



Brazos G Regional Water Planning Group

Thursday, August 1, 2024

10:00 AM

Brazos River Authority

Lt. Gen. Phillip J. Ford Central Office

4600 Cobbs Dr. Waco, TX 76710



1. Call Meeting to Order and Notice of Meeting

2. Invocation

3. Attendance and Announcements

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



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

5.1. Presentation on “What’s New” for TWDB's financial assistance programs

5.2. Report from TWDB staff for Brazos G

TWDB Regional Water Planning Update Region G August 1, 2024

- Water Supply Planning County Summaries available online
<https://www.twdb.texas.gov/waterplanning/rwp/outreach/index.asp>
- Texas Water Fund Implementation Plan released
 - Refer to updated [website](#) and email list sign up for more information
- Upcoming financial assistance workshop in Caldwell on Wednesday, September 25, 2024, at 1:30 p.m. at the Caldwell Civic Center, 103 TX-21 West, Caldwell, TX 77836
 - <https://www.twdb.texas.gov/home/tabs/doc/hot/Regional-Financial-Assistance-Workshop.pdf>
- 2026 RWP Water Supply Needs/Surplus Map -
<https://twdb.maps.arcgis.com/apps/MapSeries/index.html?appid=383ac05ff15b4e2694a21f2442d14a7d>

Texas Water Fund (TWF) Implementation Plan



- TWDB sought stakeholder feedback through surveys, invitations for public comment and board and stakeholder meetings, and a dedicated TWF email from January to April 2024.
- **Three surveys** on (1) Financial Assistance for Water Infrastructure Projects, (2) New Water Supply for Texas Fund, and (3) Statewide Water Public Awareness Program
 - Feedback summarized Board memorandum (linked below)
- **Implementation Plan** released July 23, 2024
 - Addresses statutory directives and responsive to stakeholder feedback
 - Plan is flexible and subject to change
 - Plan includes proposed funding distribution and timeline
 - <https://www.twdb.texas.gov/board/2024/07/Board/Brd02.pdf>
- Receive future updates by signing up for TWDB’s Financial Assistance email list:
<https://www.twdb.texas.gov/newsmedia/signup.asp>



6. Report and possible discussion from the Water Policy Committee



- 7. Discussion and possible action on Request from the City of Georgetown to Initiate an Amendment to the 2021 Brazos G Regional Water Plan**
 - 7.1. Presentation from the City of Georgetown representative**
 - 7.2. Report on Amendment Request and Process from the technical consultant**
 - 7.3. Discussion and possible action to pursue amendment process and approve the technical consultant to submit on behalf of the Brazos G RWPG a request minor amendment determination from the Texas Water Development Board.**



CITY OF GEORGETOWN: WATER SUPPLY OVERVIEW

Agenda Item 7.1 | August 1, 2024



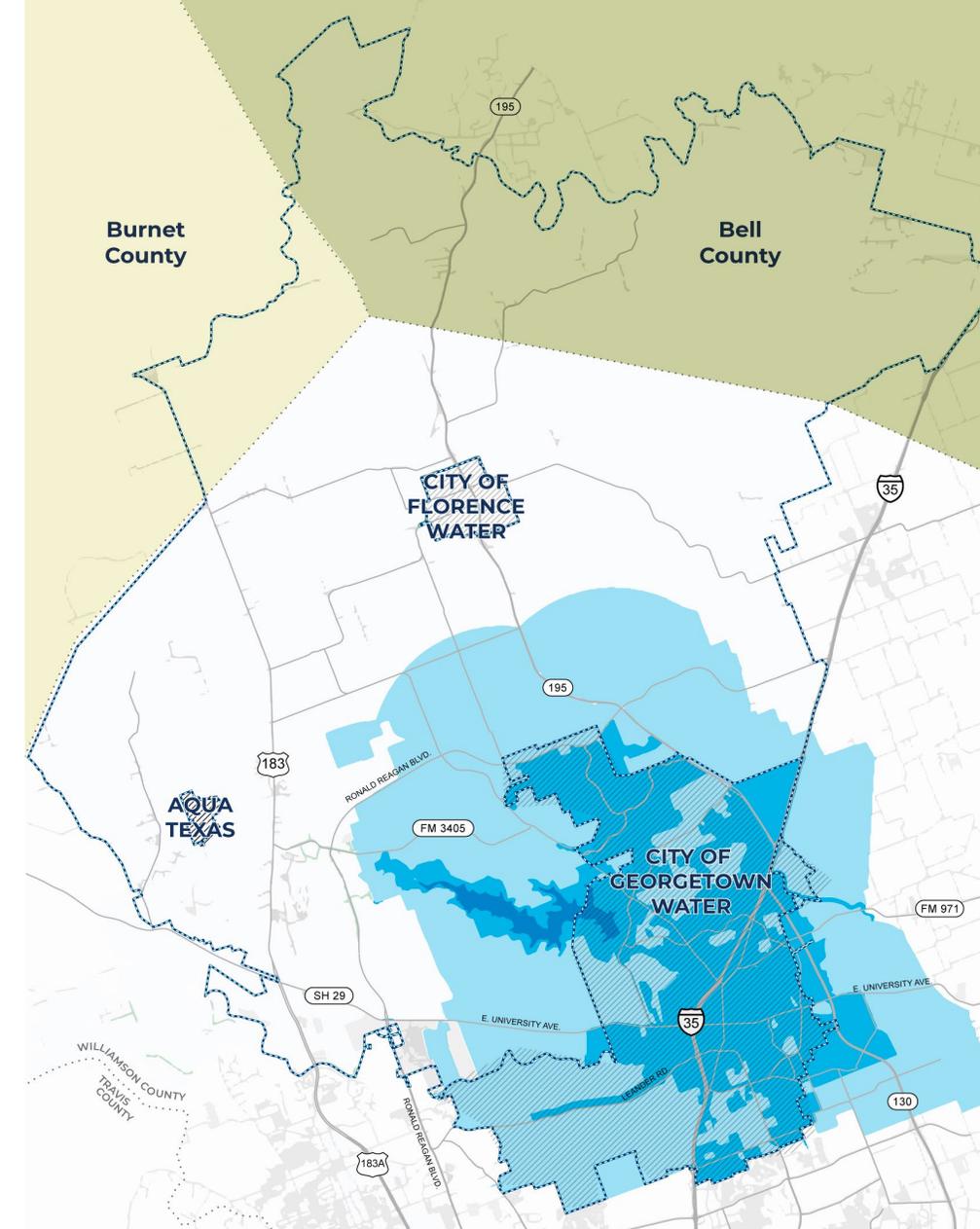
UPDATE TO BRAZOS G REGIONAL WATER PLANNING GROUP

TODAY'S DISCUSSION

- **Current state of water**
- **Water supply projects**
- **Our path towards a public-private partnership**

OUR SERVICE AREA IS AMONG THE NATION'S FASTEST-GROWING

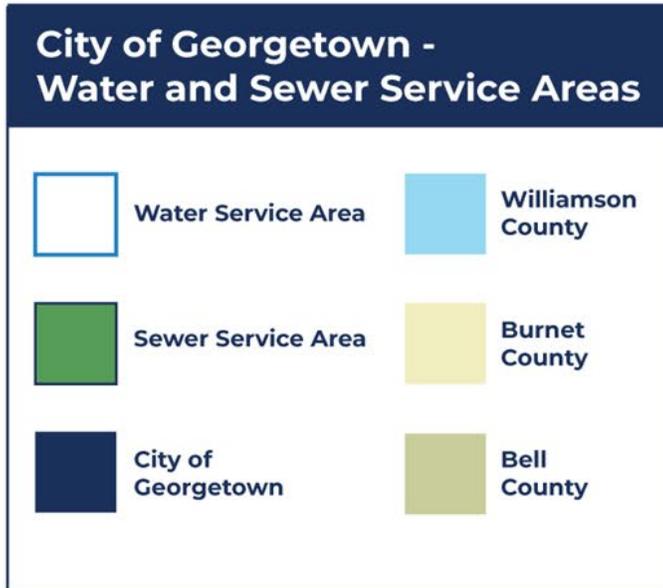
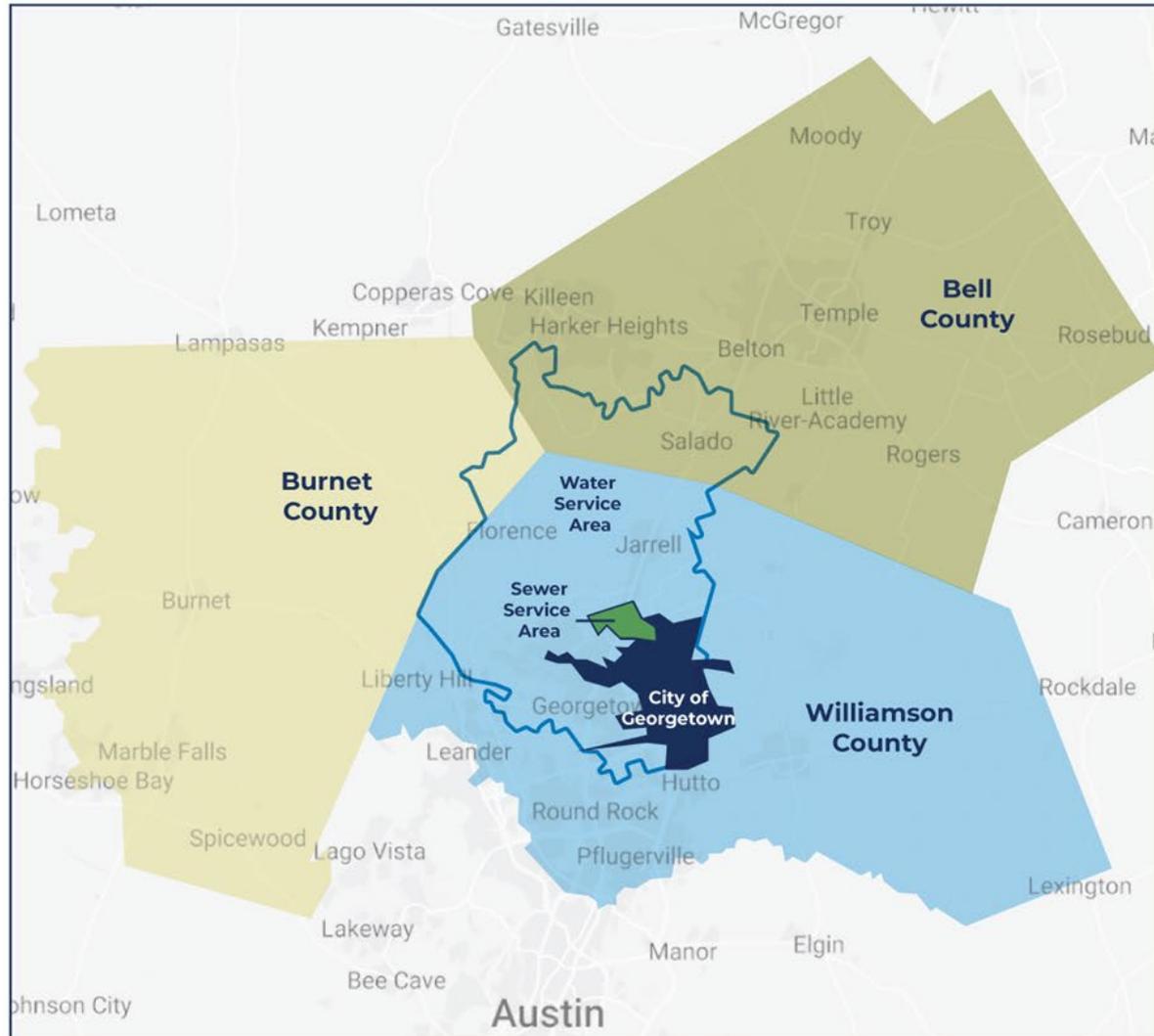
- 400-square-mile service area.
- 40% of water customers live outside City limits.
- Serve 74,000+ customers representing 170,000+ people.



Georgetown Water Operational Area



REGIONAL SERVICE AREA



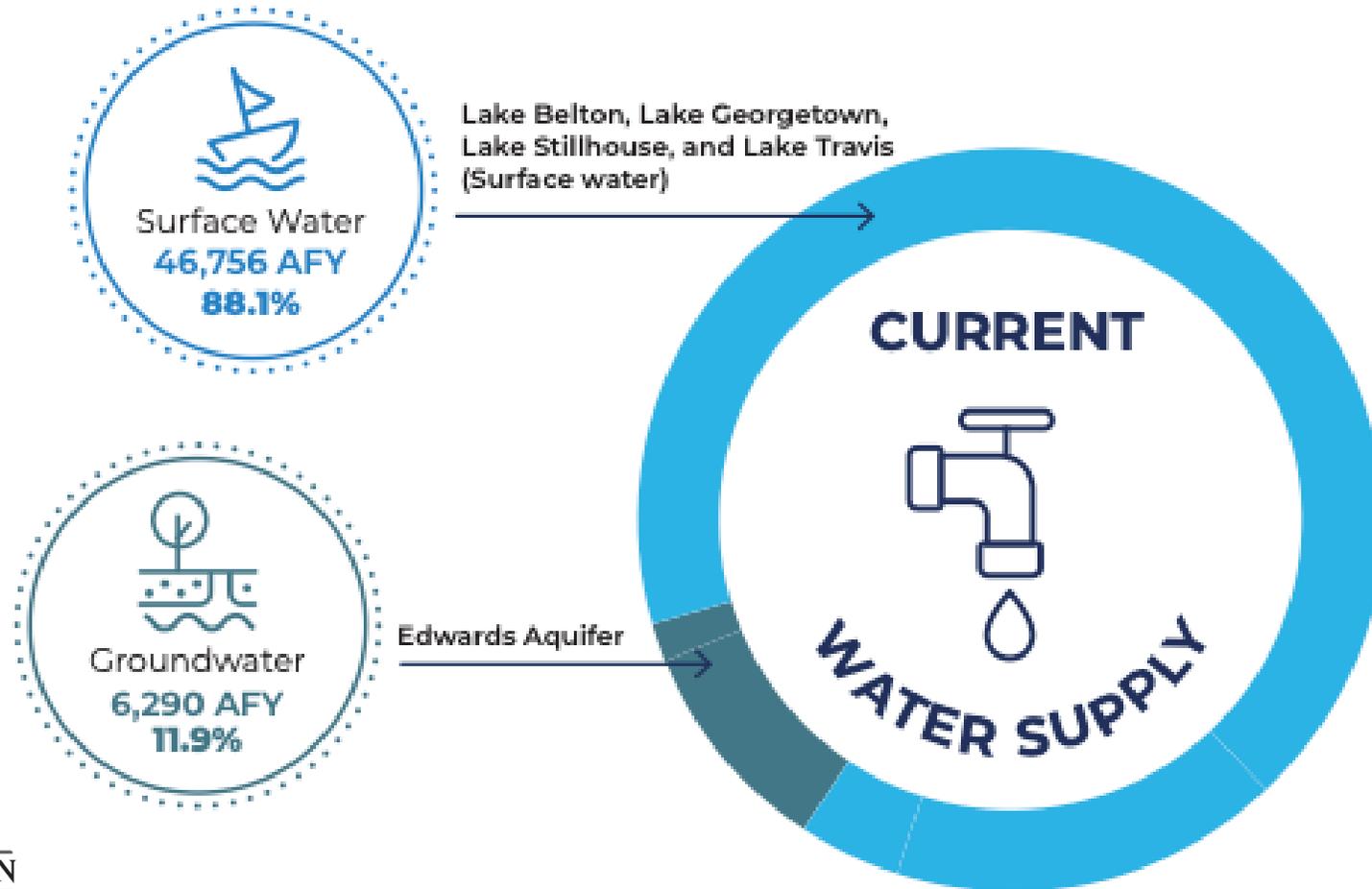
➤ Service territory was the result of the dissolution of the Chisholm trail special utility district, at the direction of the State Legislature

WE ARE MANAGING GROWTH

- Doubled number of customers over the past 10 years.
- 5,000 new customers expected per year for the next 20 years.
- No ability to stop the growth.



WHERE OUR WATER COMES FROM

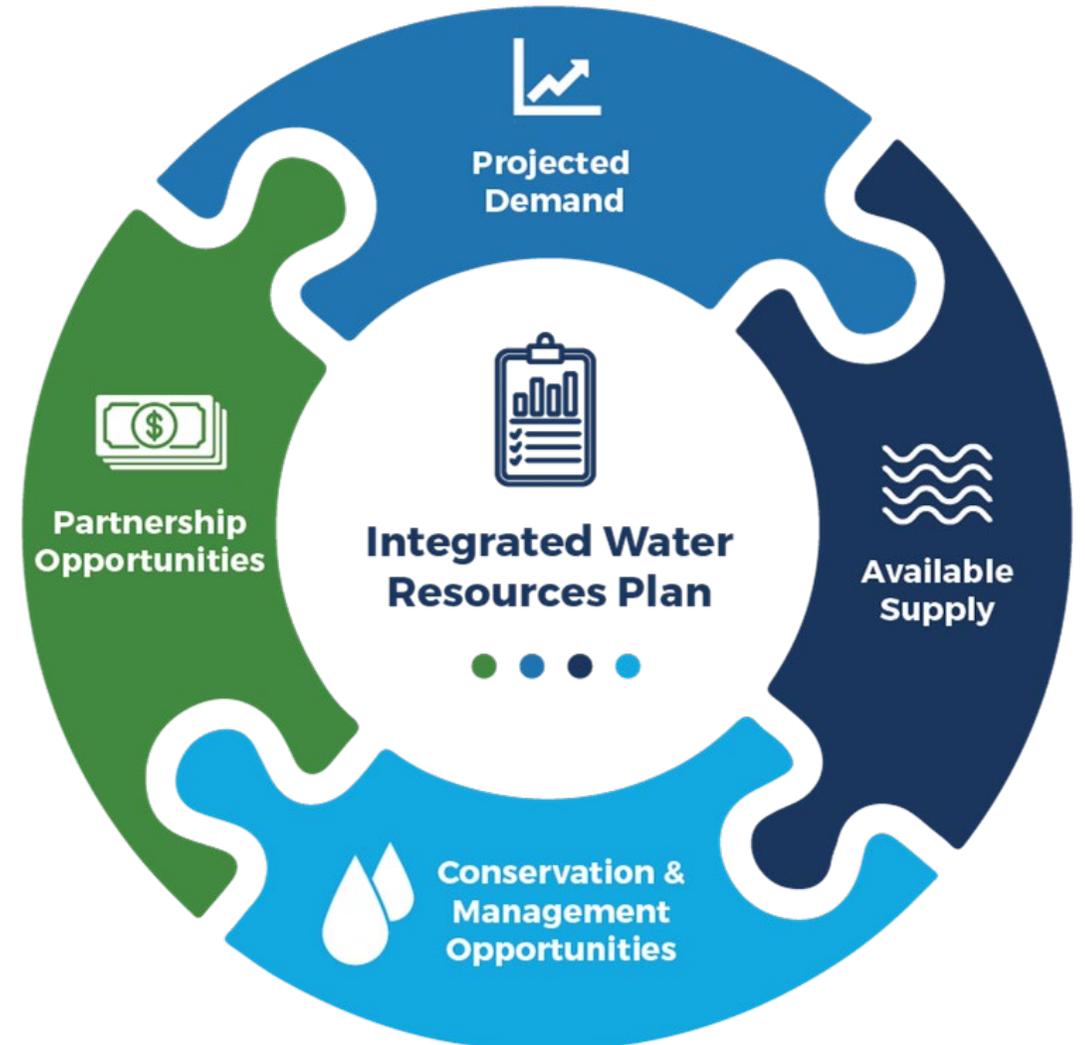


➤ The majority of our water supply currently comes from local lakes, which are **highly susceptible to drought.**

WATER SUPPLY ASSESSMENT & PLAN

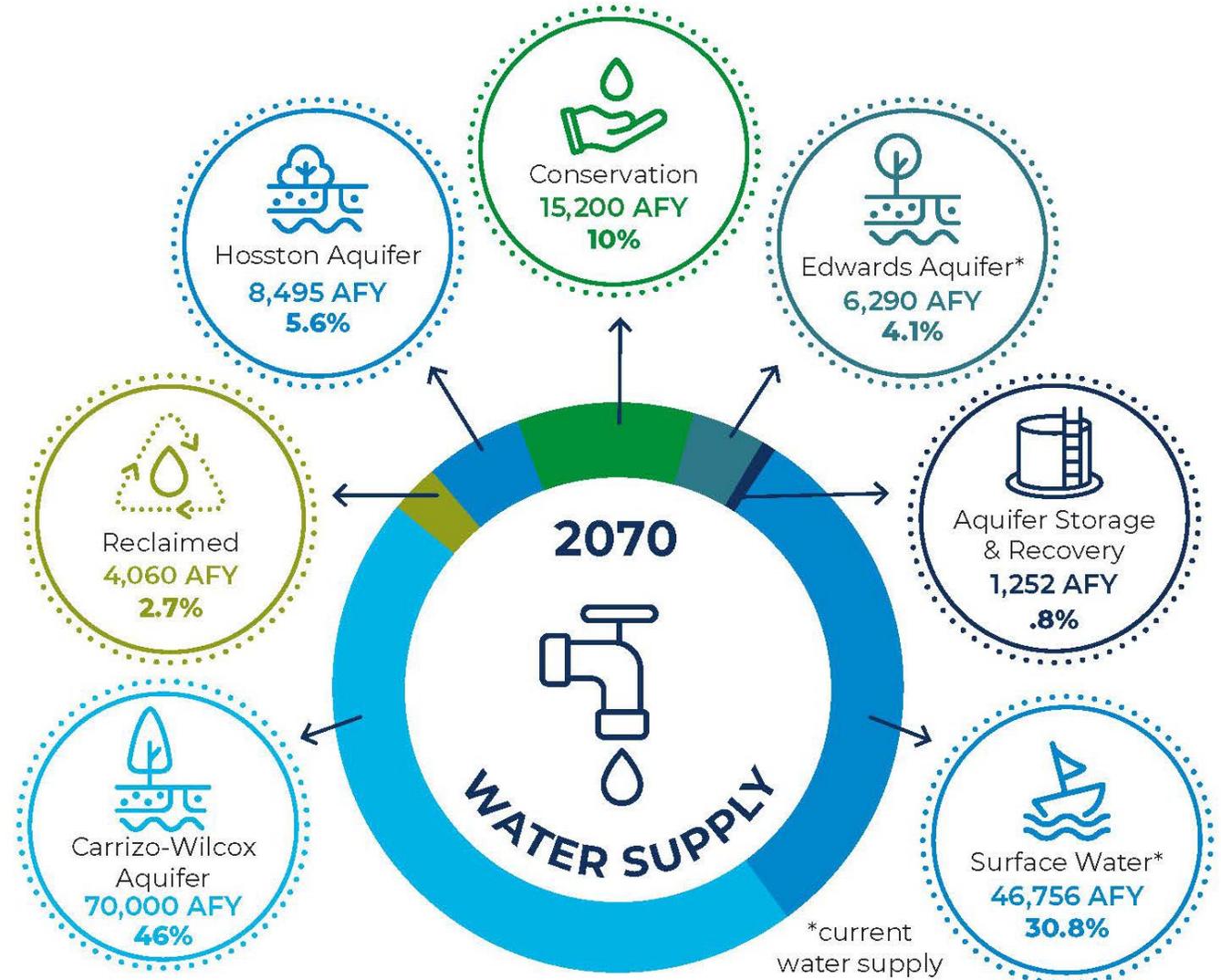
WE HAVE A HOLISTIC, MULTIFACETED APPROACH TO PLANNING & MANAGING

- Analyzed our future water needs and a plan to meet those needs
- Determined a new supply must be online by 2030 to avoid supply shortages
- Estimates a gap of 99,000-acre feet by 2070
- Emphasizes the need to diversify water sources and increase conservation initiatives



DIVERSIFYING OUR WATER SUPPLY

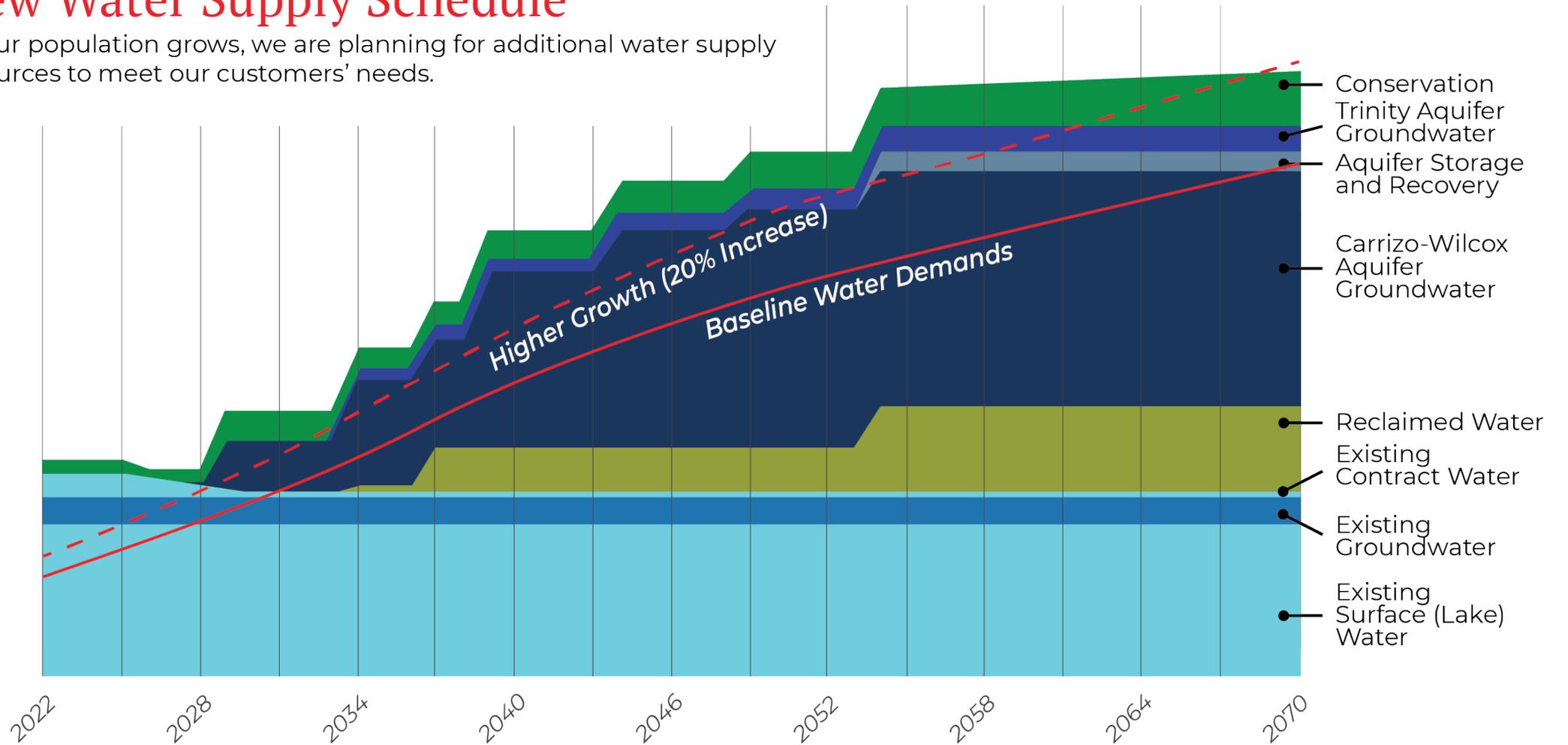
➤ We will increase reliability and resiliency through supply diversification.



IMPLEMENTATION SCHEDULE

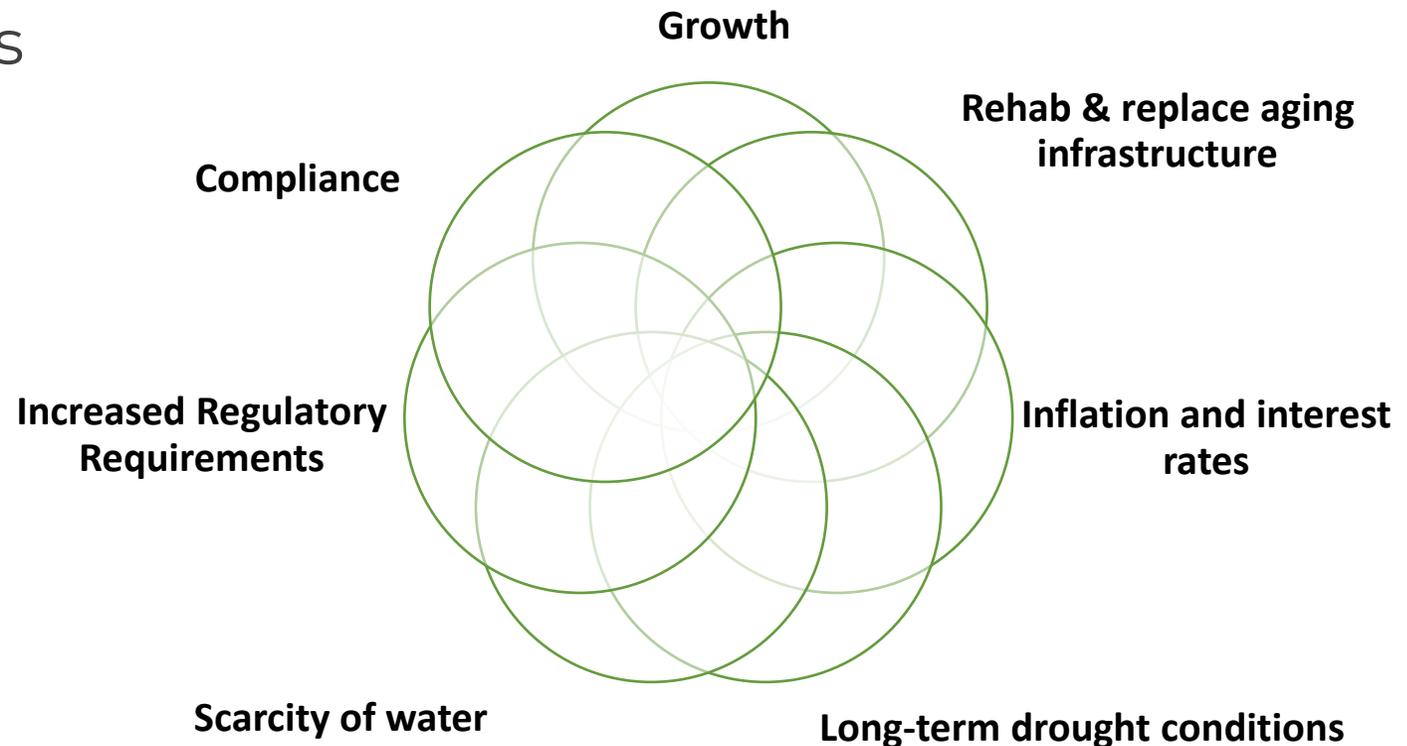
New Water Supply Schedule

As our population grows, we are planning for additional water supply resources to meet our customers' needs.



OUR CHALLENGES

- Multitude of pressures influencing our cost of service
- Rate impact to our customers
- Regional partnerships
- ASR legislation



ERA OF LOW COST, ABUNDANT WATER IS OVER

- › Surface (lake) water supply from local lakes is fully allocated.
- › More frequent and longer droughts.
- › Rising costs of infrastructure and financing.



OUR PATH TO PROCURE FUTURE WATER

- Earlier attempts to secure large water supply
- Cost escalation
- Limited surface water and groundwater availability
- Competition among the state's rapidly growing areas
- Insufficient state resources to help address our water supply needs and the infrastructure/procurement costs of new sources

GROUNDWATER RESERVATION

EXECUTED TWO-YEAR AGREEMENT WITH EPCOR IN AUGUST 2023.

- Secures **up to** 70,000 AFY
- Cost of reservation agreement is \$150 acre-foot per year; currently paying reservation fees for 40,000 AFY which is permitted for production and transport in the Brazos Valley Groundwater Conservation District
- Anticipate signing a water supply agreement in August 2025.
 - A single integrated design-build-finance-operate-maintain (DBFOM) contract
 - Take or pay

ANTICIPATED WATER DELIVERY SCHEDULE

YEARS	WATER SUPPLY (AFY)
2029 - 2033	13,000
2034 - 2038	29,000
2039 - 2043	40,000

WORK UNDERWAY

- Beginning contract negotiations
- Rate increases for our customers to finance acquisition (32.5% rate increase in April 2024, another rate increase anticipated in October 2024)
- Hydrologic analysis
- Financial assessments
- Project design
- Briefings to regional and state partners
- Public outreach and engagement
- Seeking amendment to Region G plan for funding and permitting purposes



THANK YOU

City of Georgetown

Item 7.2

Initiation of Amendment to 2021 Brazos G Regional Water Plan



WACO, TX AUG 1, 2024

Amendment Guidance

A regional water planning group may initiate an amendment on its own or an entity planned for in the regional water planning process may request an amendment.

In order for projects to be eligible for State Water Implementation Fund for Texas (SWIFT) funding, projects must be recommended in the most recent regional and state water plans and all project components must have an associated capital cost.

If a project sponsor seeks funding from the TWDB for a water supply projects or a water rights permit from the TCEQ, the proposed project must be found to be consistent with the approved regional water plan and state water plan.

If the proposed project is not consistent with the approved regional and state water plan and the sponsor cannot wait to incorporate the proposed project into the next adopted regional water plan, the existing regional water plan may be amended, or a waiver of statutory requirements regarding consistency with such plans must be obtained from the TWDB and/or TCEQ.

General Principles

- TAC §357.51
- RWPG must formally consider an amendment request within 180 days of its submittal.
- RWPG may, at its discretion, accept or reject proposed amendment request.
 - If rejects, political subdivision may file petition to TWDB's EA.
 - If accepts, RWPG takes action to proceed with amendment, and must follow amendment process in accordance with whether the amendment is
 - Substitution of an alternative strategy,
 - Minor amendment, or
 - Major amendment.
- Any proposed amendment must meet rules and guidelines for development of a regional water plan.
- If source is located in a different region, RWPG must submit a copy to the RWPG where the strategy is located concurrently with submittal of request to TWDB EA.

Request Received

- City of Georgetown
 - Working with EPCOR on Simsboro groundwater project out of Robertson county.
 - EPCOR has agreement for Upwell Goodland Farms (UGF) and individual permit holders in Brazos Valley GCD area.
 - UGF has 49,999 acre-ft of which 39,399 acre-ft is allocated to Georgetown. UGF and individual permit holders are currently securing transportation permits for the remaining to get to 70,000 acre-ft.
 - City's IWRP reflects this groundwater supply along with a water supply portfolio including ASR, reclaimed water, and surface supplies.
 - City is seeking to amend 2021 Brazos G Plan to include a groundwater WMS utilizing available groundwater supply from Carrizo-Wilcox aquifer, Robertson County, Brazos River Basin source.
- RWPG may amend 2021 Plan by first providing a copy of the proposed amendment to the EA for a determination as to whether the amendment would be minor.

Minor Amendment Process



1. Entity requests the RWPG to amend a regional water plan.

Today

2. RWPG considers request and takes action to pursue the amendment at one of its regular public meetings

3. Amendment materials are prepared in accordance with TWDB rules and guidance, and the RWPG submits a request for a “minor amendment determination” to the TWDB EA.

4. TWDB EA reviews request and issues a determination to the RWPG on whether amendment is minor or major.

Next Mtg.

5. If determined to be a minor amendment, the RWPG considers adopting the amendment at a public meeting with an opportunity for public input.

1. This meeting requires at least a 14-day notice, a 14-day written comment period prior to the meeting, and consideration of comments prior to RWPG action.

6. RWPG submits the adopted minor amendment materials to the TWDB for approval.

7. TWDB reviews the adopted minor amendment and, if acceptable, the TWDB Board will consider approval of the regional water plan amendment at a regular Board meeting.

8. The TWDB then amends the state water plan, which requires a public hearing on the proposed state water plan amendment and a 30-day public notice prior to its adoption.

Minor Amendment Criteria (TAC §357.51(c)(2))

(2) EA Pre-Adoption Review. The EA shall evaluate the proposed minor amendment prior to the RWPG's vote to adopt the amendment. An amendment is minor if it meets the following criteria:

- ? (A) does not result in over-allocation of an existing or planned source of water;
- ✓ (B) does not relate to a new reservoir;
- ✓ (C) does not increase unmet needs or produce new unmet needs in the adopted RWP unless the increase in unmet needs or new unmet needs is the result of removing infeasible WMSs and/or WMSPs in accordance with subsection (g) of this section and Texas Water Code §16.053(h)(10);
- ✓ (D) does not have a significant effect on instream flows, environmental flows or freshwater flows to bays and estuaries;
- ✓ (E) does not have a significant substantive impact on water planning or previously adopted management strategies; and
- ✓ (F) does not delete or change any legal requirements of the plan.

Project Location (provided by City of Georgetown)



Availability Review

WMS SOURCE SUMMARY REPORT

Source Name: Carrizo-Wilcox Aquifer | Carrizo| Calvert Bluff| Simsboro| Hooper

Source Region	Source County	Source Basin	Salinity	Source Type	Source Future Status	Sourceld	DBSOld
G	Robertson	Brazos	Fresh	Groundwater Groundwater	Both	943	1363

Future Water Volume Summary

	2020	2030	2040	2050	2060	2070
Source Availability	46,590	47,400	47,881	48,281	48,282	48,282
Total Direct Source Volume-In	36,617	36,617	36,617	36,617	36,617	36,617
Total Recommended WMS Increase in Availability	0	0	0	0	0	0
Total Recommended WMS Decrease in Availability	0	0	0	0	0	0
Total Recommended WMS WUG Supplies	550	550	550	550	550	550
Future Source Availability Balance (Current Source Availability + Total Decrease in Availability + Total Decrease in Availability) - (Total Direct Source Volume-In + WMS WUG Supplies)	9,423	10,233	10,714	11,114	11,115	11,115

Water User Groups (WUGs) Related to the WMS that Use Remaining Existing Availability

Sponsor Region		WMS Name								
G		Carrizo Aquifer Development - Robertson County WSC								
WUG Information					WMS WUG Supplies (acre-feet)					
WUG Name	WUG Region	WUG County	WUG Basin	WMS WUG Status	2020	2030	2040	2050	2060	2070
Robertson County WSC	G	Robertson	Brazos	Recommended	550	550	550	550	550	550
Bryan	G	Brazos	Brazos	Alternative	0	9,973	9,973	9,973	9,973	9,973
Strategy WMS WUG Supply Total:					550	10,523	10,523	10,523	10,523	10,523

Project Take Down Schedule provided by City of Georgetown

- Modified annual takedown schedule based on additional permitting information provided by EPCOR.

<u>5 year</u> Blocks from Start of Take Down	Recommended Take Down 100% Efficiency per year from 70,000 ac-ft
2029-2033	13,000 ac- ft
2034-2038	29,000 ac- ft
2039-2043	44,000 ac- ft
2044-2048	58,000 ac- ft
2049-2053	69,000 ac- ft
2054-2057	70,000 ac- ft

Potential Amended WMS Recommendation (based on remaining source availability)

Amended Recommended WMS	Source County	Source Name	Basin	Salinity	Source Type	2020	2030	2040	2050	2060	2070
Georgetown Groundwater Project	Robertson	Carrizo-Wilcox Aquifer Carrizo Calvert Bluff Simsboro Hooper	Brazos	Fresh	Ground-water	9,423	10,233	10,714	11,114	11,115	11,115

- Revised '21 Plan sections identified.

Minor Amendment Process



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Amendment Materials

- ✓ 1. A cover letter from the RWPG requesting a determination on the amendment, stating the need for the amendment, and summarizing RWPG action taken.
- ✓ 2. Documentation of what plan sections the amendment applies to and where changes would occur based on the amendment
- ✓ 3. Information to demonstrate that the amendment meets all of the minor amendment criteria listed in 31 TAC §357.51(c)(2).
- ✓ 4. Information to demonstrate that a new WMS has been fully evaluated in accordance with statute, rule, and regional water planning technical guidelines.
- ✓ 5. A summary of infeasible strategy and/or infeasible project components and why they were determined to be infeasible (for amendments associated with an infeasibility analysis).
- ✓ 6. Summarize any changes to unmet needs as a result of removing infeasible strategies, including adequate justification of increases in or new unmet municipal needs per 31 TAC§357.50(j), if applicable.
- ✓ 7. Relevant water availability modeling files, if applicable.
- ✓ 8. Relevant data revisions for the regional water planning database.

(9.) Incorporate comments received from TWDB/public and responses to comments in final packet.

Recommendation

Agenda Item 7.3

- RWPG take action to pursue the amendment, approve the technical consultant to prepare amendment materials in accordance with TWDB rules and guidance, submit a request for a “minor amendment determination” to the TWDB EA, and work with TWDB staff on proposed amendment.

Tony L. Smith, P.E.
TLSmith@carollo.com





8. Discussion and possible action on the report from the technical consultant

8.1. Regional Planning Updates

Brazos G Regional Water Planning

Item 8.1

Discussion and Possible Action on Report from Technical Consultant



WACO, TX August 1, 2024

8.1

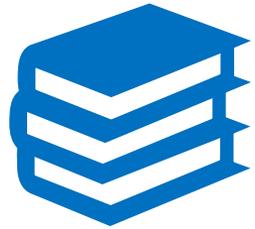
Regional Planning Updates

2026 Planning Budget Progress

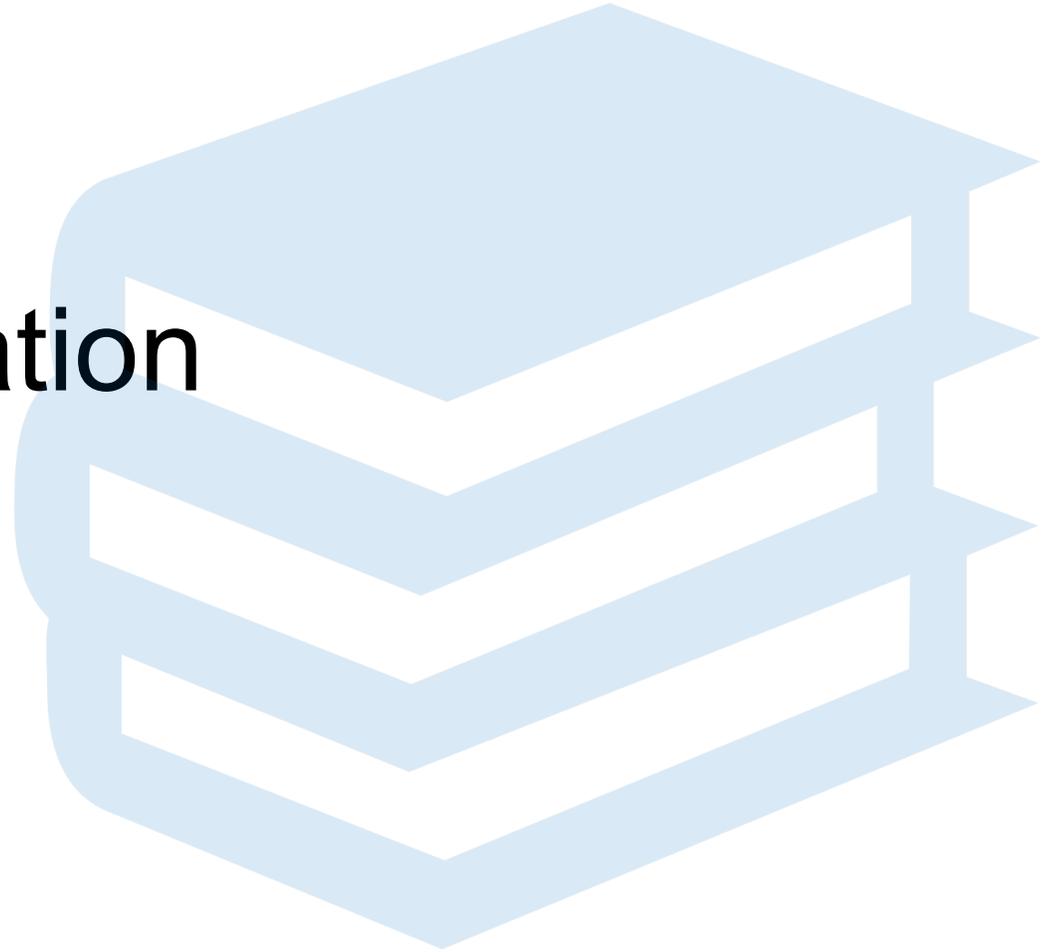
Task #	Task	Contract Amount	Expended to Date	% Complete
1	Planning Area Description	\$30,418	\$30,318.70	100%
2A	Non-Municipal Water Demand Projections	\$57,806	\$54,902.01	95%
2B	Population and Municipal Water Demand Projections	\$80,330	\$78,005.49	97%
3	Water Supply Analyses	\$189,999	\$133,485.01	70%
4A	Identification of Water Needs	\$43,143	\$4,501.99	10%
4B	Identification of Infeasible Water Management Strategies	\$33,955	\$33,862.95	100%
4C	Prepare and Submit Technical Memorandum	\$49,388	\$34,257.30	69%
5A	Identification of Potentially Feasible Water Management Strategies and Water Management Strategy Projects	\$32,514	\$9,858.12	30%
5B	Evaluation and Recommendation of Water Management Strategies and Water Management Strategy Projects	--	--	0%
5C	Water Conservation Recommendations	\$20,000	\$0	0%
6	Impacts of Regional Water Plan	\$20,000	\$0	0%
7	Drought Response, Activities & Recommendations	\$70,000	\$74.49	0.1%
8	Recommendations Regarding Unique Stream Segments and/or Reservoir Sites and Legislative & Regional Policy Issues	\$13,415	\$1,075.99	8%
9	Implementation and Comparison to the Previous Regional Water Plan	\$10,000	\$0	0%
10	Public Participation and Plan Adoption	\$282,470	\$169,009.10	60%
	TOTAL	\$933,438	\$549,351.15	59%

Task for Today

- No formal actions requested.
 - Preliminary Review of Chapter 3 and 4 Information



Chapter 3 – Evaluation of Current Water Supplies



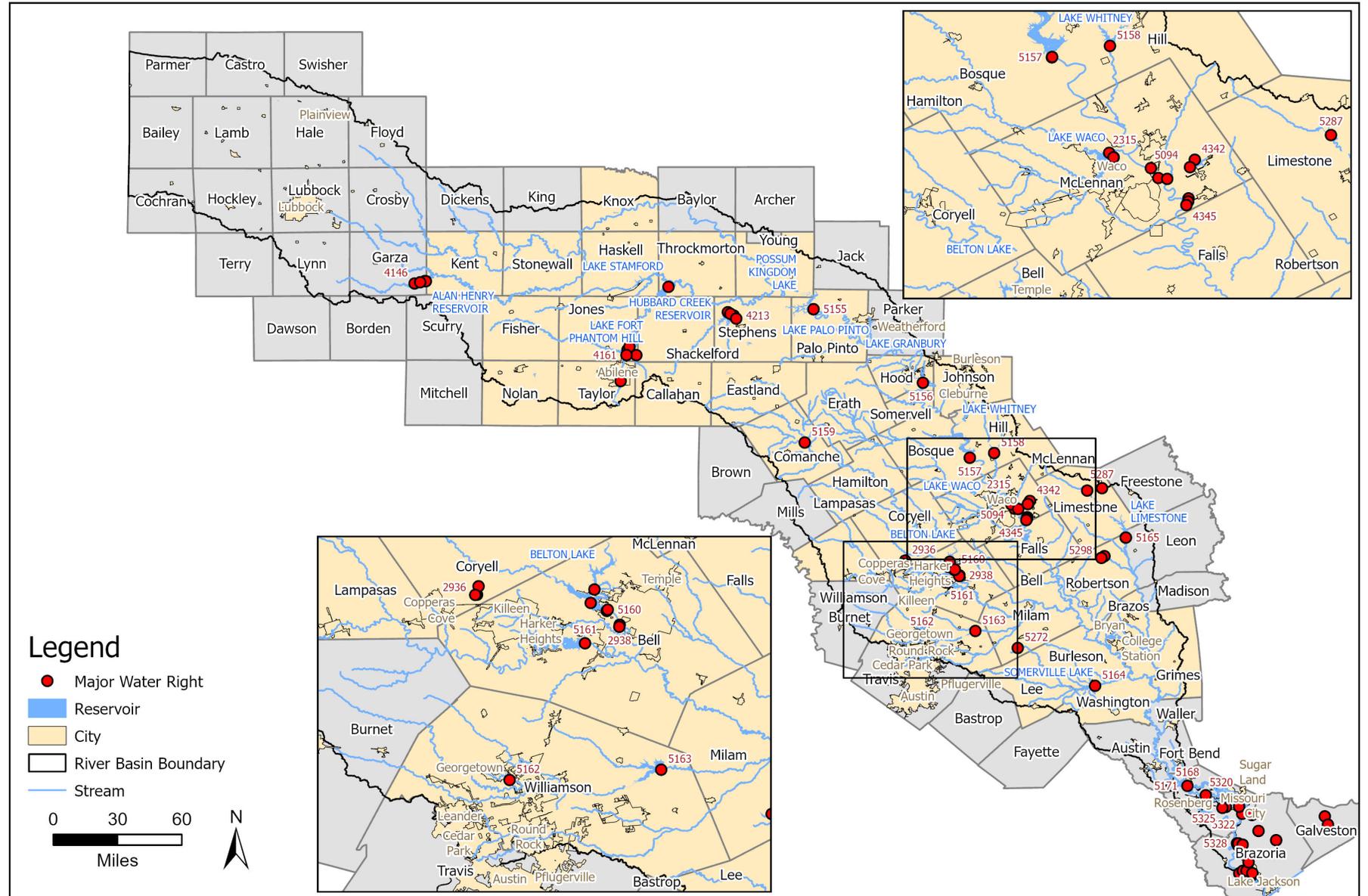
Chapter 3 Water Supplies - Outline

- Surface Water Supplies
- Determination of Surface Water Availability
- Water Quality Considerations Affecting Supply
- Groundwater Availability
- Supplies from Other Regions
- Methods to Estimate Available Water Supplies
- Existing Supplies Allocated to Water User Groups
- Existing Supplies for Major Water Providers

Surface Water Supplies: Water Right Geography

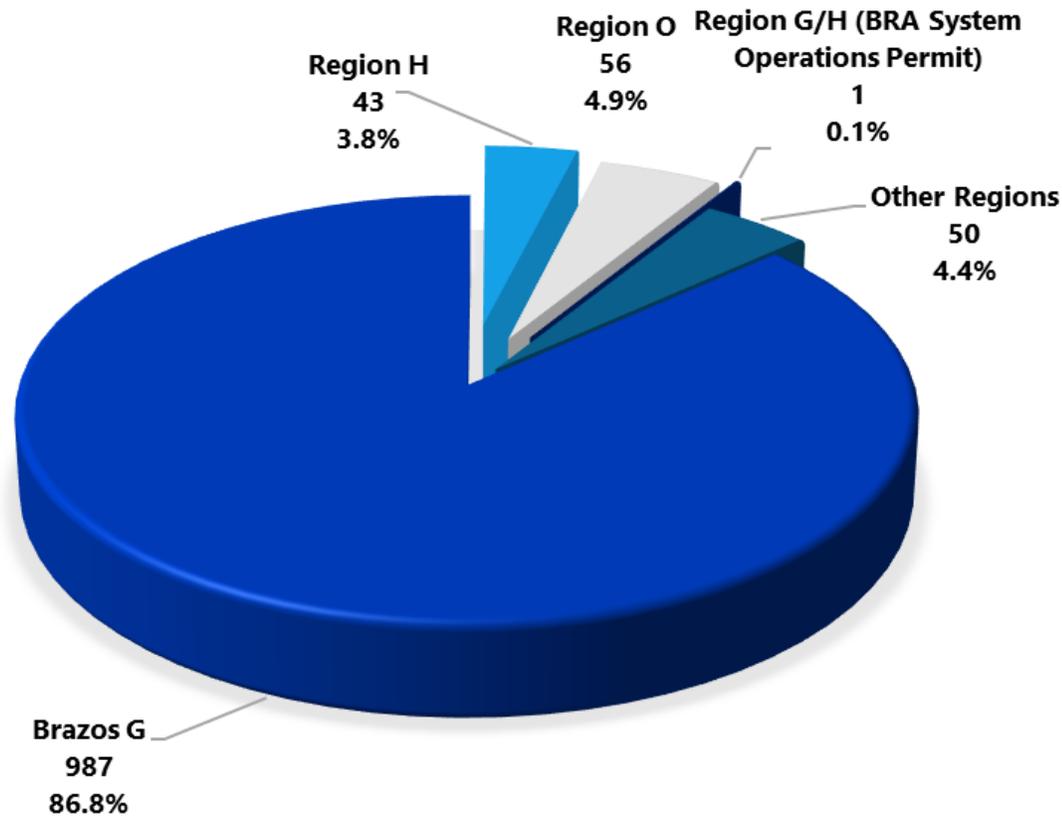
Information derived from TCEQ's Active Water Right Data (July 2024)

Major Water Rights
(≥ 10,000 acft/yr diversion and/or ≥ 5,000 acft of storage)

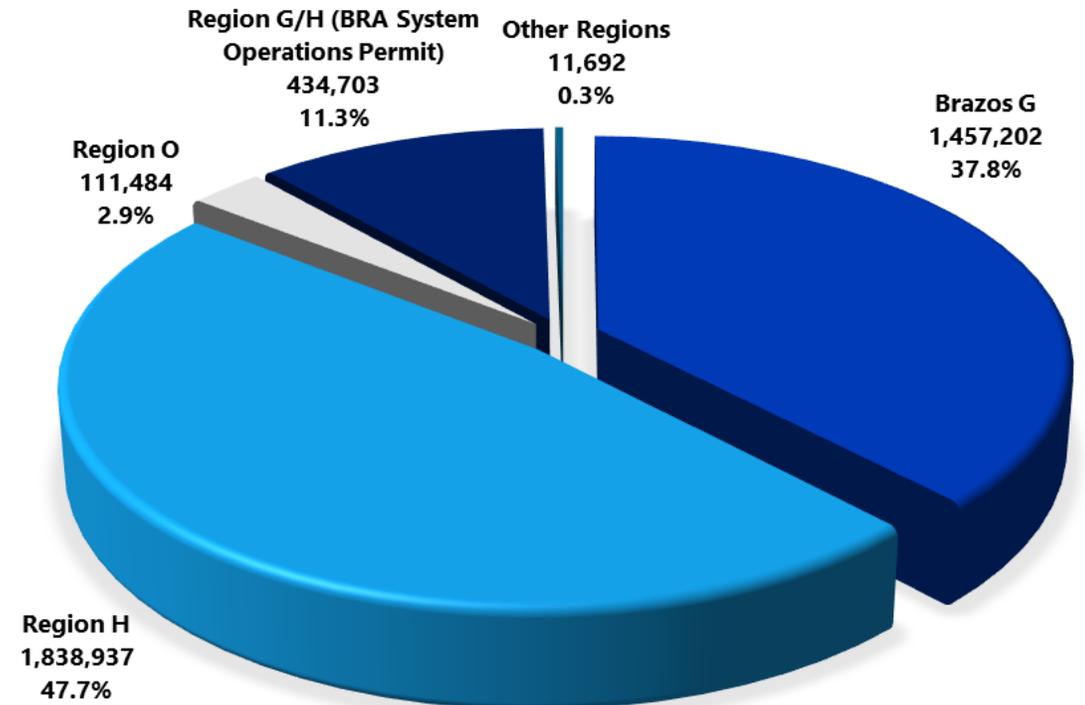


Surface Water Supplies: Water Rights

Brazos Basin Water Rights by Planning Area



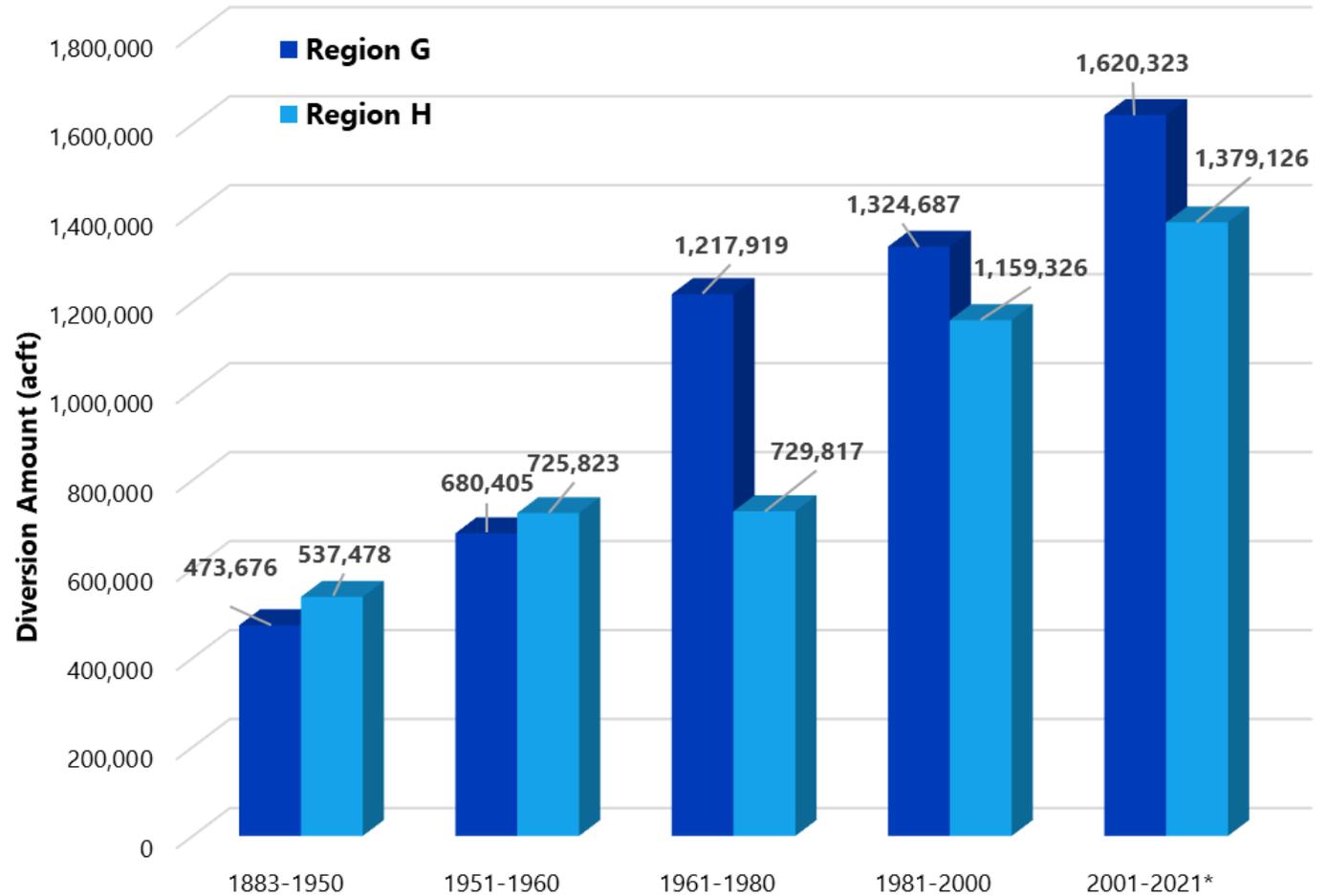
Number of Water Rights



Authorized Diversion

Surface Water Supplies: Water Rights over time

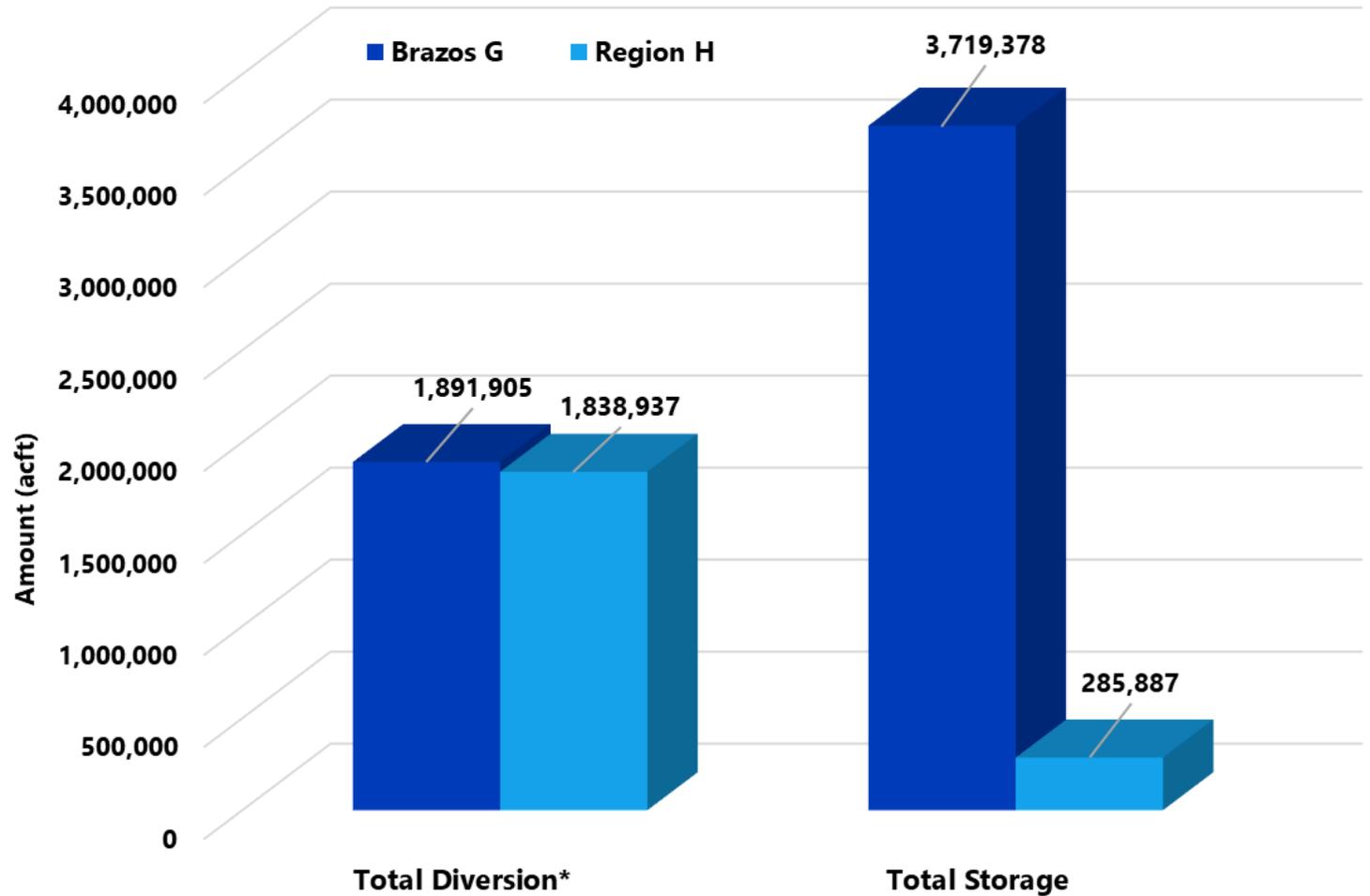
Cumulative Authorized
Diversion by Priority Date,
Brazos G and Region H



*Assumes BRA System Operations Permit authorized diversion volume is split between Region G and Region H

Surface Water Supplies: Water Rights Authorized Diversions & Storage

Total Diversion and Storage for Brazos G and Region H



*Assumes BRA System Operations Permit authorized diversion volume is split between Region G and Region H

Surface Water Supplies: Water Supply Contracts (portion shown here)

Table 3.3 Water Supply Contracts and Other Current Demands Supplied by Water User Groups (WUGs) and Wholesale Water Providers (WWPs) (acre-feet/year)

Water User Group/Wholesale Water Supplier	Contract Demand Year					
	2030	2040	2050	2060	2070	2080
BRA (LAKE AQUILLA)						
Aquilla WSD	5,953	5,953	5,953	5,953	5,953	5,953
City of Cleburne	5,300	5,300	5,300	5,300	5,300	5,300
Hilco United Services	150	150	150	150	150	150
Total Contracts and WUG Demands	11,403	11,403	11,403	11,403	11,403	11,403
BRA (LITTLE RIVER SYSTEM)						
439 WSC	1,409	1,409	1,409	1,409	1,409	1,409
Milam County, Steam Electric (ALCOA)	5,000	5,000	5,000	5,000	5,000	5,000
Bell County WCID #1	62,509	62,509	62,509	62,509	62,509	62,509
Bluebonnet WSC	8,301	8,301	8,301	8,301	8,301	8,301

Determination of Surface Water Availability

- **Brazos G WAM** used with assumptions based on **TWDB-approved** October 2023 Hydrologic Variance Request:
 - Inclusion of return flows
 - Inclusion of BRA contractual demands
 - Aggregation of BRA's Little River System, Main Stem System, and Aquilla System
 - Consistency with BRA SysOps permit
 - Incorporation of BRA reservoir system operations rules
 - Estimated Year 2030 and Year 2080 elevation-area-capacity curves for reservoirs > 5,000 acft of storage
 - Includes contractual and water-right based subordination agreements
 - Reservoir firm/safe yield determinations based on location and preference of owner

Determination of Surface Water Availability (portion shown here)

- Modeled reservoir yields based on updated estimates of sedimentation rates
- Some sources to be updated with new survey information

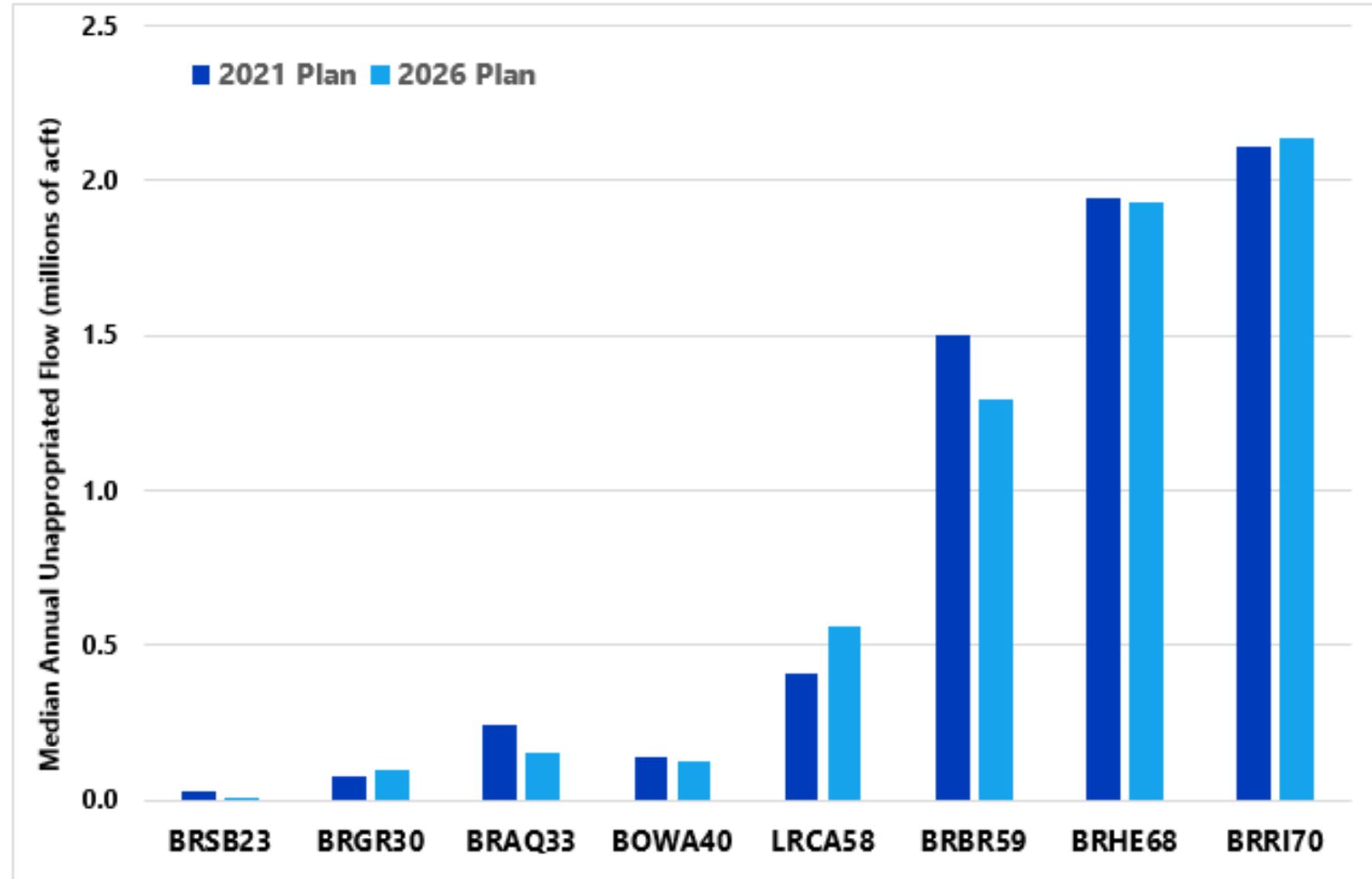
Table 3.6 Yields for Reservoirs in the Brazos G Area (acre-feet/year)

Water Right ID	Reservoir Name	Firm Yield		Safe Yield	
		2030	2080	2030	2080
BRA Reservoirs					
C5155	Possum Kingdom	155,560	151,710		
C5156	Granbury	58,652	53,792		
C5157	Whitney	18,336	18,336		
C5158	Aquilla	13,896	11,862		
C5159	Proctor	14,216	11,456		
C5160	<u>Belton⁽¹⁾</u>	100,257	100,257		
C5161	Stillhouse Hollow	67,768	67,048		
C5162	Georgetown	12,601	12,302		
C5163	Granbury	17,287	15,488		

Determination of Surface Water Availability

Comparison of Modeled Unappropriated Flows from 2021 and 2026 Brazos G Plans

- Selected control points
- Differences due to new extended hydrologic period in official WAM



Water Quality Considerations Affecting Supply

40 CFR 130.7 give TCEQ and EPA responsibility to identify water bodies that don't meet standards for designated uses.

- Total Maximum Daily Loads (TMDL) and
- Individual effluent limitations

CWA requires 303(d) list identifying water bodies in or bordering Texas for which effluent limitations are not stringent enough to implement water quality standards, and for which the associated pollutants are suitable for measurement by maximum daily load.

Plan summarizes the “Draft 2024 Texas Integrated Report of Surface Water Quality” from TCEQ

- No Category 5a streams for this planning cycle
- Table 3.10 lists all other streams with categories and impairments of concern

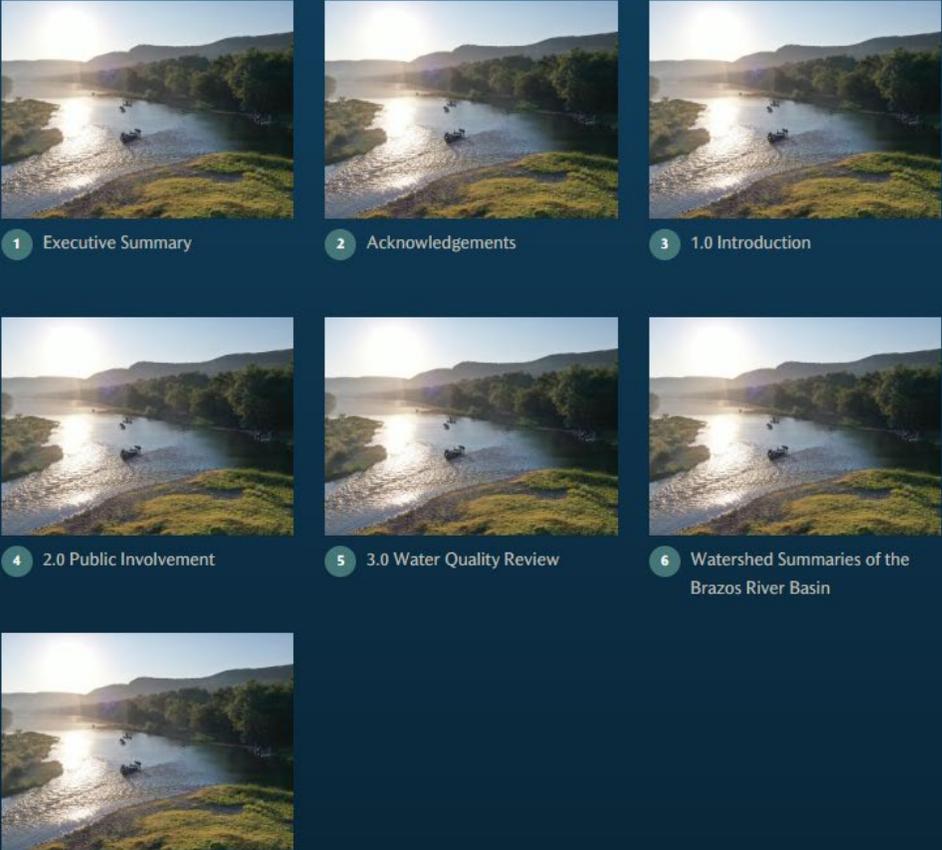
Water Quality Considerations Affecting Supply

Includes summary updates to ongoing water quality studies in the basin

Collection

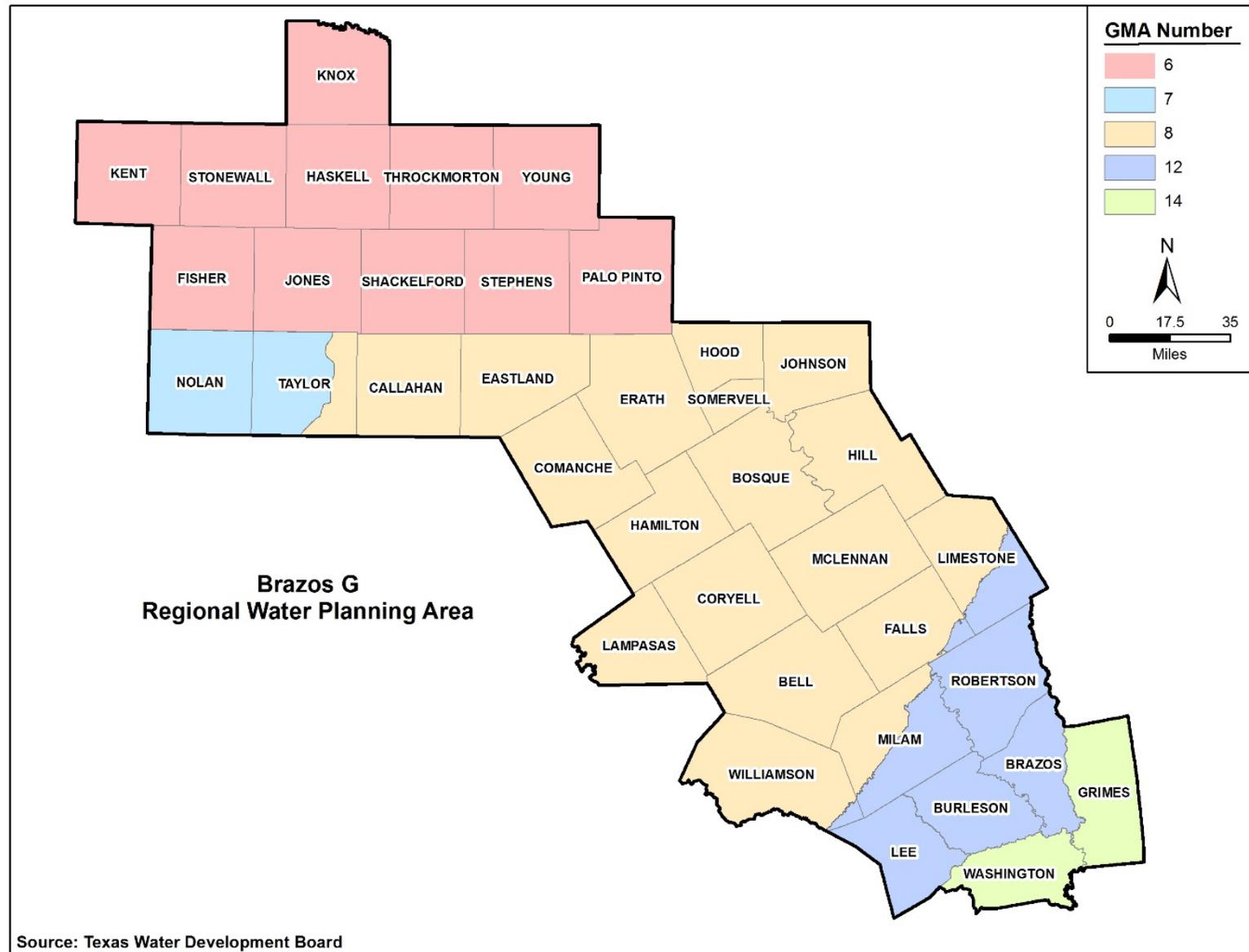
Brazos River Basin Summary Report 2022

Get started



- 1 Executive Summary
- 2 Acknowledgements
- 3 1.0 Introduction
- 4 2.0 Public Involvement
- 5 3.0 Water Quality Review
- 6 Watershed Summaries of the Brazos River Basin
- 7 4.0 Findings Recommendations and Conclusions

Groundwater Availability - GMAs

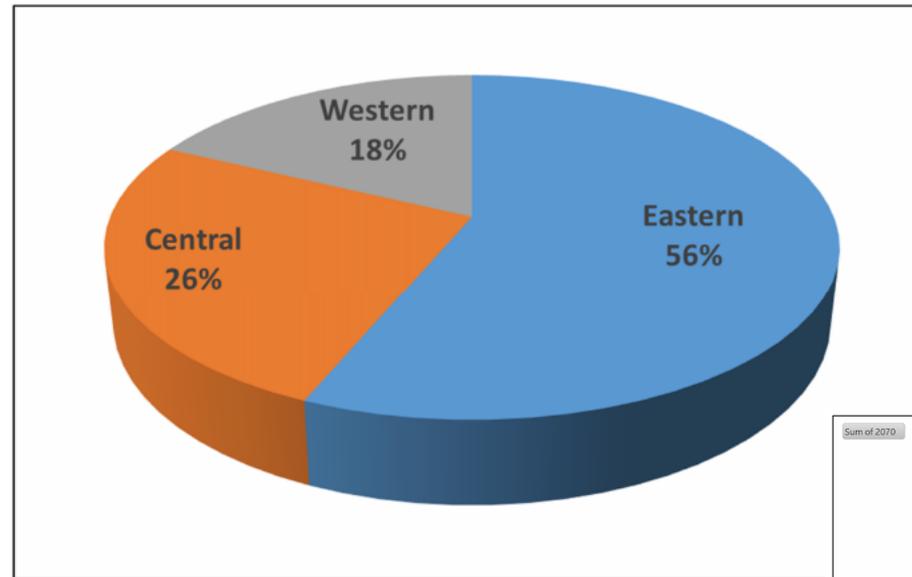
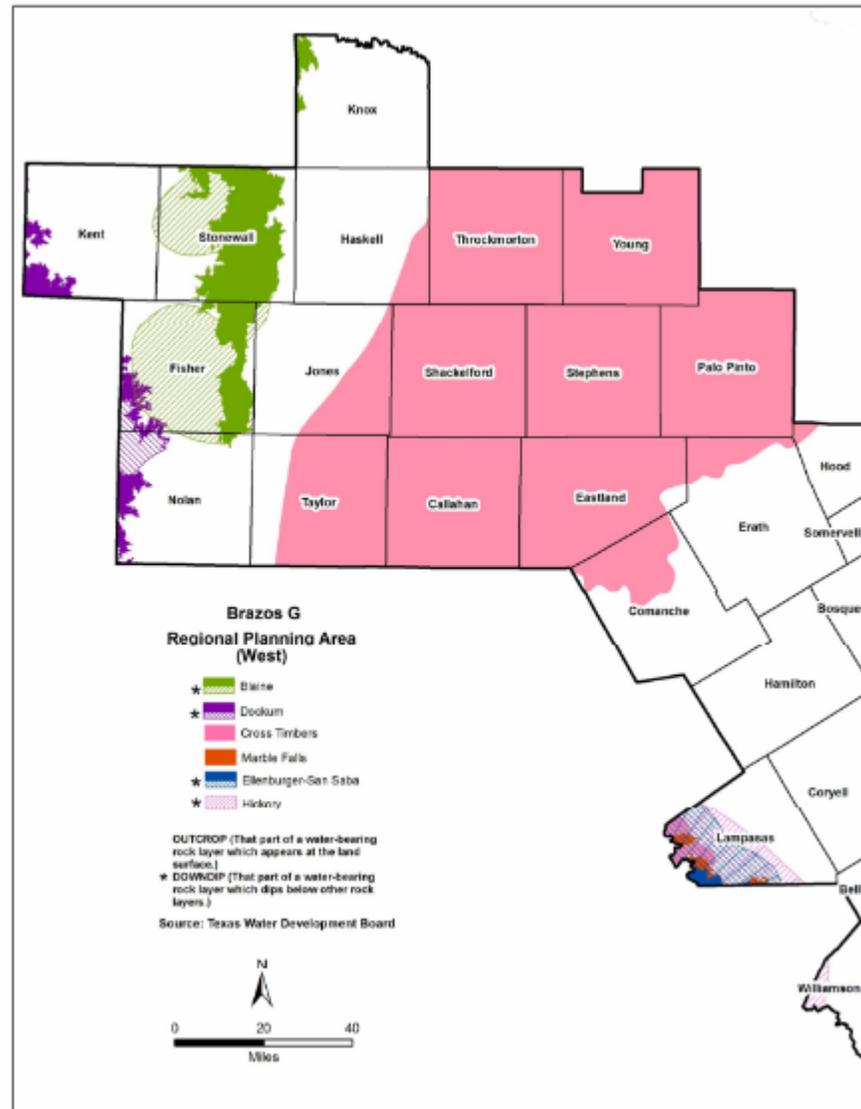


Groundwater Availability – By County and Aquifer (portion shown here)

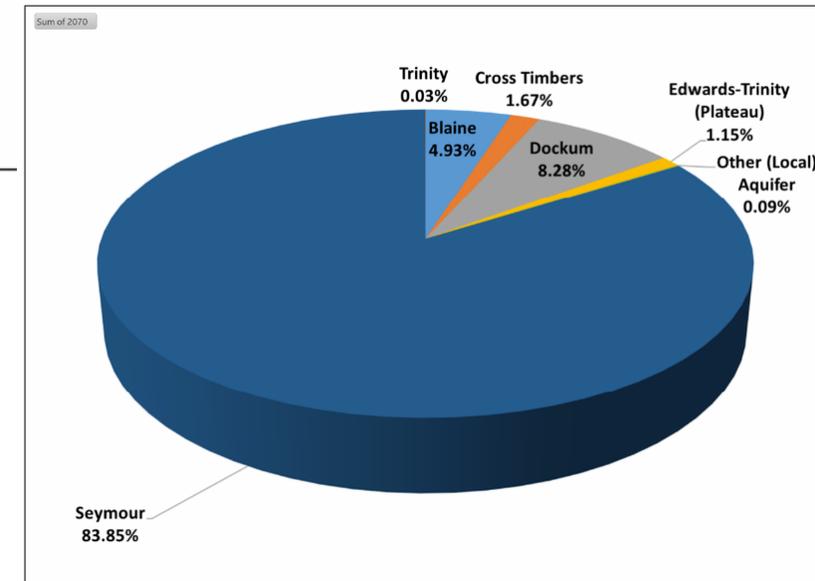
- Table 3.11
- MAGs
- Non-MAG
- No MAG peak factor employed this round
- Limestone County decreases in MAG ID'd by GW Committee.

County	Aquifer	Availability (acre-feet/year)					
		2030	2040	2050	2060	2070	2080
Bosque	Brazos River Alluvium A	830	830	830	830	830	830
	Trinity	8,769	8,769	8,769	8,769	8,769	8,769
	Subtotal	9,599	9,599	9,599	9,599	9,599	9,599
Brazos	Brazos River Alluvium	76,978	76,393	76,195	76,100	76,039	76,039
	Carrizo-Wilcox	44,153	50,160	56,168	62,176	68,184	68,184
	Gulf Coast(1)	1,189	1,189	1,189	1,189	1,189	1,189
	Queen City	245	357	469	582	694	694
	Sparta	6,014	7,545	9,076	10,607	12,138	12,138
	Yegua-Jackson	6,270	7,092	7,091	7,091	7,091	7,091
	Subtotal(2)	134,849	142,736	150,188	157,745	165,335	165,335

Distribution of Groundwater Source Availability (selected)



By area



By source in area

Supplies from Other Regions (portion shown here)

Table 3.12 Water Supplies from Other Regions

Receiving Entity	Supplier	Source ⁽¹⁾	Source Region	Contract Amount or Amount Supplied in 2030 (acft)
Abilene	Colorado River MWD	OH Ivie Lake/Reservoir Non-System Portion	F	4721
Baird	Abilene (from CRMWD)	OH Ivie Lake/Reservoir Non-System Portion	F	77
Baylor SUD	Self-supplied	Seymour Aquifer Baylor County	B	28
Bethesda WSC	Arlington	TRWD Lake/Reservoir System	C	1362
Bethesda WSC	Fort Worth	TRWD Lake/Reservoir System	C	2896
Bethesda WSC	Self-supplied	Trinity Aquifer Tarrant County	C	1736
Birome WSC	Post Oak SUD	Corsicana Richland Chambers-Halbert Lake/Reservoir System & Navarro Mills lake	C	147
Block House MUD	Cedar Park	Highland Lakes Lake/Reservoir System	K	1098

Methods to Estimate Available Water Supplies in Brazos G

Driven by

- Source availability during drought
- Capability to access water
 - Legal capability (water right, permit, contract)
 - Physical capability (infrastructure/operational)

Allocations to use categories

- Based on seller information and water purchase contract limits (updated via engagement)

Surface water

- Reservoir Firm Yield of reservoirs
- 100% dependable run-of-river supply
- Other firm local sources

Methods to Estimate Available Water Supplies in the Brazos G area

Groundwater

Adopt and employ methodology used in the 2021 Plan to adjust supply allocations using available data/information from WUGs:

- Municipal-Utilities = half of sum of well capacity * 95%
- County-Other = 125% of 2020 use
- Irrigation = projected demand in each decade
- Mining = projected demand in each decade
- Livestock = projected demand in each decade
- Power = 125% of 2020 use
- Manufacturing = 125% of 2020 use

Equal consideration of municipal and non-municipal uses

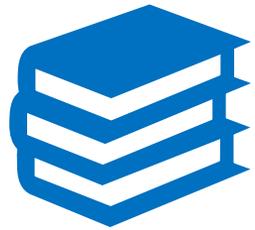
*All are prorated down if demand exceeds MAG

Existing Supplies Allocated to Water User Groups

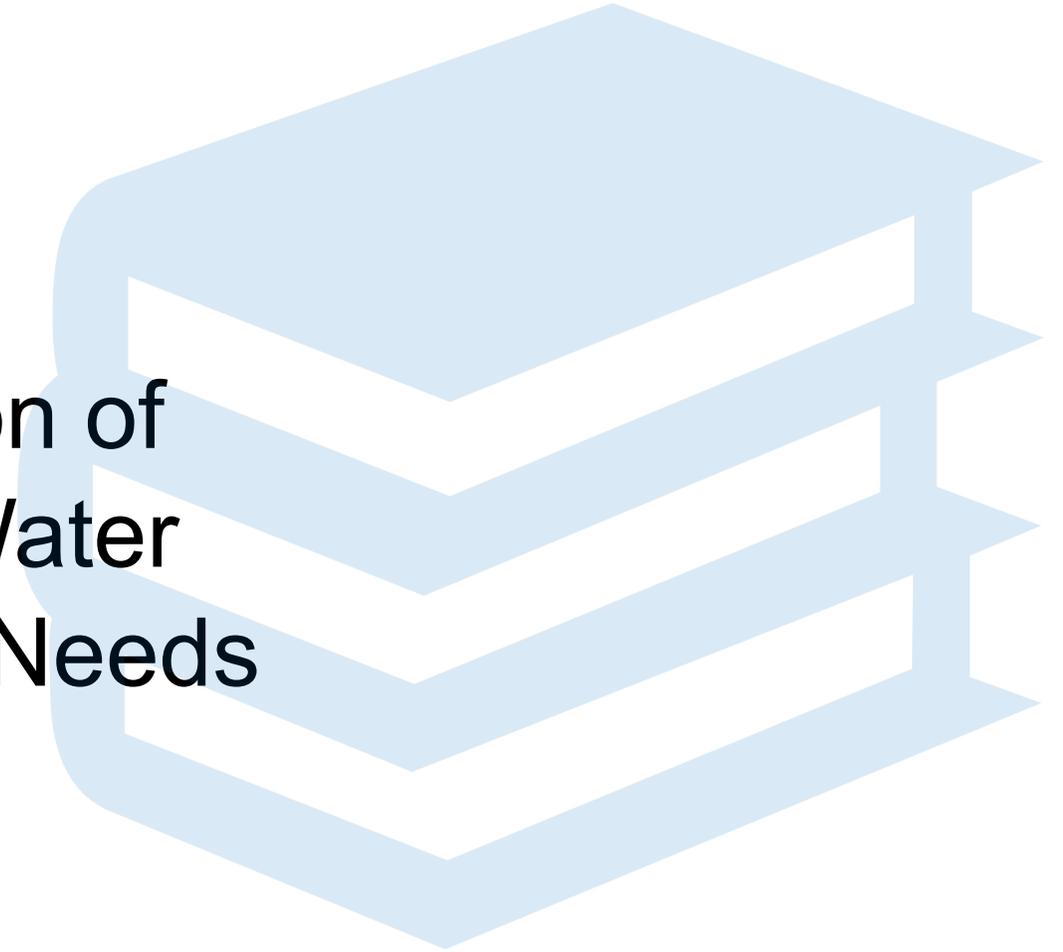
- DB27 Report to be generated and incorporated within executive summary appendix for IPP.
- Appendix F includes
 - F-1: List of Water Rights from TCEQ
 - F-2: Summary of modeled availabilities with water right and reported use categories.

Chapter 3 Water Supplies - Outline

- ✓ Surface Water Supplies
- ✓ Determination of Surface Water Availability
- ✓ Water Quality Considerations Affecting Supply
- ✓ Groundwater Availability
- ✓ Supplies from Other Regions
- ✓ Methods to Estimate Available Water Supplies
- ✓ Existing Supplies Allocated to Water User Groups
- ✓ Existing Supplies for Major Water Providers



Chapter 4 – Comparison of Water Demands with Water Supplies to Determine Needs



Key Definitions

- Water need: projected demands exceed projected supplies for a WUG
- Second-tier need: water needs that would remain after implementation of conservation and reuse strategies
- WUG: Water User Group (could also be a wholesale water provider)
- County-Other: represents small utilities and small towns, that generally supply less than 100 ac-ft of water
- Manufacturing, steam-electric, mining, irrigation, livestock are non-municipal WUGs representing other types of water use

Municipal: All 37 counties are projected to have at least one municipal WUG water need (portion shown here)

Table 4.1 Municipal WUGs with Projected Water Needs (acre-feet/year)

WUG	County	Projected Shortages (acft/yr)		Decade of Need
		Year 2050	Year 2080	
439 WSC	BELL	-383	-811	2040
BELL COUNTY WCID 1	BELL	-98	-98	2030
BELTON	BELL	483	-3,394	2060
CENTRAL TEXAS COLLEGE DISTRICT (P)	BELL	-160	-160	2030
ELM CREEK WSC (P)	BELL	-114	-181	2030
GEORGETOWN (P)	BELL	-951	-1,053	2030
HARKER HEIGHTS	BELL	-1,203	-1,587	2040
KEMPNER WSC (P)	BELL	-214	-281	2030
KILLEEN	BELL	-3,154	-7,352	2030
SALADO WSC	BELL	-900	-2,163	2030
TEMPLE	BELL	-15,188	-21,240	2030
THE GROVE WSC (P)	BELL	-4	-49	2050
CORIX UTILITIES TEXAS INC (P)	BLANCO	-33	-35	2030
CLIFTON	BOSQUE	-98	-380	2040

County-other: 17 counties are projected to have water needs

	2050 Shortage (acft/yr)	2080 Shortage (acft/yr)
County-other, Brazos		-109
County-other, Comanche	-292	-234
County-other, Erath	417	-559
County-other, Falls	-366	
County-other, Fisher	-18	-13
County-other, Grimes	-297	-312
County-other, Hill	-331	-390
County-other, Hood	-4,234	-439
County-other, Jones	-477	-289

	2050 Shortage (acft/yr)	2080 Shortage (acft/yr)
County-other, Kent	-13	-17
County-other, Lee	-94	-33
County-other, McLennan		-108
County-other, Milam	-8,960	-14,277
County-other, Palo Pinto	-178	-173
County-other, Robertson	-17	
County-other, Williamson	-13,968	-31,043
County-other, Young	-172	-203

*Excerpt from Table 4.1

Manufacturing: 16 counties are projected to have manufacturing water needs

Table 4.2 Counties with Projected Water Needs for Manufacturing Use (acre-feet per year)

WUG	Projected Shortages (acft/yr)		Decade of Need
	Year 2050	Year 2080	
BELL	-540	-661	2030
BURLESON	-38	-56	2030
COMANCHE	2	-1	2080
CORYELL	-1	-1	2030
EASTLAND	490	-15	2080
ERATH	-9	6	2030
HAMILTON	-19	-22	2030
HASKELL	-2	-2	2030
LAMPASAS	-68	-68	2030
LIMESTONE	-245	-273	2030
MCLENNAN	-817	-747	2030
NOLAN	-87	-154	2030
TAYLOR	-775	-865	2030
WASHINGTON	-172	-259	2030
WILLIAMSON	-995	-1,239	2030
YOUNG	-9	-6	2030

Steam-Electric Power Generation: 7 counties are projected to have needs

Table 4.3 Counties with Projected Water Needs for Steam-Electric Use (acre-feet per year)

WUG	Projected Shortages (acft/yr)		Decade of Need
	Year 2050	Year 2080	
BRAZOS	-269	-269	2030
GRIMES	-369	-369	2030
JOHNSON	-571	-571	2030
LIMESTONE	-960	-928	2030
ROBERTSON	-1,430	-5,619	2030
SOMERVELL	-37,839	-39,701	2030
YOUNG	-204	-185	2030

Mining: 14 counties are projected to have mining water needs

Table 4.4 Counties with Projected Water Needs for Mining Use (acre-feet per year)

WUG	Projected Shortages (acft/yr)		Decade of Need
	Year 2050	Year 2080	
BRAZOS	-1,085	-1,159	2030
BURLESON	-3,551	-3,551	2030
EASTLAND	-314	-314	2030
GRIMES	-124	-125	2030
HASKELL	-4	-4	2030
HOOD	-3,685	-4,293	2030
LIMESTONE	-3,120	-2,228	2030
MILAM	-767	-767	2030
NOLAN	-4	-5	2030
PALO PINTO	-27	-29	2030
SOMERVELL	-1,091	-1,244	2030
TAYLOR	-413	-437	2030
THROCKMORTON	-8	-8	2030
WASHINGTON	-650	-650	2030

Irrigation: 18 counties are projected to have irrigation water needs

Table 4.5 Counties with Projected Water Needs for Irrigation Use (acre-feet per year)

WUG	Projected Shortages (acft/yr)		Decade of Need
	Year 2050	Year 2080	
BELL	-949	-965	2030
COMANCHE	-9,377	-9,449	2030
GRIMES	-190	-190	2030
HAMILTON	-281	-286	2030
HASKELL	-8,309	-8,309	2030
JOHNSON	-245	-245	2030
JONES	-64	-64	2030
KNOX	-10,441	-10,204	2030
LAMPASAS	-219	-225	2030
MCLENNAN	-182	-211	2030

Livestock: 11 counties are projected to have livestock water needs

Table 4.6 Counties with Projected Water Needs for Livestock Use (acre-feet per year)

WUG	Projected Shortages (acft/yr)		Decade of Need
	Year 2050	Year 2080	
COMANCHE	-193	-193	2030
ERATH	-245	-245	2030
FALLS	-71	-71	2030
HAMILTON	-112	-112	2030
JOHNSON	-36	-36	2030
KENT	-16	-16	2030
KNOX	-25	-25	2030
LEE	-26	-26	2030
STONEWALL	-47	-47	2030
THROCKMORTON	-121	-121	2030
WASHINGTON	-196	-196	2030

Wholesale water provider needs

Table 4.7 Water Needs Projected for Wholesale Water Providers

WWP	Projected Surpluses / (Shortages) (acft/yr)		Decade of Need
	Year 2050	Year 2080	
AQUILLA WSD	0	-262	2070
BELL COUNTY WCID 1	0	-5,045	2060
BLUEBONNET WSC	-317	-454	2030
BRAZOS RIVER AUTHORITY			
<i>Lake Aquilla System</i>	0	-350	2070
<i>Little River System</i>	-44,788	-48,313	2030
<i>Main Stem/Lower Basin System¹</i>	-362	-13,235	2030
<i>Highland Lakes Supply (HB 1437)²</i>	2,872	2,872	<i>none</i>
<i>System Operations Permit³</i>	0	-19,350	2060
CENTRAL TEXAS WSC	-180	-196	2030
EASTLAND COUNTY WSD	-1,080	-1,170	2030
FHLM WSC	0	0	<i>none</i>
NORTH CENTRAL TEXAS MUNICIPAL WATER AUTHORITY	-1,724	-1,678	2030
PALO PINTO COUNTY MWD 1	-4,199	-4,880	2030
SALT FORK WATER QUALITY CORPORATION	0	0	<i>none</i>
UPPER LEON MWD	0	0	<i>none</i>
WEST CENTRAL TEXAS MWD	0	0	2030

Needs identified in this table are relative to total contractual amounts

Reflect customers’:

- lower projected demands,
- infrastructure limitations, and/or
- limited source availabilities.

Notes:

1. Includes contract demands in both Brazos G and Region H.
2. 25,000 acft/yr is available per HB 1763, of which BRA has contracted 1,200 acft/yr (Liberty Hill) and 20,928 acft/yr (Round Rock). Surplus shown represents the remaining uncontracted supply.
3. Assumes all current and pending contracts for sales of System Operations Supply are firm.

Major Water Provider Needs (excerpt from Appendix O)

Table O.3. Major Water Providers Needs.

Major Water Provider/Use Category		MWP Needs/Surplus by Category of Use in Each Decade (acft/yr)					
		2030	2040	2050	2060	2070	2080
439 WSC	Municipal	107	-145	-383	-583	-731	-811
439 WSC Total		107	-145	-383	-583	-731	-811
Abilene	Municipal	0	0	0	-2,926	-7,479	-10,721
Abilene Total		0	0	0	-2,926	-7,479	-10,721
Acton MUD	Municipal	2,038	1,805	1,546	704	-131	-407
Acton MUD Total		2,038	1,805	1,546	704	-131	-407
Alvarado	Municipal	1,568	1,471	1,370	1,280	1,178	1,064
Alvarado Total		1,568	1,471	1,370	1,280	1,178	1,064
Anson	Municipal	28	47	72	97	123	143
Anson Total		28	47	72	97	123	143
Aquilla WSD	Municipal	0	0	0	0	-262	-262
Aquilla WSD Total		0	0	0	0	-262	-262
Arlington	Municipal	-13,645	-21,996	-27,756	-34,523	-40,944	-45,822
Arlington Total		-13,645	-21,996	-27,756	-34,523	-40,944	-45,822
Bell County WCID 1	Municipal	-98	-98	-98	-2,655	-5,143	-5,143
Bell County WCID 1 Total		-98	-98	-98	-2,655	-5,143	-5,143
Bell County WCID 3	Municipal	0	0	0	0	0	0
Bell County WCID 3 Total		0	0	0	0	0	0
Bellmead	Municipal	1,605	1,862	1,518	1,788	1,447	1,708
Bellmead Total		1,605	1,862	1,518	1,788	1,447	1,708
Belton	Municipal	2,512	1,500	483	-447	-2,861	-3,394
Belton Total		2,512	1,500	483	-447	-2,861	-3,394
Bethesda WSC	Municipal	-2,401	-2,276	-3,242	-4,025	-5,095	-6,403
Bethesda WSC Total		-2,401	-2,276	-3,242	-4,025	-5,095	-6,403

Appendix O provides Major Water Provider Information

APPENDICES
JULY 2024 / DRAFT / CAROLLO

Appendix O: Major Water Provider Tables

Table O.1. Major Water Providers Demands by Category of Use.

Table O.2. Major Water Providers Supplies by Category of Use.

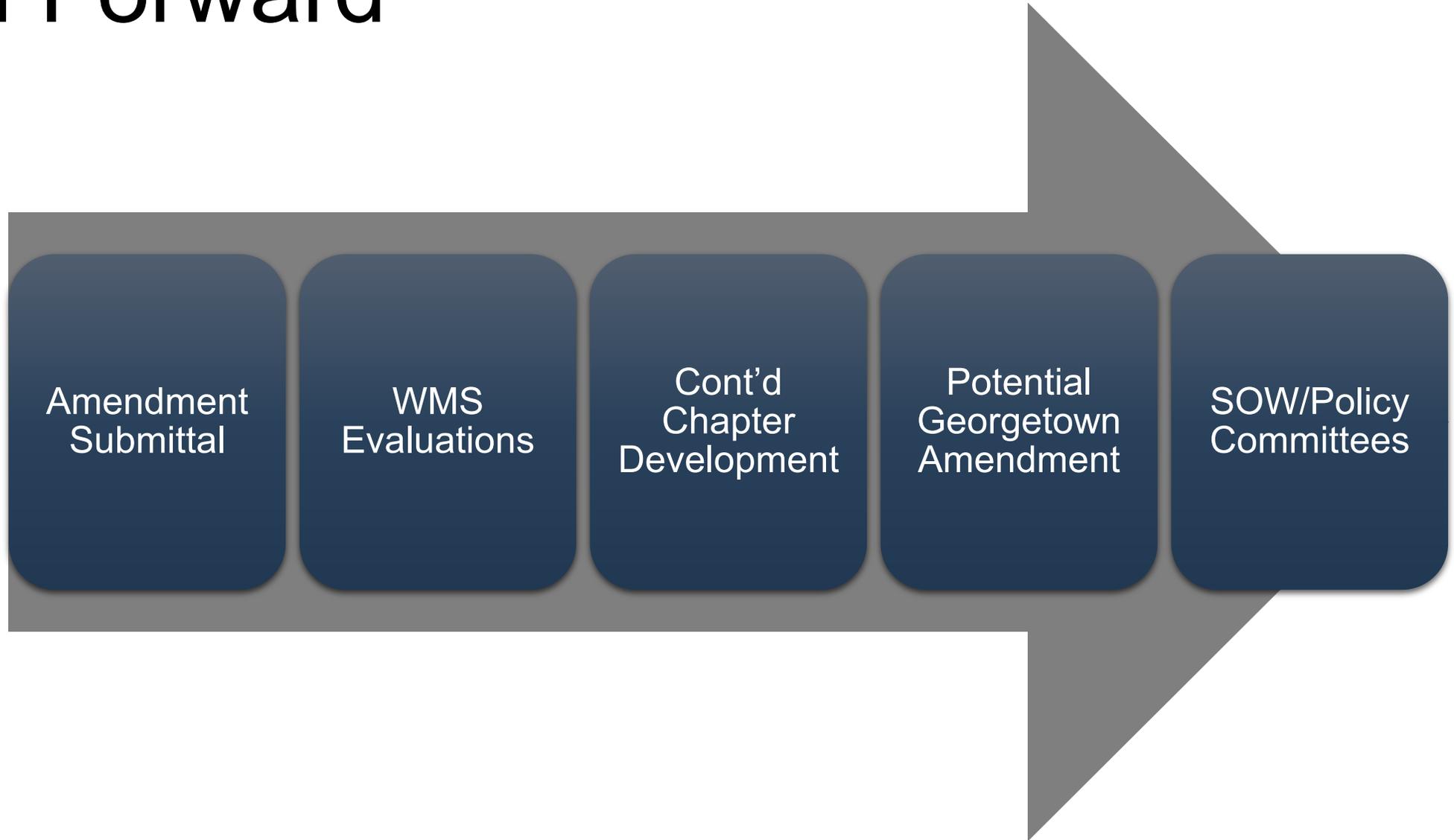
Table O.3. Major Water Providers Needs.

Table O.4. Major Water Providers Secondary Needs.

Other Activities

- TWDB RWPG/GMA Member Orientation
- Rural information
- Secondary needs analyses
- Conservation (section in Plan)
 - Collection of DCPs and WCPs
- WMS Evaluations
- Engagement, Engagement, Engagement

Path Forward



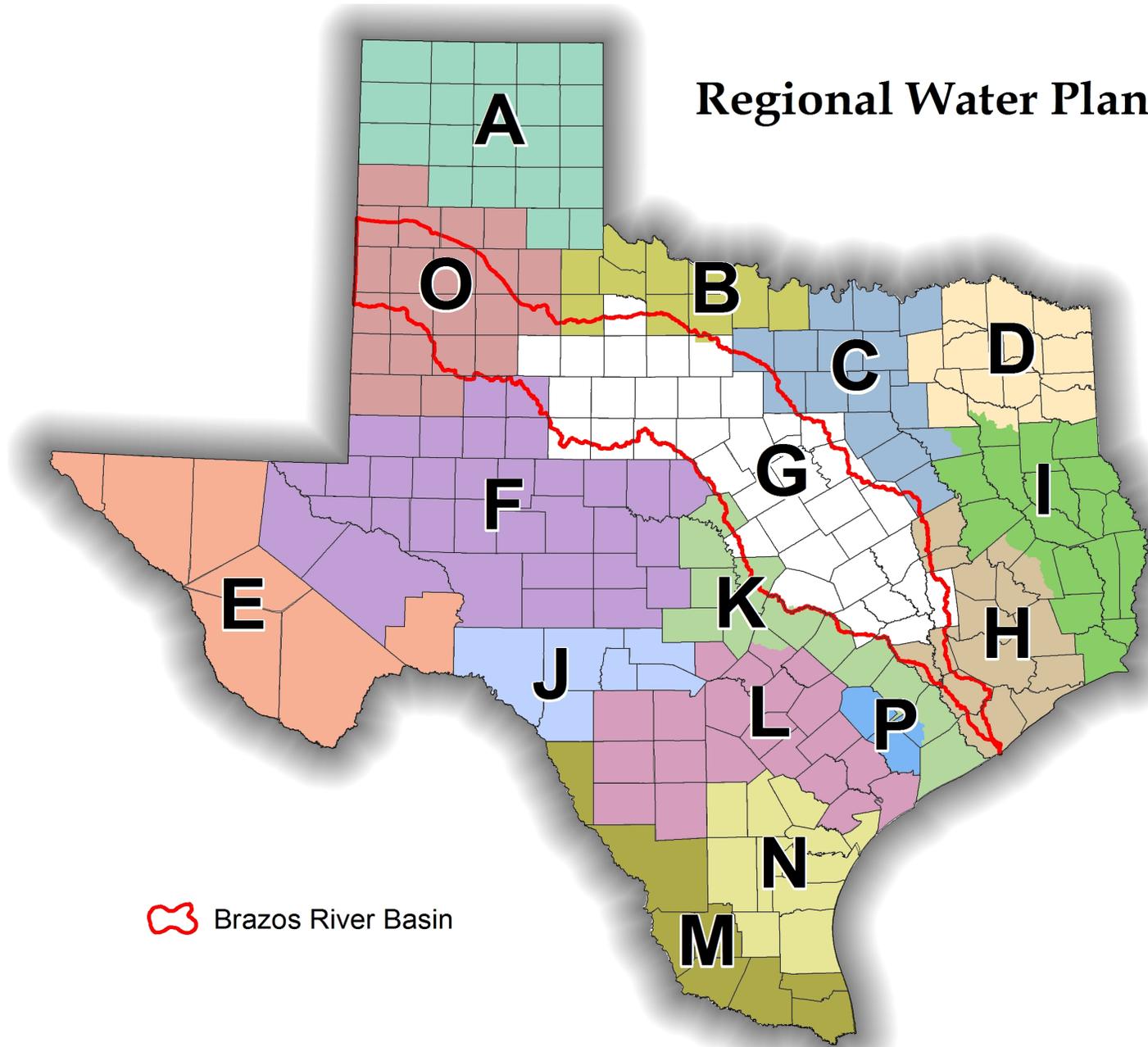
Tony L. Smith, P.E.
TLSmith@carollo.com





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

Regional Water Planning Groups



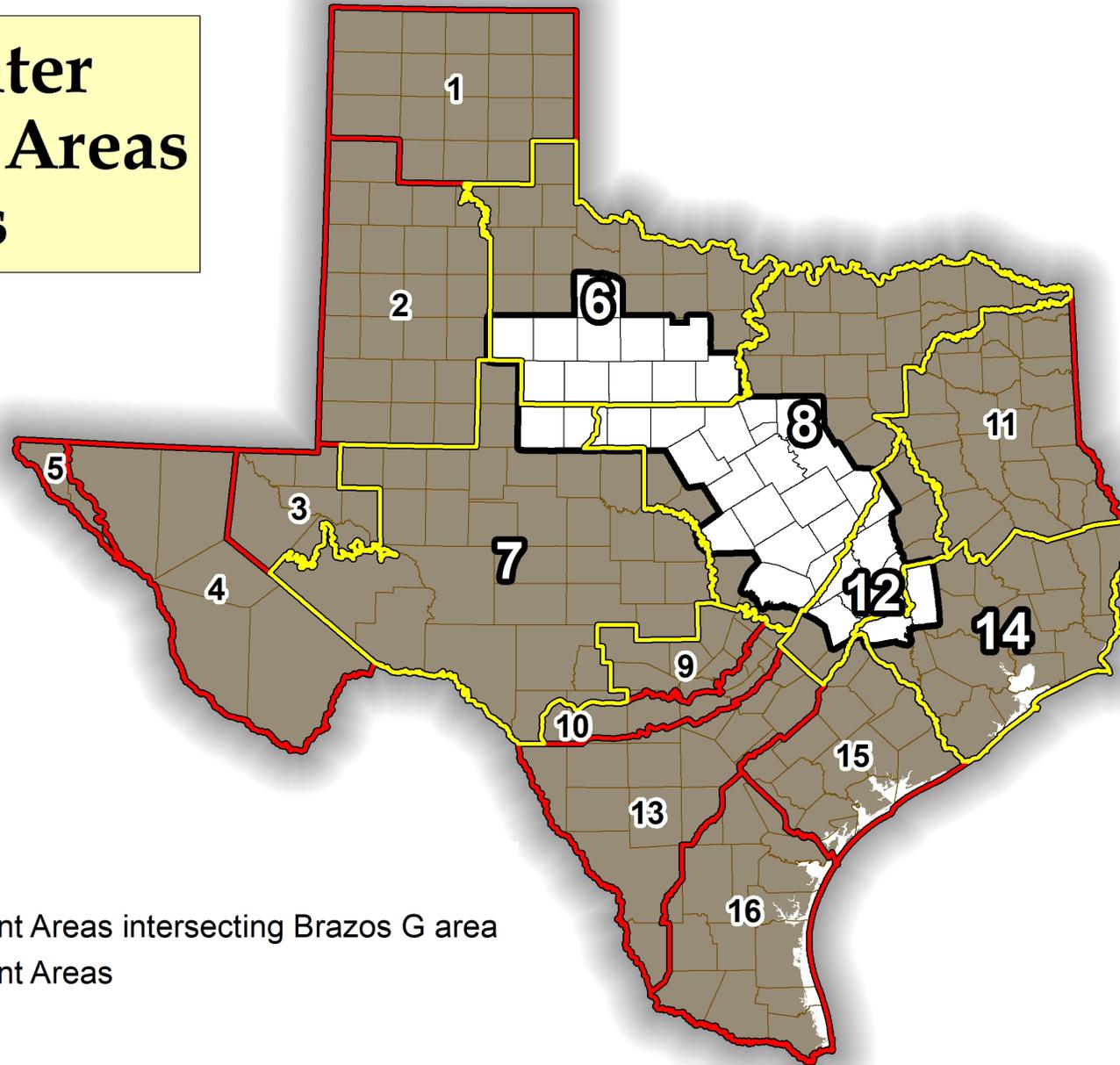
- A** Panhandle
- B** Region B
- C** Region C
- D** North East Texas
- E** Far West Texas
- F** Region F
- G** Brazos G
- H** Region H
- I** East Texas
- J** Plateau
- K** Lower Colorado
- L** South Central Texas
- M** Rio Grande
- N** Coastal Bend
- O** Llano Estacado
- P** Lavaca

 Brazos River Basin



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

Groundwater Management Areas of Texas



GMA's in Brazos G:
6, 7, 8, 12, 14

-  Brazos G Area
-  Groundwater Management Areas intersecting Brazos G area
-  Groundwater Management Areas



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





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

12.1. Administrator Report

12.2. Finance Report – Summary of Administrative Tasks and Expenses



Sub-regional Public Meetings – January 2025

Tuesday, January 14, 2025, 10:00 AM - College Station, TX

Wednesday, January 15, 2025, 10:00 AM - Waco, TX

Thursday, January 16, 2025, 10:00 AM - Abilene, TX

Brazos River Authority
Brazos G
From 04/01/24 Through 06/30/24

	Current Period	Life to date	Total Budget	Budget Variance	% Budget Remaining
Revenues					
State Grants	168,055	576,154	2,191,611	1,615,457	73.71%
Interest Income	-	-			
Total Revenues	<u>168,055</u>	<u>576,154</u>	<u>2,191,611</u>	<u>1,615,457</u>	<u>73.71%</u>
Reimbursable Expenditures					
Salaries	322	5,187			
Benefits	138	2,243			
Indirect Costs	32	519			
Other Expenditures					
Printing/Publishing ¹	8	7,331			
Public Information/Notices ²	-	2,373			
Total Other Expenditures	<u>500</u>	<u>17,653</u>	<u>42,500</u>	<u>24,847</u>	<u>58.46%</u>
Voting Planning Member Travel	878	9,150	25,500	16,350	64.12%
Subcontractor ³	166,677	549,351	2,123,611	1,574,260	74.13%
Total Reimbursable Expenditures	<u>168,055</u>	<u>576,154</u>	<u>2,191,611</u>	<u>1,615,457</u>	<u>73.71%</u>
Work in Kind					
Salaries/benefits	587	17,554			
Other	-	3,145			
Total Work in Kind	<u>587</u>	<u>20,699</u>			
Net Revenue over expenditures	<u>(587)</u>	<u>(20,699)</u>	<u>-</u>	<u>0</u>	

¹ Copies

³ includes February thru May 2024



13. Discussion and possible action on report from Brazos G Chair



**14. Consider Agenda Items and Date for the next Brazos G
RWPG public meeting**



15. Adjourn