

**Lower Colorado Regional Water Planning Group
Water Modeling Committee Meeting
AECOM, Barton Springs Conference Room
October 23, 2019**

1. Teresa Lutes called meeting to order at 1:06 p.m.

2. Attendees (13)
Committee Members:
Teresa Lutes – Region K Water Modeling Committee Chair, Municipalities Rep
David Wheelock – Region K, River Authority Rep
Doug Powell – Region K, Recreation Rep
Jason Ludwig – Region K, Electric Utilities Rep
David Bradsby – Region K, TPWD Rep
Jim Luther – Region K, Burnet County Rep
Ann McElroy – Region K, Environmental Rep

Additional Attendees:
Jaime Burke – AECOM
Alicia Smiley – AECOM
Joe Trungale – Trungale Engineering
Richard Hoffpauir – Hoffpauir Consulting
Rebecca Batchelder – LCRA
Leonard Oliver – LCRA

3. Public Comments
 - a. None.

4. Minutes Approval
 - a. Draft of July 11, 2018.
 - i. Doug Powell motioned to approve minutes. David Wheelock seconded. Committee approved minutes.

5. Region K Draft Chapter 3 Comments
 - a. Committee reviewed comments submitted by LCRA.
 - i. 3.2.1.1.2.2 – Table 3.2 – The original availability for STPNOC (71,030 ac-ft/yr) was shown as the run-of-river volume averaged over Region K’s drought of record (2008-2016) plus the LCRA backup for that time period (~19,000 ac-ft/yr). LCRA expressed concern that the firm yield for STPNOC’s reservoir is defined by the 1950s drought, not the new drought, and that by using the new drought, the RWPG is overestimating the amount of water available. Consultant performed a new firm yield analysis on STPNOC’s reservoir; firm yield was run with hydrology through 2016 while the defining drought was in the 1950s. Jason Ludwig confirmed that the new availability of 66,260 ac-ft/yr is representative.

Although the new firm yield analysis resulted in a supply resulting in a water shortage, the committee agreed to proceed with new methodology.

- ii. Section 3.2.1.1.2.2 – Ann McElroy expressed concern that Goldthwaite was discussed in Chapter 3. Jaime Burke explained the reservoirs listed are existing, not proposed, reservoirs; proposed reservoirs are included in Chapter 5.
- iii. Section 3.2.1.1.2.2 – David Wheelock wanted to know why the Llano Reservoir availability of 271 ac-ft isn't included in Table 3.2. Jaime Burke responded that it is considered run-of-river right rather than a reservoir; consultant will add an asterisk noting Llano's availability as a run-of-river right.
- iv. Section 3.2.1.1.2.3 – Table 3.3
 - 1. Teresa Lutes and Richard Hoffpauir requested hiding water rights where there are blanks in the diversion column, as it simplifies presentation and does not affect other tables.
 - 2. Teresa Lutes commented that in future cycles, the authorization for 21,403 ac-ft/yr should be 22,403 ac-ft/yr. A temporary 1,000 ac-ft authorization to be used for irrigation has since become a permanent authorization for multiple uses. Consultant will add a footnote clarifying this information.
- v. David Wheelock requested that all aquifer availability tables indicate whether or not the availability is based on the Modeled Available Groundwater (MAG).
- b. Committee reviewed comments submitted by David Lindsay in an August 15, 2019 email.
 - i. Section 3.2.1 – Added text to bullet point noting that firm yield calculation does not provide for any reserve during a Drought of Record determination.
 - ii. Section 3.2.1.1.2.1 – LCRA provided real-time language edits to better describe the status and operations of the water in the Highland Lakes System.
 - iii. Section 3.2.1.1.2.2 – Suggested edit to change text to reflect that the new Arbuckle Reservoir is not yet operational due to a leaking problem will not be changed as the Arbuckle expected to be in operations by the end of 2020.
 - iv. Section 3.2.3 – Given that the region recently experienced a new Drought of Record, and run-of-river is linked to the lowest historical flows, Lindsay expressed concern to see that Table 3.24 showed an increase of 40,000 for Gulf Coast in the run-of-river category and 25,000 for STP Nuclear. Committee discussed methodology of sources and noted that STP may change.

6. Region K Cutoff Model

- a. Joe Trungale presented the hydrologic variance modeling assumptions used to create the Region K Cutoff Model.
- b. After the hydrologic variance is applied, the Highland Lakes go dry during the most recent Drought of Record (DOR). Triggers within this model needed adjustment to ensure interruptible water isn't provided before the Highland Lakes go dry.
 - i. Trungale changed triggers for automatic transitions to extraordinary drought using look-ahead logic, which cuts off interruptible water. In this situation, 2060

is highest demand decade, and the Highland Lakes go dry for a month with no interruptible water.

1. Committee discussed how model should be reported in the RWP. Last cycle, it was presented as an average over the DOR.
2. David Wheelock asked if model included run-of-river. Trungale responded that this is just the backup water from Highland Lakes – this is for Lakes Buchanan and Travis interruptible stored water.
3. Trungale highlighted implications of model regarding environmental flows and water available for irrigation. Committee discussed impacts of strategies other than return flows. The model baseline is needed to quantify strategy benefit/yield.
 - a. David Wheelock said the environmental benefit baseline should include return flows. Teresa Lutes disagreed, as it could create an invalid environmental analysis. Richard Hoffpauir suggested two runs.
 - b. Environmental impacts will be reported cumulatively not by individual strategy. Committee may need to meet again to discuss environmental impacts or pass responsibility over to strategy committee once strategies are adopted.

7. Public Comments

- a. None.

8. Teresa Lutes adjourned at 3:05 p.m.