

Meeting Minutes
Lower Colorado Regional Water Planning Group Regular Meeting
November 13, 2019
LCRA Dalchau Service Center
3505 Montopolis Drive Austin, Texas
10:00 a.m.

Members Signing In:

Daniel Berglund, Small Business	Alicia Reinmund- Martinez, GMA 10
Jim Brasher, GMA 15	Mitchel Sodek, GMA 8
John Burke, Water Utilities	James Sultemeier, Counties
Jim Luther, Counties	Byron Theodosios, Counties
Paul Babb, Alternate for GMA 9	Jim Totten, GMA 12
Earl Foster, Alternate for Municipalities	Paul Tybor, GMA 7
Karen Haschke, Public Interest	David Van Dresar, Water Districts
Barbara Johnson, Industries	Jennifer Walker, Environmental
Teresa Lutes, Municipalities	David Wheelock, River Authorities
Ann McElroy, Environmental	Lann Bookout, Non-Voting, TWDB
David Lindsay, Alternate for Recreation	David Bradsby, Non-Voting, TPWD
Mike Reagor, Municipalities	Lawrence Brown Jr., Non-Voting, Alternate for TSSWCB

Voting Members Absent:

Ron Fieseler, GMA 9, Alternated Attended
Lauri Gillam, Municipalities, Alternated Attended
Jason Ludwig, Electric Generating Utilities
Charles Olfers, Agriculture
Doug Powell, Recreation, Alternate Attended
Robert Ruggiero, Small Business
Paul Sliva, Agriculture

Consultants/Support/Visitors/Other:

Mike Thuss, WRA	Charlie Flatten, HCA
Blake Neffendorf, City of Buda	Monica Masters, LCRA
Richard Hoffpauir, Hoffpauir Consulting	Joe Trungale, TES
Katie McNeal, Austin Water	Rebecca Batchelder
Steven Van Kampen-Lewis, SWCA	David Villarreal, TDA
Christianne Castleberry, Alt. for Water Utilities	Cindy Smiley, Smiley Law
Stefan Schuster, Aqua Strategies	Adam Connor, FNI

Quorum:

Quorum: Yes

Number of voting members or alternates representing voting members present: 21

Number required for quorum per current voting membership of 25: 13

Formal Actions Taken:

1. The minutes from the October 9, 2019 Lower Colorado Regional Water Planning Group (LCRWPG) meeting were approved as presented.
2. The LCRWPG approved the initial determination of which water management strategies would be considered as recommended, alternative, or considered for drafting Chapter 5

Regular Meeting:

1. **Call to Order** – Chairman John Burke called the meeting to order at 10:00 a.m.
2. **Welcome and Introductions** – Chairman John Burke welcomed all to the meeting.
3. **Receive public comments on specific issues related to agenda items numbers 6 through 12** – None.
4. **Attendance Report** – Teresa Lutes presented attendance report information, which was included in the members' packets for review. The budget report from LCRA was also included in the members' packets for review.
5. **Approval of Minutes from the November 13, 2019 regular meeting** – The group approved a motion by David Wheelock, and seconded, to approve the minutes as presented from the regular October 9, 2019 meeting. Mr. Wheelock commended the efforts of the Austin Water staff members who prepare the regular meeting minutes.
6. **Texas Water Development Board (TWDB) –**
 - a. Update on regional water planning activities and schedules: Lann Bookout, TWDB liaison to Region K, provided an update on water planning activities and schedules. TWDB has sent an Initially Prepared Plan (IPP) review checklist to planning group consultants, and also sent information about Infrastructure Financing Report (IFR) surveys. Other information about sociogenic impact studies will hopefully get sent out sometime late December.
7. **Committee Reports – Committee Chairs**
 - a. Water Modeling Committee: Jaime Burke, AECOM, provided an update on the Water Modeling Committee meeting held on October 23, 2019. At that meeting, the Committee reviewed comments received on draft Chapter 3 from LCRA and David Lindsay. The Committee also discussed changes to surface water availability estimates for STPNOC based on comments from LCRA.
 - b. Water Management Strategies Committee: Jaime Burke provided an update on the Water Management Strategies (WMS) Committee meeting held on October 31, 2019. At that meeting, the Committee discussed changes to draft strategies based on committee comments. The Committee also saw a presentation and discussed draft water management strategy evaluations ready for Committee review.
 - c. Legislative and Policy Committee: Jaime Burke provided an update on the Legislative and Policy Committee meeting held on November 1, 2019. At that meeting, the Committee discussed proposed edits to draft Chapter 8 sections.
 - d. Other committee reports, as needed: Ann McElroy, Chair of the Nominating Committee, provided an update on the Nominating Committee meeting held on

November 13, 2019. The Committee is proposing a slate of candidates for the executive team which will be voted on by the LCRWPG at the January 2020 meeting. The nominations are as follows:

- John Burke – Chairman
- David Wheelock – Vice Chair
- Teresa Lutes – Secretary
- Ron Fieseler – At Large
- Jason Ludwig – At Large
- Byron Theodosis – At Large

8. Consultant Status Report – AECOM

- a. Progress to date: Jaime Burke, AECOM, provided an update on consultant efforts. Since the last meeting, the consultant has worked on Chapter 3 of 2021 Plan, which is the Water Availability and Supplies chapter. The consultant received comments and suggested edits from LCRA and David Lindsay, and the Water Modeling Committee met to discuss some of the comments. AECOM is working to address all comments prior to sending the draft chapter out to the LCRWPG and plans to distribute the draft within the next two weeks.

AECOM has also been working to address remaining water management strategies. All but three of the scoped strategy write-ups have been completely drafted. Most have received either committee or LCRWPG review with comments addressed. One WMS Committee meeting was held since the last Region K meeting, and AECOM will be presenting strategies today in order to move forward with Chapter 5 and 6 text development.

Since the last LCRWPG meeting, the consultant has also been working to prepare implementation and comparison surveys for the WUGs. The surveys will hopefully be sent in the next couple of weeks and AECOM will keep the group updated on information received.

- b. Upcoming effort: Upcoming efforts for AECOM include incorporating Chapter 3 (Water Availability and Supplies) comments from the Water Modeling Committee and sending that draft chapter out to LCRWPG for review. Chapters 4 and 7 need to be completed and sent out for review as well. Chapter 5 will be composed largely of compiled water management strategy (WMS) memos, and once that is complete, the draft chapter will be sent out to the LCRWPG for review. AECOM will also begin drafting Chapter 6 (Impacts of Regional Water Plan), which includes cumulative impacts modeling. Lastly, implementation surveys will be sent out to Water User Groups/Wholesale Water Providers and work on remaining chapters will begin.

- ## **9. Discussion of draft 2021 Plan chapters out for review and comments received – AECOM.**
- Jaime Burke, AECOM, explained that both draft Chapters 1 and 2 are out for LCRWPG review. Chapter 2 has not received any comments yet, but David Lindsay has completed a draft update to Appendix 1B that will be sent out for review in the next couple weeks. Comments have been received for Chapter 2 and are being addressed. Draft chapter 3 will be sent out to the RWPG in the next couple of weeks after comments from the committee are addressed.

10. Presentation and discussion of draft water management strategies ready for LCRWPG review, and updates on any remaining working draft water management strategies – AECOM. Jaime Burke, AECOM, presented sets of drafts WMSs for the LCRWPG to review. Initially, Jaime described what strategies were presented at previous LCRWPG meetings, explaining that only strategies that had been updated since those meetings would be discussed today. These strategies are as follows:

Presented at July 10, 2019 Meeting (13)

- Municipal Drought Management
- Burnet County Regional Projects
 - Buena Vista
 - East Lake Buchanan
 - Marble Falls System
- Austin
 - Aquifer Storage and Recovery
 - OCR w/ Evaporation Suppressant
 - Onsite Rainwater and Stormwater Harvesting
 - Capture Local Inflows to Lady Bird Lake
 - IPR through Lady Bird Lake
 - Lake Austin Operations
 - Austin Conservation
- STPNOC
 - Alternate Canal Delivery
 - Brackish Surface Water Blending

Presented at October 9, 2019 Meeting (10)

- BS/EACD Edwards/Middle Trinity ASR
- BS/ EACD Saline Edwards ASR
- Municipal Conservation
- Rainwater Harvesting
- Downstream Return Flows
- Oceanwater Desalination
- Expand Use of Local Groundwater
- Development of New Groundwater Supplies
- Direct Reuse
- Direct Portable Reuse

Strategies that were presented at a previous meeting but which have been updated are listed below. Jaime provided a brief description of the updates and the LCRWPG had a discussion regarding the changes where there were questions or comments.

- BS/EACD Edwards/Middle Trinity ASR
 - Updates included added water user groups (WUGs) and changing Buda's infrastructure and sources
- BS/EACD Saline Edwards Desalination and ASR
 - Strategy will now be from saline water, with the focus on desalination and ASR meeting peaking demands
- Rainwater Harvesting
 - Updates based on feedback from TWDB that distribution-level costs such as rainwater harvesting (RWH) systems, plumbing, etc. should not be included in the Region K costing.
 - The RWPG discussed this changes to this strategy in more detail after Jaime had outlined the update. Jennifer Walker commented that the Unified Costing Model (UCM) is more useful for centralized infrastructure than it is for decentralized strategies such as RWH. She suggested including clear narrative language about how the costing was done and what types of costs are shown in the plan versus what is not included, having a cost-benefit discussion, and making a recommendation in the plan regarding the UCM use for decentralized strategies.

- Lann Bookout, TWDB, explained that under current guidelines, TWDB funding is only to provide new water supply, not to distribute existing water supply, and therefore these distribution-level costs should not be included.
- Teresa Lutes stated that she would like to have more discussion on what is considered “distribution-level” and what would be considered infrastructure needed to complete the strategy. She also suggested changing the name of the cost table from “cost of water” to something indicating that it represents the portion of a strategy that TWDB would fund, rather than the full cost of the water.
- David Wheelock commented that since cost is a nearly universal metric, it would be good to include the actual costs of a RWH system in the plan. He suggested including the costs in a write-up, as well as providing more detail on the assumptions used to generate the cost numbers.
- David Lindsay pointed out that the cost for a RWH system is also very dependent on whether it is retrofitted into an existing home or with new construction and suggested that the difference in cost be mentioned in the plan.
- Development of New Groundwater – Yegua-Jackson Aquifer
 - Updates based on adding Smithville and updating land costs in Fayette County; could consider doing one recommended and one alternative strategy.
- Expand Local Use of Groundwater -Ellenburger-San Saba Aquifer
 - Updates based on change to mining use, which reduced the strategy yield a bit. The Bertram Quarry Reservoir was initially included as groundwater, but it has now been reclassified as a surface water source, resulting in reduced groundwater yield.
- Direct Potable Reuse
 - This strategy was reviewed for potential distribution-level costs that may need to be removed, but no changes were made.
- Direct Non-Potable Reuse
 - This strategy was revised to remove distribution-level costs.
 - David Wheelock commented that there are lots of questions about how to pay for purple pipe systems, and that we should have a discussion with TWDB about funding for these systems so the LCRWPG can weigh in.

Alicia Smiley, AECOM, then presented on non-major water provider strategies. Details about each of the specific strategies can be found in the consultant presentation for this meeting. The LCRWPG discussed strategies in more detail throughout the presentation where there were comments and questions.

- Water Supply Infrastructure Development
 - Subject to change based on TCEQ decision on whether it is a surface or groundwater source.
- Mining Conservation
- Groundwater Importation – Hays County Pipeline
 - David Wheelock commented that the purchase of water cost in the costing table for this strategy seems low. Jaime explained that the cost is based on the price to purchase water from the Guadalupe Blanco River Authority (GBRA), and that the treatment and transportation of the water

is included in the Region L plan. Mr. Wheelock explained that he thought the purchasing cost for Region K should include the full cost to purchase, treat, and move the water. Jaime said she would look at ways to include more description of the full project cost in the write-up.

- Groundwater Importation – Alliance Regional Water
 - Ann McElroy asked if there had been any analysis done on the economic effects on surrounding areas for importation projects. Ms. Smiley explained that there are opportunities for feedback during the public comment period, as well as diverse stakeholder interests on the LCRWPG that could highlight issues.
 - David Lindsay suggested that AECOM look at how much of the strategy is tapping available water versus unavailable water, e.g. the modeled available groundwater (MAG).
- New Water Purchase and Water Purchase Amendments
 - One of the WUGs that was included in this strategy was Llano, which had a very high unit cost of water. Mike Reagor explained that Llano is not planning to purchase millions of dollars of water; instead, the strategy would be used only as an emergency supply to truck in water over a matter of days, not on an annual basis as shown in the plan. Ms. Smiley said that they could look at including more narrative in the write-up to explain the emergency basis. Jaime pointed out that because Llano shows an identified need in 2020, it is necessary to include a non-infrastructure WMS for 2020, which this purchase strategy fulfills.
 - David Wheelock commented that although that might be the case, it doesn't seem correct to represent a strategy which we know would be infeasible on an annual basis as being used for a whole year. He further commented that maybe the group should acknowledge that it can't meet the 2020 need rather than identifying a "paper" solution to meet a "paper" shortage. David offered to meet with Mike Reagor and Alicia Smiley to see if there is an alternative to include in the plan.
 - Mike Reagor explained that Llano is currently in the process of developing a future water supply plan, which will include a plan for emergency water supplies. Alicia said that she could look at adjusting the percentage of drought management and conservation for Llano to sync with that plan and see how that affects the 2020 shortage.
- Brush Management
 - Byron Theodosis asked about the scope of this strategy, and Jaime explained that the scope was limited to a study area based on previous study regarding brush management.
- Wharton Water Supply
- Reservoir Capacity Expansion
 - Mike Reagor explained that this strategy would be intended to avoid reservoirs going to near-zero levels, where water quality is much poorer. Lann Bookout, TWDB, commented that the strategy can be evaluated but not recommended, as it has no firm yield associated with it. If the group has concerns about these criteria, Lann suggested writing them up and submitting them to the TWDB.
- Goldthwaite Water Supply
 - Mike Reagor pointed out that this strategy was similar to the Reservoir Capacity Expansion in that it provides no firm yield.

- Ann McElroy commented that she would like to get more information from Goldthwaite about the project before making a decision to include it in the plan.
- Irrigation Drought Management

After the non-major water provider strategies, AECOM presented on new and revised Austin WMSs, as listed below. Details about each of the specific strategies can be found in the consultant presentation for this meeting. Several of the Austin WMSs, including decentralized strategies, were revised based on TWDB's guidance to remove "distribution-level" costs from the analysis. The LCRWPG discussed Austin WMSs in more detail as needed throughout the presentation.

- Austin Blackwater and Greywater Reuse
- Austin Onsite Rainwater and Storm Water Harvesting/Community-Scale Stormwater Harvesting
 - Teresa Lutes commented that the O&M costs for this strategy should be included in the write-up along with the facility costs, and that a similar approach be used for other WMSs where "distribution-level" costs were stripped out.
- Austin Decentralized Direct Non-Potable Reuse
- Austin Centralized Direct Non-Potable Reuse
 - Jaime Burke, AECOM, noted that costs for this WMS would need to be examined to determine if any "distribution-level" costs should be removed. Jaime also noted that those costs are allowed if the distribution is to another WUG, such as steam-electric.
- Austin Brackish Groundwater Desalination
 - This strategy was updated so that water is coming from saline portions of the Trinity and Edwards Aquifers.
 - Jennifer Walker asked if the Region K costs were similar to Water Forward costs for a similar strategy. Teresa Lutes responded that the costs were slightly different because the strategy in Region K is sourcing water from two aquifers, but overall the costs were similar.
- Austin Return Flows

Next, AECOM presented on new and revised Irrigation Conservation strategies, as listed below. Details about each of the specific strategies can be found in the consultant presentation for this meeting. The LCRWPG discussed strategies in more detail as needed throughout the presentation.

- On-Farm Conservation
- Irrigation Operations Conveyance Improvements
- Drip Irrigation for Non-Rice Crops
- Real-Time Metering and Monitoring
- Sprinkler Irrigation
- Tail Water Recovery

Finally, AECOM presented on LCRA strategies, as listed below. Details about each of the specific strategies can be found in the consultant presentation for this meeting. The LCRWPG discussed strategies in more detail as needed throughout the presentation.

- Expand Use of Groundwater in Bastrop County
- Alternative - Expand Use of Groundwater in Bastrop County
- Groundwater Supply for Fayette Power Plant – off-site
- Groundwater Supply for Fayette Power Plant – on-site
- Alternative Groundwater Supply for Fayette Power Plant – on-site
- Baylor Creek Reservoir
- LCRA Contract Amendments
- LCRA Contract Amendments with Infrastructure
- LCRA New Contracts
- LCRA New Contracts with Infrastructure
 - David Wheelock requested that the footnote be changed to reflect removing the volume from the Highland Lakes or other sources.
- LCRA Import Return Flows from Williamson County
- LCRA Amendments to Water Management Plan
- LCRA Enhanced Municipal and Industrial Conservation
- LCRA Amendments to Existing Water Rights
- Alternative LCRA Brackish Groundwater Desalination
- Alternative LCRA Groundwater Importation from Carrizo-Wilcox
- Alternative LCRA Supplement Environmental Flows with Brackish Groundwater
- LCRA Excess Flows Off-Channel Reservoir
 - Barbara Johnson asked if it was actually feasible for this strategy to be online by 2030, especially in light of the permitting and land acquisition that would be needed. David Wheelock responded that although LCRA has already begun permitting, the 2030 timeframe may be ambitious, so they will consider possibly pushing the implementation back to 2040.
- LCRA Mid-Basin Off-Channel Reservoir
- LCRA Draft Strategies:
 - LCRA Prairie Reservoir
 - LCRA Enhanced Recharge and Conjunctive Use
 - LCRA ASR in Carrizo-Wilcox Aquifer

11. Initial Determination of draft water management strategies as recommended, alternative, or considered, to allow for drafting of Chapter 5 text. Take action on initial determination. – AECOM. Jaime Burke, AECOM, explained that they would like to move forward on drafting Chapters 5 and 6. AECOM would like the RWPG to make an initial determination on whether each strategy is recommended, alternative, or considered. Jaime explained that the determination can change before the Initially Prepared Plan (IPP) is submitted, or up until final adoption of the plan.

Some strategies need to be “alternative” based on their sources and yields. Some WUGs may have multiple strategies to meet a need, and one strategy can be recommended, while another is “alternative”. Suggested “alternative” strategies include Expand Use of Carrizo-Wilcox Aquifer, several LCRA strategies, and potentially a Smithville strategy.

“Considered” strategies generally either don’t have enough detail, or don’t meet the regional water planning requirements. Some of the suggested “Considered” strategies are the Goldthwaite strategies related to reservoir expansion, reuse and water right permitting; Reservoir Capacity Expansion; Oceanwater Desalination (no project sponsor); Irrigation Conservation; and Aquifer Storage and Recovery (general strategy that was not applied to any WUG).

AECOM's suggestion was that all strategies other than the considered and alternative strategies mentioned be recommended by the RWPG for their respective WUGs and MWPs. Daniel Berglund moved to approve the initial determination of which water management strategies would be considered as recommended, alternative, or considered for drafting Chapter 5. Teresa Lutes seconded the motion, and the group approved the motion.

12. Presentation and discussion of draft legislative/policy recommendations ready for RWPG review. – AECOM. Jaime Burke, AECOM, provided an update on legislative and policy recommendation ready for review by the group. For recommendations related to groundwater, Jim Brasher provided minor language changes to policy, expanded the discussion on Modeled Available Groundwater (MAG) Peak Factors, and provided discussion on the utilization and permitting of brackish water. For recommendations related to potential impacts to agricultural and rural water supplies, David Van Dresar and Jim Brasher reviewed the existing policy language and suggested no changes. David Van Dresar and Jim Brasher also reviewed the agricultural water conservation policy and removed references to the LCRA-SAWS project. Finally, the brush management policy was reviewed by David Lindsay, who coordinated with the Texas State Soil and Water Conservation Board to make recommendations, including funding for brush control measures.

13. Agenda items for next meeting –

- a. Location and date of next meeting: The next meeting will be held on January 15, 2020 at the LCRA Dalchau Service Center. The following two meetings will be held on February 5 and February 18, 2020 at the LCRA Redbud Center.
- b. Other committee meetings: The Policy Committee will need to meet at a day and time to be determined.

14. New / Other business (time permitting) – None.

15. Public Comments – None.

16. Adjourn – The meeting was adjourned by Chairman John Burke at 2:21 pm.