

City of Austin-LCRA Water Partnership 2017 Annual Report

I. Purpose of Annual Report

The City of Austin-Lower Colorado River Authority (LCRA) 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 City of 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 work to collaborate and more effectively manage both entities' water supplies and resources. The Water Partnership in effect formalizes the ongoing 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 Partnership, both entities seek to cooperate, improve communication, and avoid future conflicts.

The 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 for approval.

B. Cooperative management structure

Under the leadership of the Austin City Council and the LCRA Board of Directors, as directed by the 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**.

Committees: General Purpose

The following are brief descriptions of current committees. Committee members during 2017 are listed in **Appendix 1**.



City of Austin and LCRA **WATER PARTNERSHIP**

Executive Management Committee

The Executive Management Committee (EMC) is composed of two members from the City of Austin, designated by the City Manager, and two members from LCRA, designated by the General Manager.

The Executive Management Committee 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.

Technical Committee

The Technical Committee is a standing committee made up of City 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.

Water Conservation Committee

The Water Conservation Committee is a special committee made up of City 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 is also 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 City 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 is also charged with implementing the associated plans and scope of work, as approved by the EMC.

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 the City of Austin and LCRA are considering certain long-term water supply decisions covered by the Supplemental Water Supply Agreement between the City and LCRA.

The Stakeholder Committee members, appointed by the Austin City Council and the LCRA Board of Directors, represent a wide-variety of interests including environmental, rate payers, business, agriculture, conservation, industrial, recreation, and high growth.



III. Summary of Year 2017 Activities

A. Highlights of Austin Municipal Water Supply Discussions

There were no formal discussions directed towards LCRA securing additional municipal supplies for the City of Austin in the previous year. The current municipal supply contract with LCRA, which was negotiated in 1999, will meet the City's demands up to 325,000 acre-feet per year. Note that the City's 2017 annual diversions for municipal purposes was approximately 149,146 acre-feet. According to the Supplemental Water Supply Agreement ("SWSA"), 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 may also occur at any time.

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

1. Water Forward, Austin's Integrated Water Resource Plan

A key recommendation of the City 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 eleven Mayor and Council appointees and additional ex-officio representatives from eight City departments including Austin Energy, Watershed Protection, and the Office of Sustainability and has been holding typically monthly meetings since May 2015. The IWRP is a collaborative effort led by Austin Water (AW) to provide a 100-year plan for demand management and supply-side options for the City. The plan takes into account a wide-range of factors including population growth, drought, and climate uncertainty. The City refers to this effort as Water Forward.

In July 2016 the City contracted with a consulting team to assist in the development of the Water Forward plan. During 2017 key tasks included further development of Austin Water's disaggregated demand model including baseline and climate change scenario water demand forecasts for the years 2020, 2040, 2070, and 2115. Four public workshops have been held since September 2016 in addition to numerous additional public outreach events. During 2017 the Task Force focused on public outreach, screening and evaluation of water supply and demand management options, development of five initial portfolios (portfolios being groupings of options based on themes) and initial portfolio scoring against a set of plan objectives. In addition to regular updates on the planning process and review and discussion of various plan development elements at Technical Committee meetings, AW also gave regular updates to LCRA on the planning process at EMC meetings. Completion of the project is scheduled for mid 2018 with a project report planned.



2. Water Supply Status

Following several years of drought conditions which resulted in combined storage in Lakes Buchanan and Travis rising from 689,432 acre-feet (34% full) at the end of 2014, the Lower Colorado River Basin experienced significant rainfall and streamflows in 2015 and 2016. These conditions contributed the combined storage in Lakes Travis and Buchanan rising to a level of 1,979,729 acre-feet by end of 2016. In 2017, the combined storage level dropped to 1,704,276 acre-feet (85% full) as of December 31, 2017, due in part to the inflows into the Highland Lakes in 2017 being a total of 429,205 acre-feet, which is the eighth lowest yearly inflow total on record. Lake Buchanan storage was at a level of 1015.53 ft-msl and Lake Travis' level was at 669.26 ft-msl on December 31, 2017. LCRA is not currently requesting drought response measures from its customers. However, many customers including the City of Austin have implemented permanent watering restrictions that are in place at all times. In May 2016 the City of Austin adopted permanent "Conservation Stage" watering restrictions of no more than one day per week for automatic sprinkler systems and no more than two days per week for hose-end sprinklers (Austin's Drought Contingency Plan includes additional watering restrictions that may be implemented to reduce water use from Conservation Stage).

Consistent with the 2015 Water Management Plan, interruptible stored water supplies from lakes Buchanan and Travis were available for agricultural customers in the Gulf Coast, Lakeside and Pierce Ranch in 2017. Interruptible supplies will be determined in 2018 based on March 1, 2018 and July 1, 2018 storage levels.

3. LCRA New Water Supply Projects

In January 2012, LCRA's Board of Directors set a goal of increasing LCRA's firm water supply by 100,000 acre-feet per year within the next five years. In October, 2014 the LCRA Board of Directors unanimously approved construction of an off-channel reservoir project in Wharton County. The 40,000 acre-foot off-channel reservoir known as the Arbuckle Reservoir and located near Lane City is expected to be capable of providing up to 90,000 acre-feet of firm water a year. Construction of the reservoir is ongoing and it is expected to be in operation in late 2018.

4. LCRA Soil Moisture Monitoring

In 2014, LCRA began soil moisture monitoring around Gillespie County in coordination with the University of Texas at Austin Jackson School of Geosciences in anticipation of a 2015 launch of the NASA Soil Moisture Active Passive Satellite (SMAP). LCRA updated the EMC on the ongoing collection of the data using LCRA's Hydromet system. Continued collection and research into this area may inform water supply and flood management practices in central Texas. LCRA has begun displaying NASA Land Information System modeled soil moisture on the public hydromet site: Hydromet.lcra.org.



5. Lake Austin Lake Lowering

In October 2016, the City of Austin made a formal request to LCRA for a lowering of Lake Austin to occur in early 2017. The last lowering of Lake Austin had been in 2011. The six week drawdown in 2017 gave lakeside property owners an opportunity to repair and maintain docks, retaining walls and other shoreline property. The lake lowering was also planned to aid in curbing the growth of nuisance aquatic vegetation such as hydrilla and Eurasian watermilfoil. LCRA and the City of Austin coordinated the public communication of this lake lowering. The lowering of Lake Austin began on January 2, 2017 and refilling began on February 9, 2017 with Lake Austin returning to normal operating range by February 13, 2017.

6. 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 TCEQ on March 1, 2012. The application seeks legal authority to use the City of 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. City of Austin and LCRA staff worked with TCEQ on technical review requests. At year-end 2017, TCEQ awaits the outcome of joint efforts by Austin and LCRA on Water Availability Model (WAM) modeling that incorporates the joint application and the anticipated permit.

7. Water Conservation Committee

The City of Austin and LCRA water conservation staffs continued their ongoing focus on conservation in 2017. No Water Conservation Committee meeting was held in 2017.

8. 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. The City has a number of conservation related rebate programs typically administered through the AW Water Conservation Division. The Austin City Council declared June 22, 2017 as Water Conservation Day in honor of ten years of conservation successes by citizens and staff.

9. Stakeholder Committee

No Stakeholder Committee meeting was held in 2017.

10. Water Quality Committee

The Water Quality Committee did not meet in 2017. There was no formal business for the committee to consider.



11. Stoneledge Quarry Recharge Project

The City of 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. The City of Austin, LCRA, and Barton Springs Edwards Aquifer Conservation District entered into an interlocal agreement in 2011. City staff worked on a draft water right application for the recharge project and, in August 2013, staff from the City and from LCRA met with TCEQ Water Permitting Division staff for a pre-application meeting. LCRA and the City 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. The City submitted the water right application to TCEQ on November 4, 2015. The application is currently in technical review at TCEQ.

12. Water Use Reporting

LCRA and the City coordinated on annual TCEQ water use reporting for submittal of TCEQ Water Use Reports for year 2017.

13. LCRA Water Rate Changes

In November 2015 the LCRA Board approved firm water customer water rates that went into effect for calendar year 2016, lowering the firm water rate from the drought rate of \$175 per acre-foot to \$145 per acre-foot. No changes to the water rate was made for 2017.

IV. Brief summary of planned year 2018 activities

Upcoming events:

- Annual briefings to City of Austin Water and Wastewater Commission and Austin City Council
- Updates to the LCRA Board of Directors to be provided, as needed
- LCRA to begin an update to the 2015 LCRA Water Management Plan
- City of Austin to submit updated 100-year water demand projections (Demand Schedule) to LCRA for use by the partnership.

Ongoing Activities:

- Continue coordination on water supply and drought response measures and other items being addressed by the COA-LCRA Water Partnership Technical Committee
- Continue updates on LCRA Water Management Plan related matters
- Continue pursuing the Joint Application for Reuse of City of Austin Return Flows at TCEQ
- 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



**City of Austin and LCRA
WATER PARTNERSHIP**

- Continue updates and review of Austin's Water Forward project (Austin's Integrated Water Resource Plan)
- Continue updates and review of LCRA's Water Resources Plan

Attachment:

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

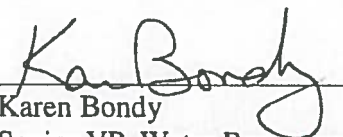
Appendix:


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

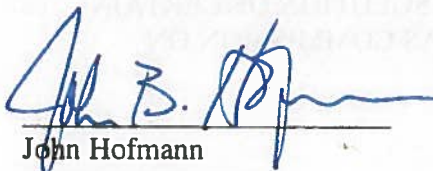



**City of Austin and LCRA
WATER PARTNERSHIP**

Approved By:


Karen Bondy
Senior VP, Water Resources
Lower Colorado River Authority


Greg Meszaros
Director, Austin Water
City of Austin

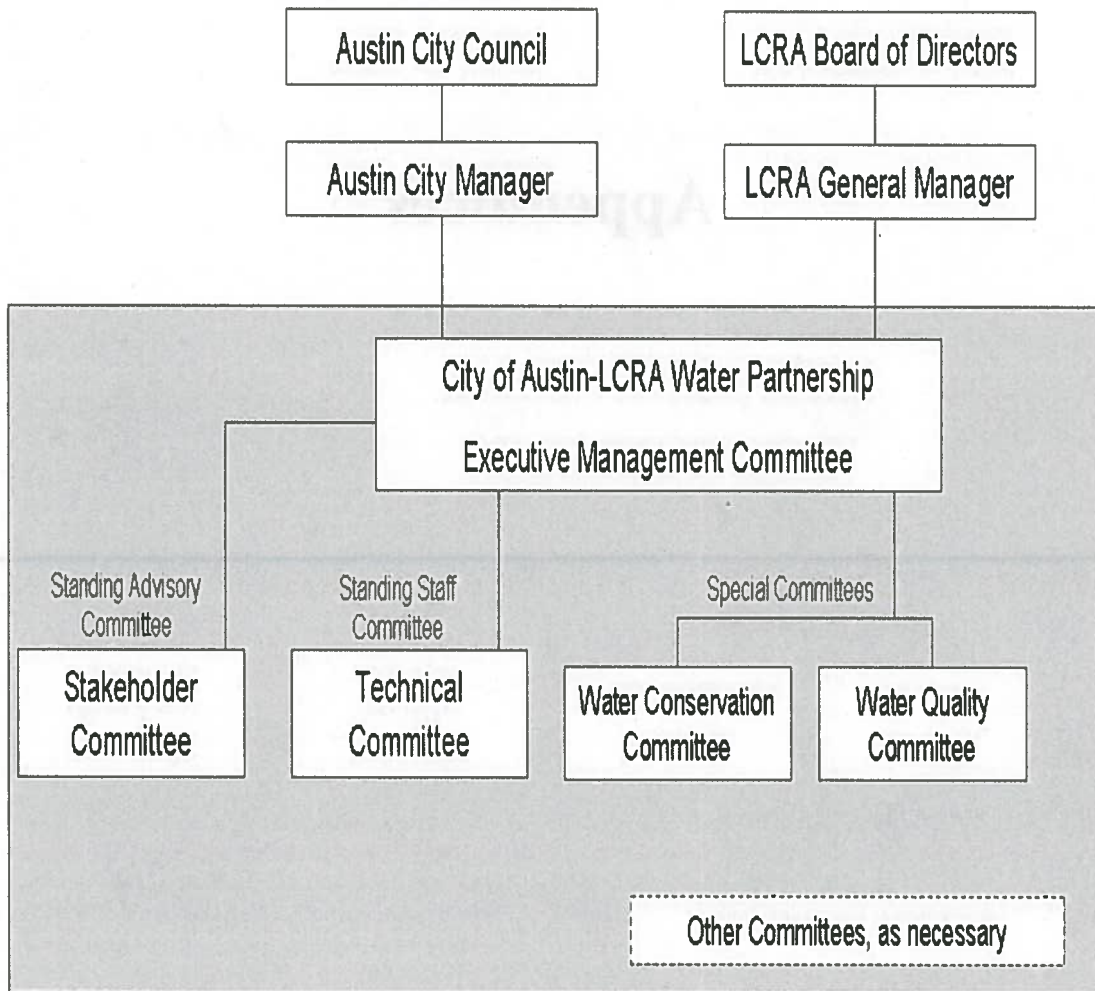

John Hofmann
Executive VP, Water
Lower Colorado River Authority


Robert Goode
Assistant City Manager
City of Austin

Signed March 30, 2018



City of Austin-LCRA Water Partnership Organization



Attachment A



City of Austin-LCRA Water Partnership
Organization

LCRA Board of Directors

Austin City Council

Austin General Manager

Austin General Manager

Appendices



Appendix 1

Committee Rosters

(as of Dec. 2017)

Executive Management Committee

City of Austin

Robert Goode, Assistant City Manger
Greg Meszaros, Director, Austin Water

LCRA

Karen Bondy, Senior Vice President, Water Resources
John Hofmann, Executive Vice President, Water

Technical Committee

City of Austin

Jeff Fox, Project Manager, Austin Water
Teresa Lutes, Managing Engineer, Austin Water
Ross Crow, Assistant City Attorney, Law Department

LCRA

Ronald Anderson, Chief Engineer
Steve Kellicker, Manager, Financial Planning & Analysis
Lyn Clancy, Managing Associate General Counsel & Senior Water Policy Advisor

Water Conservation Committee

City of Austin

Daryl Slusher, Assistant Director, Austin Water
Drema Gross, Austin Water

LCRA

Valerie Miller, Manager, Water Contracts & Water Conservation

Water Quality Committee

City of Austin

Daryl Slusher, Assistant Director, Austin Water
Mike Personett, Watershed Protection Department
Vic Ramirez, Water Quality Protection, LCRA
Bryan Cook, Manager, Water Quality Protection, LCRA



Stakeholder Committee

| Interest Category | Member |
|-------------------|-------------------|
| Agricultural | Robby Cook |
| At large | Mary Ann Hefner |
| Business | Barbara Johnson |
| Business | Hank Smith |
| Conservation | Susan Butler |
| Environmental | Jennifer Walker |
| Environmental | Lonnie Moore |
| High Growth | Jon Beall |
| High Growth | Pete Dwyer |
| High Growth | Clifton Ladd |
| Industrial | Ned Ross |
| Industrial | Dan Wilcox |
| Rate Payers | Katherine Woerner |
| Rate Payers | Marion Sanchez |
| Recreation | Rod Malone |



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")

