitoring and information - [Algae in Austin's Waterways | Austin Watershed Protection | AustinTexas.gov](#)
- *What is the difference between numeric vs. narrative criteria?*
 - *Answer:* Numeric criteria are assigned to parameters with known water quality standard values; narrative criteria are for parameters that do not have assigned standard values like nutrients and are listed as concerns rather than impairments.
 - *A comment was made that the EPA has developed proposed criteria for some of the narrative parameters like nutrients, but TCEQ has not set criteria and has not accepted EPA criteria.*

Colorado River Environmental Models Overview – Erik Smith, LCRA Water Quality Protection

Smith presented an overview of the Colorado River Environmental Models (CREMs) development, history, data collection processes, program uses and explained SWAT and CE-QUAL-W2 model capabilities.

Questions/Discussion

- *How are assumptions for NPS [non-point source pollution] derived/added to models?*
 - *Answer:* Primarily through land use analyses.
- *Have you used CREMs for management of NPS and point sources decision making; and does it work for cyanobacteria toxins modeling?*



- Answer:
 - The CREMs models have been able to demonstrate the effectiveness of LCRA's Highland Lakes Watershed Ordinance and to help determine appropriate management needs and practices for those programs. In addition, CREMs has been used to inform management decisions regarding other agency regulatory issues such as TCEQ point source discharges and the TCEQ Highland Lakes discharge ban rule by demonstrating impacts to water quality from point sources.
 - The latest version of CE-QUAL-W2 can be used for cyanobacteria modeling but is not the best because cyanobacteria/toxins are difficult to model. But it is important to note that the reservoirs in the Highland Lakes have had cyanobacteria toxicity detected in the benthic (bottom-dwelling) algae and *not* in the water column. The modeling capabilities and the visualization shown in this presentation are for the water column.
 - As a result of the data and science collected on cyanobacteria toxins in the Highland Lakes, LCRA strongly recommends that people and pets avoid all contact with algae. Though toxic algae was last detected in the lakes several years ago, algal material can begin producing toxins at any time without a change in appearance and ingesting the toxins can be dangerous and even fatal to animals. LCRA urges lake goers not to take a chance and to keep humans and pets away from any algae in the waterways. Here are [examples of algae](#) and here are ways to [minimize risks of exposure](#).

- *Have you considered using satellite imagery in modeling?*
 - Answer: Yes, and we continue to explore that science.

Networking Break and Informational Booths:

- **Get Fertilizer Wiser**
- **Austin Youth River Watch**
- **Colorado River Land Trust**



- **City of Austin Watershed**
- **Shoal Creek Conservancy**

eDNA for Aquatic Insects – Bianca Perez, City of Austin Watershed Protection Department (virtual presentation)

Perez presented on the City of Austin study areas, technical details of the eDNA collection process, and uses and limitations of the data.

Questions/Discussion

- *Is there a public interface or map?*
 - *Answer:* No, but the City of Austin reports are available online.
- *Can you share any future plans or projects using eDNA?*
 - *Answer:* The city is looking at use for studying diatoms, cyanobacteria blooms, communities across time, and speeding up the time for analyses.
- *What is the cost of eDNA sampling?*
 - *Answer:* About \$200-300 for one primer, and it varies with the number of samples and primers.
- *Is the cost comparable to other methods?*
 - *Answer:* Yes, with cost of personnel hours, collection, and time it takes to identify taxonomy, the traditional methods may be more expensive.
- *Where are these studies taking place/which water bodies?*
 - *Answer:* Across the city in multiple watersheds, but not in the reservoirs.

Spring and Summer Weather Outlook – Bob Rose, LCRA Meteorologist

Rose presented information on what weather forecasters are predicting for this spring and summer and compared the outlook to preceding years with similar patterns.

Questions/Discussion



- *Why does NOAA's prediction differ from other model predictions?*
 - *Answer:* The discussions included with NOAA's maps do not elaborate but perhaps they take a more cautious approach until they actually see rain or trends forming.
- *Do the models factor in the recent high pressure dome?*
 - *Answer:* We've never seen that strong of a heat dome this early in the year and it took everyone by surprise. It rivaled the late summer heat domes that we typically see. It is challenging to model these sporadic mesoscale events.

Open Discussion

Questions/Discussion

- *Colorado River Watch Network water quality volunteers always get questions when we are out sampling asking how is the water quality. Is there any way to give CRWN testers information, such as a QR code, to point the public to appropriate LCRA resources, or where they can find more information?*
 - *Response:* Excellent idea. LCRA will look into this.
- *We are seeing higher turbidity in Lake Austin below Mansfield Dam in previous months. Why is this?*
 - *Response:* City of Austin and LCRA noticed this too. There is a LCRA water quality data buoy and vertical profiler on Lake Travis at Mansfield Dam, and by pulling and viewing this data, we discovered that the cold snap we experienced in January caused some perturbation of the bottom sediments, or what is referred to as a "turnover" event. This caused those sediments in Lake Travis to become suspended off of the bottom, and when water releases were made out of Mansfield Dam, the upper part of Lake Austin became turbid.