

## City of Austin-LCRA Water Partnership 2021 Annual Report

### I. Purpose of Annual Report

The City of Austin-Lower Colorado River Authority Water Partnership (Water Partnership) is charged with providing a written Annual Report on the status and direction of water supply discussions as considered by the Water Partnership during the previous year.

### II. Background on Partnership

#### A. History

The Water Partnership was created through the June 2007 Austin and LCRA Settlement Agreement. The November 2007 Supplemental Water Supply Agreement provides additional details on roles, responsibilities and expectations related to the Water Partnership, including the establishment of a stakeholder group.

The Water Partnership was formed to provide a cooperative management structure through which Austin and LCRA staff can collaborate and more effectively manage both entities' water supplies and resources. The Water Partnership in effect formalizes the on-going meetings between the staffs of the two entities to assure regular communication on matters of mutual concern. Austin and LCRA have recognized the complex and diverse nature of water supply planning and management of water resources in the lower Colorado River basin. Through the Water Partnership, both entities seek to cooperate, improve communication and avoid future conflicts.

The Water Partnership and its various committees continue to meet on a regular basis and will continue to work cooperatively on water supply, conservation, quality and permitting issues. As needed, the Water Partnership presents recommendations to the Austin City Council and LCRA Board of Directors for approval.

#### B. Cooperative Management Structure

Under the leadership of the Austin City Council and the LCRA Board, as directed by the Austin city manager and LCRA general manager, the Water Partnership is composed of a series of committees headed by the Executive Management Committee (EMC). For reference, a depiction of the general organizational structure of the Water Partnership is shown in **Attachment A**.



## **B.1. Committees: General Purpose**

The following are brief descriptions of current committees. Committee members in 2021 are listed in **Appendix 1**.

Starting March 2020 and continuing through 2021, all meetings were held virtually for due to the ongoing Covid-19 social distancing guidelines.

### Executive Management Committee

The EMC is composed of two members from Austin, designated by the city manager, and two members from LCRA, designated by the general manager.

The EMC is responsible for carrying out the purpose and scope of the Water Partnership. This committee oversees the work of the sub-committees, including among other things, evaluation of and implementation of any approved joint water supply strategies.

In 2021, LCRA led the EMC meetings, continuing the second year of a two-year cycle. Beginning in 2022, Austin will lead EMC meetings for the next two years.

### Technical Committee

The Technical Committee is a standing committee made up of Austin and LCRA staff members appointed by the EMC. The committee is charged with developing projections of water demands, coordination on water use reporting, identification and evaluation of water supply alternatives, reporting on water rights permitting activities, developing technical analyses and implementation plans for water supply strategies identified for further study, pursuing technical projects or issues as assigned by the EMC, and assisting with agenda development for the EMC.

In 2021, Austin led the Technical Committee meetings, continuing the second year of a two-year cycle. Beginning in 2022, LCRA will lead Technical Committee meetings for the next two years.

## **B.2. Committees: Special Purpose**

### Water Conservation Committee

The Water Conservation Committee is a special committee made up of Austin and LCRA staff members appointed by the EMC. Consistent with the Settlement Agreement, the Water Conservation Strategies Report was developed and approved in 2008. The Water Conservation Committee also is charged with implementing the associated plans and scope of work, as approved by the EMC.

### Water Quality Committee

The Water Quality Committee is a special committee made up of Austin and LCRA staff members appointed by the EMC. Consistent with the Settlement Agreement, the Water Quality Monitoring and Evaluation Plan was developed and approved in 2010. The Water Quality Committee also is charged with implementing the associated plans and scope of work, as approved by the EMC. The Water Quality Committee met in 2021 to coordinate on zebra mussels, harmful algal blooms, and other topics.

### Stakeholder Committee

This stakeholder group is comprised of a balanced and diverse group of organizations and individuals interested in the parties' water supply discussions. The Stakeholder Committee is charged with providing feedback and input to the EMC when Austin and LCRA are considering certain long-term water supply decisions covered by the Supplemental Water Supply Agreement between Austin and LCRA.

The Stakeholder Committee members, appointed by the Austin City Council and the LCRA Board, represent a wide variety of interests including environmental, rate payers, business, agriculture, conservation, industrial, recreation and high growth. Due to extensive recent stakeholder engagements by both LCRA and Austin, the Stakeholder committee has not been reconstituted.

## **III. Summary of Year 2021 Activities**

### **A. Highlights of Joint Activities**

#### **A.1. Austin Municipal Water Supply Discussions**

There were no formal discussions directed towards LCRA securing additional municipal supplies for Austin in 2021. The current municipal supply contract between Austin and LCRA, which was negotiated in 1999, will meet Austin's demands up to 325,000 acre-feet per year. Note that Austin's 2021 annual diversion for municipal purposes was approximately 159,000 acre-feet. According to the Supplemental Water Supply Agreement, the Water Partnership must determine whether to begin a long-term planning process for additional supplies soon after Austin's municipal demand exceeds 225,000 acre-feet per year, but may decide to initiate those discussions at an earlier date. Supply planning for Austin's non-municipal water needs also may occur at any time.

#### **A.2. Joint Application for Reuse of City of Austin Return Flows**

Consistent with the actions required of the 2007 Settlement Agreement, Austin and LCRA filed a Joint Application for Reuse with the Texas Commission on Environmental Quality (TCEQ) on March 1, 2012. The application seeks legal authority to use Austin's return flows to help meet the city's long-term municipal



needs and to help meet environmental needs and continued use of the water to meet other downstream water needs. TCEQ declared the application administratively complete in July 2012. Austin and LCRA staff worked with TCEQ on technical review requests. At year-end 2017, TCEQ awaited the outcome of joint efforts by Austin and LCRA on Water Availability Model modeling that incorporates the joint application and the anticipated permit. In 2020, Austin and LCRA continued discussion related to Water Availability Modeling for the application. In 2021, LCRA and Austin jointly withdrew the JAR application from TCEQ for the time being.

### **A.3. TCEQ Water Use Reporting**

LCRA and Austin coordinated on the 2021 annual water use reports and were submitted to TCEQ by March 1, 2022.

### **A.4. Zebra Mussel Monitoring and Response**

In June 2017, Texas Parks and Wildlife Department (TPWD) and LCRA biologists confirmed the presence of invasive zebra mussels in Lake Travis. The reservoir was then given the invasion status of “infested” meaning it contained an established reproducing population of the invasive species. As LCRA monitoring efforts continued, new zebra mussel invasions were discovered in other Central Texas reservoirs and “infested” designations were given by TPWD to Lake Austin (February 2018), Lady Bird Lake (October 2018), Lake LBJ (August 2019), Lake Marble Falls (December 2019), Lake Buchanan (December 2020), and Inks Lake (June 2021).

Routine monitoring for early detection of zebra mussels is being conducted in two LCRA-managed waterbodies where established populations of zebra mussels have not been confirmed – Lakes Bastrop and Fayette. LCRA is monitoring the downstream dispersal of zebra mussels in the Colorado River below Lady Bird Lake. LCRA also is monitoring zebra mussel spawning trends in Lake Buchanan, Inks, LBJ, Lake Marble Falls, Lake Travis, Lake Austin and Lady Bird Lake to help inform management decisions for all stakeholders.

In 2021, Austin Water converted the temporary copper sulfate-based zebra mussel suppression systems that were installed in 2020 to permanent bulk storage systems. Biannual diver inspections have confirmed that the chemical feed systems successfully reduced mussel growth on AW intake structures. AW will continue utilizing diver cleaning services in the future. Currently, AW is finalizing documents for bid and advertisement for Phase III of zebra mitigation efforts, copper ion generation, with construction expected to be completed summer of 2023.



### **A.5. Region K Water Planning Process**

The 2021 Region K Water Plan was approved by the Texas Water Development Board in 2021. Austin and LCRA both continued to participate in the Lower Colorado Regional Water Planning Group as they begin the 2026 regional water planning process, including participating on the Consultant Selection and Bylaws Committees.

### **A.6. Harmful Algae Concerns in 2021**

Toxin-producing algae was detected in Lady Bird Lake in July of 2019. Since 2019, cyanobacteria have been detected at various locations in some of the lakes of the Colorado River Basin upstream of Austin.

When cyanobacteria (also called blue-green algae) grow to excessive levels and produce cyanotoxins, these events are called harmful algal proliferations (HAPs) when referring to cohesive mats of algae, or harmful algal blooms (HABs) when referring to planktonic (i.e. freely floating phytoplankton cells in the water column) algae. The algae producing toxins in Lady Bird Lake was growing in cohesive mats and this event is therefore categorized as a HAP. While cyanobacteria have been found, to date, a HAB has not been detected in the Highland Lakes.

In August 2020, the EMC charged the Technical Committee with evaluating HAB/HAP incident risk associated with Lake Travis and Lake Austin. The Technical Committee's Harmful Algae Work Group focused on identifying drivers and strategies to manage potential risk associated with a cyanotoxin event that could impact drinking water supply. Key environmental variables that influence the risk of HAB/HAP occurrences and severity are water temperature, hydrology, and nutrient concentrations. Nutrient concentrations and inputs to the lake systems were identified as the most manageable variable among the three.

A critical component of the immediate response to harmful algae is monitoring; LCRA and City of Austin conduct monitoring across the region and technical teams are coordinating and sharing data between organizations. LCRA conducts routine cyanotoxin monitoring sampling in the Highland Lakes and has maintained a public information website with recent monitoring results since 2020.

The City of Austin Watershed Protection Department has monitored for harmful algae locations in Lake Austin and Lady Bird Lake since the 2019 algae event. Lady Bird Lake continues to meet State of Texas contact recreation standards, which are based on bacteria levels. Austin Water regularly tests algae levels near their intake pipes on Lake Austin and Lake Travis and has not seen levels of concern for drinking water. In fall of 2021, Austin Water invested in equipment for monitoring and sampling capabilities as a part of their cyanotoxin response plan, which improved the frequency and turn-around time of results. Additionally, this



plan includes triggers and operational responses for periods of high risk. Currently, Austin Water does not use Lady Bird Lake as a source for drinking water.

The Technical Committee's Harmful Algae Work Group evaluated ongoing water quality protection programs and recommended continued coordination in this area. Additionally, public outreach and communication was key for City of Austin and LCRA harmful algae response. Austin and LCRA will continue to monitor and collaborate on potential HAB/HAP risk management strategies.

## **B. Highlights of Other Water Supply-Related Activities and Discussions**

### **B.1. Austin Water Forward**

A key recommendation of Austin's 2014 Austin Water Resource Planning Task Force was the development of an Integrated Water Resource Plan (IWRP). In December 2014, the Austin City Council passed a resolution creating the Austin Integrated Water Resource Planning Community Task Force (Water Forward Task Force) to support the development of the IWRP. This Task Force is made up of 11 Mayor and Council appointees and additional ex-officio representatives from eight Austin departments including Austin Energy, Watershed Protection and the Office of Sustainability and has typically been holding monthly meetings since May 2015. The IWRP is a collaborative effort led by Austin Water to provide a 100-year plan for demand management and supply-side options for Austin. The plan takes into account a wide-range of factors including population growth, drought and climate uncertainty. Austin refers to this effort as Water Forward.

The Austin Water-led Water Forward, Integrated Water Resource Plan is Austin's 100-year roadmap for a sustainable water future. The plan was developed using a holistic, One Water planning approach that balances multiple objectives including water reliability, social, environmental and economic benefits. The plan's transformative vision reflects a substantial collaborative effort that took place over the course of three and a half years. The Austin City Council adoption of the Water Forward plan in November 2018 was the culmination of extensive work with the Austin community, a citizen task force, and across multiple City departments, Boards and Commissions, and regional entities.

The plan embraces innovative strategies to address future water challenges including advanced metering infrastructure (AMI) using smart technology and data analytics to identify potential customer leaks, as well as incentives for smart irrigation system controllers. The plan seeks to meet non-potable demands with non-potable source waters through centralized and decentralized strategies. As Austin grows, new development can help to implement onsite reuse strategies or can connect to the City's centralized reclaimed water system to incrementally meet growing demands. In 2021, efforts to implement these Water Forward strategies

included the continuation of AMI meter installation and Council approval of new code language for benchmarking, onsite water reuse, and extension of reclaimed water connection requirements.

Another key component of Water Forward is an Aquifer Storage and Recovery (ASR) facility to save available water during wet times and store it underground, safe from evaporation, for use during drought or other emergency situations. Storage strategies such as ASR stretch Austin's existing surface water supplies and provide community self-sufficiency through a locally-controlled second source of supply. In 2020, Austin's City Council approved negotiation and execution of a contract for Phase 1 ASR services. In March 2021, Austin executed an agreement with HDR for Phase 1a ASR engineering services, which include development of an ASR program and desktop modeling to identify potential sites for piloting. Work on these tasks proceeded in 2021.

Austin Water is implementing the 2018 Water Forward plan as part of an adaptive management approach. Major Water Forward stakeholder engagement efforts during CY21 were limited due to COVID-19 protocols. Austin Water continues to engage in various community, industry, and public events to make presentations and share information about the Water Forward Plan and implementation efforts underway.

In addition to implementing the 2018 Water Forward Plan, in 2021 AW began work to develop the 2024 update to the Water Forward Plan. The update will allow AW to update projections with new data, refine our methodology, and incorporate information about changing conditions as needed.

In addition to regular updates on the Water Forward plan implementation process and review and discussion of various plan elements at Technical Committee meetings, Austin Water also gave regular updates to LCRA on Water Forward implementation at EMC meetings.

## **B.2. Austin Drought Contingency Plan and Water Conservation Plan**

Austin adopted water conservation and drought contingency plans that went into effect in May 2016. These plans include watering restrictions of no more than once a week for automatic irrigation systems and two days a week for hose-end sprinklers during evening or night time hours. Home car washing is allowed with a bucket or auto shut-off hose. Certain irrigation methods, tree bubblers, hand-held watering and drip irrigation are generally allowed any time on any day. Austin has a number of conservation-related rebate programs typically administered through the Austin Water Conservation Division. These provisions remained in place in 2021.



### **B.3. Austin Water Rights Activities**

Austin's Watershed Protection and Development Review Department is considering the use of an inactive rock quarry adjacent to Little Bear Creek, a tributary of Onion Creek, as a means of recharge enhancement to the Barton Springs segment of the Edwards Aquifer. The intent of the additional recharge is to augment flow at Barton Springs. Austin, LCRA and Barton Springs Edwards Aquifer Conservation District entered into an interlocal agreement in 2011. Austin staff worked on a draft water right application for the recharge project and, in August 2013, staff from Austin and LCRA met with TCEQ Water Permitting Division staff for a pre-application meeting. Austin and LCRA worked together to address follow-up items raised by TCEQ staff, including additional surface water modeling and incorporating recent flow data from Little Bear Creek. Austin submitted the water right application to TCEQ on November 4, 2015. At the end of 2021, the Stoneledge Quarry application remained in technical review at TCEQ.

### **B.4. LCRA Water Supply Status**

On Jan. 1, 2021, the combined storage of lakes Buchanan and Travis was 1.508 million acre-feet. ENSO conditions started the year in La Nina status.

- On March 1, 2021, the combined managed storage of lakes Buchanan and Travis was 1.501 million acre-feet. As a result of the combined storage amount, "Normal" water supply conditions were in effect, and up to 178,000 acre-feet of interruptible stored water was available for the first agricultural season of 2021. Environmental flow requirements from March 2021 through June 2021 were set to "Subsistence" levels for instream flows and "OP-3" levels for freshwater inflows to Matagorda Bay.
- On July 1, 2021, the combined managed storage of lakes Buchanan and Travis was 1.665 million acre-feet. As a result of the combined storage amount, "Normal" water supply conditions were in effect, and up to 66,000 acre-feet of interruptible stored water was available for the second agricultural season of 2021. Environmental flow requirements from July 2021 through October 2021 were set to "Subsistence" levels for instream flows and "OP-3" levels for freshwater inflows to Matagorda Bay.
- On November 1, 2021, the combined managed storage of lakes Buchanan and Travis was 1.586 million acre-feet. Environmental flow requirements from November 2021 through February 2022 are set to "Subsistence" levels for instream flows and "OP-3" levels for freshwater inflows to Matagorda Bay.

Inflows to the Highland Lakes were low in 2021. However, runoff from the heavier rain downstream of Mansfield Dam has helped meet water supply needs and resulted in a reduced releases from Mansfield Dam. The year ended with a combined storage of 1.572 million acre-feet on December 31, 2021.





### **B.5. LCRA New Water Supply Projects**

In October 2014, the LCRA Board unanimously approved construction of an off-channel reservoir project in Wharton County. LCRA built the reservoir, named the Arbuckle Reservoir, near Lane City. The reservoir, which formerly was known as the Lane City Reservoir, could add up to 90,000 acre-feet of water to the region's supply. It is the first project that will allow LCRA to capture and store significant amounts of water downstream of the Highland Lakes.

In November 2018, reservoir construction was substantially complete, and initial filling and testing started. In March 2019, after approximately four months of filling, staff observed groundwater seepage outside the exterior of the reservoir. LCRA Dam Safety staff and engineers stopped the filling and emptied the partially filled reservoir. Subsequent engineering analysis and testing have determined that an additional subsurface seepage cutoff wall will be required to control groundwater transference and allow the reservoir to be refilled.

Construction of the new subsurface cutoff wall and other related items necessary to control seepage and allow the reservoir to operate safely are underway.

LCRA owns the groundwater rights associated with the 5,000-acre Griffith League Boy Scout Ranch in Bastrop County, and is seeking permits to drill up to eight wells for the production of up to 25,000 acre-feet of water when the need arises to meet demand. On May 16, 2018, the LCRA Board approved moving forward with permitting and design of the groundwater project. LCRA submitted operation and transport permit applications to the Lost Pines Goundwater District (LPGCD) on Feb. 21, 2018. A hearing at the State Office of Administrative Hearings (SOAH) on the permits was held in October 2019, and a Proposal for Decision was sent to LPGCD in March, 2020. In October, 2021 the LPGCD Board voted to grant production permits for amounts significantly lower than LCRA's applications and transport permits for the full 25,000 acre-feet per year. In November, 2021, LCRA filed a motion for rehearing which was granted in February, 2022 and scheduled for hearing on April 4, 2022.

### **B.6. LCRA Updates to Lakes Buchanan and Travis volumetric surveys**

As a best practice, LCRA periodically performs volumetric surveys of the Highland Lakes to provide updated information for water resources planning and flood operations. LCRA contracted with the Texas Water Development Board for the latest surveys of lakes Buchanan and Travis.

The TWDB Lake Buchanan volumetric survey published in 2020 determined the lake has a reservoir capacity of 880,356 acre-feet and encompasses 22,452 acres at its conservation pool elevation of 1,020 feet above mean sea level (feet msl). The previous survey completed in 2006 determined Lake Buchanan encompassed



22,017 acres. The 2020 survey defined the lake as having a slightly larger area than the 2006 survey, resulting in the conservation storage increasing.

The TWDB Lake Travis volumetric survey published in 2021 determined the lake has a reservoir capacity of 1,115,076 acre-feet and encompasses 19,044 acres at its conservation pool elevation of 681 feet msl. The previous survey completed in 2008 determined Lake Travis encompassed 19,297 acres.

The 2020/2021 surveys determined the combined storage of lakes Buchanan and Travis when full is 1,995,432 acre-feet. This is 0.75 % less than the 2006/2008 combined storage of 2,010,544 acre-feet determined from the 2006/2008 surveys.

LCRA began using the updated values for lakes Buchanan and Travis on May 27, 2021.

### **B.7. LCRA Water Rate Changes**

In October 2021, the LCRA Board approved an increase to the firm water rate to \$155 per acre-foot beginning in 2022. Prior to the change, the rate had been \$145 per acre-foot since 2016.

## **C. Other Activities and Discussions**

### **C.1. Water Conservation Committee**

Austin and LCRA water conservation staff continued their ongoing focus on conservation in 2021. No Water Conservation Committee meeting was held in 2021.

### **C.2. Stakeholder Committee**

No Stakeholder Committee meeting was held in 2021.

### **C.3. Water Quality Committee**

The Water Quality Committee met in 2021 to discuss zebra mussels, harmful algal blooms, and other items.

## **IV. Summary of Planned Year 2022 Activities**

### **A. Upcoming Events**

- Annual briefings to the Austin Water and Wastewater Commission and Austin City Council.
- Updates provided to the LCRA Board, as needed.
- Austin to submit updated 100-year water demand projections (Demand Schedule) to LCRA for use by the partnership.
- Austin Water will continue implementing Water Forward strategies.



**B. Ongoing Activities**

- Continue coordination on water supply and drought response measures and other items being addressed by the Austin-LCRA Water Partnership Technical Committee.
- Coordination on zebra mussel monitoring and remediation.
- Continue to monitor and collaborate on potential HAB risk management strategies.
- Continue coordination on water use reporting.
- Continue coordination regarding LCRA and Austin pending water rights permits at TCEQ.
- Support implementation of the Stoneledge Quarry Recharge Project.
- Continue updates and review of LCRA's Water Supply Resources Report.

**Attachment:**

- A. City of Austin-LCRA Water Partnership Organization Chart.

**Appendix:**

1. Committee Rosters
2. EXHIBIT A - COA and LCRA Water Resource Management Partnership From the: SETTLEMENT AGREEMENT BY AND BETWEEN THE CITY OF AUSTIN AND THE LOWER COLORADO RIVER AUTHORITY REGARDING JOINT WATER RESOURCE MANAGEMENT AND THE RESOLUTION OF CERTAIN REGULATORY MATTERS PENDING AT THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

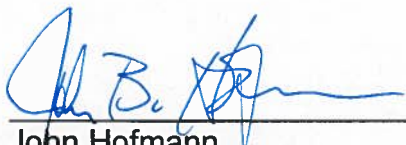
**Approved By:**



Monica Masters  
VP, Water Resources  
Lower Colorado River Authority



Greg Meszaros  
Director, Austin Water  
City of Austin

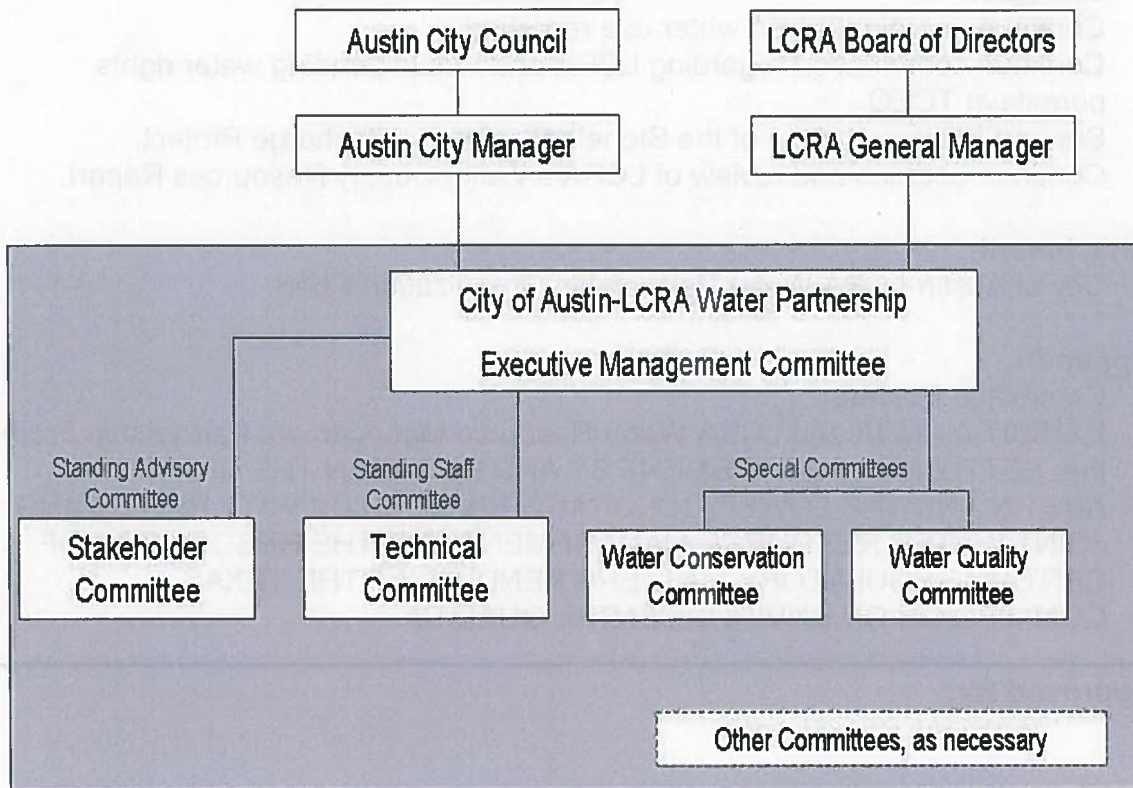


John Hofmann  
Executive VP, Water  
Lower Colorado River Authority



Kevin Critendon  
Assistant Director,  
Austin Water, City of Austin

# City of Austin-LCRA Water Partnership Organization



Attachment A



# Appendix 1 Committee Rosters (as of December 2021)

## Appendices

### Executive Management Committee

City of Austin  
Greg Westens, Director, Austin Water  
Kevin Claxton, Assistant Director, Austin Water  
LCRA  
Monica Masten, Vice President  
John Hoffman, Executive Vice President, Water

### Technical Committee

City of Austin  
Megan Grotz, Engineer, Austin Water  
Teresa Jiles, Managing Engineer, Austin Water  
Ross Crow, Assistant City Attorney, Law Department  
LCRA  
Randy Johnson, Chief Engineer  
Greg Grant, Associate General Counsel

### Water Conservation Committee

City of Austin  
Kevin Claxton, Assistant Director, Austin Water  
LCRA  
Vivian Miller, Manager, Water Contacts and Conservation

### Water Quality Committee

City of Austin  
Kevin Claxton, Assistant Director, Austin Water  
Mike Kelly, Assistant Director, Austin Watershed Protection  
LCRA  
No Ramirez, Associate General Counsel, Legal Services  
Bryan Cook, Manager, Water Quality Protection



# Appendix 1

## Committee Rosters

### (as of December 2021)

#### **Executive Management Committee**

##### City of Austin

Greg Meszaros, Director, Austin Water

Kevin Critendon, Assistant Director, Austin Water

##### LCRA

Monica Masters, Vice President, Water Resources

John Hofmann, Executive Vice President, Water

#### **Technical Committee**

##### City of Austin

Helen Gerlach, Engineer A, Austin Water

Teresa Lutes, Managing Engineer, Austin Water

Ross Crow, Assistant City Attorney, Law Department

##### LCRA

Ronald Anderson, Chief Engineer

Greg Graml, Associate General Counsel

#### **Water Conservation Committee**

##### City of Austin

Kevin Critendon, Assistant Director, Austin Water

##### LCRA

Valerie Miller, Manager, Water Contracts and Conservation

#### **Water Quality Committee**

##### City of Austin

Kevin Critendon, Assistant Director, Austin Water

Mike Kelly, Assistant Director, Austin Watershed Protection

##### LCRA

Vic Ramirez, Associate General Counsel, Legal Services

Bryan Cook, Manager, Water Quality Protection



# Appendix 2

## EXHIBIT A - COA and LCRA Water Resource Management Partnership

From the:

### SETTLEMENT AGREEMENT BY AND BETWEEN THE CITY OF AUSTIN AND THE LOWER COLORADO RIVER AUTHORITY REGARDING JOINT WATER RESOURCE MANAGEMENT AND THE RESOLUTION OF CERTAIN REGULATORY MATTERS PENDING AT THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

EFFECTIVE DATE: JUNE 18, 2007

- 1. Background:** Water is the lifeblood of Central Texas communities. Austin and LCRA have individually employed traditional water management strategies, focusing on solutions that have often unintentionally led to conflict. These conflicts, if left unresolved, may limit the ability of the Parties to meet their responsibilities as major water suppliers. As population growth and economic factors in the region increase the demand for water, the Parties recognize a different approach is needed. Collaborative water management strategies can offer new opportunities to optimize water supply solutions for the region.
- 2. Vision:** Reliable and affordable water, managed in an environmentally responsible and collaborative manner, is critical to the vitality and economy of the region.
- 3. Purpose:** LCRA and Austin, as the two largest water right holders in the lower Colorado River basin, have agreed to develop a cooperative management structure. Through this new approach, the Parties will jointly evaluate and implement strategies to optimize water supplies to meet water needs of their customers and the environment.
- 4. Scope:** The scope of the partnership agreement will include joint water supply planning, as well as the ability to manage both entities' individual raw water supplies as an integrated system. All existing raw surface water supplies, including Return Flows, of each party will be included in this agreement. Future water supplies will be included as approved by the Executive Management Committee.

Day-to-day management and coordination of the river system including flood management, water quality protection and other functions will remain LCRA's



responsibility. Day-to-day water/wastewater utility planning and operations will remain the responsibility of each party.

**5. Cooperative Management Structure:** The Parties shall establish an Executive Management Committee and Technical Water Resources Planning Subcommittee, with the following structure and responsibilities:

**A. Executive Management Committee**

i. Composition: The Executive Management Committee (EMC) will be composed of two representatives each of Austin and LCRA, to be designated by the chief executive officer of each organization.

ii. Duties and Responsibilities: The EMC will be responsible for carrying out the Purpose and Scope as follows:

1. establishing and implementing strategic goals and policies,
2. approval of joint water supply strategies and implementation plans,
3. continued supervision and oversight of approved joint water supply strategies and implementation plans,
4. obtaining any necessary approvals from and ensuring compliance with requirements of each party's governing body,
5. coordination of communication with internal and external stakeholders,
6. ensuring adherence to the decision-making guidelines set forth below,
7. creation and general supervision of any subcommittees necessary to carry out the Purpose and Scope, and
8. developing standard operating procedures and bylaws for the EMC and any subcommittees.

**B. Technical Water Resource Planning Subcommittee.** A Technical Water Resource Planning Subcommittee (Technical Subcommittee) shall be established as follows:

i. Composition: The Technical Subcommittee will be an interdisciplinary committee comprised of members appointed by the EMC.

ii. Duties and Responsibilities. The Technical Subcommittee will be responsible for:





1. Projections of water demands and identification of a wide array of supply alternatives, including Return Flows, and preliminary recommendation of alternatives for consideration by the EMC for further study.
2. In consultation with the EMC, develop any necessary technical analyses and implementation plans for strategies identified for further study.

**C. Decision-making Guidelines**

- i. Consensus decisions of the EMC shall be made using interest-based problem solving, mindful of the standards and mutual interests of the Parties as set forth below.
- ii. The standards against which water supply strategies shall be evaluated include:
  1. Improve relationships between Austin and LCRA
  2. Cost effective and provides value to both Parties
  3. Obtain stakeholder input in an effort to fairly address multiple needs of the region
- iii. The mutual interests of the Parties to be addressed by any water supply strategy selected by the EMC include:
  1. maintaining ownership and protecting the value of each party's individual water rights,
  2. preserving water quality and environmental health of the river and bay system,
  3. improving the Parties' relationship and building trust through enhanced information sharing, cooperation, and partnering,
  4. improving water supply certainty, including enhancing reliability and water availability, and
  5. responsible water resource management, mindful of the Parties commitment to a strong water conservation ethic.
- iv. The Parties may, by consensus, modify the standards and mutual interests to be used in making decisions under this agreement.
- v. If the EMC cannot reach a consensus decisions on whether to pursue particular water supply strategies recommended by the Technical Subcommittee, then the EMC shall request a decision from the chief executive officers of each organization.



## 6. Operating Guidelines:

- A. The Parties agree to designate their representatives to the Water Partnership Executive Management Committee (EMC) within 90 days of the final approval of the Supplemental Water Supply Agreement called for in Paragraph 1V.B of the Settlement Agreement. The Parties also agree to convene an initial meeting of the EMC within 120 days of execution of the Supplemental Water Supply Agreement.
- B. The initial tasks of the EMC include, but are not limited to:
- i. Develop operating procedures and by-laws, to include but not be limited to:
    1. Set meeting schedule to initially include a minimum of one EMC meeting per quarter
    2. Set meeting logistics including chair, chair rotation schedule, meeting location, and record keeping, including meeting minutes, workplans, etc.
    3. Set schedule and process to develop scopes and workplans for tasks to be accomplished by the COA and LCRA Water Resource Management Partnership
    4. Set reporting schedule to include a minimum reporting schedule of at least one report to each the Austin City Council and the LCRA Board every two years
    5. Set regular quarterly meeting format to include, as appropriate, but not be limited to:
      - a. Report by each party on all activities that might affect either party's water rights or water supply, which may include any significant developments in the following:
        - i. status of
          - all water rights applications
          - a water supply development projects (current or proposed Water Management Plan status)
          - any proposed water treatment, wastewater treatment or other related facilities
          - any direct reuse projects
          - water conservation efforts
        - ii. status of joint efforts and suggestions for additional joint effort opportunities
        - iii. updates on studies relevant to water supply availability



- iv. updates on relevant environmental issues and implementation of environmental policies
  - v. relevant legislative updates including new statutes and pending legislation relating to water supply of the Parties
  - vi. Relevant administrative matters before the State Office of Administrative Hearings
  - vii. Updates on significant actions or decisions by the Texas Commission on Environmental Quality
  - viii. Update on water rates revisions
  - ix. Information on water sales, water usage, major diversions, new customers, and projected water demands (short and long-term)
  - x. Update on any LCRA Water Management Plan planned amendments
  - xi. State Region K regional water planning efforts
  - xii. Update on LCRA Board and Austin City Council actions relevant to water supply availability
- b. Subcommittee reports
  - c. Other items as determined
6. Set meeting process to initially include a minimum of two work sessions per year
- a. Work session tasks may include, but not be limited to:
    - i. develop joint basin management strategies in keeping with the mutual interests of the parties as outlined in Exhibit A. Section 5. C. iii., and updated, as needed, by the EMC.
    - ii. develop plans for joint studies and projects,
    - iii. develop any joint resolutions, proposed agreements,
    - iv. Formulate subcommittees, as needed
    - v. Evaluate on-going efforts of the COA and LCRA Water Resource Management Partnership including a re-evaluation of the scope and purpose, including progress of efforts to meet long-term water supply needs
7. Appoint the Technical Water Resource Planning Subcommittee
8. Develop initial scope and workplan to address the following:



- a. Develop initial scope of tasks to be accomplished in the initial two years, including but not limited to:
  - i. As per Settlement Agreement Section VII. D., develop proposal to address maintenance of Town Lake levels
  - ii. Establish process to evaluate and implement joint water management strategies to optimize water supplies
- b. Establish coordination of reporting, operations, and diversions
- c. Develop a list of matters to be monitored by the EMC
- d. Develop process for determining future tasks and work plans, once initial tasks are complete, including development of demand projections ("Demand Schedule")

- a. Work session tasks may include, but not be limited to:
  - i. develop joint water management strategies in keeping with the mutual interests of the parties as outlined in Exhibit A Section 5. C. iii. and attached, as needed, by the EMC.
  - ii. develop plans for joint studies and projects.
  - iii. develop any joint resolution proposal.
  - iv. formulate subcommittees, as needed.
  - v. Evaluate on-going efforts of the COA and LCRA Water Resource Management Partnership including a re-evaluation of the scope and purpose, including progress of efforts to meet long-term water supply needs.
- 7. Appoint the Technical Water Resource Planning Subcommittee.
- 8. Developmental scope and whether to address the following:

