



BRAZOS G REGIONAL WATER PLANNING GROUP

August 12, 2020

12:30 P.M.

Virtual Meeting



- 1. CALL THE MEETING TO ORDER**
- 2. INVOCATION**
- 3. NOTICE OF MEETING**
- 4. ATTENDANCE AND ANNOUNCEMENTS**
- 5. PUBLIC INPUT**



6.1. Report and possible discussion from Texas Water Development Board (TWDB) staff.



6.2. Discussion and possible action from the Brazos G Water Policy Committee.



6.3. Presentation, discussion and possible action regarding changes to the Initially Prepared 2021 Brazos G Regional Water Plan.

6.3.1. Leaving some municipal needs unmet in 2020 if infrastructure cannot be developed by 2023.



Potential Unmet Municipal Needs in 2020

Agenda Item 6.3.1

August 12, 2020



Background

- TWDB comment regarding the Initially Prepared Plan

“Volume II and the State Water Planning Database (DB22). The plan includes the following recommended water management strategies (WMS) by WMS type, providing supply in 2020 (not including demand management): 18 *groundwater wells & other*, two *aquifer storage and recovery*, 13 *other direct reuse*, six *new major reservoir*, two *conjunctive use*, and 24 *other surface water, including the Groesbeck minor reservoir*. **Strategy supply with an online decade of 2020 must be constructed and delivering water by January 5, 2023.**”



Unmet Needs for Municipal WUGs and WWPs if Projects Start in 2030 instead of 2020

WUG/WWP	PREVIOUS ONLINE DECADE	UPDATED ONLINE DECADE	PROJECT NAME	UNMET NEED (acft/yr)
BELL COUNTY WCID NO. 1	2020	2030	BELL COUNTY WCID 1- NORTH REUSE & SOUTH REUSE	2,693
BRA	2020	2030	LAKE GRANGER AUGMENTATION-PHASE 2 LAKE GRANGER ASR	39,414
GROESBECK	2020	2030	GROESBECK OFF CHANNEL RESERVOIR	688
HEWITT	2020	2030	REUSE- BULLHIDE CREEK	480
MULTI COUNTY WSC	2020	2030	CORYELL COUNTY OFF CHANNEL RESERVOIR	46
NORTH CENTRAL TEXAS MWA	2020	2030	LAKE CREEK RESERVOIR	1,722
PALO PINTO COUNTY MWD #1	2020	2030	TURKEY PEAK RESERVOIR	1,751
THROCKMORTON	2020	2030	THROCKMORTON RESERVOIR	135
TEXAS A&M	2020	--	None	99

Recommendation

Option 1:

- Show needs unmet in 2020
- Include language in each situation acknowledging:
 1. Those needs will only occur during a drought equivalent or worse than the drought of record.
 2. Demand management, while not a strategy recommended by Brazos G, will be required in the event of a serious drought prior to the recommended strategies coming online.

Option 2:

- Recommend Drought/Demand Management as a WMS for needs in 2020



Questions/Discussion





6.3. (Continued)

6.3.2. Threshold of significant water needs related to the assessment of aquifer storage and recovery as a recommended water management strategy.



Threshold of Significant Water Needs Related to ASR

Agenda Item 6.3.2

August 12, 2020



Background

HB 807 passed in June 2019 added a new requirement to the regional water plans:

- **TWC §16.053(e)(10):** “If a RWPA has significant identified water needs, [the RWP shall provide] a specific assessment of the potential for aquifer storage and recovery projects to meet those needs.”
- This requires regional water planning groups to identify what a “significant water need” is with regard to Aquifer Storage and Recover.
- TWDB guidance further notes that RWPGs are to conduct those assessments as budget allows.



Recommendation

1. Identify a significant water need with regard to ASR as 10,000 acft/yr or more in 2070.
2. Identify those WUGs meeting that definition and provide a brief assessment as appropriate.

WUG	2070 Need (acft/yr)	Assessment of ASR Potential
ABILENE	-18,910	ASR not identified as a potentially feasible strategy
BRYAN	-19,650	ASR recommended as a water management strategy
COLLEGE STATION	-13,360	ASR recommended as a water management strategy
COUNTY-OTHER, WILLIAMSON	-37,814	ASR recommended for WWP (BRA)
GEORGETOWN	-65,467	ASR recommended as a water management strategy
HUTTO	-10,703	ASR recommended for WWP (BRA)
LEANDER	-19,041	ASR not identified as a potentially feasible strategy
ROUND ROCK	-16,566	ASR recommended for WWP (BRA)
TEMPLE	-17,103	ASR recommended for WWP (BRA)
IRRIGATION, COMANCHE	-15,292	ASR not identified as a potentially feasible strategy
IRRIGATION, HASKELL	-15,835	ASR not identified as a potentially feasible strategy
IRRIGATION, KNOX	-10,706	ASR not identified as a potentially feasible strategy
IRRIGATION, ROBERTSON	-17,921	ASR not identified as a potentially feasible strategy
MINING, WILLIAMSON	-10,745	ASR not identified as a potentially feasible strategy
STEAM ELECTRIC POWER, MILAM	-32,254	ASR not identified as a potentially feasible strategy
STEAM ELECTRIC POWER, SOMERVELL	-35,867	ASR not identified as a potentially feasible strategy

Questions/Discussion





6.3. (Continued)

6.3.3. Modifications to the following recommended water management strategies:

- **City of Cleburne Reuse**
- **City of College Station Reuse**
- **Lake Granger Augmentation**
- **Oak Creek Reservoir Conjunctive Use**
- **Belton to Stillhouse Pipeline**



Modifications to Water Management Strategies

Agenda Item 6.3.3

August 12, 2020



Background

TWDB comments regarding the Initially Prepared Plan require modification of some and elimination of other recommended strategies and/or projects

- Reuse facilities that may be considered “distribution”
- Lake Granger Augmentation
 - Temporarily overdrafts Carrizo-Wilcox Aquifer MAG in a few limited years
- Oak Creek Reservoir Conjunctive Use
 - Temporarily overdrafts Dockum Aquifer MAG in a few limited years
- Lake Belton to Lake Stillhouse Hollow Pipeline
 - Creates zero new supply



Reuse Strategies

- TWDB comment regarding the Initially Prepared Plan

“Volume II, Chapter 3. The plan in some instances appears to include infrastructure components that are not required to increase the volume of supply for the WUG but are associated with internal distribution systems, which are ineligible per contract Exhibit C, Section 5.5.3. For example, but not limited to, page 3.3-5 states the North Reuse Project will include branch pipelines and page. 3.7-2 states that Cleburne Reuse Project will serve future commercial developments. Please make clear in the plan that evaluations for all Reuse WMSs does not include reuse distribution lines directly to residences or commercial businesses in the final, adopted regional water plan. [Contract Exhibit C, Section 5.5.3]”



Reuse Strategies Recommended in the IPP

- Waco WMARSS Reuse
 - Transmission to multiple wholesale reuse customers – no changes necessary
- Bell County WCID No. 1 Reuse
 - Includes two large transmission facilities, plus several smaller branches to retail customers. Branch lines appear to not be eligible. Transmission lines appear eligible.
- City of Bryan Reuse to Lake Bryan
 - Includes transmission line to Lake Bryan. Option 1 includes reuse for steam-electric cooling and appears eligible. Option 2 includes indirect potable reuse of the water discharged to Lake Bryan and is eligible.
- City of Bryan Reuse to Miramont Country Club
 - Direct non-potable reuse to a specific retail customer. Not eligible.



Reuse Strategies Recommended in the IPP

▪ Cedar Park Reuse

- Includes transmission line to deliver water to a central location from which distribution to irrigation uses would be constructed (distribution to end users not included). Appears eligible.

▪ Cleburne Reuse

- Includes transmission line from WWTP to form West Loop that would allow delivery to multiple customers. Includes some branch lines for direct deliver to specific customers. Main loop system appears eligible, but branch lines are not.

▪ College Station Reuse

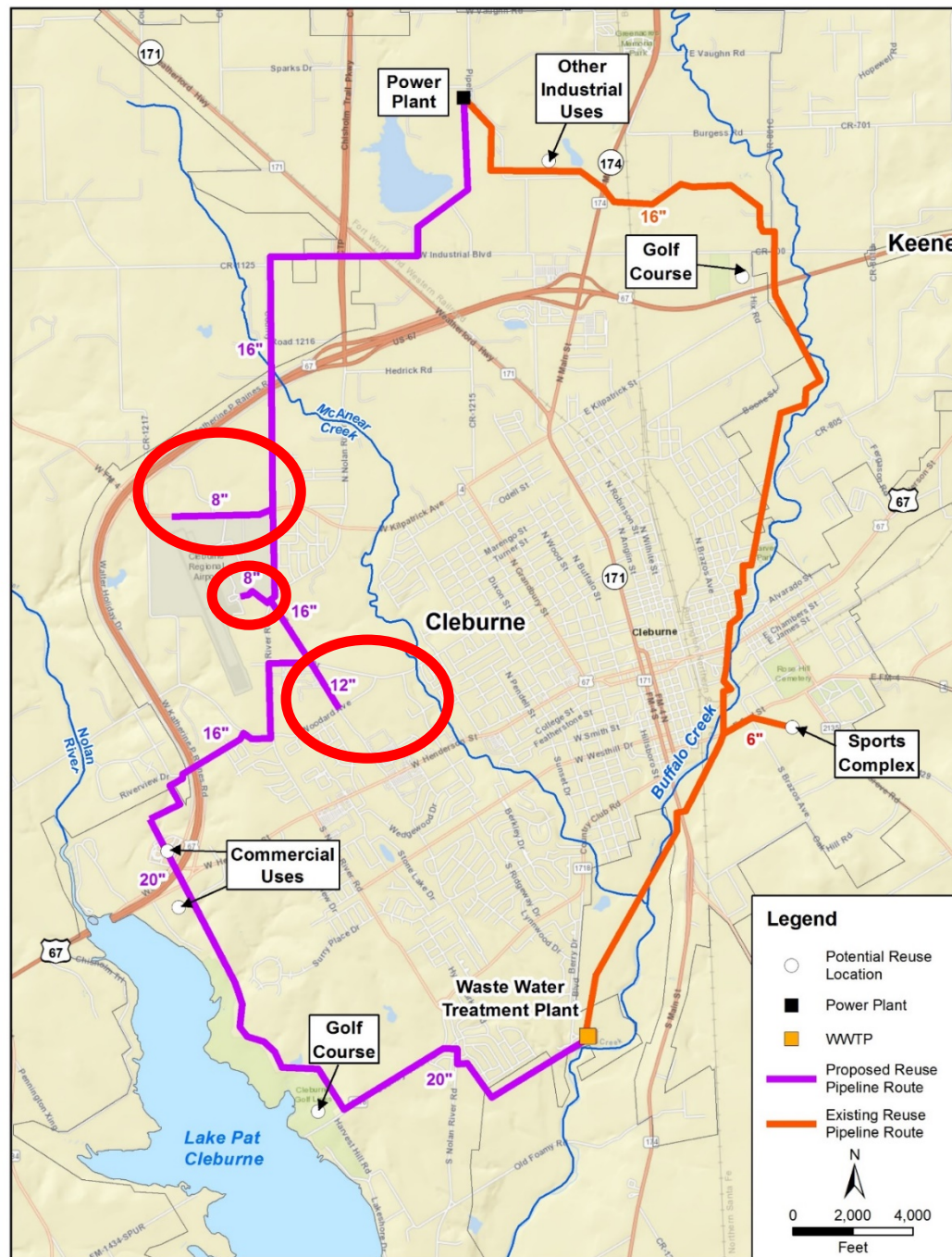
- Includes lines delivering water directly from WWTP to specific irrigation uses and commercial customers. Appears to be not eligible.

▪ Georgetown Reuse

- Includes facilities to transmit treated effluent from WWTP to existing reuse distribution facilities. Appears to be eligible.



Example of Partial Elimination (Cleburne)



Recommendations Regarding Reuse Facilities

- Remove all facilities that would transmit reuse supply directly to specific customers
 - Remove some components for Bell County WCID No. 1 and Cleburne
 - Complete elimination of Bryan to Miramont Country Club and College Station non-potable reuse projects
- Will not create unmet needs for any of the WUGs affected



Lake Granger Augmentation

- TWDB comment regarding the Initially Prepared Plan

“Volume II, Section 7.1. The representation of the Lake Granger Augmentation WMS phases and data structure as entered DB22 appears to be inconsistent with how the WMSs is described in the plan. Please reconcile how the WMS and projects are described in the final, adopted regional water plan and presented in DB22. The MAG volume for recommended WMSs in the plan and in DB22 may not be over-drafted in any decade year. At the time of review, there did not appear to be sufficient MAG availability in DB22 available for either phase of this WMS. Additionally, WMS supplies may not be presented as zero in all decades in the final, adopted regional water plan [31 § TAC 357.34(b); Contract Exhibit C, Section 3.5.4]”



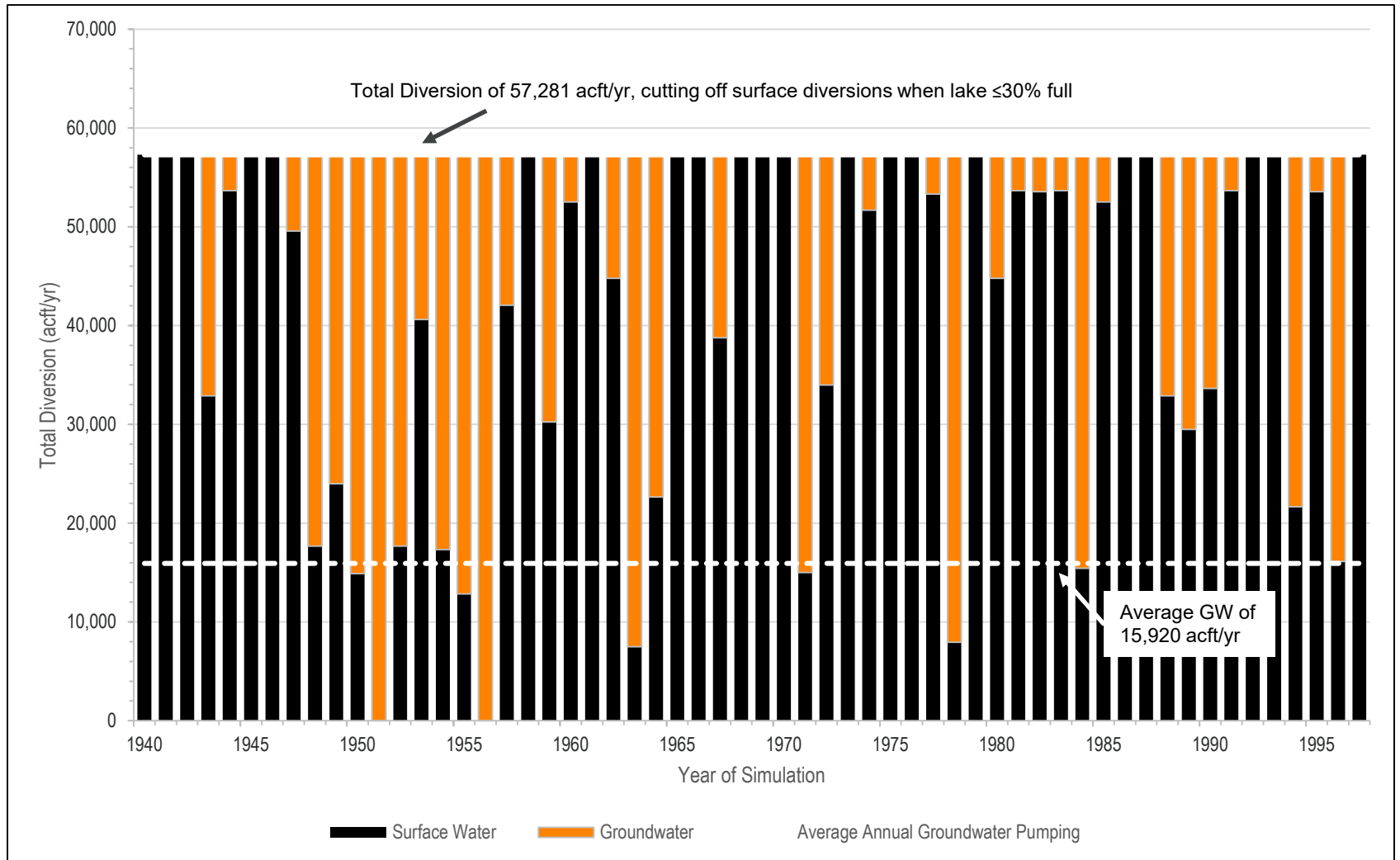
Lake Granger Augmentation

- Phase 1 – zero supply because zero remaining MAG available from the Trinity Aquifer in Williamson County
- Phase 2 – 46,265 acft/yr additional supply
 - Overdrafts Lake Granger and then relies on new groundwater supply to replace Lake Granger supply during drought years
 - Average annual GW pumping: 15,920 acft/yr
 - Maximum single year GW pumping: 57,281 acft/yr
 - MAG available after meeting existing supplies (Carrizo-Wilcox Aquifer):

County	2020	2030	2040	2050	2060	2070
Milam	17,529	14,806	14,205	15,902	16,606	16,596
Lee	10,697	3,814	3,363	4,277	1,710	328



Lake Granger Augmentation – SW and GW Supply



Lake Granger Augmentation

- Reformulated strategy to limit maximum annual GW to 14,205 acft/yr
 - Supply developed: 5,000 acft/yr
 - Max GW used (single year): 14,168 acft/yr
 - Ave Annual GW used (57 year simulation): 550 acft/yr



Recommendations for Lake Granger Augmentation and Williamson County-Other Supplies

- Remove Phase 1 from the strategy, but describe Phase 1 in the text
- Reformulate Phase 2 of strategy to new supply of 5,000 acft/yr
- Reformulate Phase 2 of strategy to new GW supply of 14,168 acft/yr
- Modify strategies recommended for BRA Little River System and Williamson County-Other to replace lost supply
 - BRA Little River System – increase Williamson County GW South Option

	2020	2030	2040	2050	2060	2070
CW-Lee		6,000	6,000	6,000	7,200	6,000
Yegua Jacson-Burleson		7,500	7,500	7,500	7,500	7,500
Sparta-Burleson		800	800	800	800	800

- Williamson County-Other – increase supply from Lake Whitney Reallocation in 2060 and 2070 to 12,000 acft/yr and 26,000 acft/yr



Oak Creek Reservoir Conjunctive Use

- TWDB comment regarding the Initially Prepared Plan

“Volume II, Section 7.2 The evaluation of the Oak Creek Reservoir WMS indicates that the MAG will be exceeded in multiple years but does not appear to include a supporting ‘peak factor’ analysis to support short-term overdrafts. Please reconcile how the WMS and projects are described in the plan and presented in DB22 in the final, adopted regional water plan. The MAG volume for recommended WMSs in the plan and in DB22 may not be over-drafted in any decade year. At the time of review, there did not appear to be sufficient MAG availability in DB22 available for this WMS. Additionally, please ensure that the region has coordinated with Region F on the volume of water available through the Region F Oak Creek Reservoir Subordination WMS. [31 § TAC 357.34(b); Contract Exhibit C, Section 3.5.4]”



Oak Creek Reservoir Conjunctive Use

- After research of the issue, the MAG availability assigned in DB22 was only the Brazos Basin portion in Nolan County (Dockum Aquifer)
- Colorado Basin portion provides sufficient additional supply for the project without overdrafting the MAG (Dockum Aquifer)
- No changes needed to this strategy in the plan, but a correction in DB22 is required



Belton to Stillhouse Hollow Pipeline

- TWDB comment regarding the Initially Prepared Plan

“Volume II, Section 9.5. Table 9.5-2 presents the available project yield for the Lake Belton to Lake Stillhouse Hollow Pipeline WMS as 30,000 ac-ft/yr, however the yield reported in DB22 is zero ac-ft/yr in all decades. The WMS appears to move existing supply to areas of need more efficiently and does not appear to make new supply available to any WUGs. Please clarify whether the WMS increases the volume of water supply delivered to WUGs. If so, the volume of water supply must be represented in DB22 in at least one planning decade. If not, the WMS must be removed as a recommended WMS from DB22, and the WMS evaluation must be presented in a separate section in the final, adopted regional water plan. [31 TAC § 357.34(d)]”



Recommendations for Belton to Stillhouse Hollow Pipeline

- Decrease current supplies from BRA to Georgetown by 5,000 acft/yr
- Assign 5,000 acft/yr supplies from new pipeline to Georgetown
- Essentially a DB22 adjustment, but some changes to the text of the plan are required, i.e., Georgetown needs have to be increased



Questions/Discussion





6.4. Presentation of the timeline to develop the 2021 Brazos G Regional Water Plan.



Schedule to Develop the 2021 Brazos G Plan

Agenda Item 6.4

August 12, 2020



Working Schedule for the 2021 Planning Cycle

- [August 12, Brazos G Policy Committee and RWPG Meeting](#)
- August 12 – September 23 – Complete final changes to 2021 Brazos G Plan
 - Prioritization Scoring
 - Assemble Infrastructure Financing Survey Results
 - Final text and DB22 revisions
- September 9 Brazos G RWPG – Review scoring and survey results; finalize plan
- September 30 Brazos G RWPG – Adopt Final 2021 Brazos G Plan
- October 5 – Final Plan to printer
- **October 14, 2020 – Submit Final Plan**

- October 15, 2020 –





6.5. Report and possible discussion on updates from other regional water planning groups (Regions B, C, F,H, K, L & O).



6.6. Report and possible discussion on Groundwater Management Area (GMA) activities.



6.7. Report and possible discussion on agency communication and information.



6.8 Discussion and possible action on report by Brazos G Administrator.



6.9 Discussion and possible action on report by Brazos G Chair.



- 7. DISCUSSION AND POSSIBLE ACTION ON
NEW BUSINESS TO BE CONSIDERED AT
NEXT MEETING**
- 8. CONFIRMATION OF NEXT MEETING
DATE**
- 9. ADJOURN**