# **Region K Public Meeting**

August 29, 2018

Lower Colorado Regional Water Planning Group (Region K)



August 29, 2018

### Agenda

### ............

- 1. Call to Order
- 2. Welcome and Introductions
- 3. Receive public comments
- 4. Attendance Report
- 5. Consent Agenda
- 6. Texas Water Development Board
- 7. Committee Reports



#### ............

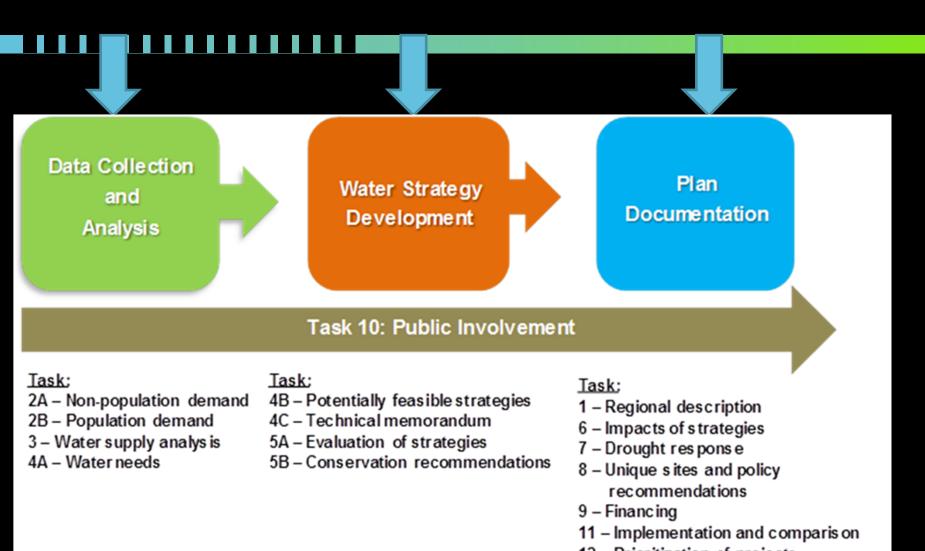
# Agenda Item 8 CONSULTANT STATUS REPORT

Region K

AECOM

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## 8. Consultant Status Report

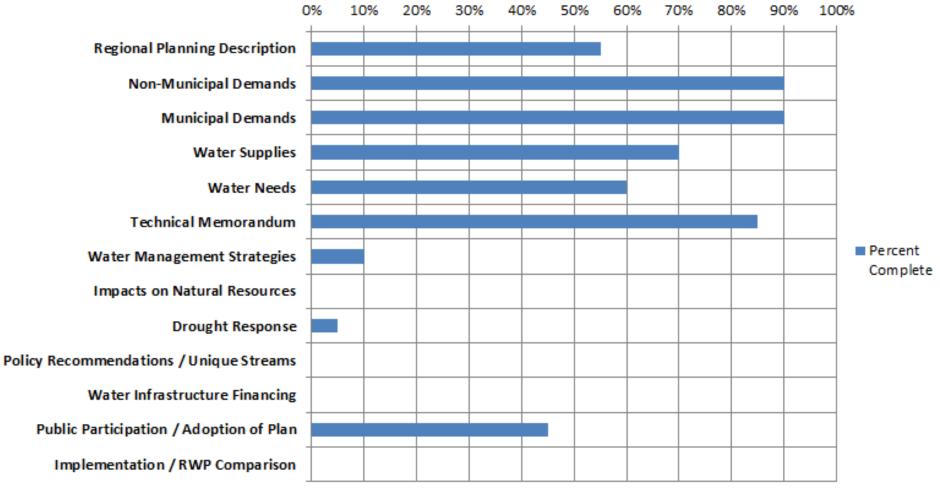


12 - Prioritization of projects

#### AECOM

### 8. Consultant Status Report

#### 2021 Region K Plan Task Percent Complete



#### All tasks are now partially or fully funded



## 8. Consultant Status Report Effort since last meeting (July 11, 2018)

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- Water Availability and Supply
  - Updates to water supplies using survey responses and other sources of data.
  - Entering of data into TWDB DB22 database.
  - Coordination with other regions regarding shared sources and supplies.
  - Minor correction to Region K Cutoff Model, consistent with methodology approved by RWPG at July meeting.
    - Irrigation rights subordination to Austin corrected IND to MUL demand pattern.
    - Reran models. Minor adjustment to Firm Yield of Highland Lakes. Some changes to ROR rights.

Model Results	2020	2030	2040	2050	2060	2070
July RWPG Mtg Highland Lakes FY (AF)	384,802	384,089	383,397	382,693	381,991	381,277
Updated Highland Lakes FY (AF)	384,877	384,174	383,420	382,768	382,025	381,251



## 8. Consultant Status Report Effort since last meeting (July 11, 2018)

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### Water Availability and Supply – ROR availability changes

Water Right		Maximum		July Mtg	Updated	Updated - July Mtg	
Number	Water Rights Holder	Permitted Diversion	Priority Date	2020	2020	2020	
5434	LCRA - Garwood	133,000	Nov 1, 1900	121,845	121,845	0	
	Garwood	Sub-Total		121,845	121,845	0	
5475	LCRA - Lakeside #1 Sr	52,500	Jan 4, 1901	2,856	2,780	-76	
5475	LCRA - Lakeside #1 Jr	78,750	Nov 1, 1987	0	0	0	
5475	LCRA - Lakeside #2	55,000	Sep 2, 1907	2,912	2,912	0	
	Lakeside #1 and #2	Sub-Total		5,768	5,692	-76	
5476	LCRA - Gulf Coast Sr	228,570	Dec 1, 1900	56,337	53,815	-2,522	
5476	LCRA - Gulf Coast Jr	33,930	Nov 1, 1987	0	0		
	Gulf Coast	Sub-Total		56,337	53,815	-2,522	
5477	LCRA - Pierce Ranch	55,000	Sep 1, 1907	2,912	2,912	0	
	Pierce Ranch	Sub-Total		2,912	2,912		
						0	
5471	City of Austin - (mun.) <sup>1, 2</sup>	250,000	Jun 30, 1913	183,819	150,765	-33,054	
5471	City of Austin - (mun.) <sup>1</sup>		Jun 30, 1913	1,197	34,798	33,601	
5471	City of Austin - (mun.) <sup>1</sup>	21,403	Jun 27, 1914	8,583	8,583	0	
5471	City of Austin - (stm.)	24,000	Jun 27, 1914	4,084	4,140	56	
5471	City of Austin - (stm.)		Jun 27, 1914	396	396	0	
5489	City of Austin - (mun.) <sup>1</sup>	20,300	Aug 20, 1945	7,247	7,247	0	
5489	City of Austin - (stm.)	16,156	Aug 20, 1945	0	0	0	
5489	City of Austin - (stm.) 1		Aug 20, 1945	5,099	5,100	1	
5437	STP Nuclear Operating Co. <sup>1</sup>	102,000	Jun 10, 1974	71,030	71,030	0	
5434	City of Corpus Christi <sup>3</sup>	35,000	Nov 2, 1900	22,101	22,101	0	
	Totals	1,433,200		490,418	488,423	-1,995	



# 8. Consultant Status Report Effort since last meeting (July 11, 2018)

- Water Needs
  - Water needs calculated by comparing supplies and demands.
- Technical Memorandum
  - Prepared draft Tech Memo for posting and presentation at today's meeting.

#### Drought Response

- Started reviewing drought triggers and responses based on updated drought contingency plans and for new Water User Groups.
- Preparation of draft partial scope of work for Task 5A evaluation of water management strategies for RWPG consideration. (later agenda item)



# 8. Consultant Status Report Upcoming effort

- .............
- Submit Technical Memorandum deliverable to TWDB, pending RWPG approval.
- Submit partial Task 5A Scope-of-Work for evaluating strategies to TWDB, pending RWPG approval.
- Chapters 1 4 text updates for RWPG review.
- Work with Water Management Strategies Committee to consider additional strategies for evaluation to present to RWPG and complete Task 5A scope of work. Consider based on needs, input from Water User Groups, and initial qualitative analysis.



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Agenda Item 9

# PRESENTATION OF DRAFT REGION K TECHNICAL MEMORANDUM

Region K

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- Technical Memorandum is first deliverable due to TWDB for this planning cycle.
- ▼ To be administratively complete, it must include:
  - TWDB Database Reports (see Attachment A of Memo)
  - Methodologies and model assumptions for hydrologic variances, and the original unmodified availability numbers.
  - Information such as versions and dates of all WAM models and runs used in determining surface water availabilities and the electronic models.
  - Documented process to identify potentially feasible water management strategies.
  - Single list of all potentially feasible strategies identified to date. (See Attachment B of Memo)
  - Declaration of whether or not the RWPG wishes to pursue simplified planning.



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### ▼ TWDB Database Reports (Attachment A) include:

- Water User Group (WUG) Population
- Water User Group (WUG) Demand
- Water User Group (WUG) Category Summary
- Source Availability
- Water User Group (WUG) Existing Water Supply
- Water User Group (WUG) Needs/Surpluses
- Source Water Balance
- Source Data Comparison to 2016 Regional Water Plan
- WUG Data Comparison to 2016 Regional Water Plan



# Methodologies

#### - Groundwater Availability

- Modeled Available Groundwater (MAG) volumes used for majority of the groundwater sources.
- Several groundwater sources do not have MAG volumes because the GMAs identified the sources as non-relevant for joint planning purposes. Other methodologies used:
  - Ellenburger-San Saba Aquifer (Blanco County, Colorado and Guadalupe Basins)
    - » The availability was determined based on the effective recharge listed in the GTA Aquifer Assessment 10-01 MAG for GMA-9 (TWDB, June 22, 2011).
  - Ellenburger-San Saba Aquifer (Llano County, Colorado Basin)
    - » The availability was determined based on the 5-foot drawdown total pumping volume listed in the GTA Aquifer Assessment 08-08 for GMA-7 (TWDB, August 31, 2010).
  - Hickory Aquifer (Blanco County, Colorado Basin)
    - » The availability was determined based on the estimated recharge listed in the GAM Run 18-003 Blanco-Pedernales Groundwater Conservation District Groundwater Management Plan (TWDB, April 3, 2018).
  - Marble Falls Aquifer (Blanco County, Colorado Basin)
    - » The availability was determined based on the estimated recharge listed in the GAM Run 18-003 Blanco-Pedernales Groundwater Conservation District Groundwater Management Plan (TWDB, April 3, 2018).



# Methodologies (continued)

- Several groundwater sources do not have MAG volumes because the GMAs identified the sources as non-relevant for joint planning purposes. Other methodologies used:
  - Other Aquifer (Bastrop County, Colorado Basin)
    - » The availability was determined based on TCEQ Drinking Water Watch (DWW) database listed total production for City of Bastrop, along with published TWDB historical groundwater pumpage data for Bastrop County WCID 2 and Mining in Bastrop County, Colorado Basin. Same methodology used for 2016 Plan.
  - Other Aquifer (Burnet County, Brazos Basin)
    - » The availability was determined based on mining groundwater usage listed in the TWDB historical groundwater pumpage data. Same methodology used for 2016 Plan.
  - Other Aquifer (Burnet County, Colorado Basin)
    - » The availability was determined based on discussion with Central Texas Groundwater Conservation District regarding alluvial permits and Granite/Granite Gravel Aquifer permits, as well as published TWDB historical groundwater pumpage data for other/unknown aquifers for exempt uses. Same methodology used for 2016 Plan.
  - Other Aquifer (Fayette County, Colorado Basin)
    - » The availability was determined based on discussion with Fayette County Groundwater Conservation District regarding alluvial supplies during the 2016 planning cycle. No changes to the methodology for this cycle.

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# Methodologies (continued)

- Several groundwater sources do not have MAG volumes because the GMAs identified the sources as non-relevant for joint planning purposes. Other methodologies used:
  - Other Aquifer (Llano County, Colorado Basin)
    - » The availability was determined based on review of published TWDB historical groundwater pumpage data for County-Other, Kingsland WSC, and Livestock in Llano County. Same methodology used for 2016 Plan.
  - Other Aquifer (Travis County, Colorado Basin)
    - » The availability was determined based on review of published TWDB historical groundwater pumpage data for water uses in Travis County. In addition, the TCEQ DWW database lists the source of the City of Manor's groundwater wells as alluvial. Same methodology used for 2016 Plan.
  - Other Aquifer (Travis County, Guadalupe Basin)
    - » The availability was determined based on review of published TWDB historical groundwater pumpage data for water uses in Travis County. Same methodology used for 2016 Plan.
- UPDATE to GMA-7 MAG numbers since posting of Tech Memo.
  - TWDB staff recommend adding a sentence to the Tech Memo noting that the Marble Falls Aquifer in San Saba County has changed from a MAG to a non-MAG during the draft period, and we will be reviewing its methodology prior to the Initially Prepared Plan.



# Methodologies (continued)

#### • UPDATE to GMA-7 MAG numbers since posting of Tech Memo.

Current DB22 Source Name	DB22 Source Name after GMA 7 MAG Adopted	RWPA	County	River Basin	Current DB22 Groundwater MAG Type	DB22 Groundwater MAG Type after GMA 7 MAG Adopted	Source Availability (acre-feet/year) 2020	Source Availability (acre-feet/year) 2020 after GMA 7 MAG Adopted	2020 Difference
EDWARDS-TRINITY-PLATEAU	EDWARDS-TRINITY- PLATEAU, PECOS VALLEY, AND TRINITY AQUIFER	к	Gillespie	Colorado	MAG	MAG	4,860	4,843	(17)
EDWARDS-TRINITY-PLATEAU AOUIFFR	EDWARDS-TRINITY- PLATEAU, PECOS VALLEY, AND TRINITY AQUIFER	к	Gillespie	Guadalupe	MAG	MAG	136	136	0
	ELLENBURGER-SAN SABA AQUIFER	к	Gillespie	Colorado	MAG	MAG	6,270	6,294	24
	ELLENBURGER-SAN SABA AQUIFER	к	Gillespie	Guadalupe	MAG	MAG	1	0	(1)
	ELLENBURGER-SAN SABA AQUIFER	К	San Saba	Colorado	PARTIAL MAG	MAG	10,893	7,890	(3,003)
HICKORY AQUIFER	HICKORY AQUIFER	К	Gillespie	Colorado	MAG	MAG	1,659	1,751	92
HICKORY AQUIFER	HICKORY AQUIFER	К	Gillespie	Guadalupe	MAG	MAG	0	0	0
HICKORY AQUIFER	HICKORY AQUIFER	К	San Saba	Colorado	MAG	MAG	1,479	7,680	6,201
MARBLE FALLS AQUIFER	MARBLE FALLS AQUIFER	к	San Saba	Colorado	MAG	NON-MAG	11,063	11,063	0



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- Methodologies (continued)
  - Surface Water
    - TCEQ Guadalupe-San Antonio River Basin WAM Run 3 (unmodified) used to determine firm yield of Blanco Reservoir.
    - Region K Cutoff Model used to determine surface water availability volumes in the Colorado River Basin and Brazos-Colorado Coastal Basin, including the firm yield of the Highland Lakes reservoir system.
    - Correction to model run date listed on page 3 (b.2.c.) should be August, not July.



#### ............

Documented Process for Identifying Potentially Feasible WMS

- Process presented and approved on April 11, 2018.
- Process is documented in the Memo in Section 2.
- List of Potentially Feasible WMS Identified by Region K to Date.
  - Attachment B of Memo
  - Uses template provided by TWDB to identify categories of strategies that are potentially feasible for the various Water User Groups.
  - List mainly based on strategies from 2016 Plan and feedback from WUGs and WWPs this cycle.



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### Statement on Simplified Planning

- Statement in Tech Memo that Region K does not plan to pursue simplified planning.
- The 85<sup>th</sup> Legislative Session provided RWPGs the option to implement simplified planning if there are no significant changes to the water availability, water supplies, or water demands in the region.
- Simplified planning allows for a limited update to a regional water plan and a reduced work effort during the plan development during offcensus cycles. Reduced work effort would include limited updates to water management strategies and several chapters of the plan.
- Recommend that Region K not pursue simplified planning due to new WUGs, changed demands, changed water availability and supply numbers, and determined water needs.



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Submittal and posting requirements:

- Approve submittal of the Tech Memo at a regular RWPG meeting
- Agenda for RWPG meeting to be posted 14 days before
- TWDB recommends Tech Memo is available for review 1 week prior to meeting date
- Public comments are accepted for up to 14 days following the meeting
- Tech Memo is due to TWDB by September 10, 2018
- Public comments received within the 14-day period, but after the Tech Memo due date, will be submitted to TWDB when the comment period ends.



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Agenda Item 10

# RECEIVE ORAL AND WRITTEN PUBLIC COMMENTS ON THE DRAFT TECHNICAL MEMORANDUM

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### **10.** Public Comments on Technical Memorandum

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- Public comments may be provided either orally or in written form at this meeting.
- Additionally, comments will be received through September 12, 2018.

Send written comments to: Mr. John Burke, Region K Chairman c/o LCRA (Administrative Agent) P.O. Box 220 Austin, TX 78767 administrative@regionk.org

 All comments received by September 12, 2018 will be submitted to TWDB.



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# Agenda Item 11 **TAKE ACTION REGARDING DRAFT TECHNICAL MEMORANDUM**

Region K

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## **11. Take Action on Technical Memorandum**

#### ...........

- Consider approval to authorize the Technical Consultant to address the Planning Group changes to the draft Region K Technical Memorandum.
- Consider approval to authorize the Technical Consultant to submit the Region K Technical Memorandum to TWDB by September 10, 2018.
- Consider approval to authorize the Technical Consultant to submit public comments that are received by September 12, 2018, to TWDB.

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# Agenda Item 12 DRAFT TASK 5A PARTIAL SCOPE OF WORK FOR EVALUATION OF WMS

Region K

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### **12. Draft Task 5A Partial Scope of Work**

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### Water Management Strategy Evaluation Task

- TWDB has allocated budget for this task (\$319,178).
- RWPG is required to prepare a scope of work for each strategy evaluation they want to perform.
- This scope of work must be presented for public input and RWPG approval before submitting to TWDB for their approval.
- The RWPG does not have to submit the entire scope of work at once. It can be submitted in pieces.
- It is recommended to leave a portion of the budget unallocated in case an unexpected strategy needs to be evaluated later in the process.
- TWDB must approve scope of work and issue Notice-to-Proceed before task work is allowed to begin.



### **12. Draft Task 5A Partial Scope of Work**

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- Water Management Strategy Evaluation Task
  - See Handout
  - Strategies initially scoped include:
    - Drought Management
    - Basic and Advanced Water Conservation Strategies
    - Expand Use of Local Groundwater
    - City of Austin Return Flows
  - Strategies chosen based on large number of WUGs served by them in 2016 Plan or in order to start developing the strategy version of the Cutoff Model.
  - \$232,178 remaining for additional strategies (Oct-Jan).
  - Requesting input from RWPG and the public on the partial scope.



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Agenda Item 13

# RECEIVE PUBLIC COMMENTS ON DRAFT TASK 5A PARTIAL SCOPE OF WORK

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Agenda Item 14

# CONSIDER AND TAKE ACTION ON DRAFT TASK 5A PARTIAL SCOPE OF WORK

## 14. Take Action on Draft Task 5A Scope of Work

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- ▼ Consider approval of Task 5A Partial Scope of Work.
- Consider approval to authorize LCRA to submit a request to the TWDB for a Notice-to-Proceed on the Task 5A Partial Scope of Work and execute the subsequent contract amendments.
- Consider approval to authorize the Technical Consultant to make minor edits to the Task 5A Partial Scope of Work based on comments received from TWDB.



### Agenda

#### ............

- 15. Presentation on hydrographic surveys of lakes Travis and Buchanan
- 16. Presentation on City of Austin analysis of hydrologic basin conditions incorporating impacts of climate change
- 17. Update and discussion on very low inflows into Highland Lakes
- 18. Agenda items for next meeting
- 19. New / Other Business
- 20. Public Comments

## 21. Adjourn

