

#### **Brazos G Regional Water Planning Group**

#### Wednesday, May 31, 2023

#### 10:00 AM

#### **BRAZOS RIVER AUTHORITY**

4600 COBBS DR. WACO, TX 76710



- 1. Call Meeting to Order
- 2. Invocation
- 3. Notice of Meeting
- **4. Attendance and Announcements**

5. Public Input - Public questions and comments on agenda items or water planning issues (limited to 5 minutes each)



## 6. Report, discussion, and possible action on report from the Executive Committee

# 6.1. Recommendation regarding the open voting member position representing the Electric Generating Utilities Interest Category

"The Executive Committee recommends to the members of the Brazos G Regional Water Planning Group appointment of <u>Ryan Bayle</u> representing Electric Generating Utilities Interests to serve as a voting member of the Brazos G Regional Water Planning Group."



**Proposed Action:** 

"BE IT HEREBY RESOLVED that the Brazos G Regional Water Planning Group confirms the appointment of <u>Ryan Bayle</u> representing <u>Electric Generating Utilities Interests</u> to serve as a voting member of the Brazos G Regional Water Planning Group."



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

#### Significant new requirements for the 2026 RWPs

- Task 4B: Exhibit C, Section 2.11 (Identification of infeasible WMSs in the 2021 RWP)
  - Required by SB 1511, 85<sup>th</sup> Texas Legislature
  - Analysis must be completed prior to March 4, 2024 (Technical Memorandum due date)
  - Planning groups to present results of analysis at same public meeting where RWPG also presents methodology for identifying potentially feasible WMSs in 2026 RWP
  - Deliverable to TWDB: List of identified infeasible WMSs included in Technical Memorandum
  - If infeasible WMSs identified, planning groups must amend 2021 plans to:
    - Remove infeasible WMS or WMSP,
    - Revise infeasible WMS or WMSP to make feasible, and/or
    - Incorporate new WMS or WMSP
  - RWPG-adopted amendments due to TWDB June 5, 2024

### Significant new requirements for the 2026 RWPs (cont.)

- Task 4B: Exhibit C, Section 2.11 (cont.)
  - Review WMSs and WMSPs in the previous RWP; coordinate with project sponsors to determine implementation status and determine infeasibility
  - Planning groups should review strategies & projects that require a permit and/or involve construction and that:
    - are shown to be online in 2020 or 2030
    - are related to new major reservoirs, seawater desalination, DPR, brackish groundwater, ASR, and out of state transfers
    - generally require significant resources and time to implement
  - Analysis **not** required for strategies/projects that do not require a permit or involve construction



Significant new requirements for the 2026 RWPs (cont.)

- Task 4B: Exhibit C, Section 2.11 (cont.)
  - Affirmative steps by the sponsor may include but not limited to:
    - spending money on the strategy or project,
    - voting to spend money on the strategy or project, or
    - applying for a federal or state permit for the strategy or project
  - -Supporting data provided to planning groups January 10<sup>th</sup> and clarification guidance provided January 31<sup>st</sup>



8. Report, discussion, and possible action on the report from Technical Consultant – Carollo

#### 8.1. Infeasible Strategies for Brazos G

8.2. Regional Water Planning Update

## Brazos G Water Planning

#### Item 8 Technical Consultant Presentation



WACO, TX MAY 31, 2023

#### 2026 Planning Budget Progress

Task #	Task	Contract Amount	Expended to Date	% Complete
1	Planning Area Description	\$30,418	\$0	0%
2A	Non-Municipal Water Demand Projections	\$57,806	\$28,665.45	50%
2B	Population and Municipal Water Demand Projections	\$80,330	\$31,763.94	40%
3	Water Supply Analyses	n/a	n/a	0%
4A	Identification of Water Needs	n/a	n/a	0%
4B	Identification of Potentially Feasible WMSs and WMS Projects	n/a	n/a	0%
4C	Prepare and Submit Technical Memorandum	n/a	n/a	0%
5A	Evaluation and Recommendation of WMSs and WMS Projects	n/a	n/a	0%
5B	Water Conservation Recommendations	n/a	n/a	0%
6	Impacts of Regional Water Plan	n/a	n/a	0%
7	Drought Response, Activities & Recommendations	n/a	n/a	0%
8	Recommendations Regarding Unique Stream Segments and/or Reservoir Sites and Legislative & Regional Policy Issues	\$13,415	\$0	0%
9		n/a	n/a	0%
10	Public Participation and Plan Adoption	\$88,204	\$51,629.94	59%
11	Implementation and Comparison to the Previous Regional Water Plan	n/a	n/a	0%
12		n/a	n/a	0%
	TOTAL	\$270,173	\$112,059.33	41%

#### Sixth Cycle of Regional Water Planning (2026 Regional Water Plans)

Working Schedule (as of January 2023)<sup>A</sup>

_			Development board																																								
Item	Entity	Activity	Planning SOW				2021		TT	T	$\mathbf{H}$	-	П	2	022	T		T		T	T	20	23							20	24	Т	-		H		-		2025	_		-	
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1	TWDB	RFA for regional water planning grant posted and applications due		Ц		Appli	cations	due 4/12	/2021				Ц				$\square$		$\square$		$\square$	L	$\square$				Ц								⊥	$\square$			⊥	$\square$	Ц	⊥	Ц
2	TWD8/RWPG	Initial planning contract execution deadline						C a	etracta e	rescutes	i by II/3	11/2021	L																														
3	TWD8/RWPG	Anticipated additional contracting activities																																									$\Box$
4	TWDB	Regional Water Planning rules update																																									
5	TWDB	TWD8/BEG Mining study	2A																																								
6	RWPG	RWPGs hold pre-planning & coordination meeting (before technical work begins)	10																																								
7	TWDB	Municipal WUG list, GPCD, historical population, and water use released	28																																						$\Box$		
8	RWPG	Review municipal WUG list, GPCD, historical population, and water use; provide feedback to TWDB	28								Π																														$\Box$		
9	TWDB	Draft Livestock, Manufacturing, and Steam Electric Power demand projections released	2A																																								
10	TWDB	Draft Irrigation and Mining projections released	ZA																																					$\Box$	$\square$	Τ	$\Box$
11	TWDB	Draft Population and Municipal demand projections released	28																																						$\square$		
12	RWPG	Review draft projections and finalize adjustments with TWDB staff	2A, 2B																																					$\Box$	$\Box$	Τ	$\Box$
13	TWDB	TWDB Board adopts projections	2A, 2B										Π																											$\Box$	$\square$	Τ	$\Box$
14	TWDB	D827 prepared for data entry <sup>c, n</sup>																																							$\square$		$\square$
15	TWDB/RWPG	D827 individualized training for consultants																																						$\Box$	$\Box$		$\Box$
16	TWDB	Updated MAGs released																																							$\square$		$\Box$
17	RWPG	Evaluate water availability and existing water supplies																																							$\square$		
18	RWPG	Identify water needs									Π		Π																											$\Box$	$\square$	Τ	$\Box$
19	RWPG	Identify infeasible WMSs in the 2021 RWPs																																							$\square$		$\Box$
20	RWPG	Technical Memo due				Π					Π		Π																Technic	al Men	10 đượ	3/4/2	1024						Т	$\Box$	$\square$	Τ	$\Box$
21	RWPG	Amendments to 2021 RWPs to remove/revise infeasible WMSs																																					Τ	$\Box$	$\square$	Τ	$\Box$
22	RWPG	RWPG adopted amendments to 2021 RWPs to remove/revise infeasible WMSs due to TWDB																													2021	RWP a	mende	ments fo	r infea	sible W	MSs du	e 6/5/	1024				$\Box$
23	RWPG	Identify potentially feasible WM5s				$\Box$	Ι			Ι			$\Box$							Ι																	Ι		Τ			Ι	$\Box$
24	TWD8/RWPG	Review and negotiate SOW submittals for WMS evaluations and issue notice-to-proceeds <sup>2</sup>								Ι	Π		$\square$							Τ																			Τ		$\Box$	Ι	$\Box$
25	IPC	Interregional Planning Council report due to the TWDB				$\square$					Π		Π																IPC Rep	ort due	3/3/	2024									$\Box$	Ι	$\Box$
26	RWPG	Initially Prepared Plan due				Π	Τ						Π																								199	due 3/	/3/2025	$\Box$		Τ	$\Box$
27	TWDB	Socioeconomic Impact Report released to RWPGs				$\square$					Π					Γ																			Γ				Τ		$\Box$	Τ	$\Box$
28	RWPG	Final Plan due				Π					Π		Π			Τ											Π								Τ			RWP	due 10/	/20/20	25		Π
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Notes: <sup>A</sup> Estimated timeline based on currently available agency resources and subject to change

<sup>8</sup> Only Tasks included in the initial contract scope of work have task numbers in this initial timeline.

<sup>c</sup> D827 is the updated, online water planning database for the 2027 State Water Plan

<sup>®</sup> Anticipated database availability dates are estimates based on currently available agency resources



#### 2026 Plan Schedule Detail

Date	Scheduled Events/Tasks
Jan 2022	TWDB releases initial Draft Non-Municipal data for Livestock, Manufacturing, and Steam-Electric Power Generation for review
Sept 2022	TWDB releases remaining Draft Non-Municipal data for Irrigation and Mining for review
Jan 2023	TWDB release of Draft Municipal Population and Demand Projections
Mar 2023	Brazos G Meeting –revisions to non-municipal demand projections
	Brazos G Meeting – Initial discussion on Infeasible Strategies, consideration of actions regarding City of Liberty Hill requests for Consistency Waiver.
July 2023	Brazos G Meeting – Consideration of action to approve submittal of municipal revisions, summary and discussion on infeasible strategies.
July-Aug 2023	Review Draft Projections and finalize adjustments with TWDB staff (Non-Municipal: July 14, Municipal: Aug 11)
Oct 2023	TWDB Board adopts projections

#### Today's Discussion

Item 8.1 – Summary of Infeasible Strategy Evaluation

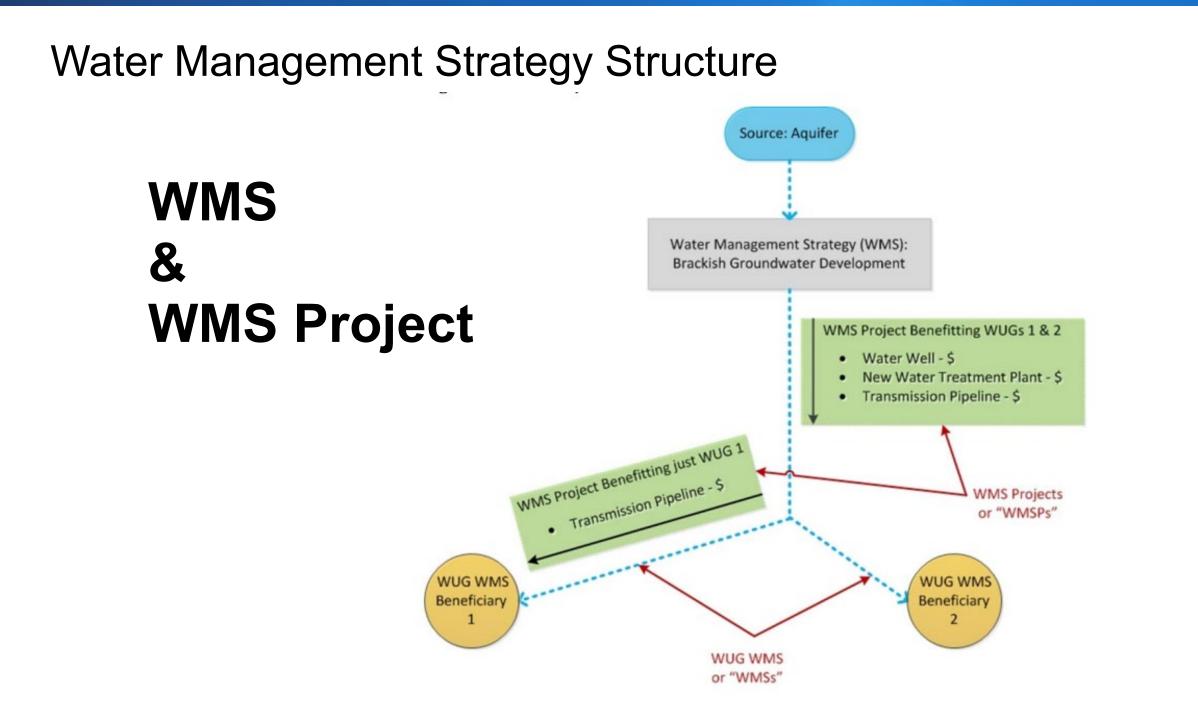
No action sought today

Item 8.2 – Regional Water Planning Update

## Item 8.1

## Summary of Ongoing Evaluation of Infeasible Water Management Strategies and Projects

Strategies and Projects



#### Potentially Feasible Water Management Strategies

- Statutory and Rule Requirements
  - TWC §16.053(e)(5); and
  - 31 TAC §357.34(c))
- RWPGs must consider, but are not limited to considering, 24 types of WMSs for all identified water needs.
- Technical Memorandum, IPP, and Final RWP must include:
  - The documented process used by the RWPG to identify potentially feasible WMS;
  - The list or table of all identified WMSs that were considered potentially feasible, to date, for meeting a need in the region per 31 TAC §357.12(b).
  - If no potentially feasible WMSs are identified or recommended for an identified water need, then the RWP must document the reason.

#### Statutory Language behind the New Requirement to Identify Infeasible WMSs

"Infeasible WMSs include those WMSs where proposed sponsors have not taken an affirmative vote or other action to make expenditures necessary to construct or file applications for permits required in connection with implementation of the WMS on a schedule in order for the WMS to be completed by the time the WMS is needed to address drought in the plan."

#### Infeasibility Review

Focus on reviewing 2021 Plan's strategies and projects **that require a permit and/or involve construction** and that:

- are shown to be online by the 2020 (no later than January 5, 2023) or 2030 decade,
- Related to:
  - new major reservoirs,
  - seawater desalination,
  - direct potable reuse,
  - brackish groundwater,
  - aquifer storage and recovery, and
  - out of state water transfers;
- Generally required for implementation either:
  - significant resources;
  - significant time.

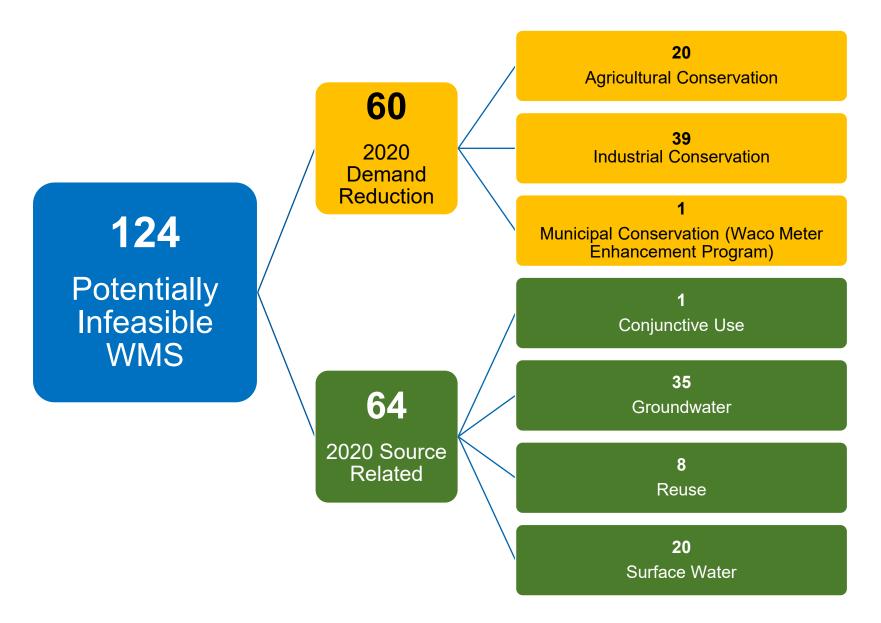
#### Infeasibility Review (cont'd)

TWDB recognizes information may be difficult to obtain or may not be available for some WUG categories

 e.g., county-wide water user groups that are to be implemented by private parties

RWPG may therefore not be able to determine infeasibility for some strategies or projects.

#### Summary of Potential Infeasible 2020 WMS to be Investigated



#### Major Reservoir WMS – Online 2030, 2040

Source Description	WMS Sponsor and/or select WUG Beneficiary List	2030	2040	2050	2060	2070	Online Decade
Brushy Creek Lake/Reservoir	Marlin	0	2,000	2,000	2,000	2,000	2040
Cedar Ridge	Abilene; County- Other, Taylor; Roscoe; Sweetwater; Bitter Creek WSC	22,500	22,500	22,500	22,500	22,500	2030
	North Central Texas Municipal Water Authority	12,900	12,900	12,900	12,900	12,900	2030
	Graham Throckmorton	3,500	3,500	3,500	3,500	3,500	2030
	Mineral Wells; Palo Pinto County MWD 1	6,000	6,000	6,000	6,000	6,000	2030
Coryell County Off-Channel Lake/Reservoir	Multi County WSC	3,135	3,135	3,135	3,135	3,135	2030

#### Aquifer Storage and Recovery, Reuse – Online 2030, 2040

WMS Name	WMS Sponsor and/or select WUG Beneficiary List	Source Description	2020	2030	2040	2050	2060	2070	Online Decade
Bryan ASR (Carrizo-Wilcox)	Bryan	Simsboro Aquifer ASR   Brazos	0	6,000	6,000	6,000	8,500	10,500	2030
Lake Granger ASR		Trinity Aquifer ASR   Williamson	0	7,600	11,900	11,900	11,900	11,900	2030
Reuse DPR- College Station	College Station	Direct Reuse	0	8,232	8,232	8,232	8,232	8,232	2030

#### WMS Projects online by 2020

- 72 WMS Projects
- 66 WMS Project sponsors

#### 2020 WMS Projects - 32 Municipal Sponsors

Sponsor	WMSP Name	Capital Cost
Abilene	Cedar Ridge Reservoir	\$ 283,646,000
Abilene	Abilene BRA Sys Ops Facilities Expansion	\$ 8,939,000
Bellmead; Lacy Lakeview	Reuse- Bellmead/Lacy-Lake	\$ 16,076,000
Brazos River Authority	Lake Granger ASR	\$ 116,431,000
Brazos River Authority	Lake Granger Augmentation-Phase 2-BRA	\$ 845,564,000
Brazos River Authority	Lake Aquilla Reallocation- BRA	\$ 24,353,000
Brenham	Gulf Coast Aquifer Development- Brenham	\$ 2,958,000
Bryan	Reuse- Bryan (Option 1)	\$ 11,092,000
Cedar Park	Reuse-Cedar Park	\$ 7,184,000
Central Washington County WSC	Gulf Coast Aquifer Development- Corix Utilities Texas Inc	\$ 1,853,359
Cleburne	Reuse- Cleburne	\$ 29,803,000
College Station	College Station ASR (Reuse)	\$ 86,514,000
Gatesville	Expand WTP (1.2 MGD) - Gatesville	\$ 9,577,000
Godley	Trinity Aquifer Development- Godley	\$ 1,101,000
Highland Park WSC	Trinity Aquifer Development- Highland Park WSC	\$ 1,829,000
Jayton	New WTP (0.4 MGD)- Jayton	\$ 3,555,000
Johnson County SUD	Trinity Aquifer Development - Johnson County SUD	\$ 9,306,000
Kempner WSC	Expand WTP (1.8 MGD) - Kempner WSC	\$ 10,821,000
Liberty Hill; Cedar Park; Round Rock; Leander	Brushy Creek RUA Water Supply	\$ 326,793,406

Sponsor	WMSP Name	Cap	oital Cost
Mart	Interconnect from Waco to Mart	\$	7,105,372
Municipal county-other (Comanche)	Trinity Aquifer Development- Comanche County-Other	\$	5,359,000
Municipal county-other (Falls)	Upgrade WTP for Arsenic-Falls County-Other	\$	255,000
Municipal county-other (Hood)	Trinity Aquifer Development - Hood County- Other	\$	6,210,000
Municipal county-other (McLennan)	Upgrade WTP For Arsenic-McLennan County Other	\$	2,871,000
Municipal county-other (Somervell)	Somervell County Water Supply Projects Phases 1-4, 7A, 9-17	\$	36,250,000
Prairie Hill WSC	Upgrade WTP for Arsenic- Prairie Hill WSC	\$	1,408,000
Robertson County WSC	Carrizo Aquifer Development - Robertson County WSC	\$	3,440,000
Robinson	Expand WTP (4 MGD)- Robinson	\$	16,813,000
Rockdale	Carrizo Aquifer Development - Rockdale	\$	5,086,000
Sonterra MUD; Municipal county-other (Williamson)	East Williamson County Water Project	\$	30,264,420
Stephenville	Trinity Aquifer Development- Stephenville	\$	7,344,000
Strawn	Trinity Aquifer Development- Strawn	\$	2,447,000
Sweetwater	Interconnect from Abilene to Sweetwater	\$	21,667,019
Temple	Expand WTP (4.2 MGD) - Temple	\$	35,666,000
Waco	Reuse- Flat Creek	\$	20,014,000
Waco	Reuse- WMARSS China Spring	\$	25,888,000
Waco	Reuse- WMARSS I-84	\$	28,249,000
Waco	Conservation - Meter Enhancement Program - Waco	\$	15,282,000

#### 2020 WMS Projects – 34 Non-Municipal Sponsors

Sponsor	WMSP Name	Ca	pital Cost
	Edwards Aquifer Development - Bell		
Irrigation (Bell)	County Irrigation	\$	922,000
	Trinity Aquifer Development-Bosque		
Irrigation (Bosque)	County Irrigation	\$	2,473,000
	Gulf Coast Aquifer Development -		
Irrigation (Grimes)	Grimes County Irrigation	\$	623,000
	Woodbine Aquifer Development- Hill		
Irrigation (Hill)	County Irrigation	\$	870,000
	Blaine Aquifer Development - Knox		
Irrigation (Knox)	County Irrigation	\$	631,000
	Marble Falls Aquifer Development -		
Irrigation (Lampasas)	Lampasas County Irrigation	\$	2,054,000
	Trinity Aquifer Development - Palo		
Irrigation (Palo Pinto)	Pinto County Irrigation	\$	49,832,000
	Other Aquifer Development -		
Irrigation (Stephens)	Stephens County Irrigation	\$	143,000
	Cross Timbers Aquifer Development -		
Irrigation (Throckmorton)	Throckmorton County Irrigation	\$	405,000
	Edwards Aquifer Development-		
Irrigation (Williamson)	Williamson Irrigation	\$	675,000
	Cross Timbers Aquifer Development -		
Irrigation (Young)	Young County Irrigation	\$	540,000
	Cross Timbers Aquifer Development -		
Livestock (Young)	Young County Livestock	\$	151,000
	Sparta Aquifer Development -		
Manufacturing (Burleson)	Burleson County Manufacturing	\$	233,000
	Blaine Aquifer Development - Knox		
Manufacturing (Knox)	County Manufacturing	\$	331,000
	Carrizo Aquifer Development -		
Manufacturing (Limestone)	Limestone County Manufacturing	\$	1,767,000

Sponsor	WMSP Name	Cap	ital Cost
	Blaine Aquifer Development - Stonewall County		
Manufacturing (Stonewall)		\$	192,000
Mining (Bell)	Trinity Aquifer Development-Bell County Mining	\$	8,771,000
	Trinity Aquifer Development - Comanche County		
Mining (Comanche)	Mining	\$	2,223,000
	Trinity Aquifer Development - Coryell County		
Mining (Coryell)	Mining	\$	3,145,000
	Trinity Aquifer Development- Eastland County		
Mining (Eastland)	Mining	\$	3,669,000
	Blaine Aquifer Development - Fisher County		
Mining (Fisher)	Mining	\$	511,000
	Gulf Coast Aquifer Development - Grimes County		
Mining (Grimes)	Mining	\$	744,000
	Trinity Aquifer Development - Hamilton County		
Mining (Hamilton)	Mining	\$	548,000
Mining (Hood)	Trinity Aquifer Development - Hood County Mining	\$	1,027,000
Mining (Knox)	Blaine Aquifer Development - Knox County Mining	\$	178,000
	Ellenburger San-Saba Aquifer Development -		
Mining (Lampasas)	Lampasas County Mining	\$	2,051,000
Mining (Lee)	Carrizo Aquifer Development - Lee County Mining	\$	3,077,000
	Trinity Aquifer Development- Palo Pinto County		
Mining (Palo Pinto)	Mining	\$	4,885,000
	Trinity Aquifer Development - Somervell County		
Mining (Somervell)	Mining	\$	876,000
	Blaine Aquifer Development - Stonewall County		
Mining (Stonewall)	Mining	\$	687,000
	Cross Timbers Aquifer Development -		
Mining (Throckmorton)	Throckmorton County Mining	\$	344,000
	Gulf Coast Aquifer Development - Washington		
Mining (Washington)	County Mining	\$	3,348,000
	Cross Timbers Aquifer Development - Young		
Mining (Young)	County Mining	\$	514,000
Steam-electric power	Carrizo Aquifer Development - Limestone County		26
(Limestone)	Steam-Electric	\$	1,709,000

## Select Recommended WMS Projects associated with an online decade of later than 2020.

Project Category	WMS Project Name	Capital Cost	Online Decade	Project Sponsors
New major reservoir	Brushy Creek Reservoir- Marlin	\$33,229,000	2040	Marlin
Aquifer storage and recovery	Bryan ASR (Carrizo-Wilcox)	\$72,404,000	2030	Bryan
New major reservoir	Coryell County Off Channel Reservoir-BRA	\$82,584,000	2030	Multi-County WSC
New major reservoir	NCTMWA Lake Creek Reservoir	\$259,001,000	2030	North Central Texas Municipal Water Authority
New major reservoir	New Throckmorton Reservoir	\$68,103,000	2030	Throckmorton
New major reservoir	Turkey Peak Reservoir	\$102,530,000	2030	Palo Pinto County MWD 1

#### Engagement / Survey of WWPs and WUG Sellers

- Project Name
- Project Sponsor
- Online Decade
- Date of Affirmative Action
- State Water Right Status
  - Application filed?
  - Admin complete?
  - Draft released by TCEQ?
  - Issued?
- Federal 404 Permit Status
  - Applied for?
  - Issued?

- Planning/Design/Construction Status
  - Type/Amount of study/testing/design performed to date (%)
  - Land Acquisition?
  - Started Construction?
  - Completed construction?
- Est. Funds Expended to Date
- Pertinent Details

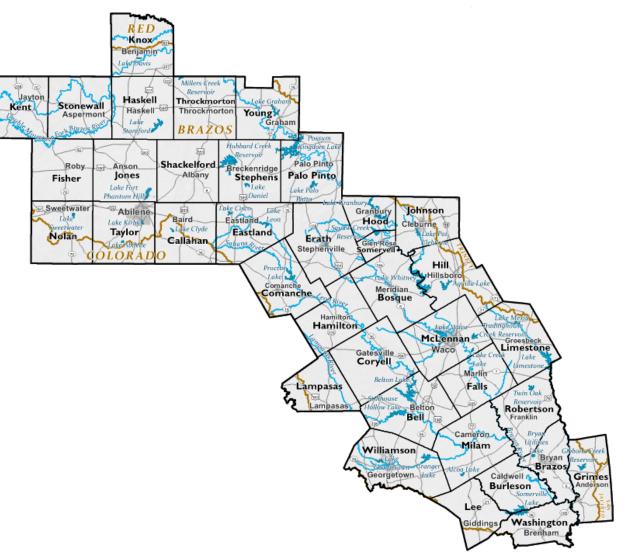
## Item 8.2 Regional Water Planning Update

#### Ongoing efforts

- Updating primary points of contact
- Distribution of surveys
- Identification of Infeasible Water Management Strategies
- Investigation into representation of military installations

#### Military Installations in Brazos G

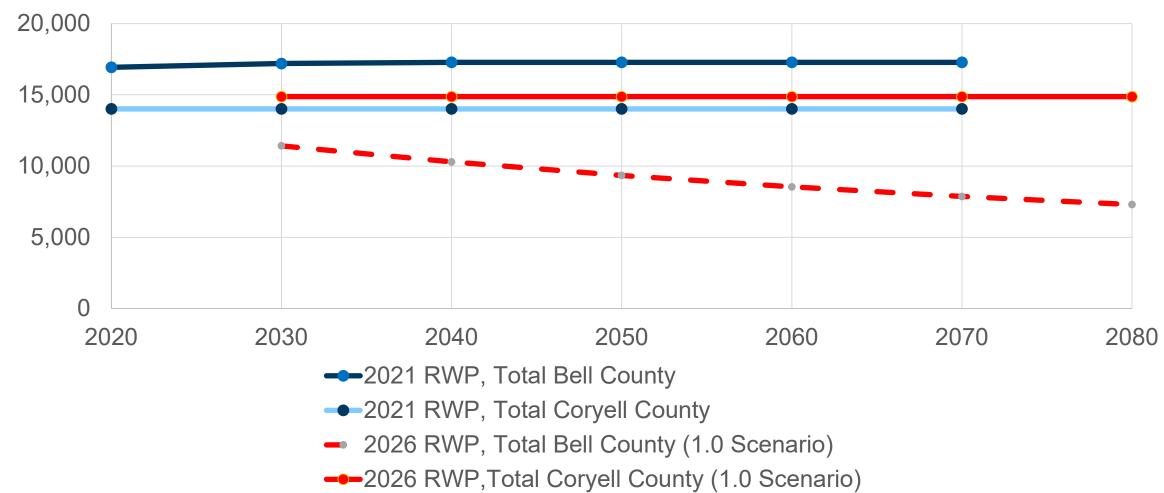
- Dyess Air Force Base, Taylor County
- Fort Cavazos (formerly Hood), Bell and Coryell Counties



- To calculate population and water demand, TWDB applies methodology similar to that of a water utility.
- The key difference is populations assumed to be only group quarters are held constant.
- For the 2021 Regional Water Plan:
  - Dyess AFB was combined with the City of Abilene to create one WUG.
  - Fort Cavazos was differentiated as a unique WUG and delineated between Bell and Coryell County.

- For the 2026 Regional Water Plan Estimates:
  - Dyess AFB remains combined with the City of Abilene as a single WUG;
     Dyess AFB population is held constant throughout the planning period.
  - Population assigned to the Coryell County portion of Fort Cavazos was held constant throughout the planning period.
  - Population assigned to the Bell County portion of Fort Cavazos declined between the 2010 and 2020 census, thus TWDB shows a decreasing population trend throughout the planning period.

Comparison of 2021 to Draft 2026 Population Projections, Fort Hood/Cavazos



- A decreasing trend for that duration would be unlikely for a military installation; increases and decreases are typically single events.
- Carollo will contact staff at both Dyess AFB and Fort Cavazos to determine if there is information available to justify population projection modifications.

### Path Forward

#### Engagement on Municipal Projections

#### Infeasible Strategies

Water Supply Availability



## 9. Discussion and possible action for a Consistency Waiver Request for the City of Liberty Hill's Projects – 1) Direct Potable Reuse and 2) Edwards Aquifer Well Field

- 9.1. Presentation from City of Liberty Hill representatives
- 9.2. Report from Technical Consultant Carollo
  - 9.2.1. Action Item Letter to TWDB to support or oppose a Consistency Waiver

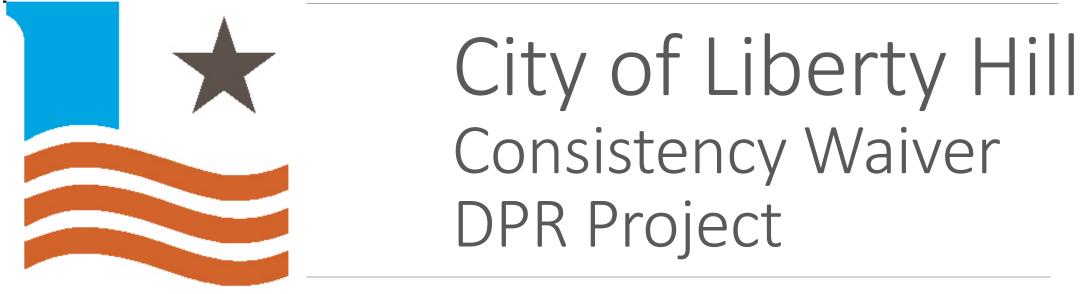
**Request for the City of Liberty Hill's Direct Potable Reuse Project** 

9.2.2. Action Item – Letter to TWDB to support or oppose a Consistency Waiver

Request for the City of Liberty Hill's Edwards Aquifer Well Field Project



#### 9.1. Presentation from City of Liberty Hill representatives



MAY 31, 2023



#### Project Background

- Liberty Hill's South Fork WWTP is an MBR plant with a current capacity of 2.0 MGD and an ultimate permitted capacity of 4.0 MGD
- Construction of the expansion of the plant to 4.0 MGD is underway and expected to be complete by December, 2023.
- The WWTP serves customers in the Liberty Hill Wastewater CCN service area that are provided water service by Liberty Hill, Georgetown, and Leander.
- The proposed project consists of constructing a direct-potable reuse water treatment plant to treat effluent water from the WWTP to drinking water quality standards.
- The proposed project ranked #10 on the TWDB's Intended Use Plan, and the project is eligible for \$10 million in loan forgiveness funding.
- The total TWDB funding amount for the project is \$28,550,000

## Project Map





#### Need for Project

- The Liberty Hill water system has grown 11.1% annually in the last 10 years and 17.3% annually in the last 5 years.
- System growth projections estimate that Liberty Hill's water system will grow from 1,610 connections to 32,120 connections in the next 20 years.
- The City's current water sources consist of 600 acre-feet per year from Lake Travis through Leander and 112 acre-feet per year in Trinity well supply.
- 20-year projected water demand for Liberty Hill is 10,362 acre-feet per year. Current 20-year deficit is 9,650 acre-feet per year.

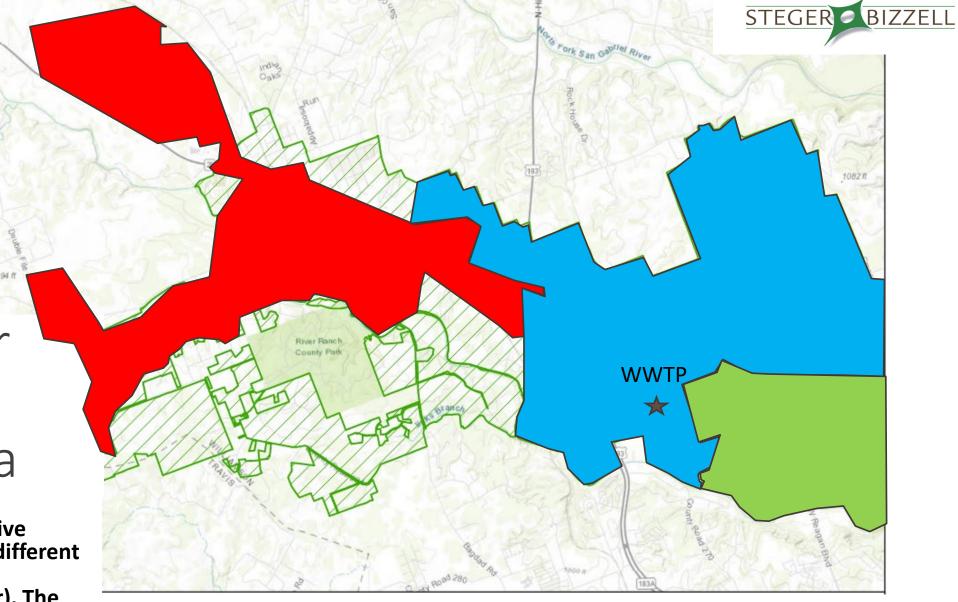


#### Water Source/Available Supply

- The source of water for this project is treated effluent from the City's WWTP. The WWTP is expected to be at the ultimate capacity of 4.0 MGD by the time construction of the proposed project is complete.
- The proposed project is expected to provide an additional 3,808 acrefeet per year of treated water supply, 44% of the 20-year needs for the City.
- The City has wastewater service agreements with all developments that send raw wastewater to the City for treatment and disposal.
- The City already has a reuse authorization for the WWTP with TCEQ that authorizes the City of Liberty Hill to sell all treated effluent to reuse customers as Type 1 reuse water within the City's reuse authorization area.
- The Regional Water Plan assumes 100% reuse of all effluent, making the proposed project consistent with the Regional Water Plan.

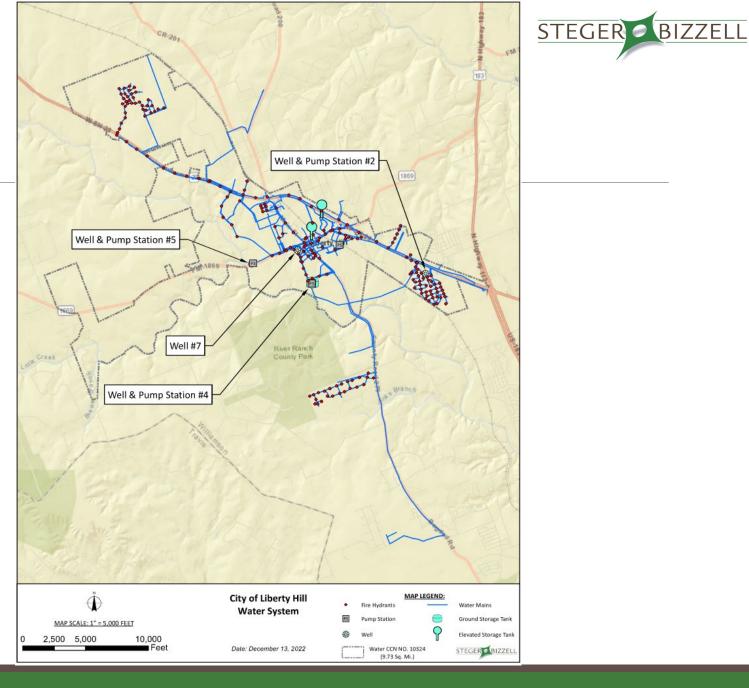
Wastewater Collection Service Area

 The collection system has approximately 14,000 active customers is served by 3 different Water CCNs (Liberty Hill, Georgetown, and Leander). The water generated in these three CCN's will make up 100% of the raw wastewater supply



#### Project Service Area

 The project service area will be the City of Liberty Hill water CCN service area, which consists of an area of 9.73 square miles.





#### Why is Project not in Regional Water Plan

- The proposed project is a relatively new project from a conceptual basis for the City.
- The City of Liberty Hill has been a historically small community that has not formally participated in Region G planning meetings.



#### Current Status of Loan - Timeline

- PIF Application submitted March 2022.
- Loan Application submitted December 2022
- Expected loan TWDB approval July 2023
- Submit environmental/engineering planning documents December 2023
- Estimated completion of design December 2025
- Estimated construction start date January 2026
- Estimated construction completion December 2027



#### City's Interactions with Region G RWPG

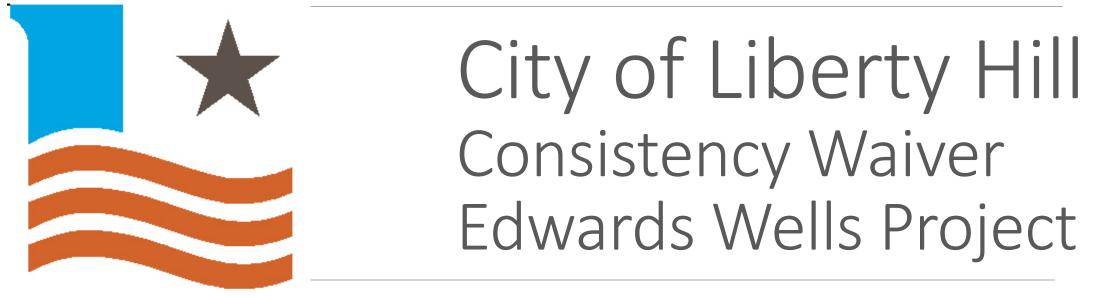
- City staff held a pre-application meeting with TWDB and TCEQ staff in November, 2022.
- Steger Bizzell attended Region G planning group meeting on March 8, 2023
- Public comment was made at this meeting to introduce the proposed project to Region G and to request to be placed on agenda for May 31 for consistency waiver.
- Steger Bizzell has been in contact with Carollo Engineers since March 8, 2023 in preparation for May 31 meeting.



#### Conclusion

 In conclusion, the City of Liberty Hill requests that a consistency waiver is granted for the proposed project.

- Reuse projects are consistent with the Region G Regional Water Plan.
- The City of Liberty Hill has rights to all treated effluent water through the City's existing surface and ground water rights, wastewater service agreements with all users sending wastewater to the City's plant, and the City's existing Type 1 reuse authorization with TCEQ.
- The proposed project will help the City meet their 20-year water supply needs.
- The project includes environmental benefits including elimination of discharge of treated wastewater to the South San Gabriel River where algal blooms are a concern and water conservation through water reuse.



MAY 31, 2023



#### Project Background

- The proposed project consists of developing up to 6,000 gpm of Edwards Aquifer water supply wells in the Georgetown area to provide water supply to Liberty Hill's water CCN service area.
- The project scope includes planning, design and construction of an Edwards Aquifer well field, 15.5 miles of 24" raw water transmission main, and chloramine treatment facilities.
- We intend to perform an updated study of the Edwards Aquifer groundwater availability model in Williamson County to confirm available water supply in the Edwards Aquifer for the project during the planning phase of the project.



#### Project Background (cont.)

- The project budget also includes land acquisition costs and environmental planning costs.
- The proposed project ranked #12 on the TWDB's Intended Use Plan, and the project is eligible for \$10 million in loan forgiveness funding.
- The total TWDB funding for the project is \$27,000,000

#### Project Map





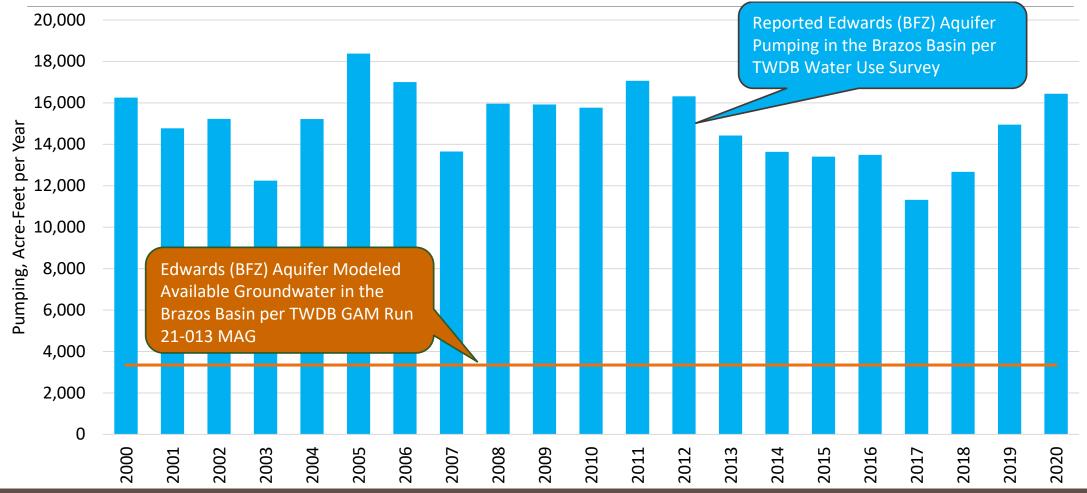
#### Need for Project

- The Liberty Hill water system has grown 11.1% annually in the last 10 years and 17.3% annually in the last 5 years.
- System growth projections estimate that Liberty Hill's water system will grow from 1,610 connections to 32,120 connections in the next 20 years.
- The City's current water sources consist of 600 acre-feet per year from Lake Travis through Leander and 112 acre-feet per year in Trinity well supply.
- 20-year projected water demand for Liberty Hill is 10,362 acre-feet per year. Current 20-year deficit is 9,650 acre-feet per year.



#### 20-Year Historical Edwards Aquifer Pumping – Williamson County

(source: http://www.twdb.texas.gov/waterlpanning/waterusesurvey/historical-pumpage.asp)





#### Existing GAM Limitations

- Not a robust representation of surface water
- Regional model limited for local stream/spring flow evaluations
- DFC adopted by GMA 8 for Williamson County is to: "Maintain at least 60 acre-feet per month of aggregated stream/spring flow during a repeat of the drought of record"
- Model predictive pumping does not appear to be reflective of realworld observations
- GAM update should address discrepancy between simulated and realworld conditions
- Utilizing results from the 20-year-old GAM will inhibit Liberty Hill's ability to provide water to its citizens

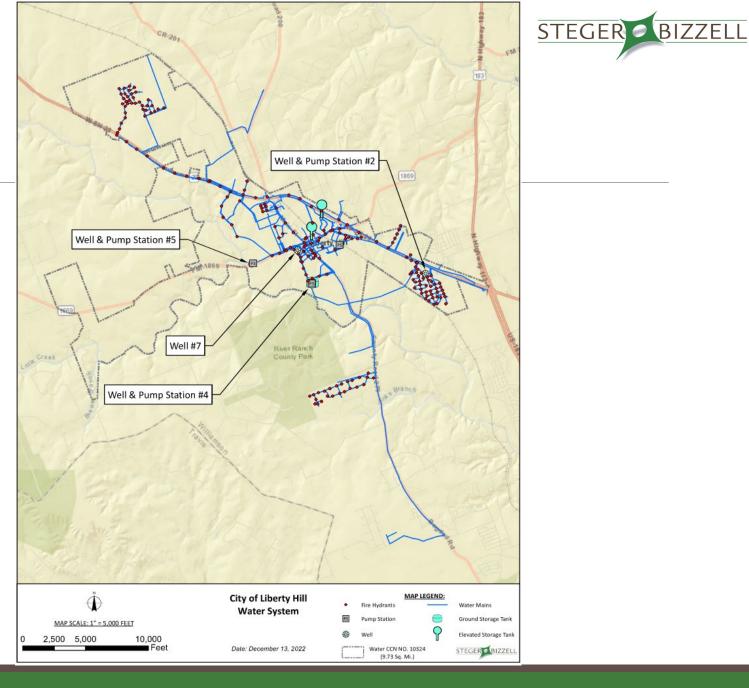


### Available Water Analysis – Region G and State Water Plan Data

	Edwards Aquifer Region G Williamson County – Total Supply and Demand – Acre-Feet Per Year					
Description	2020	2030	2040	2050	2060	2070
A. Total Supply – Edwards Region G Brazos	3351	3351	3351	3351	3351	3351
B. Total Supply – Edwards Region G Colorado	101	101	101	101	101	101
C. Total Supply (A + B)	3452	3452	3452	3452	3452	3452
D. Existing Allocations in Region/State Plans	2671	2736	3128	3351	3351	3351
F. Recommended WMS for Irrigation in 2021 Region G Plan	172	155	149	0	0	0
F. Total Demands (D + E)	2843	2891	3277	3351	3351	3351
G. Total Available Surplus (C – F)	609	561	175	101	101	101

#### Project Service Area

 The project service area will be the City of Liberty Hill water CCN service area, which consists of an area of 9.73 square miles.





#### Why is Project not in Regional Water Plan

- The proposed project is a relatively new project from a conceptual basis for the City.
- The City of Liberty Hill has been a historically small community that has not formally participated in Region G planning meetings.



#### Current Status of Loan - Timeline

- PIF Application submitted March 2022.
- Loan Application submitted December 2022
- Expected loan TWDB approval July 2023
- Submit environmental/engineering planning documents December 2023
- Estimated completion of design June 2024
- Estimated construction start date July 2024
- Estimated construction completion July 2025



#### City's Interactions with Region G RWPG

- City staff held a pre-application meeting with TWDB and TCEQ staff in November, 2022.
- Steger Bizzell attended Region G planning group meeting on March 8, 2023
- Public comment was made at this meeting to introduce the proposed project to Region G and to request to be placed on agenda for May 31 for consistency waiver.
- Steger Bizzell has been in contact with Carollo Engineers since March 8, 2023 in preparation for May 31 meeting.



#### Conclusion

- In conclusion, the City of Liberty Hill requests that a consistency waiver is granted for the proposed project.
- Liberty Hill's community has an immediate need to develop new water supply sources to meet the needs of their growing community.
- The existing GAM indicates that 609 acre-feet per year of Region G Edwards Well water is available in the Edwards Aquifer.
- TWDB historical pumping data for the Edwards Aquifer in Williamson County indicates that there is far more water supply available than what is indicated in the GAM.
- The proposed project should not be denied funding based solely on out-of-date GAM data that is not consistent with TWDB historical pumping data.

# Summary of Liberty Hill Consistency Waiver Request

ltem 9.2

Report from Brazos G RWPG Technical Consultant



WACO, TX May 31, 2023

#### Texas Administrative Code §357.60 – Consistency of Regional Water Plans

- (b) For the purposes of the Texas Water Code §16.053(j) (relating to Board Financial Assistance) projects proposed to the Board for funding shall be **considered to meet any need identified in an approved RWP in a manner consistent with the RWP if the project**:
  - (1) Is an enhancement of an Existing Water Supply or water source identified in the analysis developed under §357.32 of this title (relating to Water Supply Analysis) as meeting a demand, even though the project is not specifically recommended in the RWP;
  - (2) Involves a minor modification to an existing surface water right that is not in conflict with the RWP; or
  - (3) Is meeting a need in a manner consistent with the plan developed under Subchapters C and D of this chapter.
  - (4) For the purposes of the Texas Water Code §16.053(j), projects proposed to the Board for funding to meet any need identified in an approved RWP for which there is not a recommended WMS in such plan shall be considered by the Board not to be consistent with the approved RWP.
  - (5) For the purposes of the Texas Water Code §16.053(k) (relating to Board Waivers), the Board may consider, among other factors, changed conditions if a Political Subdivision requests a waiver of the Texas Water Code §16.053(j) for a project proposed to the Board for funding to meet a need in a manner that is not consistent with the manner the need is addressed in an approved RWP. **The Board shall request the members of any affected RWPG to provide input on the request for waiver of the Texas Water Code §16.053(j)**.



# The project sponsor (Liberty Hill) has submitted a consistency waiver request to TWDB.

#### The project sponsor should:

- Explain to TWDB why the consistency waiver is requested, and
- Provide the technical material that will be submitted to the TWDB.

#### Process (cont'd)

The RWPG is to discuss each project and take formal action(s) regarding support or opposition of the waiver request.

- The TWDB Board takes action on whether or not they will grant a consistency waiver based on the information received.
- In the RWPG's consideration of a consistency waiver, the RWPG should consider, at a minimum, the availability of water at the proposed project location.

# RWPG is to provide input to TWDB in the form of a letter to TWDB EA and PM:

- General opinion regarding availability of water at the proposed project location;
- Summary of interactions with the project sponsor; and
- Statement of outcome of considerations indicating whether the RWPG supports or opposes the waiver request.

#### City of Liberty Hill

#### City reports need for additional water:

- Based on historical growth rates and known existing commitments for future water connections, City projects growth from 1,610 connections today to 32,120 connections by 2042.
- City's projected total source water demand is 10,362 acre-feet per year by 2042.
- 20-year water supply deficit: 9,650 acre-feet per year.

#### Current activity:

• The City reports two (2) existing supplies:

 $\circ$  600 ac-ft/yr year in Lake Travis from the City of Leander; and

- $\odot$  112 ac-ft/yr of Trinity well supply in Liberty Hill
- Two proposed projects:
  - $\odot$  Edwards Aquifer Wells project; and
  - Direct Potable Reuse (using City's existing South Fork WWTP)

#### City of Liberty Hill (cont'd)

#### Future activity:

• Will be seeking TWDB funding assistance (Drinking Water State Revolving Fund).

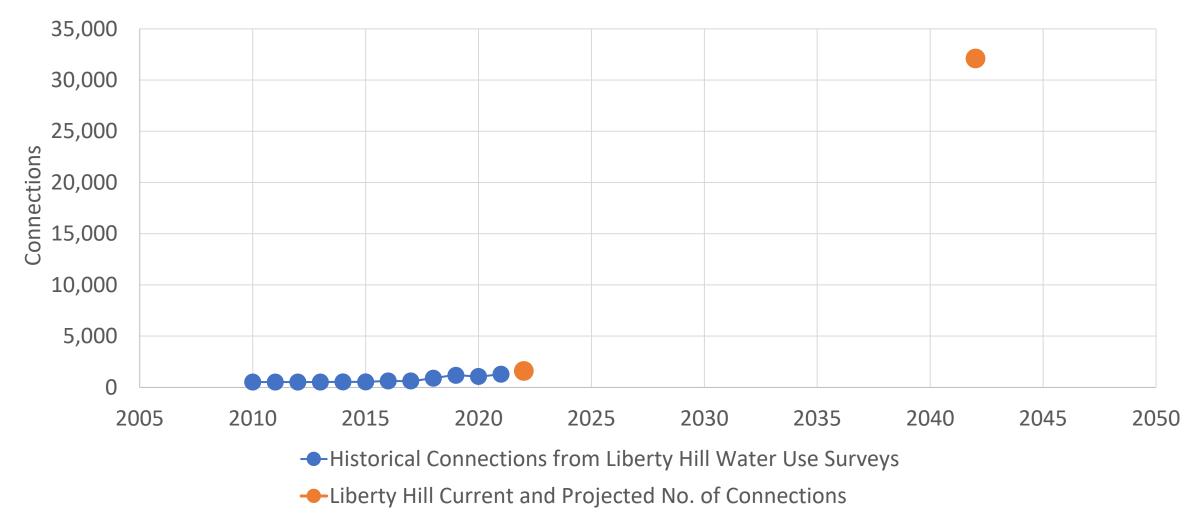
Seeking consistency waiver support from Brazos G for each proposed project.

- Groundwater development is not a recommended strategy.
- DPR is not an explicitly identified recommended strategy in 2021 Plan.

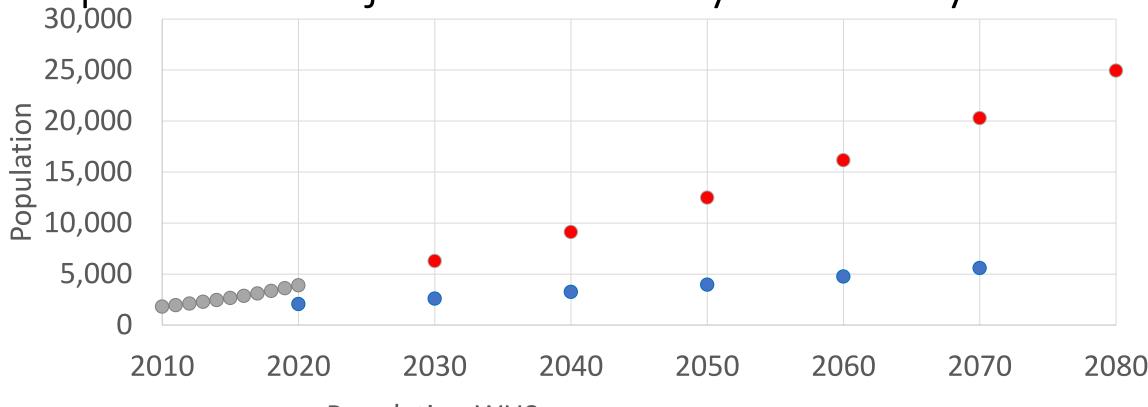
#### Demand

- Information on demands presented herein are for context only.
- The RWPG is not required to provide input on growth projections for this process.

#### Projected Growth and Need – City of Liberty Hill Connections

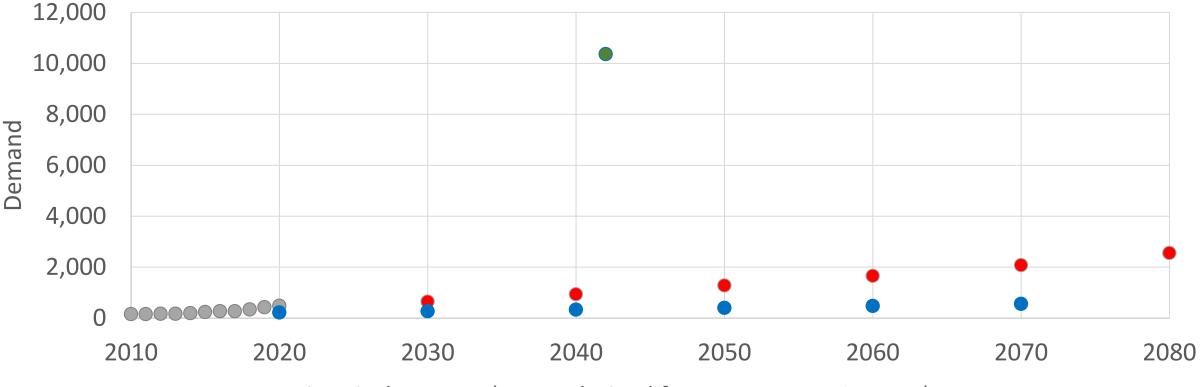


#### Historical, Adopted 2021 Plan, and Draft 2026 Population Projections for City of Liberty Hill



- Population WUS
- 2021 Plan Population
- 2026 Plan Draft Projected 1.0 Population

#### **Comparison of Demand Projections**



- Historical Net Use (TWDB derived from Water Use Surveys)
- Liberty Hill Projected Demand
- 2026 Plan Draft Projected 1.0 Demand
- 2021 Plan Demand

# Consideration of Supply Availability

Texas Administrative Code §357.32 – Relates to Planning Activities for Needs Analysis and Strategy Recommendations Water Supply Analyses (emphasis added)

(a) RWPGs shall evaluate:

- (1) Source water Availability during Drought of Record conditions; and
- (2) Existing Water Supplies that are legally and physically available to each WUG and WWP within the RWPA for use during the Drought of Record.
- (c) (excerpted) ... As the default approach for evaluating existing supplies, RWPGs shall assume full utilization of existing water rights and **no return flows** when using Water Availability Models.

## Project No. 1

#### Direct Potable Reuse (DPR) Project

- City has Type I authorization for irrigation;
- WWTP capacity of 2,240 ac-ft/yr (2 MGD) with ultimate capacity of 4,480 ac-ft/yr (4 MGD)

### Supply Availability from 2021 RWP

 WAM Run 3 includes an assumption of full consumptive use by water rights with no return flows (and thus 100% reuse by water right), thus DPR for a water right owner (or one to which that right is legally conveyed) is consistent with the 2021 RWP.

	Summary Information						
	Туре	Reuse (Direct)					
	Source	Treated wastewater effluent from the City's existing South Fork WWTP					
	Basin	Brazos River Basin					
	Place of Use	City of Liberty Hill water CCN service area, Brazos River Basin, Williamson County					
	Use Types	Municipal, Irrigation					
	Volume	Requesting up to 3,808 ac-ft/yr of treated water supply					
	Rate	Variable					

## Legal Availability

Liberty Hill has contracted 2,572 ac-ft/yr of Colorado Water from BRA (pursuant to HB 1437).

This 2,572 ac-ft/yr amount is comprised of three contracts with BRA:

- A 2004 BRA contract for 600 ac-ft/yr;
- A 2019 BRA contract for an additional 600 ac-ft/yr; and
- A 2022 BRA contract for an additional 1,372 ac-ft/yr.

#### The City has identified two sources:

- 600 acre-feet per year in Lake Travis from the City of Leander No documentation on extension of right to reuse; and
- 112 acre-feet per year of Trinity well supply in Liberty Hill

### 2,684 ac-ft/yr

## Supplemental Information

- 1. A statement of the need for the project, including

  - (a) water source treated wastewater effluent from the City's existing South Fork WWTP.
     (b) expected supply volumes to be generated by the project and ultimately expected by t expected supply volumes to be generated by the project and, – ultimately expected to provide an additional 3,808 acre-feet per year of treated water supply.
    - whether there are sufficient available supplies for the project to be developed. DPR is consistent with the assumption of 100% reuse utilized *c*) in the WAM Run 3 utilized to assess availability and does not conflict with any recommended WMS for reuse. Physical availability is reported by the City via WWTP capacity of 2,240 ac-ft/yr (2 MGD) with ultimate capacity of 4,480 ac-ft/yr (4 MGD). Documentation of legal supply availability has been identified for 2,684 ac-ft/yr, which is less than the City's requested 3,808 ac-ft/yr.
- A summary of the extent/service area of the project. Consistency waiver request should state the proposed service area of the project will be the City of Liberty Hill water CCN service area, which is located in Williamson County in the Brazos River Basin.
- *13.* A statement as to why this project was not reflected in the most currently adopted Regional Water Plans. The proposed project is a relatively new project from a conceptual basis for the City, so it has not been mentioned to the TWDB in any previous Regional Water Plan discussions. Additionally, the current version of the Region G Regional Water Plan does not [explicitly] include direct potable reuse as a part of the regional water plan available water supply sources. Additionally, the City of Liberty Hill has been a historically small community that has not formally participated in Region G planning meetings.
- 4. A summary of the current status of any loan (if applicable), including timelines for closing on the loan, beginning construction, TCEQ enforcement actions, etc. The PIF document was submitted to TWDB in March, 2022. The loan application was submitted in December, 2023. The project schedule submitted with the TWDB loan application is as follows:
  - Submit environmental planning documents: 6/1/2023
  - Submit engineering planning documents: 12/1/2023
  - Estimated date for completion of design: 12/1/2025
  - Estimated construction start date for first contract: 1/1/2026
  - Estimated construction end date for last contract: 12/31/2027

5. A summary of the WSC's interactions with the regional water planning group, including when the waiver request was presented to the RWPG, the action taken by the RWPG, and any interactions with the RWPG's technical consultants on how the project would impact the currently adopted Region C Regional Water Plan. Steger Bizzell attended the last Region G regional planning group meeting on March 8, 2023. Because a consistency waiver presentation for this project was not formally on the March 8 meeting agenda, a public comment was made to introduce the planning group board members to the proposed project and to request to be placed on the next Region G planning made to introduce the planning group board members to the proposed project and to request to be placed on the next Region G planning made to introduce the planning group board members to the proposed project and to request to be placed on the next Region G planning made to introduce the planning group board members to the proposed project and to request to be placed on the next Region G planning made to introduce the planning group board members to the proposed project and to request to be placed on the next Region G planning made to introduce the planning group board members to the proposed project and to request to be placed on the next Region G planning made to introduce the planning group board members to the proposed project and to request to be placed on the next Region G planning made to introduce the planning group board members to the proposed project and to request to be placed on the next Region G planning group board members to the proposed project and to request to be placed on the next Region G planning group board members to the proposed project and to request to be placed on the next Region G planning group board members to the proposed project and to request to be placed on the next Region G planning group board members to the proposed project and to request to be placed on the next Region G planning group board members to the project and to **√**5. group meeting agenda for a consistency waiver request. In addition, City staff held a pre-application meeting with TWDB and TCEQ staff in November 2022 for this project, and the City has been in contact with Carollo Engineering staff since the March 8th meeting in preparation for the May 31, 2023 Region G planning group meeting.

## **Consistency Status**

#### Based on project details provided to date, should <u>not</u> require:

• Amendment to Regional Water Plan

#### Plan review indicates:

- 2021 Brazos G WAM includes assumption of 100% reuse. This is assumed for each water right, for the owner/legal holder of the water right.
- No documentation for the surface water supply reported by the City (600 ac-ft/yr from Lake Travis via the City of Leander) has been provided to date identifying the legal extension of the right to reuse.
- BRA contracts with Liberty Hill *do* contain such language extending the right of use to direct reuse (flange to flange).
- The City's requested amount of 3,808 ac-ft/yr is greater than the 2,684 ac-ft/yr of presently documented legally available source water supply.

#### **Direct Potable Reuse Project**

#### Selected Options for RWPG Consideration

- Submittal of a letter to TWDB from the Brazos G Regional Water Planning Group stating the outcome of the considerations of the RWPG.
- Support the consistency waiver request for the City of Liberty Hill's Direct Potable Reuse Project.
- Support the consistency waiver request for the City of Liberty Hill's Direct Potable Reuse Project in an amount not to exceed 2,684 ac-ft/yr, unless additional documentation is provided by the City to TWDB indicating ownership or the legal extension of the right to use an additional amount not exceeding the City's requested 3,808 ac-ft/yr.
- Oppose the consistency waiver request for the City of Liberty Hill's Direct Potable Reuse Project, unless additional documentation is provided by the City to TWDB indicating legal extension of the right to use up to and not exceeding the City's requested 3,808 ac-ft/yr.
- Oppose the consistency waiver request for the City of Liberty Hill's Direct Potable Reuse Project.
- Support or oppose the consistency waiver request, noting other matters brought up during the deliberations of the RWPG at its May 31, 2023 meeting.



#### **Proposed Action**

"The Brazos G Regional Water Planning Group <u>supports</u> the Texas Water Development Board granting the <u>City of Liberty Hill</u> a waiver of consistency for developing the <u>Direct Potable Reuse Project</u> based on the current water plan and authorizes the RWPG technical consultant to work with the Brazos G Administrator to prepare and submit a <u>letter of support</u>, signed by the Brazos G Chairman, to the Texas Water Development Board."

## Project No. 2

#### Edwards Aquifer Wells Project

- Proposed well-field from Edwards-Balcones Fault Zone (BFZ) Aquifer in Georgetown area;
- Not located within GCD;

#### Supply Availability from 2021 RWP

- Not a recommended WMS;
- Requested amount revised by the City to align with unallocated MAG availabilities for Edwards-BFZ Aquifer within Brazos G/Williamson County area (Brazos & Colorado basins combined).
- Does not conflict with recommended WMS for Irrigation-Williamson County WUG.

#### **Physical Availability**

• TWDB will review the application and make an assessment whether or not there is water available for the life of the loan. Their review has not been finalized at this time.

#### **Summary Information**

Туре	Groundwater
Source	Edwards-BFZ Aquifer, Williamson County, Brazos G RWPA
Basin	Brazos and Colorado River Basins
Place of Use	City of Liberty Hill water CCN service area, Brazos River Basin, Williamson County
Use Types	Municipal
Volume	"the available volume of water in the Edwards Aquifer in Region G Williamson County for this project." See next slides for amounts.
Rate	Unstated

81

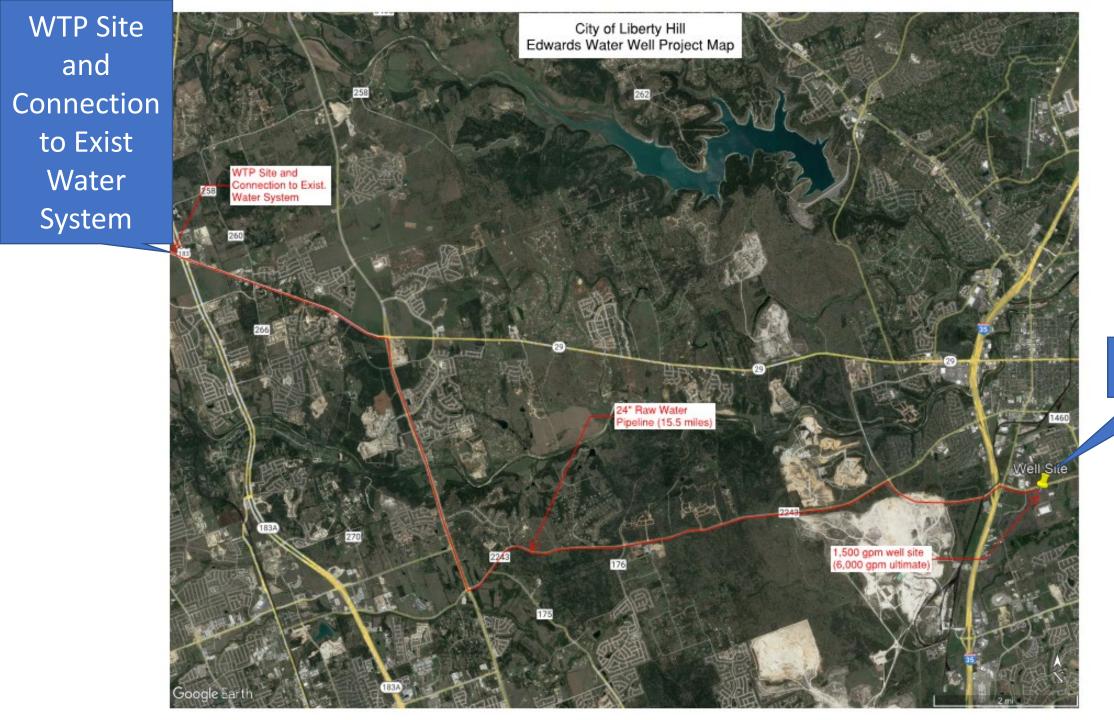
### Project's requested available volume of water in the Edwards Aquifer in Region G Williamson County

	Edwards Aquifer Region G Williamson County –					
	Total Supply and Demand – Acre-Feet Per Year					
Description	2020	2030	2040	2050	2060	2070
A. Total Supply – Edwards Region G Brazos	3351	3351	3351	3351	3351	3351
B. Total Supply – Edwards Region G Colorado	101	101	101	101	101	101
C. Total Supply (A + B)	3452	3452	3452	3452	3452	3452
D. Existing Allocations in Region/State Plans	2671	2736	3128	3351	3351	3351
F. Recommended WMS for Irrigation in 2021	172	155	149	0	0	0
Region G Plan						
F. Total Demands (D + E)	2843	2891	3277	3351	3351	3351
G. Total Available Surplus (C – F)	609	561	175	101	101	101

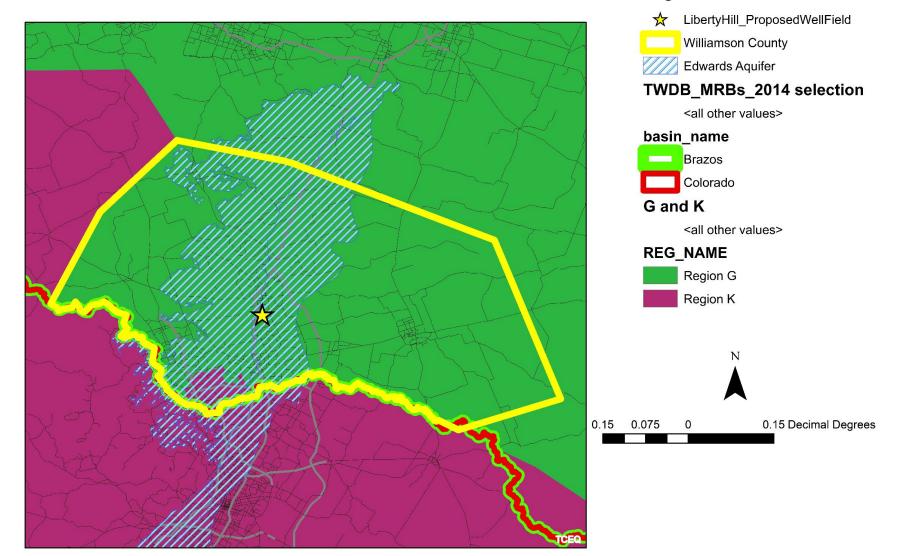
## Derivation of Edwards-BFZ Aquifer (Williamson County) Surplus by Basin

			2020	2030	2040	2050	2060	2070
Region	County	Basin						
	WILLIAMSON	BRAZOS	3,351	3,351	3,351	3,351	3,351	3,351
G	WILLIAMSON	COLORADO	101	101	101	101	101	101
STIN	IG SUPPL	1						
ZOS G (I	BRAZOS BASIN)		2,671	2,736	3,128	3,351	3,351	3,351
MS S	UPPLY	I		I				
G	WILLIAMSON IRRIGATION	BRAZOS	172	155	149	0	0	C
AVAILABLE SURPLUS AFTER ALLOCATIONS								
		BRAZOS	508	460	74	0	0	0
	CO	LORADO	101	101	101	101	101	101
	G ISTIN NZOS G ( VIS S G	G WILLIAMSON	G       WILLIAMSON       BRAZOS         G       WILLIAMSON       COLORADO         ISTING SUPPLY         AZOS G (BRAZOS BASIN)         WILLIAMSON         G       WILLIAMSON         G       IRRIGATION         BRAZOS	G       WILLIAMSON       BRAZOS       3,351         G       WILLIAMSON       COLORADO       101         ISTING SUPPLY         AZOS G (BRAZOS BASIN)       2,671         VSOS G (BRAZOS BASIN)       2,671         MILLIAMSON         G       WILLIAMSON       2,671         MILIAMSON         G       WILLIAMSON       172         AFTER ALLOCATIONS         BRAZOS       508	RegionCountyBasinGWILLIAMSONBRAZOS3,3513,351GWILLIAMSONCOLORADO101101ISTING SUPPLYVZOS G (BRAZOS BASIN)2,6712,736VIS SUPPLYGWILLIAMSON IRRIGATIONBRAZOS172155AFTER ALLOCATIONSBRAZOS508460	Region         County         Basin           G         WILLIAMSON         BRAZOS         3,351         3,351         3,351           G         WILLIAMSON         COLORADO         101         101         101           ISTING SUPPLY         COLORADO         101         101         101           ISTING SUPPLY         2,671         2,736         3,128           VIS SUPPLY         2,671         2,736         3,128           VIS SUPPLY         8         172         155         149           AFTER ALLOCATIONS         8         74         74	Region         County         Basin         Image: Constraint of the second se	Region         County         Basin           G         WILLIAMSON         BRAZOS         3,351         3,351         3,351         3,351           G         WILLIAMSON         COLORADO         101         101         101         101           S         WILLIAMSON         COLORADO         101         101         101         101           ISTING SUPPLY         ZOS G (BRAZOS BASIN)         2,671         2,736         3,128         3,351         3,351           VIS SUPPLY         ZOS G (BRAZOS BASIN)         2,671         2,736         3,128         3,351         3,351           G         WILLIAMSON         BRAZOS         172         155         149         0         0           G         IRIGATION         BRAZOS         172         155         149         0         0           AFTER ALLOCATIONS         BRAZOS         508         460         74         0         0

• •					1	
G. Total Available Surplus (C – F)	609	561	175	101	101	101



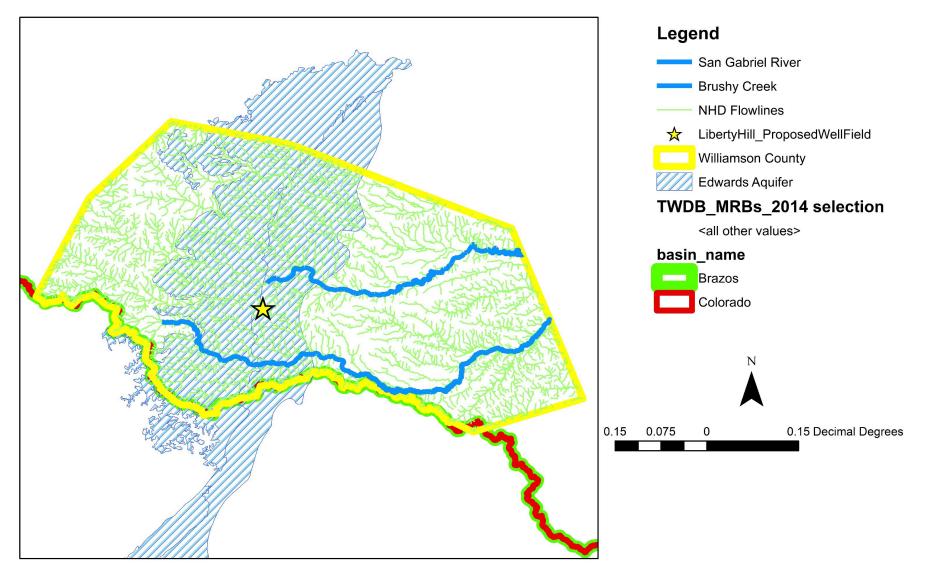
Proposed Well Site



Williamson County

Edwards Aquifer Wells Project - General location of proposed Well Field for the City of Liberty Hill. Planning Regions G and K Brazos and Colorado River Basins

#### Legend

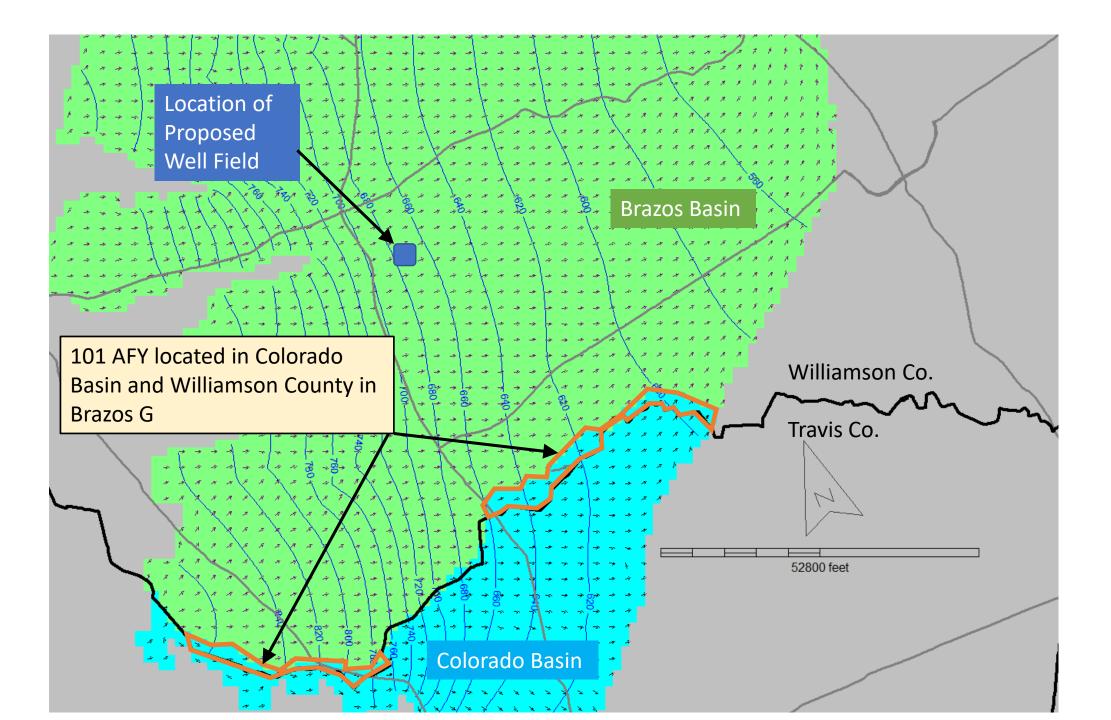


Williamson County

Edwards Aquifer Wells Project - General location of proposed Well Field for the City of Liberty Hill.

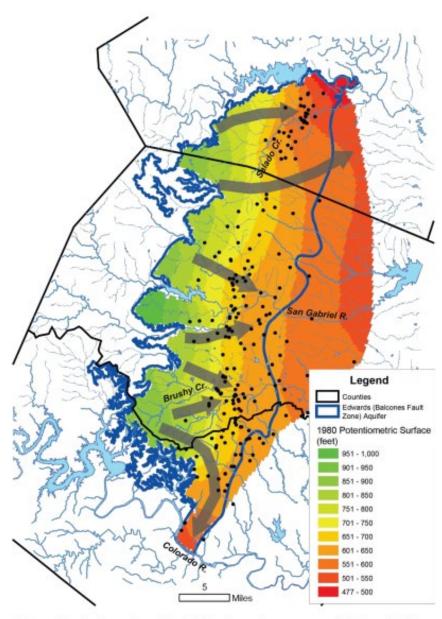
Planning Regions G and K

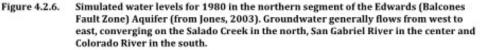
Brazos and Colorado River Basins



MAG is developed from a model to evaluate groundwater flow conditions at regional scale

- GAM designed to address regional scale questions.
- TWDB makes no warranties or representations relating to the actual conditions of any aquifer at a particular location or at a particular time.
- Important for GCDs to monitor groundwater pumping and groundwater levels in the aquifer to inform and refine these analyses with TWDB
- Reality of how the aquifer responds to the actual amount and location of pumping now and in the future.





Conceptual Model: Northern Segment of the Edwards-BFZ and Assoc. Trinity Aquifers of Texas – Jones, TWDB, Feb. 2023

#### Excerpted p. 58:

and others, 1990). Intense fracturing in the Balcones Fault Zone suggests that the aquifer is anisotropic because of preferential flow through the generally northeast-southwestoriented fractures (Baker and others, 1986; Duffin and Musick, 1991). Groundwater flow along fractures is partially responsible for the southward flow towards the Colorado River in the southern part of the study area, where fracturing is most intense (Figures 2.2.2 and 4.2.6). Senger and others (1990) suggested that some of the major faults, especially in the south, also act as hydraulic barriers, restricting west-to-east groundwater flow. In the central and northern parts of the aquifer, where faulting is less intense, the influence of fractures on regional groundwater flow is less apparent (Senger and others, 1990). In the central and northern parts of the study area, groundwater flows west to east with tendencies to converge on the major rivers and streams—Brushy Creek, San Gabriel River and Salado Creek (Figure 4.2.6). Groundwater flow convergence on major rivers is also apparent in the Trinity Aquifer, especially towards the Salado Creek and Colorado, San Gabriel, and Lampasas rivers (Figure 4.2.7).

## Supplemental Information

- 1. A statement of the need for the project, including
  - *a)* water source groundwater wells in the City of Georgetown area drawing from the Edwards-BFZ Aquifer, Williamson County, Brazos and Colorado River Basins.
  - *b)* expected supply volumes to be generated by the project and, the proposed project is expected to provide from the Edwards-BFZ MAG supply in the Brazos River Basin an amount of 609 ac-ft/yr in 2020 to 0 ac-ft/yr by 2050, and 101 ac-ft/yr over the 2020 2070 period from the MAG portion located in the Colorado River Basin.
    - c) whether there are sufficient available supplies for the project to be developed. According to the MAG amounts utilized for the purposes of the 2021 Brazos G RWP, there are sufficient available supplies for the proposed project to produce the requested 609 ac-ft/yr down to74 ac-ft/yr by 2040 from that portion of the Edwards-BFZ Aquifer located in Brazos G, Williamson County, Brazos River Basin. No documentation has been provided to date supporting the proposed project well site's physical capability to access only that portion of the MAG for the Edwards-BFZ Aquifer located in Brazos G, Williamson County, Colorado River Basin. Impacts to other local groundwater water supplies and/or ability to comply with endangered species concerns related to groundwater are not documented.
- 2. A summary of the extent/service area of the project. Consistency waiver request should state the proposed service area of the project will be the City of Liberty Hill water CCN service area, which is located in Williamson County in the Brazos River Basin.
- 3. A statement as to why this project was not reflected in the most currently adopted Regional Water Plans. The proposed project is a relatively new project from a conceptual basis for the City, so it has not been mentioned to the TWDB in any previous Regional Water Plan discussions.
- Additionally, the City of Liberty Hill has been a historically small community that has not formally participated in Region G planning meetings.
- 4. A summary of the current status of any loan (if applicable), including timelines for closing on the loan, beginning construction, TCEQ enforcement actions, etc. The PIF document was submitted to TWDB in March, 2022. The loan application was submitted in December, 2023. The project schedule submitted with the TWDB loan application is as follows:
  - Submit environmental planning documents: 6/1/2023
  - Submit engineering planning documents: 6/1/2023
  - Estimated date for completion of design: 12/1/2023
  - Estimated construction start date for first contract: 3/1/2024
  - Estimated construction end date for last contract: 3/1/2025

5. A summary of the WSC's interactions with the regional water planning group, including when the waiver request was presented to the RWPG, the action taken by the RWPG, and any interactions with the RWPG's technical consultants on how the project would impact the currently adopted Region C Regional Water Plan. Steger Bizzell attended the last Region G regional planning group meeting on March 8, 2023. Because a consistency waiver presentation for this project was not formally on the March 8 meeting agenda, a public comment was made to introduce the planning group board members to the proposed project and to request to be placed on the next Region G planning group meeting agenda for a consistency waiver request. In addition, City staff held a pre-application meeting with TWDB and TCEQ staff in November 2022 for this project, and the City has been in contact with Carello Fagingaring staff since the March 8th meeting for the March 21, 2022.

## **Consistency Status**

#### Based on project details provided to date, should <u>not</u> require:

Amendment to Regional Water Plan.

#### Plan review indicates:

- Does not conflict with existing or recommended MAG supply allocations.
- Proposed project would utilize all remaining, unallocated available MAG supply from the Edwards-BFZ Aquifer in Williamson County (Brazos and Colorado Basins).
- Unallocated MAG supply availability in the Brazos River Basin decreases from 508 acft/yr in 2020 to 0 ac-ft/yr by 2050.
- By 2050, the only remaining MAG supply availability is located in that portion of the Edwards-BFZ Aquifer located in the Colorado River Basin.
- Proposed project appears to be just outside Georgetown City limits. No documentation on potential impacts to other local groundwater supply and/or ability to comply with endangered species concerns related to groundwater has been provided.

#### **Edwards Aquifer Wells Project**

#### Selected Options for RWPG Consideration

- Submittal of a letter to TWDB from the Brazos G Regional Water Planning Group stating the outcome of the considerations of the RWPG.
- Support the consistency waiver request for the City of Liberty Hill's Edwards Aquifer Wells Project.
- Support the consistency waiver request, up to the amounts requested by the City to be withdrawn from that portion of the MAG identified as available from the Edwards-BFZ Aquifer/Brazos G Region/Williamson County/Brazos River Basin, noting that the project is projected to have 0 available supply by 2050.
- Oppose the consistency waiver request.
- Oppose the consistency waiver request, noting the need for documentation supporting that the
  project's identified well field location could physically access and utilize only that portion of the MAG
  for the Edwards-BFZ Aquifer/Brazos G Region/Williamson County/Colorado River Basin, as without
  access to that portion the requested amounts of physically available supply declines to 0 ac-ft/yr by
  2050.
- Support or oppose the consistency waiver request, noting other matters brought up during the deliberations of the RWPG at its May 31, 2023 meeting.

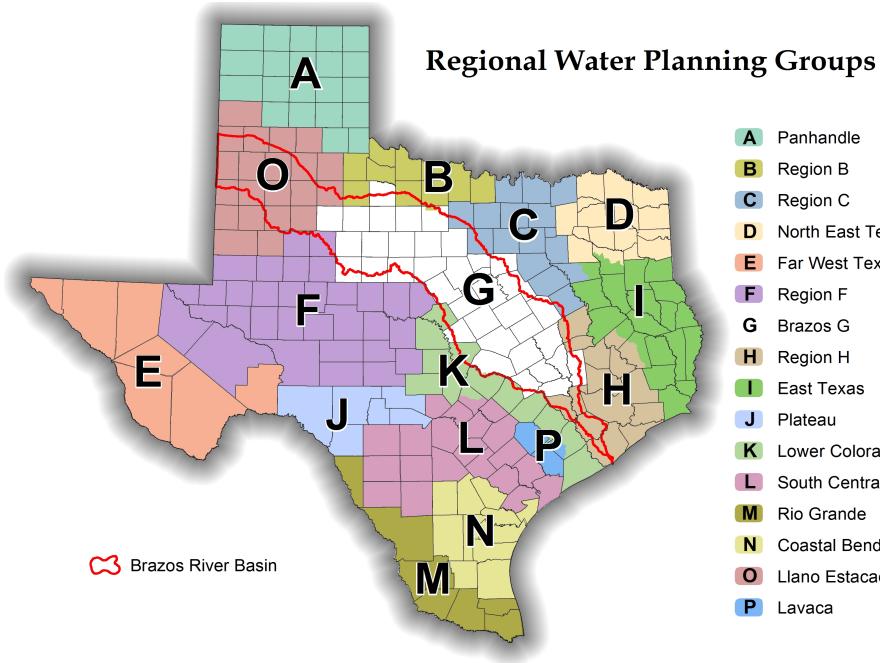


#### **Proposed Action**

"The Brazos G Regional Water Planning Group <u>supports</u> the Texas Water Development Board granting the <u>City of Liberty Hill</u> a waiver of consistency for developing the <u>Edwards Aquifer Wells Project</u> based upon the current water plan and authorizes the RWPG technical consultant to work with the Brazos G Administrator to prepare and submit a <u>letter of support</u>, signed by the Brazos G Chairman, to the Texas Water Development Board."



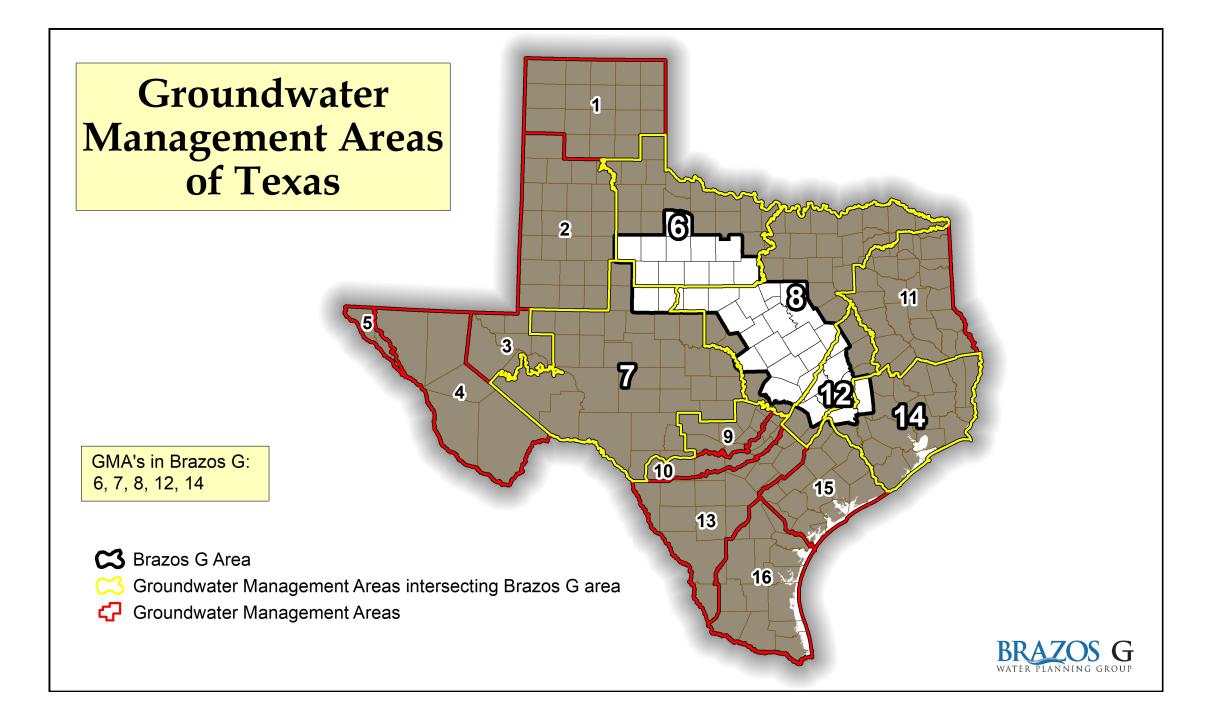
# **10.** Report and possible discussion on updates from other regional water planning groups (Regions B, C, F, H, K, L & O)







# **11.** Report and possible discussion on Groundwater Management Area (GMA) activities





### 12. Report and possible discussion on agency communication and information. (TPWD, TDA, TSSWCB, BBASC, & Interregional Planning Council)





# **Soil & Water**

CONSERVATION BOARD



### 13. Discussion and possible action on report by Brazos G Administrator

### **13.1. Administrator Report**

13.2. Finance Report – Summary of Administrative Tasks and Expenses



### **13.1. Administrator Report**

## Discussion on Member Contact Information that is currently provided on the Brazos G Website.

#### Current:

• Name, Entity Represented, Physical addresses, Mailing addresses, County, **Email**, Phone numbers, and Interest Category Represented.

#### Proposed Change:

- Name, Entity Represented, Location, and Interest Category Represented.
- Contact with Brazos G would be directed through the Contact Us form on the Brazos G website or the planning group sponsor's email contact <a href="mailto:BrazosGlnfo@brazos.org">BrazosGlnfo@brazos.org</a>.



#### Current: Brazos G RWPG Voting Members (23)

#### Updated March 2023

Physical Address (County)	Mailing Address	Telephone	Email Address Interest Category Represented
Wilson Cattle Company 7026 East OSR Bryan, TX 77808 (BRAZOS COUNTY)	7026 East OSR Bryan, TX 77808	Office: (979) 218-1800	wlwilsoncattlecompany@gmail.com Interest Category: Agriculture
Beard Kultgen Brophy Bostwick & Dickson, PLLC 220 S. Fourth St. Waco, TX 76701 (MCLENNAN COUNTY)	PO Box 21117 Waco, TX 76702-1117	Office: (254) 776-5500	peek@thetexasfirm.com Interest Category: Small Business
Brazos River Authority 4600 Cobbs Drive Waco, TX 76714-7555 (MCLENNAN COUNTY)	PO Box 7555 Waco, TX 76714-7555	Office: (254) 761-3194	davidc@brazos.org Interest Category: River Authorities
Clearwater UWCD 700 Kennedy Court Belton, TX 76571 (BELL COUNTY)	PO Box 1989 Belton, TX 76571	Office: (254) 933-0120	daaron@cuwcd.org Interest Category: Groundwater Management Area Representative
Wes-Tex GCD 100 E. 3rd St., Ste. 305B Sweetwater, TX 79556 (NOLAN COUNTY)	100 E. 3rd St., Ste. 305B Sweetwater, TX 79556	Office: (325) 236-6033	dale.adams@co.nolan.tx.us Interest Category: Groundwater Management Area Representative
	(County)Wilson Cattle Company 7026 East OSR Bryan, TX 77808 (BRAZOS COUNTY)Beard Kultgen Brophy Bostwick & Dickson, PLLC 220 S. Fourth St. Waco, TX 76701 (MCLENNAN COUNTY)Brazos River Authority 4600 Cobbs Drive Waco, TX 76714-7555 (MCLENNAN COUNTY)Clearwater UWCD 700 Kennedy Court Belton, TX 76571 (BELL COUNTY)Wes-Tex GCD 100 E. 3rd St., Ste. 305B Sweetwater, TX 79556	(County)Mailing AddressWilson Cattle Company 7026 East OSR Bryan, TX 77808 (BRAZOS COUNTY)7026 East OSR Bryan, TX 77808 (RRAZOS COUNTY)Beard Kultgen Brophy Bostwick & Dickson, PLLC 220 S. Fourth St. Waco, TX 76701 (MCLENNAN COUNTY)PO Box 21117 Waco, TX 76702-1117Brazos River Authority 4600 Cobbs Drive Waco, TX 76714-7555 (MCLENNAN COUNTY)PO Box 7555 Waco, TX 76714-7555 Waco, TX 76714-7555Clearwater UWCD 700 Kennedy Court Belton, TX 76571 (BELL COUNTY)PO Box 1989 Belton, TX 76571 Belton, TX 76571 Belton, TX 76571 Sweetwater, TX 79556	(County)Mailing AddressTelephoneWilson Cattle Company 7026 East OSR Bryan, TX 778087026 East OSR Bryan, TX 77808Office: (979) 218-1800Beard Kultgen Brophy Bostwick & Dickson, PLLC 220 S, Fourth St. Waco, TX 76701 (MCLENNAN COUNTY)PO Box 21117 Waco, TX 76702-1117Office: (254) 776-5500Brazos River Authority Waco, TX 76714-7555PO Box 7555 Waco, TX 76714-7555Office: (254) 776-13194Clearwater UWCD 700 Kennedy Court Belton, TX 76571 (BELL COUNTY)PO Box 1989 Belton, TX 76571 (BELL COUNTY)Office: (254) 933-0120Wes-Tex GCD 100 E. 3rd St., Ste. 305B Sweetwater, TX 79556100 E. 3rd St., Ste. 305B Sweetwater, TX 79556Office: (325) 236-6033



#### Proposed:

Name/Title	Entity/Location	Interest Category Represented
Wayne Wilson,	Wilson Cattle Company,	Agriculture
Self Employed; Ranching	Bryan, TX	
CHAIR	Brazos County	
Gail Peek,	Beard Kultgen, Brophy, Bostwick, & Dickson, PLLC	Small Business
Of-Counsel	Waco, TX	
VICE-CHAIR	McLennan County	
David Collinsworth,	Brazos River Authority	River Authorities
General Manager/CEO,	Waco, TX	
SECRETARY/TREASURER	McLennan County	
Dirk Aaron,	Clearwater UWCD,	Groundwater Management Area Representative
General Manager	Belton, TX	
	Bell County	
Dale Adams,	Wes-Tex GCD	Groundwater Management Area Representative
General Manager	Sweetwater, TX	
	Nolan County	



# 13.2. Finance Report – Summary of Administrative Tasks and Expenses

The Finance Report of Administrative Expenses through April 30, 2023, is provided for your information.

#### Brazos River Authority Brazos G From 02/01/23 Through 04/30/23

	Current	Life	Total	Budget	% Budget
	Period	to date	Budget	Variance	Remaining
Revenues					
State Grants	45,928	126,530	1,823,980	1,697,450	93.06%
Interest Income	-	-			
Total Revenues	45,928	126,530	1,823,980	1,697,450	93.06%
Reimburseable Expenditures					
Salaries	629	2,556			
Benefits	270	1,111			
Indirect Costs	63	256			
Other Expenditures					
Printing/Publishing <sup>1</sup>	240	4,444			
Public Information/Notices <sup>2</sup>	-	2,373			
Total Other Expenditures	1,203	10,739	42,500	31,761	74.73%
Voting Planning Member Travel	821	3,732	25,500	21,768	85.37%
Subcontractor <sup>3</sup>	43,904	112,059	1,755,980	1,643,921	93.62%
Total Reimburseable Expenditures	45,928	126,530	1,823,980	1,697,450	93.06%
Work in Kind					
Salaries/benefits	601	14,433			
Other	39	293			
Total Work in Kind	640	14,726			
Net Revenue over expenditures	(640)	(14,726)	_		

<sup>1</sup> Postage/copies/Domain renewal <sup>3</sup> includes Jan thru April



#### 14. Discussion and possible action on report by Brazos G Chair



### 15. Consider Agenda Items and Date for the next Brazos G RWPG public meeting

#### Next Brazos G Meeting Date: Thursday, July 27, 2023



17. Adjourn