- 1. Lauri Gillam called meeting to order at 10:14 a.m.
 - a. Lauri Gillam mentioned that when receiving emails, in accordance with the Open Meetings Act requirements, please do not "reply to all." Members of a governing body (i.e. committee members) cannot correspond with one another regarding planning group business outside an open meeting. All correspondence should be sent directly to Jaime Burke.
- 2. Attendees (23)

Lauri Gillam – Region K Population and Water Demand Committee Chair, Small Municipalities Rep David Wheelock – Region K, River Authority Rep John Burke – Region K, Water Utilities Rep Daniel Berglund – Region K, Small Business Rep Ann McElroy – Region K, Environmental Rep David Lindsay – Region K, Recreation Rep (Alternate) Teresa Lutes – Region K, Municipalities Rep Lann Bookout – TWDB (Region K non-voting member) Jaime Burke – AECOM Alicia Smiley – AECOM James Kowis – James Kowis Consulting, LLC Yun Cho – TWDB Katie Dahlberg – TWDB Stacy Pandey – LCRA Rebecca Batchelder – LCRA Jeff Fox – Austin Water / Region K, Municipalities Rep (Alternate) Helen Gerlach – Austin Water Christianne Castleberry – Castleberry Engineering / Region K, Water Utilities Rep (Alternate) Cindy Smiley – Smiley Law Firm Earl Foster – Lakeway MUD Susan Patton – CTWC Jo Karr Tedder – CTWC Jordan Furnans – LRE Water, LLC

- 3. Public Comments
 - a. No public comments.
- 4. Minutes Approval
 - a. Draft of September 14, 2017
 - i. David Wheelock proposed to add note in (5) Non-Municipal Demand Projections that comments had been provided prior to meeting, and the commenters were not necessarily at the meeting.

- b. Draft of October 31, 2017
 - i. David Wheelock proposed to delete last sentence of (6aii).
 - Dave Lindsay proposed to add the following sentence to (6aiii): See separate meeting handout "Irrigation Demand Metric and Associated Water Conservation Requirements Summary and Excerpts: Court Order from 1988 Adjudication of Water Rights; Certificates of Adjudication held by LCRA; LCRA's Water Management Plans (1989 +)" for full discussion.
- c. John Burke motioned to approve both sets of minutes with the noted changes. David Wheelock seconded. Committee passed.
- 5. Meeting Objectives
 - a. Lauri Gillam commended AECOM for presenting such complicated information and organizing it well for the committee.
 - b. The committee needs to finalize and approve recommendation for presentation to RWPG at the January 10, 2018 meeting.
 - c. Jaime Burke lead discussion on revising:
 - i. Municipal projections based on feedback from October 31st meeting
 - ii. Manufacturing Demands for Travis County
 - iii. Steam Electric for Llano County
 - iv. Irrigation Demands, particularly in:
 - 1. Colorado County
 - 2. Wharton County
 - 3. Matagorda County
- 6. Municipal projections revisions (as discussed at the October 31st meeting.)
 - Letters and emails were sent to WUGs whose draft projections have changed based on the utility boundary versus city boundary methodology agreed upon at the October 31st meeting. The following WUGs requested *not* to change their GPCD based on utility boundaries:
 - i. Bastrop County-Other
 - ii. Kingsland WSC
 - iii. City of San Saba
 - iv. Travis County WCID 17
 - v. North Austin MUD No. 1
 - vi. Teresa Lutes motioned to approve requests. John Burke seconded. Committee passed.
 - b. Travis County
 - i. As a result of Lago Vista not increasing population in draft projection due to lack of sufficient data, unaccounted population was added to City of Austin per request of the City.

- ii. City of Austin will revise request to break municipal request into portion that will fit under the population cap that TWDB staff have agreed to consider, and a supplemental request for the additional population that City of Austin actually expects to see. The RWPG will take the municipal requests up as separate agenda items at the January Region K meeting.
- iii. Region G and Region K need to coordinate to have the same draft projections for City of Leander. Committee came to a consensus to wait for the City to respond and the Region K planning group will decide on draft projections. This is due to incomplete information from City of Leander as of December 7th.
- c. Williamson County
 - Previously, Williamson County-Other population had been revised to zero (0) to reflect moving the entire population under City of Austin. Based on TWDB staff suggestion at October 31st meeting, City of Austin revisited the numbers and determined that 3% of the County-Other population should remain in County-Other. The remaining 97% was moved under City of Austin. This is because while this population may live in the Austin service area, they use wells for water.
- d. John Burke motioned to approve changes as noted above. Dave Lindsay seconded. Committee passed.
- 7. Manufacturing Demands Travis County
 - a. City of Austin is requesting revisions to Manufacturing Demand in Travis County in 2040-2070 beyond what the committee agreed to recommend with the incorporation of the 2015 potentially unaccounted for additional manufacturing water use at the October 31st meeting:
 - i. 2040: 14,853 to 18,299 AFY
 - ii. 2050: 14,853 to 19,491 AFY
 - iii. 2060: 14,853 to 20,683 AFY
 - iv. 2070: 14,853 to 21,876 AFY
 - b. Teresa Lutes provided additional documentation to back this request in the form of a handout. Main points include:
 - When creating manufacturing demands, the North American Industry Classification System (NAICS) codes used by TWDB does not cover all manufacturing in City of Austin, leaving unaccounted water use in the industrial sector.
 - ii. Austin Water's disaggregated demand model projects higher estimates of manufacturing demand than TWDB's current projections.
 - c. TWDB staff asked that City of Austin provide additional data showing how the manufacturing growth will exceed anticipated water use efficiencies. Current trends for the State show water use for manufacturing decreasing even as manufacturing shows growth. City of Austin agreed to provide additional data. David Wheelock motioned to approve City of Austin's Manufacturing Demands projections. John Burke seconded. Committee passed.

- 8. Steam Electric Llano County
 - a. David Wheelock submitted a letter to Region K and presented the request to the committee to revise projections for Llano County. The 2020 water demands projections were developed for each county by using the highest county aggregated steam-electric power water use from 2010-2014. As the Ferguson Power Plant was under reconstruction during that time, the numbers provided for Llano were under-projected. Using 2015-2016 data, Wheelock proposed to alter the Llano County numbers to 1,748 acre-feet/year.
 - b. Committee passed the approval to recommend the requested revision to the Llano County steam-electric demand.
- 9. Irrigation Demands
 - a. Donna Klaeger (Region K, Counties Rep) submitted a letter of support to utilize the 5.25 acrefeet per acre-total water use waste standard requirement as a maximum allowable water usage metric for determining irrigation demand.
 - b. Explanation of various source components that make up the irrigation demands in Colorado, Matagorda, and Wharton Counties (surface water for LCRA Irrigation Districts, surface water for other irrigation water rights, and groundwater) and that the Committee would need to choose a methodology for each component in order to determine the revised total by County.
 - c. Surface Water for LCRA Irrigation Districts
 - i. Discussion of whether demand is at the field or at the point of diversion. Decision that demand is at point of diversion, similar to previous plans.
 - ii. Daniel Berglund noted that the total surface water numbers presented in 10/5/17 memo of 419,601 AF is less than 2015 LCRA WMP interim demands of 438,500 AF, and less than the 464,000 AF actually used in 2011.
 - iii. Discussion whether 5.25 AF/A is a legal requirement, and that showing demands higher than that allows for wasted water.
 - iv. Discussion focusing on 5.25 AF/A requirement for irrigation, rather than historical use, being a different methodology than other water use categories.
 - v. Showing historical use shows what happens if nothing changes, and pushes the effort to look at conservation.
 - vi. Concern that after 30 years, Gulf Coast Irrigation District has not made effort to reduce water use.
 - vii. Conservation projects being done in Gulf Coast with grant funding that is available because of water management strategies listed in the Region K Water Plan.
 - viii. Discussion of irrigation demand projections for Colorado, Matagorda, and Wharton counties being flat versus decreasing each decade. Committee fairly comfortable with decadal decrease of 2.69% over planning horizon, which is what Region K used in the last planning cycle.
 - ix. Motion made by David Wheelock to recommend to Region K RWPG to accept the surface water numbers in the 10/5/17 memo, as summarized in 12/7/17 meeting

> Handout 6 Item 1.a. for the 2020 demand. Include a reduction of 2.69% per decade for future decades. The RWPG will work to identify water management strategies that focus on conservation, along with possible other strategies. Lauri Gillam seconded. Motion passed, Dave Lindsay voted no.

- d. Surface Water for other irrigation water rights
 - i. Options presented included 1)last cycle's numbers (90th percentile of 2000-2011 water use), 2) 2011 water use, and 3) average of 2010-2014 water use.
 - ii. Some concern that Colorado County numbers for the second two options are too low and don't reflect a true demand.
- e. Groundwater
 - i. Options presented included 1) 2011 water use, and 2) average 2010-2014 water use.
 - ii. Some discussion, but no strong opinion for one option versus another.
- f. Committee felt that because the TWDB draft projections used an average 2010-2014 water use, they would recommend that method for both the groundwater component and the surface water for other irrigation rights component. Ann McElroy made the motion, David Wheelock seconded, motion passed.
- g. Additional Supplemental water discussion. David Wheelock mentioned that although supplemental (non-rice) water use had been included for the Gulf Coast irrigation district numbers, it hadn't been included for Lakeside irrigation district because in 2011, there wasn't a demand at Lakeside. Because there possibly should be, David Wheelock requested that 2,000 acres at 1.2 AF/A be added to the Lakeside irrigation district demand. Committee approved the motion.
- h. Committee also approved to apply the 2.69% demand decrease per decade to the entire irrigation demand in Colorado, Wharton, and Matagorda counties.
- i. Resulting breakdown of revised irrigation demands by county, and the projection of the 2020 demands out to 2070 see attached sheet.
- 10. Additional Discussion
 - a. Teresa Lutes wanted to encourage the Committee and the RWPG to take the information regarding irrigation water use that has been presented and discussed, and use it to identify conservation water management strategies in the 2021 Plan that will specifically reduce water demand, acknowledging that the recommended water demands based on historical water use have room for improvement and the region should do what it can to help make that happen. She also wanted to clarify the planning process and how it is broken into steps that are somewhat separate from each other. First step is to identify water demands, based on historical water use or some other determined methodology. Second step is to identify existing available water and supplies during drought conditions, separate from the demands. Third step is to compare the demands and existing water supplies to determine where there are "needs", or water shortages. Fourth step is to identify potential water management strategies, such as conservation or new water supply projects, to help meet the water

shortage. Including strategies/projects in the regional water plans allows the State to help provide financing to implement the projects, and helps to show specifically what projects need to occur in order to increase supply or reduce demand where it's needed.

11. Next meeting

- a. No meeting scheduled
- 12. New / Other Business
 - a. None.
- 13. Public Comments limit 3 minutes per person
 - a. Jordan Furnans, LRE Water, LLC.
 - Concerned that the Committee's recommendation of average 2010-2014 water use for the smaller non-LCRA irrigation water rights in the lower basin is not a good representation of normal water demand. Believes that the numbers used in the last cycle (90th percentile of 2000-2011 water use) are a better representation.
 - ii. Believes use of 2011 planted acreage for calculating irrigation demands may be too high for future dry-year water demands based on changes to "open supply" concept.
 - iii. Subsidence District study is coming out soon
- 14. Lauri Gillam adjourned at 2:10 p.m.

| Irrigation District | Surface Water I | Demand (AFY) | | |
|--|--|-----------------------|-------------------------|-------------------------------|
| | Region K | Region P | | |
| Garwood | 84,000 | 16,000 | | |
| Lakeside* | 135,311 | | | |
| Pierce Ranch | 30,000 | | | |
| Gulf Coast** | 156,690 | | • | |
| Total | 406,001 | 16,000 | | |
| Irrigation District | Surface Water | r by County in R | egion K (AFY) | |
| | Colorado | Wharton | Matagorda | |
| Garwood 1 | 84,000 | 0 | 0 | |
| Lakeside ² | 55,478 | 79,833 | 0 | |
| Pierce Ranch ³ | 0 | 30,000 | 0 | |
| Gulf Coast ⁴ | | 7,835 | 148,855 | |
| Other SW Rights in Lower Basin ⁵ | 94 | 2,885 | 8,814 | |
| Total | 139,572 | 120,553 | 157,669 | |
| | Groundwater | by County in R | egion K (AFY) | |
| | Colorado | Wharton | Matagorda | |
| Avg 2010-2014 Use | 33,540 | 68,557 | 33,919 | |
| | Total Demand | by County in R | egion K (AFY) | |
| | Colorado | Wharton | Matagorda | |
| Revised Projection | 173,112 | 189,110 | 191,588 | |
| Draft TWDB Projection | 123,682 | 147,543 | 109,595 | |
| *Includes 2,400 AF of Supplemental W: **Includes 20,024 AF of Supplemental | Water (non-rice irri | | | |
| | Colorado Co. | | | |
| ¹ Region K portion of Garwood is 100% ² Intenside in 41% Colorado Co. 50% W | | | | |
| ² Lakeside is 41% Colorado Co., 59% W | | | | |
| ² Lakeside is 41% Colorado Co., 59% W ³ Pierce Ranch is 100% Wharton Co. | harton Co. | | | |
| ² Lakeside is 41% Colorado Co., 59% W ³ Pierce Ranch is 100% Wharton Co. ⁴ Gulf Coast is 92% Matagorda Co., 8% | harton Co. Wharton Co. | Christi (TCEO W | ster Hre Persons A | 20 |
| ² Lakeside is 41% Colorado Co., 59% W ³ Pierce Ranch is 100% Wharton Co. | harton Co. Wharton Co. | s Christi (TCEQ W | ater Use Reports A | werage 20 |
| ² Lakeside is 41% Colorado Co., 59% W ³ Pierce Ranch is 100% Wharton Co. ⁴ Gulf Coast is 92% Matagorda Co., 8% | harton Co. Wharton Co. , STPNOC, & Corpus | | - | |
| ² Lakeside is 41% Colorado Co., 59% W ³ Pierce Ranch is 100% Wharton Co. ⁴ Gulf Coast is 92% Matagorda Co., 8% ⁵ Surface water rights other than LCRA | harton Co. Wharton Co. , STPNOC, & Corpus | nmittee Recom | mended Revision | ns to Irrig |
| ² Lakeside is 41% Colorado Co., 59% W ³ Pierce Ranch is 100% Wharton Co. ⁴ Gulf Coast is 92% Matagorda Co., 8% ⁵ Surface water rights other than LCRA, Projections | harton Co. Wharton Co. , STPNOC, & Corpus Con 2020 | nmittee Recom 2030 | mended Revision 2040 | ns to Irrig 2050 |
| ² Lakeside is 41% Colorado Co., 59% W ³ Pierce Ranch is 100% Wharton Co. ⁴ Gulf Coast is 92% Matagorda Co., 8% ⁵ Surface water rights other than LCRA | harton Co. Wharton Co. , STPNOC, & Corpus | nmittee Recom | mended Revision | ns to Irrig 2050 159,51 |

169,569 165,008 Total (Lower Basin) 553,810 538,912 524,416 510,309 496,582 483,225 582,407 567,509 553,013 525,179 Total (Region K) 538,906 511,822

2070

151,048

167,169