LCRA WATER QUALITY ADVISORY COMMITTEE MEETING

MIDDLE COLORADO RIVER BASIN

Nov. 13, 2024 | 9 a.m.

LCRA McKinney Roughs Nature Park

Cedar Creek, TX

MEETING NOTES

Welcome and Introductions

The Clean Rivers Program (CRP) meeting of the Lower Colorado River Basin Water Quality Advisory Committee (WQAC) was held Nov. 13, 2024, at 9 a.m. in-person at McKinney Roughs Nature Park, Wildflower Hall. LCRA's Lisa Benton and Zoe Nichols welcomed the 43 attendees.

Stakeholder Affiliations

- Austin Water
- Austin Water Center for Environmental Research
- Austin Youth River Watch
- Bird City Bastrop
- City of Austin Watershed Protection Department
- Colorado River Alliance
- Colorado River Land Trust
- Environmental Stewardship
- Great Springs Project
- League of Independent Voters
- LCRA Environmental Laboratory Services
- Simsboro Aquifer Water Defense Fund
- Texas Commission on Environmental Quality
- Texas Parks and Wildlife Department

Overview of McKinney Roughs and the lower Colorado River (Nicholas Cowey, LCRA Parks)

Cowey welcomed attendees. He presented the history of the McKinney Roughs property and the unique geology and geography of the park. The Colorado River runs through the park, providing an opportunity for visitors to learn about the river and enjoy the various trails.

Clean Rivers Program, Aquatic Life Monitoring (Zoe Nichols, LCRA)

Nichols presented preliminary findings from the 2024 Clean Rivers Program Aquatic Life Monitoring (ALM) conducted in the lower Colorado River. She discussed each ALM component (fish assemblage, stream's physical habitat, benthic macroinvertebrate community,

instantaneous field measurement, flow discharge, 24-hour dissolved oxygen (DO), and water chemistry) and the collection methodology for each.

Nichols discussed results from three sites in the lower basin the Colorado River at Utley, Colorado River at Austin's Colony, and Cedar Creek. All three sites met their expected Aquatic-Life Use fish score during the noncritical period. Cedar Creek was only collected during the noncritical period. From the noncritical to critical event, the habitat score remained consistent at Utley and increased from intermediate to high at Austin's Colony due to excessive vegetation growth. See the online presentation for more details. A follow-up meeting with Environmental Stewardship stakeholders was held on Dec. 9, 2024, to further explain the ALM collection protocols and results.

American Eels (Anthea Fredrickson, LCRA)

Fredrickson discussed the lack of data on American eels in Texas, which resulted in the species being listed as a Species of Greatest Conservation Need. She described their unique life history and how American eels are catadromous, meaning the adults spawn in the ocean and the larvae travel towards the coast and make their way upstream in freshwater. Other states have determined when glass eels arrive in freshwater streams and rivers, but there was a need to study the timing for rivers in Texas.

In 2022, a collaborative group including LCRA, Texas Parks and Wildlife Department (TPWD) and University of Houston-Clear Lake (UHCL) was formed to determine when glass eels appear in Texas. LCRA biologists routinely sampled at two sites in the Colorado River using multiple types of sampling gear. Fyke nets, baited mesh traps and eel mops were some of the gear types used, with eel mops being the most successful. Results from 2022 and 2023 data show that glass eels are arriving in the Colorado River as early as December and continue to show up until May.

Highlights from the Austin Youth River Watch (Chanel Davis and Alondra Flemming-Parra, AYRW)

Davis and Fleming-Parra provided an overview of the Austin Youth River Watch programs and initiatives, as well as updates for 2024.

Group Photo and Networking Break

Native Mussel Conservation (Lisa Benton, LCRA)

Benton provided a brief presentation on freshwater mussel conservation within the Colorado River basin. She discussed the mussel life cycle and ecological benefits they provide to river ecosystems. The Texas pimpleback (*Cyclonaias petrina*), Texas fatmucket (*Lampsilis bracteata*), Balcones spike (*Fusconaia iheringi*) and Texas fawnsfoot (*Truncilla macrodon*) are the four federally-listed mussel species in the Colorado River basin.

LCRA and U.S. Fish and Wildlife Service finalized a Candidate Conservation Agreement with Assurances (CCAA) in 2023 for the four species. Benton explained how LCRA is implementing the CCAA.

Colorado River Alliance Mobile River Introduction (Rachel Pierron, Colorado River Alliance)

Pierron shared about the Colorado River Alliance and invited attendees to join her outside to tour the Mobile River parked at McKinney Roughs for this meeting. The Mobile River is a traveling water science center that brings the river directly to the schools of 7th graders in the Texas Colorado River basin.

LUNCH and Mobile River Tours

Turbidity Investigation on the Colorado River below Austin (Lisa Benton, LCRA)

Benton presented a timeline of events and actions taken to identify and address the turbidity issue on the Colorado River. Following the initial complaint in July 2023, the City of Austin conducted field reconnaissance and an LCRA aerial drone survey was done, but a specific source wasn't discovered. Following the initial investigations, two longitudinal studies between Hwy 183 and FM 973 were conducted. In February 2024, LCRA deployed three turbidity monitoring sensors for a 48-hour period. In April 2024, LCRA met with the TCEQ Region 11 Director and Water Section Manager. In May 2024, LCRA deployed five turbidity monitoring sensors in the dog head reach of the Colorado River.

Benton discussed next steps including more continuous turbidity sensor deployments in the Colorado River and Walnut Creek, investigate turbidity concentrations further downstream, and engage with Travis County.

TCEQ Nutrient Criteria Progress and Updates (Sarah Whitley, TCEQ)

Whitley presented an overview of the TCEQ Nutrient Criteria Development Plan. The purpose of the plan is to provide a framework for the continued development of numeric nutrient criteria for the State of Texas. Please see the informative presentation posted with the meeting materials for more information on this update.

Land Conservation Initiatives in the lower Colorado River basin (Jeff Crosby, Colorado River Land Trust)

Crosby presented about the Colorado River Land Trust, which is a private nonprofit governed by Board of Directors to promote voluntary conservation efforts on private lands while protecting Texas' heritage of farming, ranching, hunting, and fishing. Their goal is to protect the Colorado River and its surrounding waterways and land through conservation easements. A conservation easement is a voluntary legal agreement, between a landowner and a qualified holder, that

allows a landowner to permanently limit the type or amount of development on their property in order to protect the property's conservation and agricultural values, while retaining private ownership of the land. The Colorado River Land Trust works in the High Plains of West Texas, the Hill Country, farmland, coastal fisheries and coastal wetlands.

Austin-Bastrop River Corridor Partnership (Kevin Anderson, Austin Water)

Anderson provided a history of the Austin-Bastrop River Corridor Partnership ("Partnership"), documenting 21 years of change along the Colorado River. The Austin Water Center for Environmental Research at Hornsby Bend has been spearheading the Partnership conversations. The Partnership is an information group of nonprofit organizations, governmental agencies, businesses, schools, landowners, municipal staff members and other local citizens concerned with the future of the Colorado River corridor from Austin through Bastrop County. Over the years, a number of key issues have been identified. As well as goals to promote actions that protect the river's health. A publication entitled "Discovering the Colorado: A Vision for the Austin-Bastrop River Corridor" was developed to raise public awareness about the river and continues to be a guiding document on action needed for this section of river today.

Discussion Work Group:

The following prompts were provided to meeting participants and then discussed as a group:

INDIVIDUAL REFLECTION

When thinking about *water quality* of the Colorado River between Austin and Columbus, what insights do you have from the presentations in this meeting or from your own experience that you would like this group to be aware of? What are some ideas for next steps that can be taken to focus efforts on these issues?

GROUP REFLECTION (10-15 minutes)

1. Assemble into your small group.
2. Identify who will be the scribe to capture notes on the flipchart.
3. Pulling from your individual reflections, identify the top 3 shared insights your team has for this section of river and record them on the flipchart.
4. Brainstorm on ideas for next steps to these 3 insights and record group ideas on the flipchart.
5. Identify one speaker to represent your group. Each team will be given 3-5 minutes to verbally highlight their team's reflections in front of the full group.

Reflections included:

- Sustainable development that protects natural resources
- Need for proactive planning
- Targeted public awareness
- More public access points to the river

- Expand geographic reach of programming/regulations that protect water quality in upstream parts of the basin
- Educate youth and inspire next generation of environmental stewards
- Re-think what invasive vegetation means to the river
- Continue aquatic life monitoring
- Need for better nutrient removal technology and nature-based solutions
- Health of the river
- Request for a Total Maximum Daily Load to be conducted on the Colorado River below Austin
- River protection leadership is needed
- Concerns over fish, mussels, otter populations
- What actions can be taken to remove nitrate from the river?
- How can we limit the nitrates source?