



**BRAZOS G REGIONAL WATER PLANNING GROUP**

**WEDNESDAY, NOVEMBER 2, 2022**

**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 and possible discussion from Texas Water Development Board (TWDB) staff**

# TWDB Update

## Brazos G Regional Water Planning Group Meeting

November 2, 2022

Jean Devlin

Jean.Devlin@TWDB.Texas.gov



## Significant new requirements for the 2026 RWPs

- Task 3: Exhibit C, Section 2.3 (Water Availability and Existing Supplies)
  - Technical Memorandum and RWPs must include methodology for calculating anticipated sedimentation rate and revising the area-capacity rating curves
  - Reuse availability presented as a separate subsection in Chapter 3
  - Hydrologic variance requests for surface water must use template checklist

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

- Task 4B: Exhibit C, Section 2.11 (Identification of infeasible WMSs in the 2021 RWP)
  - Required by SB 1511, 86<sup>th</sup> Texas Legislature
  - Analysis must be completed prior to **March 4, 2024**
  - Results presented at public meeting where RWPG also presents methodology for identifying potentially feasible WMSs in 2026 RWP
  - Infeasible WMSs to be listed in Technical Memorandum
  - If infeasible WMSs identified, 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 **June 4, 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 and coordinate with project sponsors to determine implementation status and determine infeasibility
  - At a minimum, review status of strategies and projects with an online decade of 2020 in the 2021 RWPs.
    - Such strategies were required to be online and delivering water by **January 5, 2023**
  - Additional near-term strategies and projects that have lengthy permitting or construction processes should also be reviewed for infeasibility
  - 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

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

- Task 4C: Exhibit C, Section 2.12.1 (Technical Memorandum)
  - Include summary of region's interregional coordination efforts to date
  - Include list of identified infeasible WMSs and WMSPs resulting from new Task 4B
- Task 5B: Exhibit C, Section 2.5 (Evaluation/Recommendation of Strategies & Projects)
  - Guidance added to address HB 807, 87<sup>th</sup> Texas Legislature (ASR assessments and GPCD goals)
  - Conservation WMSs required to be split out for water loss mitigation vs water use reduction
  - New subsection documenting implementation status of certain WMS types



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

- Task 7: Exhibit C, Section 2.7 (Drought response information)
  - Guidance added to address HB 807, 87<sup>th</sup> Texas Legislature (unnecessary or counterproductive drought response)
  - RWPGs to identify rather than recommend drought response triggers & actions
  - New guidance to optionally address droughts worse than drought of record
  - New subsection required to address how the planning group is addressing uncertainty and droughts worse than drought of record (if applicable), and what additional measures not included in the plan could be available during a drought worse than drought of record

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

- Task 9: Exhibit C, Section 2.9 (Implementation)
  - Reduced content of implementation survey
  - Guidance added to address HB 807, 87<sup>th</sup> Texas Legislature (progress in achieving economies of scale)
- Task 10: Exhibit C, Section 2.10, 2.13, 2.14 (Adoption and deliverables)
  - Initially Prepared Plan and final RWP must document summary of region's interregional coordination efforts
  - State Database Reports (DB27) to be included in Initially Prepared Plan and final RWP via hyperlinks to TWDB's Database Reports application, in lieu of hard copies

# Important Reminders

- Infrastructure finance survey and related chapter removed
- RWPG task to prioritize recommended projects removed
- Due to removal of IFR chapter, 2026 RWPs will have 10 chapters
  - Implementation and comparison of previous plan now Chapter 9
- Documents available on the 2026 RWP Document Page:
  - General copy of first amended SOW
  - First amended Exhibit C
  - Summary of major revisions to Exhibit C
  - <https://www.twdb.texas.gov/waterplanning/rwp/planningdocu/2026/documents.asp>

# Projections Timeline

Draft Water Demand Projections	Timeline
Livestock, Manufacturing, Steam-Electric Projections + Supporting Data	January 20, 2022
Water User Group List + Historical Population, Connections, Net Use, GPCD	March 16, 2022
<b>DUE:</b> RWPGs review WUG list + historical WUG data	July 29, 2022
Irrigation, Mining Projections + Supporting Data	August 23, 2022
Non-municipal Basin Splits	August 23, 2022
Population Projections + Plumbing Code Savings + Municipal Demand Projections	February 2023
<b>DUE:</b> RWPGs request revisions for non-municipal demand projections	July 14, 2023
<b>DUE:</b> RWPGs request revisions for population and municipal demand projections	August 11, 2023
TWDB Board Meeting to Adopt Projections	Fall 2023
<b>DUE:</b> Technical Memorandum	March 4, 2024

# Important Considerations

- All data released thus far is available online
  - Interactive dashboards
  - Underneath each dashboard is Excel file format + methodology summaries
- <https://www.twdb.texas.gov/waterplanning/data/projections/2027/projections.asp>
- Timeframe for reviewing draft population and municipal demand projections is ~6 months
  - Regions should meet soon after release and develop strategy for meeting the deadline
  - Regions are strongly encouraged to submit non-municipal revisions requests before municipal data release
  - Declines in population will be reflected in the draft population projections

## Important Considerations (cont.)

- Planning groups must take action to approve submitting revisions requests
- Planning groups encouraged to coordinate with TWDB as early as possible on potential revisions
- Guidance regarding projections revisions provided in RWP contract Exhibit C, Section 2.2
- TWDB staff available for assistance and to provide projections presentations
- RWP grant funds may not be used for revisions to TWDB **Board-adopted** projections

# Interregional Planning Council

- On July 7, 2022 the Board appointed a member and alternate for each regional water planning group to the Interregional Planning Council.
- The planning groups were sent an e-mail with a welcome letter from the TWDB's Executive Administrator, a copy of House Bill 807, and a copy of the TWDB Board appointment memorandum
- First meeting is scheduled for November 9<sup>th</sup>. The meeting will be held in Austin with a virtual component.

# New Education Materials

- New one-pager: Water Supply and Flood Mitigation strategies; Drought of Record
- New educational materials: Member Guide and Administrative Guidance
- Both materials are now available on the TWDB website for viewing





# 6th Cycle of Regional Water Planning Web Page

- 6th Cycle of RWP landing page:  
<http://www.twdb.texas.gov/waterplanning/rwp/planningdocu/2026/index.asp>
- Page includes planning documents such as the 6<sup>th</sup> Cycle plan timeline, BMP Guide, rules pamphlet, contract docs, planning newsletters, and Chairs' Conference Call notes
- [RegionalWaterPlanning@twdb.Texas.gov](mailto:RegionalWaterPlanning@twdb.Texas.gov) is now being used for broadcast communications to RWPGs regarding regional water planning



## **7. Report, discussion, and possible action on report from Technical Consultant - Carollo**

**7.1. Preliminary summary of methodologies and draft  
projections of non-municipal irrigation and mining  
water use categories**

**7.2. Regional Water Planning Update**

# Brazos G Water Planning

Technical Consultant Presentation



WACO, TX November 2, 2022



# 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
Jul 2022	Municipal WUG List, Draft Historical Population, Water Use, and GPCD
Sept 2022	TWDB releases remaining Draft Non-Municipal data for Irrigation and Mining for review
Nov 2022	Brazos G Meeting – Summary of Irrigation and Mining Projections
Dec 2022	Contract Amendments
Feb 2023	Tentative TWDB release of Draft Municipal Population and Demand Projections

# 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	\$14,876.47	26%
2B	Population and Municipal Water Demand Projections	\$80,330	\$7,511.97	9%
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	\$22,671.39	26%
11	Implementation and Comparison to the Previous Regional Water Plan	n/a	n/a	0%
12	...	n/a	n/a	0%
	<b>TOTAL</b>	<b>\$270,173</b>	<b>\$45,059.83</b>	<b>17%</b>

# Today's Discussion

Summary of Irrigation and Mining Methodologies and Draft projections

No Action Sought

# Draft Irrigation Projections



# Non-Municipal

- Livestock
- Manufacturing
- Steam-Electric Power Generation
- **Irrigation**
- **Mining**

# Methodology: Irrigation

## Annual use estimated from:

- Calculated evapotranspiration-based “crop water need” from TWDB Agricultural Conservation Dept.
- Estimated irrigated acreage (by county) from Farm Service Agency

## 2030 Baseline based on average of:

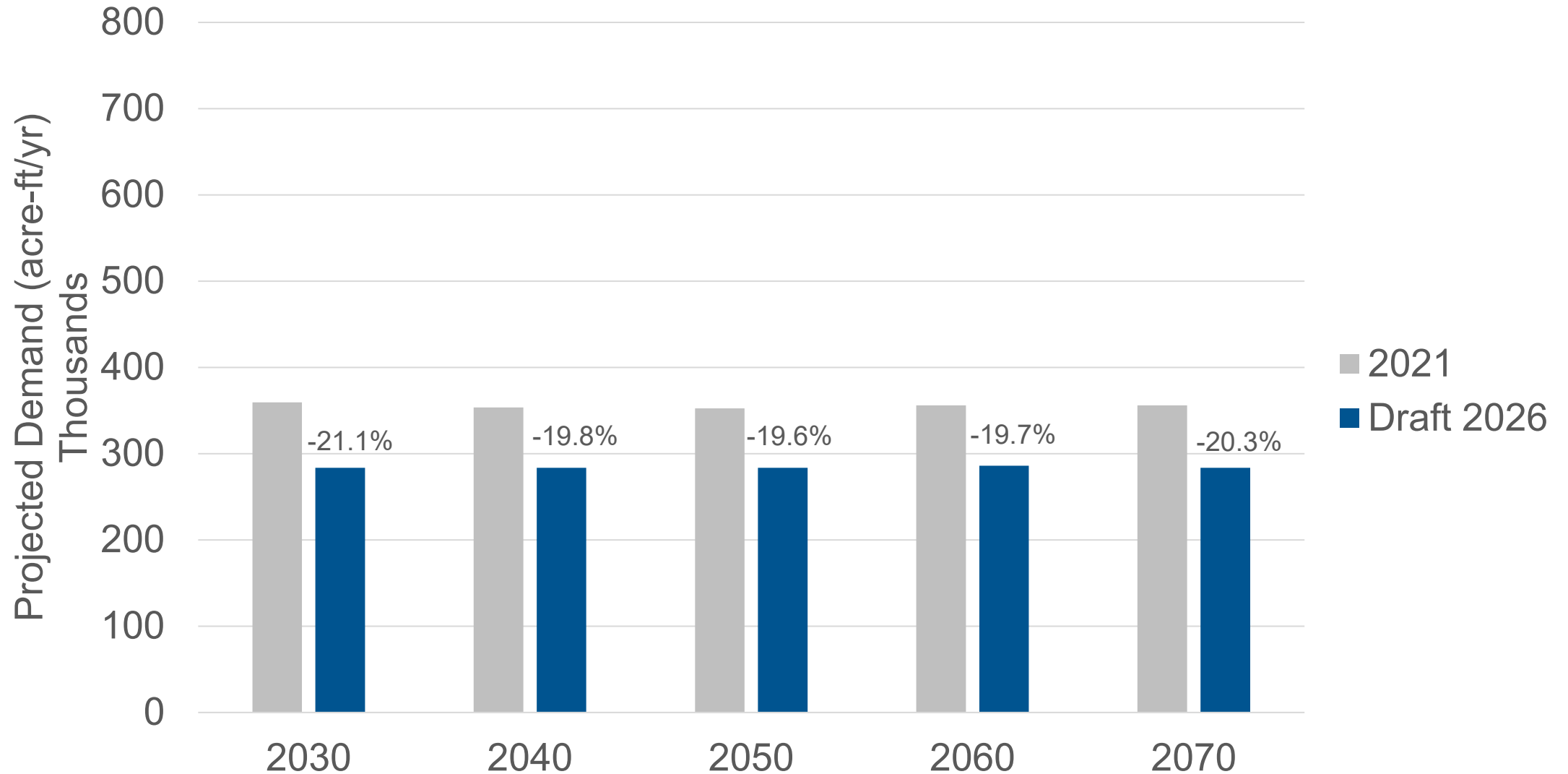
- Annual use estimates for 2015-2019

## Assumed constant over planning period.

- Unless groundwater availability over the planning period is projected to be less than the groundwater-portion of the baseline irrigation demand projections,
- If so, irrigation demand is commensurately decreased starting in 2040 or later.

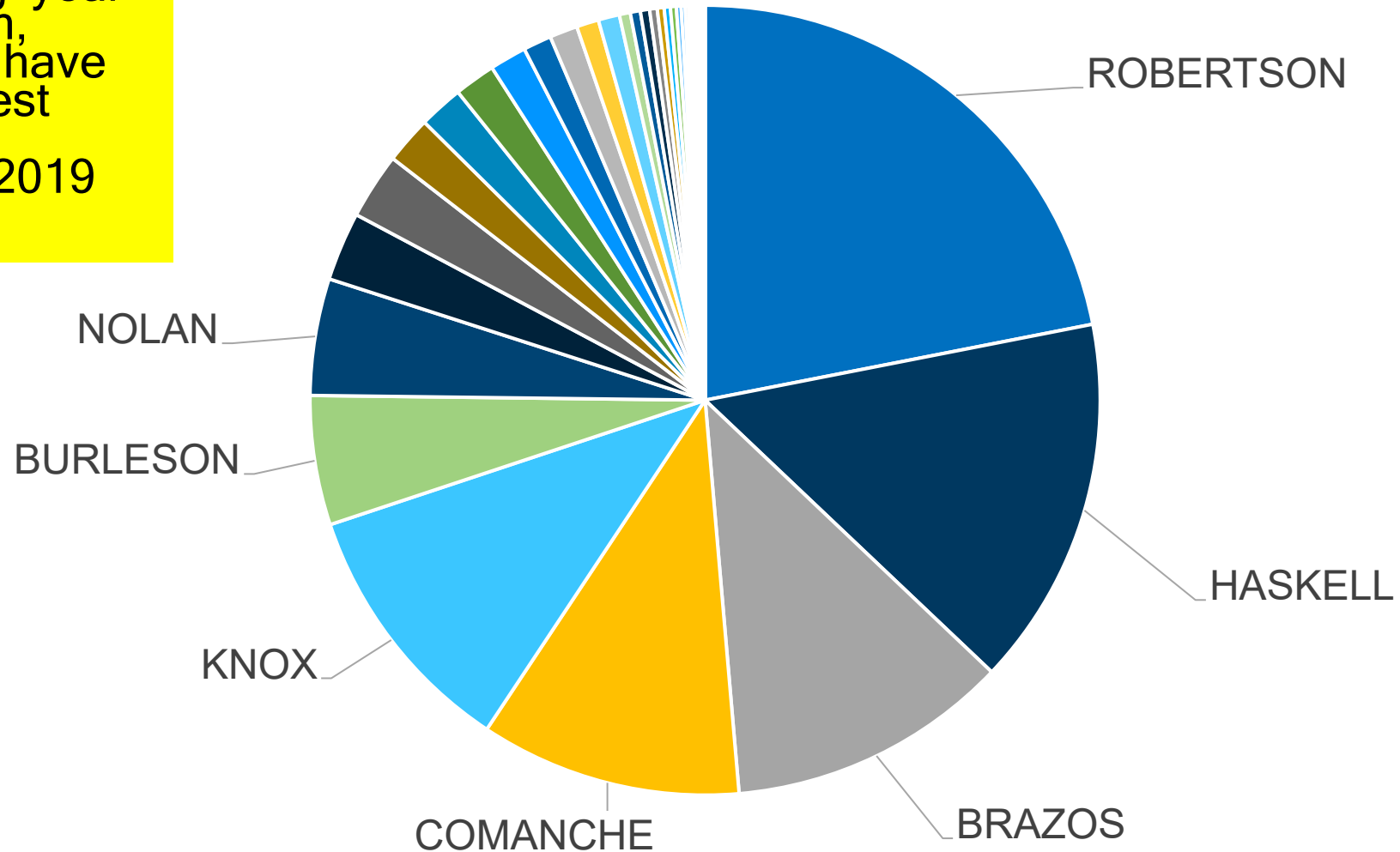
# Comparison of Draft 2026 Irrigation Projections to 2021 Plan

## Brazos G Projected Irrigation Demand

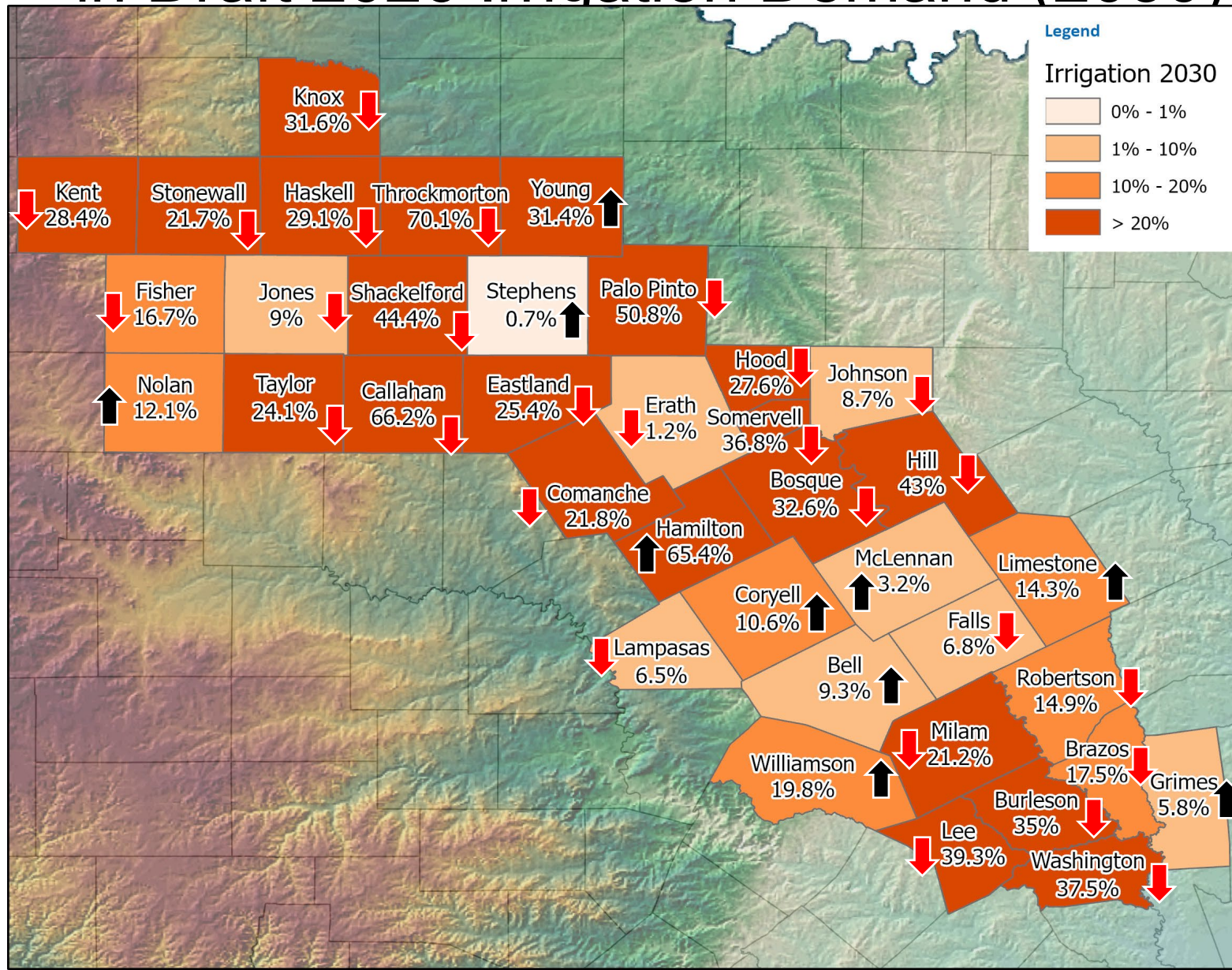


# Proportion of 2019 Irrigated Water Use Estimates by County in Brazos G

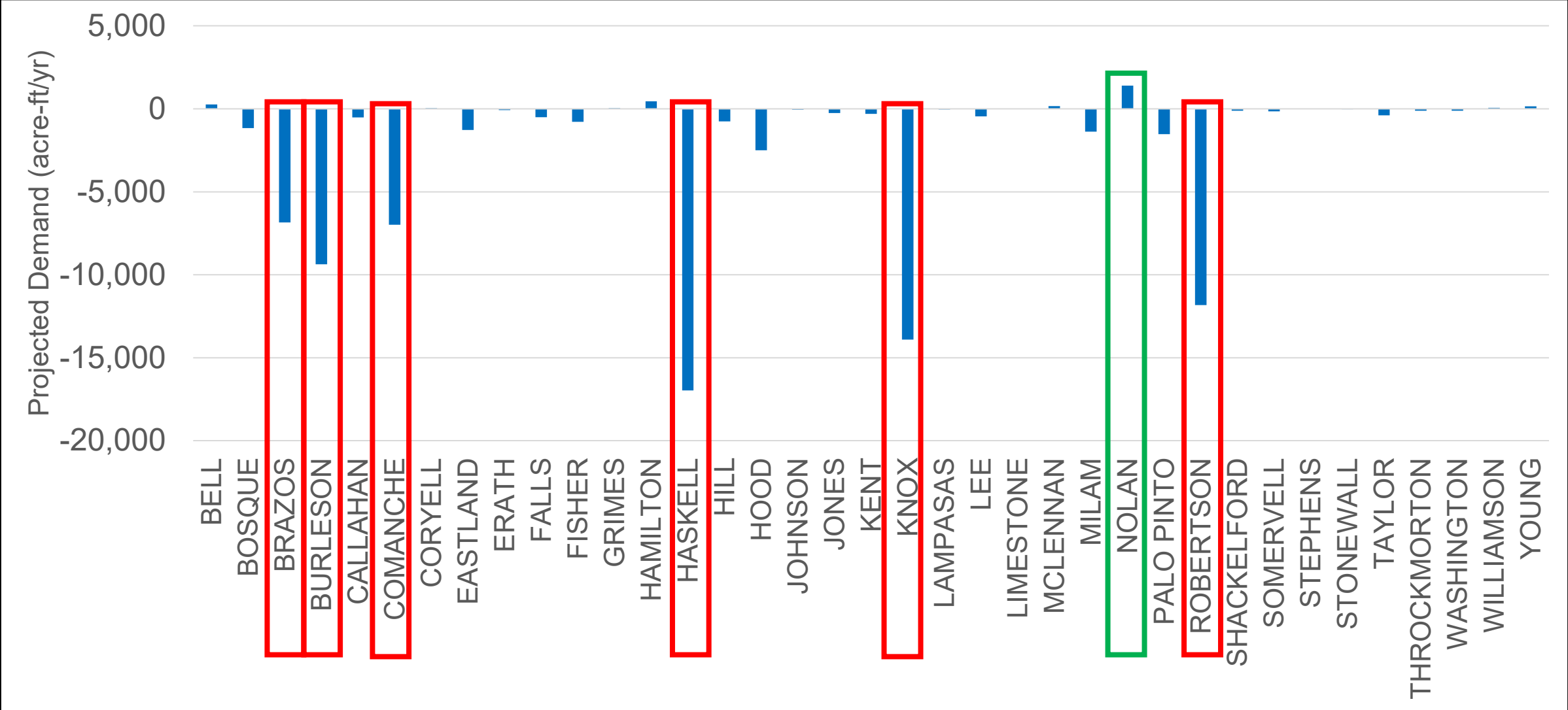
While exhibiting year-to-year variation, these counties have exhibited greatest proportion over the 2010-2019 period.



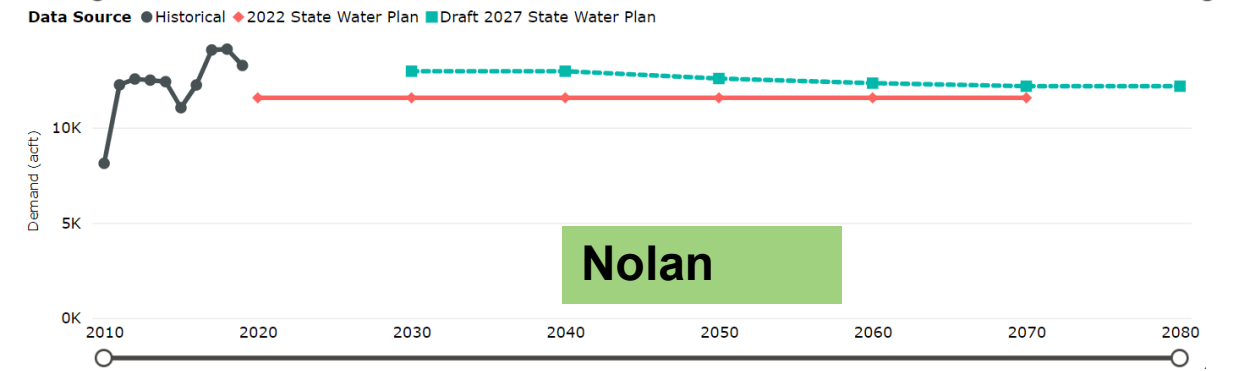
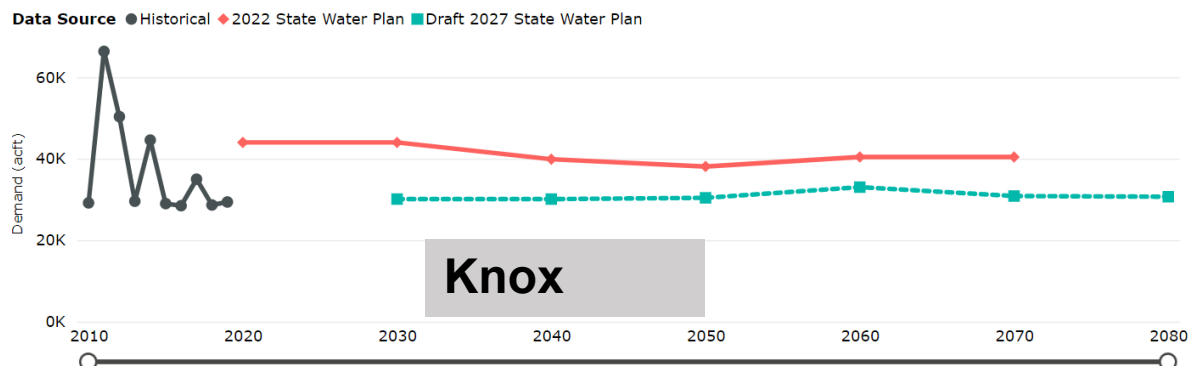
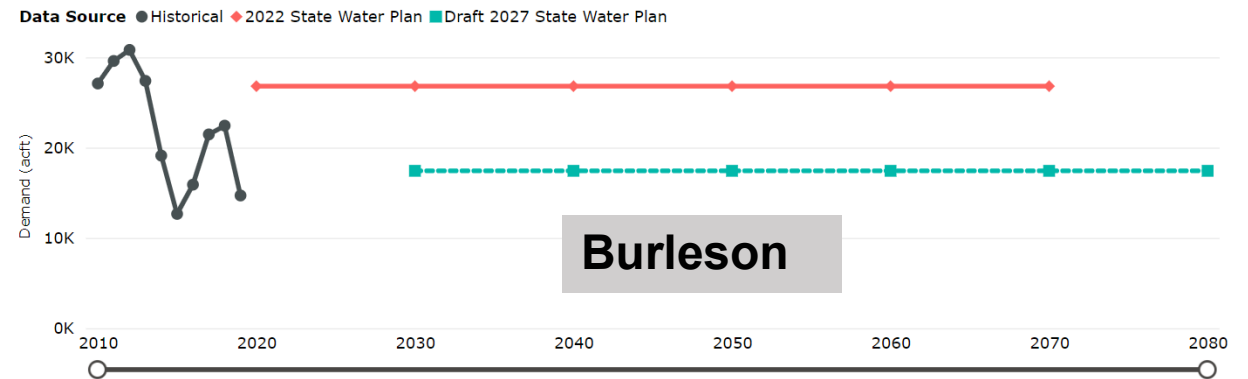
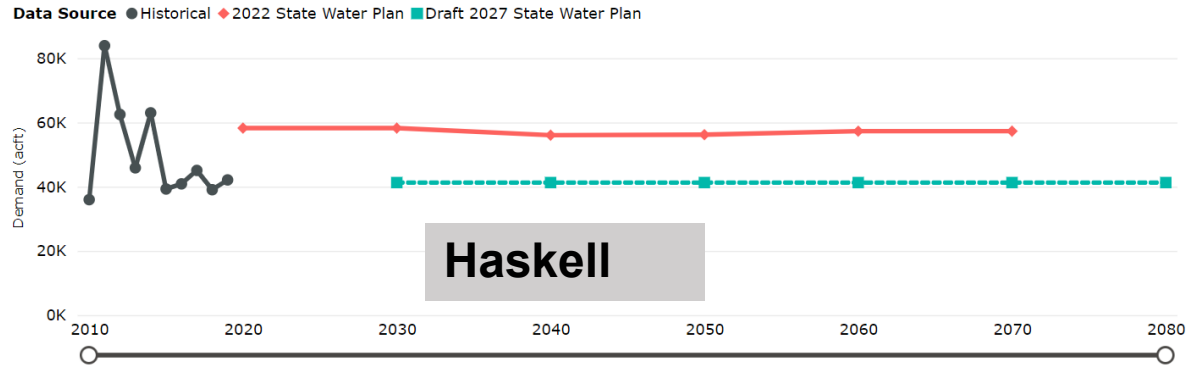
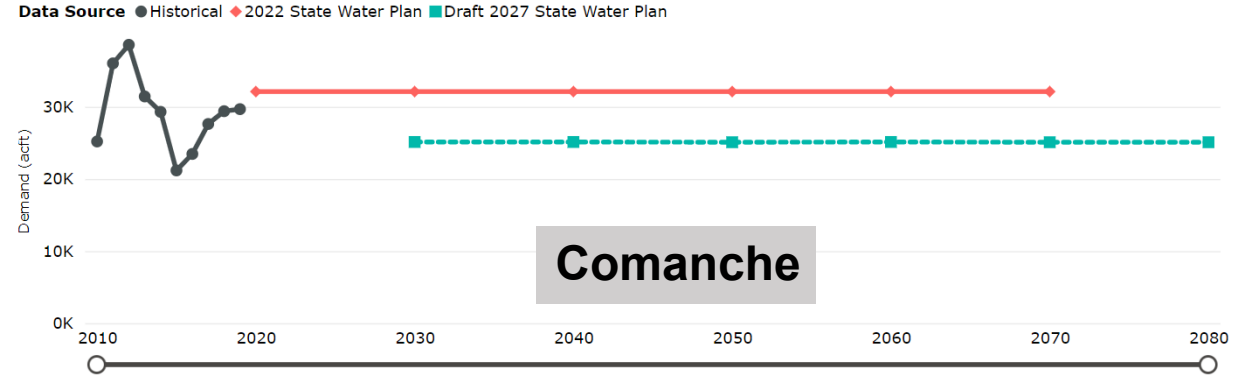
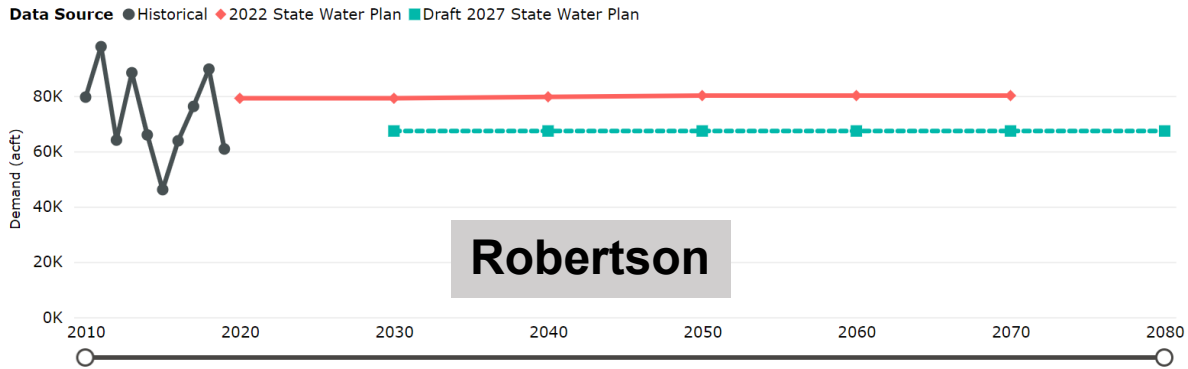
# Geographic Distribution of Change in Draft 2026 Irrigation Demand (2030)



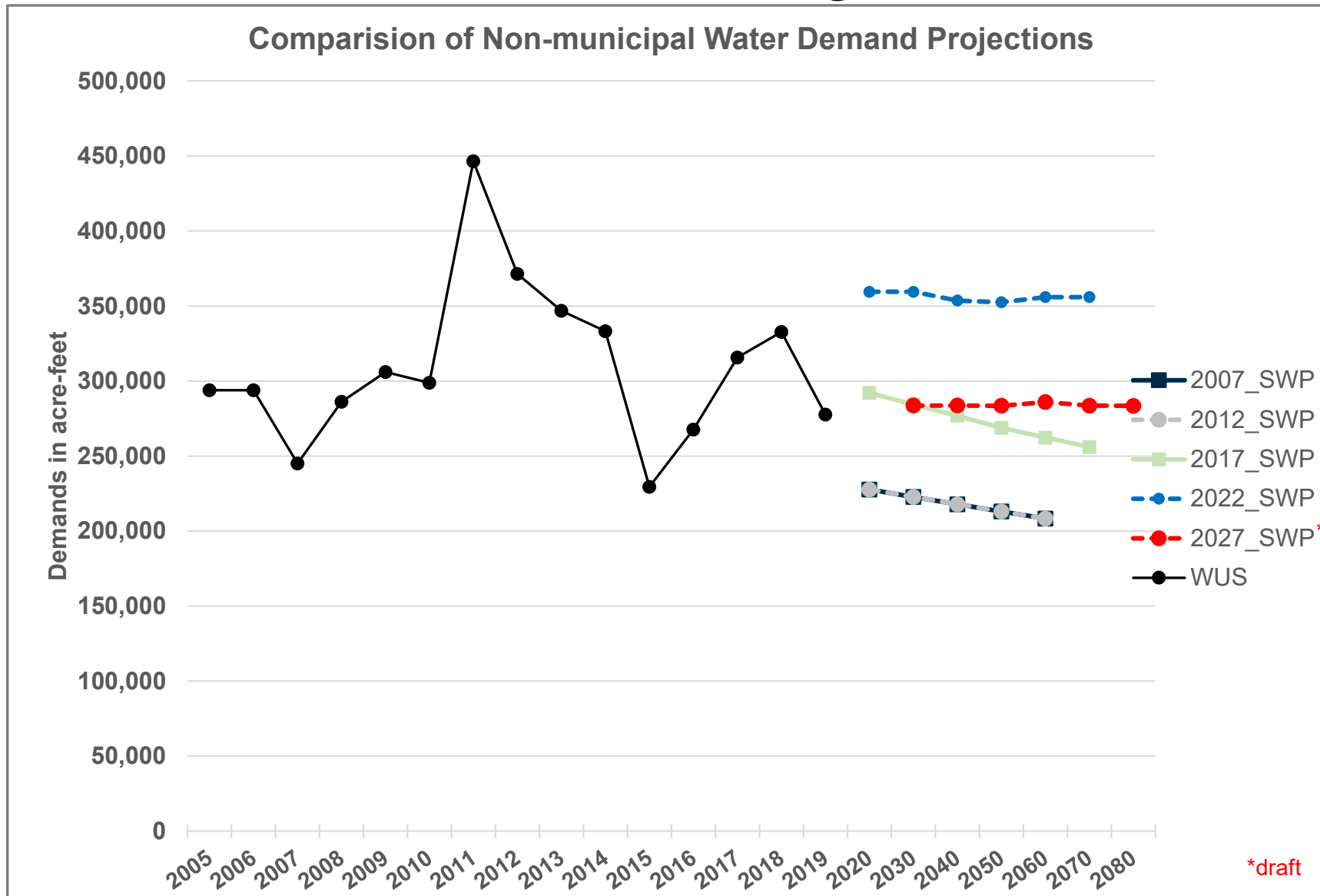
# Difference in Projected 2030 Irrigation Demand from 2021 Plan



# Historical Comparison to Reported Irrigation Use and Previous Region G Plans



# Historical Comparison to Reported Irrigation Use and Previous Region G Plans





# Assessment - Irrigation

Overall reduction in projected irrigation demands.

Driven by:

- Decreases in estimated use in those counties with highest demands.
- Averaging over 2015-2019 period

Considering:

- Proposal of revisions to include full 10 yr period for analysis in order to conservatively capture 2011 drought usage.

# Draft Mining Projections

# Methodology: Mining

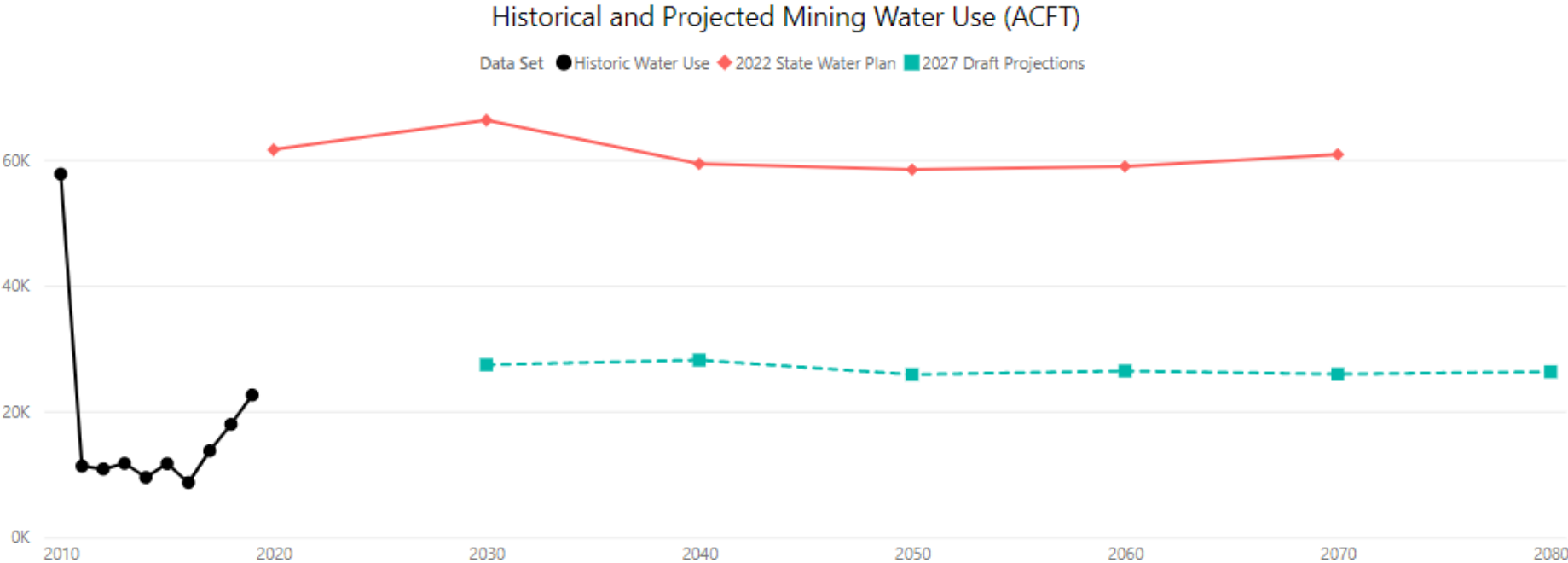
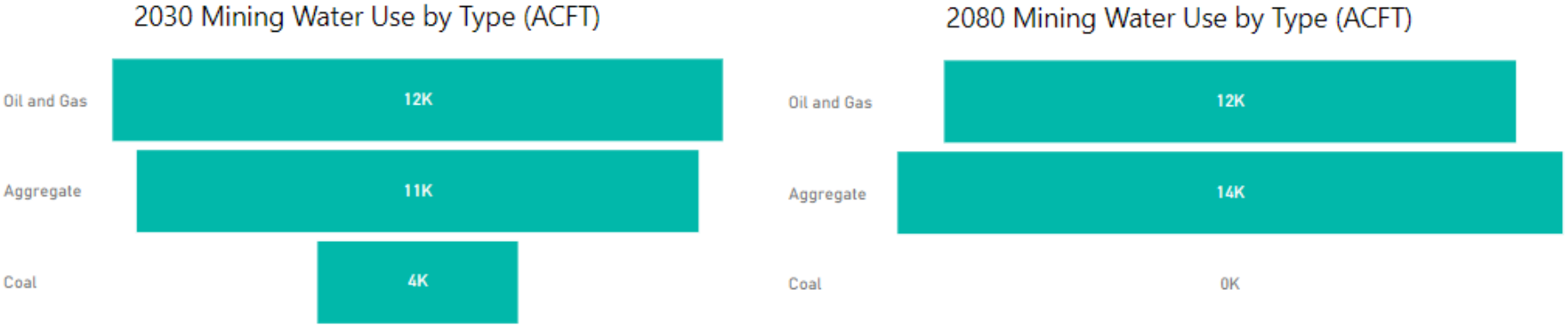
UT Bureau of Economic Geology (UTBEG) recently contracted study update.

- Evaluated major mining operations across Texas
- Oil & Gas plays, aggregates, and coal & lignite

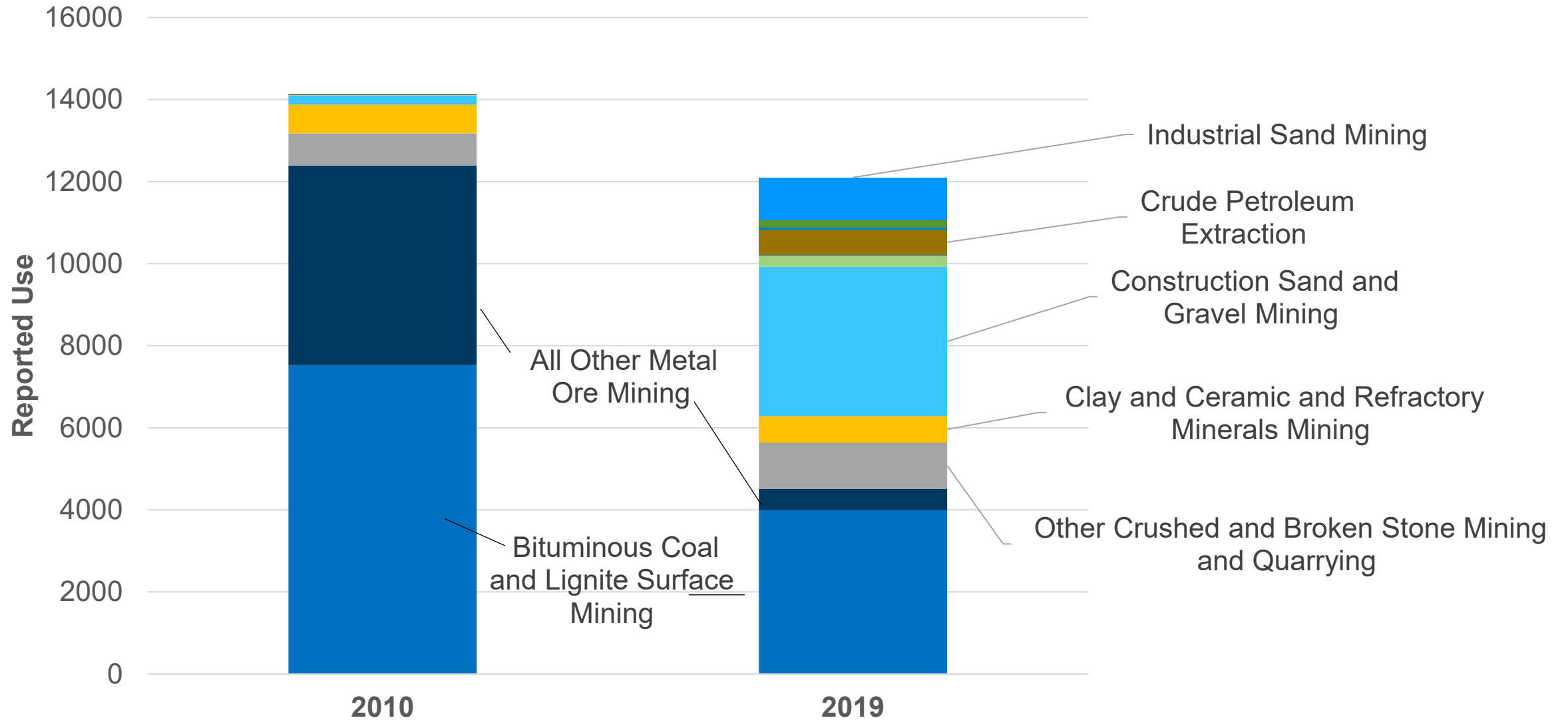
2030 Baseline based on average of UTBEG estimates annual mining water use.

- Demand for aggregates increase in proportion to population growth.
- O&G consistent then tailing off as plays mature starting around 2060.

# Comparison of Region G Historic Mining Water Use and Projections



# Classes of Reported Historical Use in Brazos G (from WUS)



## Key Drivers

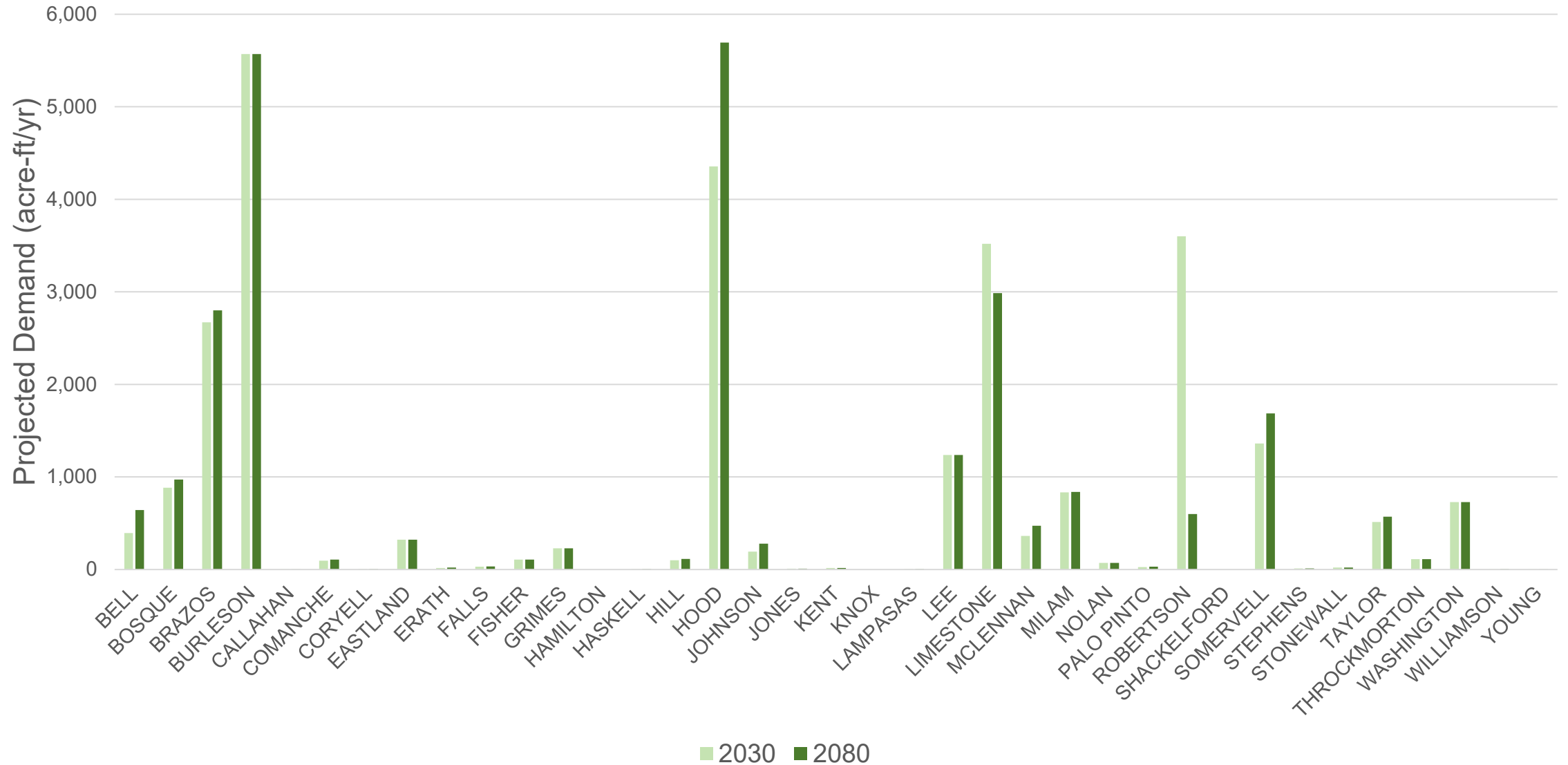
Significantly (~50%) less coal mining in Robertson County since 2011.

Luminant's Three Oaks mine in Lee County ceased reported water use in 2015.

Not driven by drought, but cessation of facilities.



# Draft Projected Mining Demand 2030 and 2080





# Assessment - Mining

Overall reduction in projected mining demands.

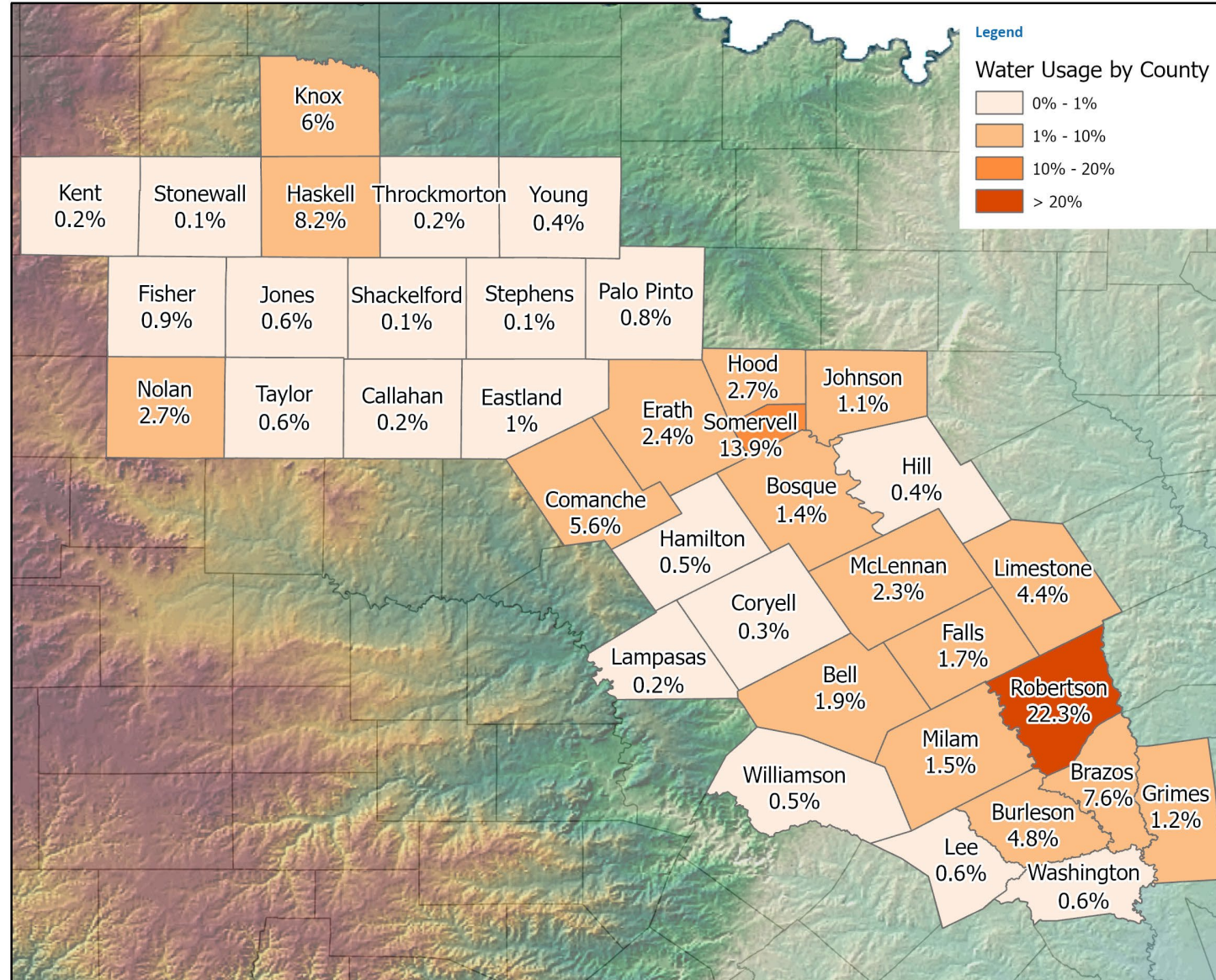
Magnitude of projections are relatively small compared to other larger demands within Brazos G.

Projections affected by observed decreases in reported use over the last decade.

Projected decreases over time are related to BEG estimates for cessation of coal mining in:

- Limestone (Kosse Strip)
- Robertson (Calvert Mine)

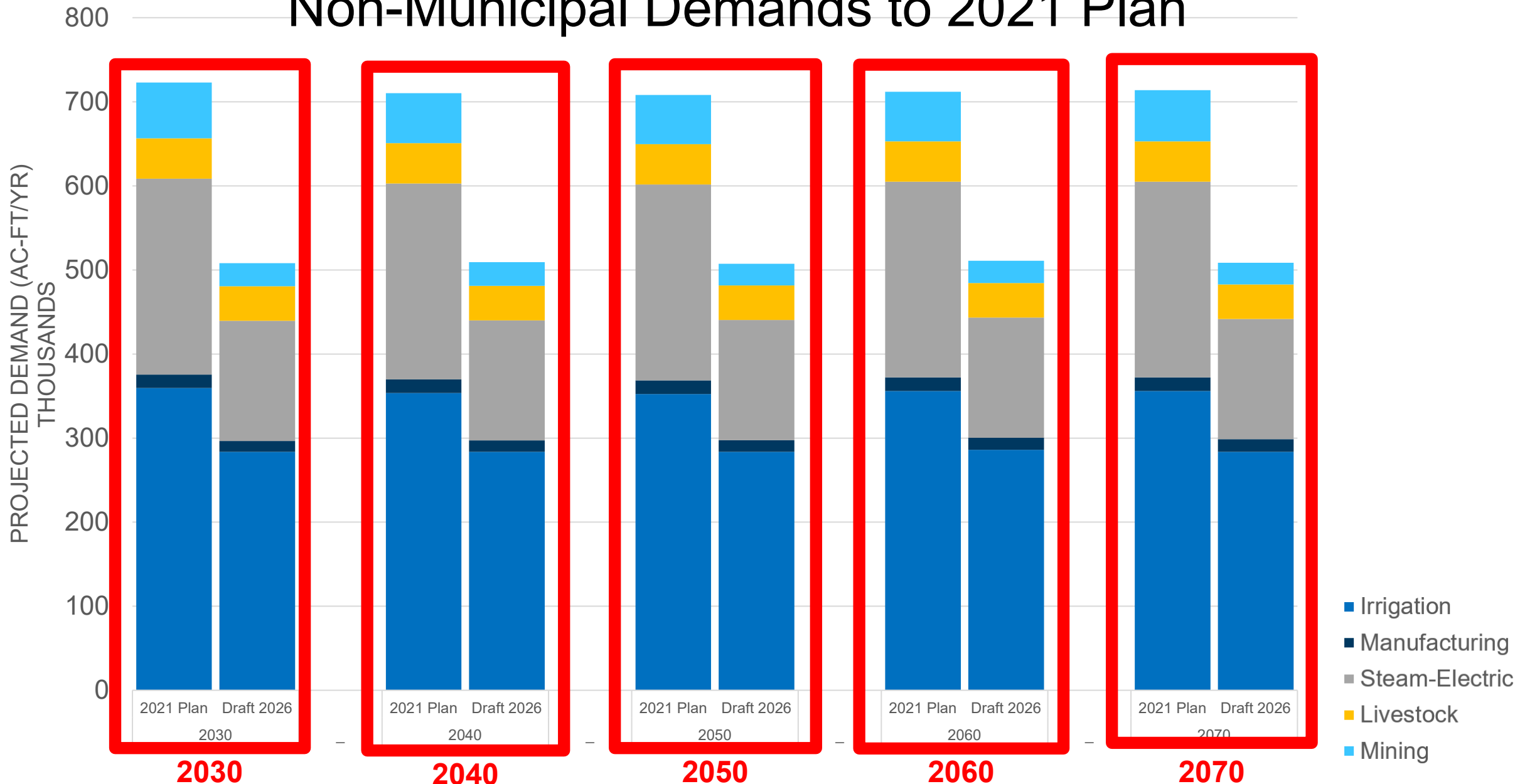
# Spatial Distribution of 2030 Draft Total Non-Municipal Demand (2030)



# Change from 2021 Plan in terms of the Proportions of Demand by Use Type



# Summary Comparison of Draft Non-Municipal Demands to 2021 Plan



# Today's Message on Non-Municipal Demands

These are **Draft** amounts.

TWDB's process is to now incorporate information from region/local sources.

- Coordinate with TWDB to discuss application of methods and clarifications
- Soliciting input

No action sought today.

- but recommendations forthcoming (likely Q1 2023)

Submittal due July 2023.

- (but we'll want to submit sooner)

# Path Forward



Execution of  
consultant  
contract  
amendments

Continue  
engagement

Seek Action on  
Proposed  
Demand  
Revisions at Q1  
2023 meeting

## 7.2 – Regional Water Planning Update

### Submittal of Formal Comments and Revisions to Draft WUG List.

- July 20, 2022
- Summary memorandum;
- Required Excel workbook;

### Submitted technical comments on Draft Exhibit C Guidelines.

- Points of clarification
- DWDOR
- New sections

### Sub-Regional Meetings

- Bell, McLennan, and Williamson Counties

# Questions?

Tony L. Smith, P.E.  
Carollo Engineers, Inc.  
Office: 512-427-8151  
[TLSmith@Carollo.com](mailto:TLSmith@Carollo.com)





**8. Discussion and possible action to support a Waiver of  
Consistency for the Files Valley WSC Groundwater Project**

# Files Valley WSC

Consistency Waiver Request



WACO, TX November 2, 2022

# Files Valley WSC

## Need for additional water:

- Recent growth (estimated at 0.25 MGD), and
- Anticipated 0.5 MGD supply reduction (Aquilla WSD) by 2031;
- TAC §290.45 Rule for Minimum Water System Capacity Requirement (0.6 gpm/connection)

## Current activity:

- Developing 50 MG/Yr well (154 ac-ft/yr) in Trinity Aquifer in Ellis County (Region C) to address immediate needs.
- Insufficient to meet projected growth and supply loss.

## Future activity:

- Anticipates pursuit of additional wells. Details on this additional supply not yet known.
- Will be seeking TWDB funding assistance (specific fund not yet known)

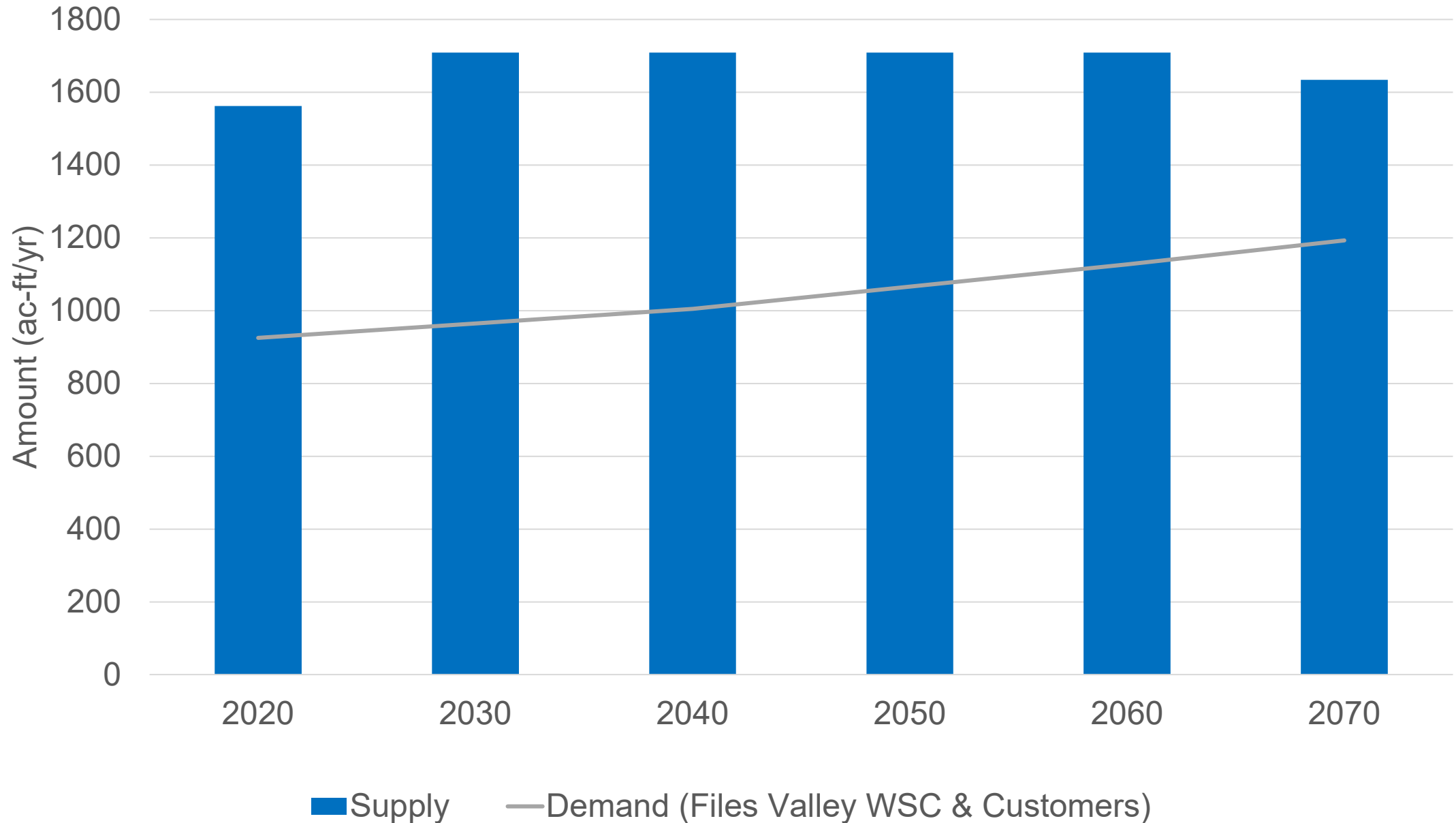
## Seeking consistency waivers from both Brazos G and Region C.

- Groundwater development is not a recommended strategy.
- Region C shows one recommended strategy to purchase supply from TRWD through Waxahachie.

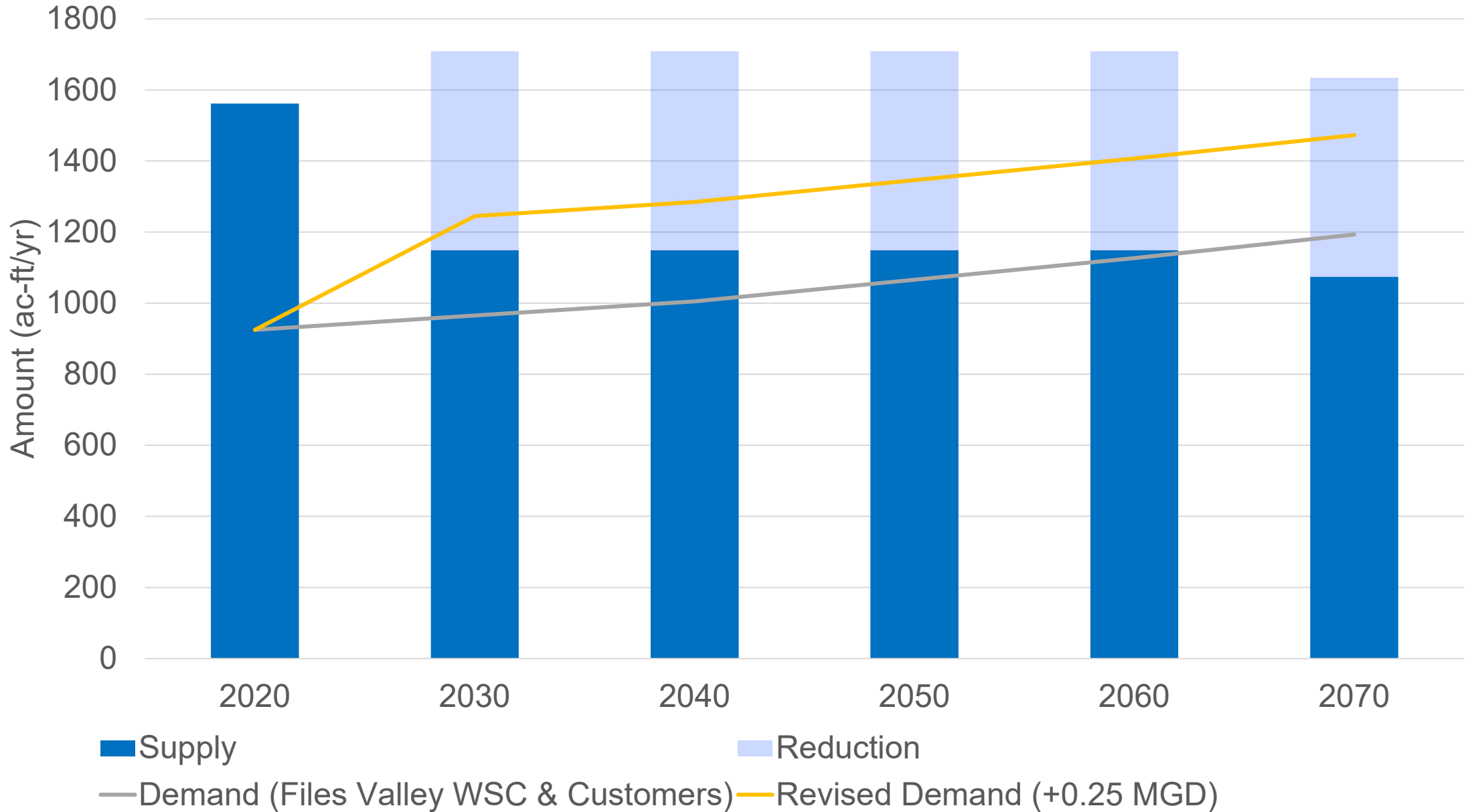
# Process

- Files Valley submitted letter with supporting information
- RWPG discuss project and take formal action regarding planning group support or opposition of the waiver.
- RWPG 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 WSC; and
  - Statement of outcome of considerations indicating whether the RWPG supports or opposes the waiver request.

# Files Valley WSC Supply/Demand – 2021 Brazos G Plan



# Files Valley WSC Updated Information



# Availability Assessment

County		Aquifer	2020	2030	2040	2050	2060	2070
		<b>Need</b>	<b>0</b>	<b>96</b>	<b>136</b>	<b>197</b>	<b>258</b>	<b>399</b>
Availability	Ellis County	Nacatoch	20	20	20	20	20	20
		Trinity	620	1302	1543	1569	905	915
		Woodbine	0	506	506	506	506	506
	Hill County	Trinity	0	0	1	0	0	0
		Woodbine	265	264	265	264	265	264
		Brazos River Alluvium	0	0	0	0	0	0

\*Availability represents the amount of water available after allocation of all existing supplies utilizing the source as identified in the 2021 Regional Water Plans.

# Supplemental Information

1. A statement of the need for the project, including
  - ✓ a) water source – Trinity Aquifer, Ellis County and/or Hill County
  - ✓ b) expected supply volumes to be generated by the project and, – replace 0.5 MGD and meet additional 0.25 MGD, total of 0.75 MGD (840 ac-ft/yr).
  - ✓ c) whether there are sufficient available supplies for the project to be developed. Sufficient supply identified from Trinity Aquifer in Ellis County by Brazos G Consultant.
- ✓ 2. A summary of the extent/service area of the project. Consistency waiver request should state project's affect in both Regions C and G, as strategy would serve customers in both regions.
- ✓ 3. A statement as to why this project was not reflected in the most currently adopted Regional Water Plans. – Project need was recently identified through discussions with local water providers.
- ✓ 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. No application to date, anticipated need to initiate process within the next 5 years. Currently in violation of TAC §290.45 Rule for Minimum Water System Capacity Requirement (0.6 gpm/connection).
- ✓ 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. Initial email discussions with TWDB staff, then Brazos G technical consultant, began in late September 2022. A conference call was held on Oct. 19, 2022, with the Files Valley WSC representative, Brazos G technical consultant, and TWDB staff. Subsequent calls and emails have been exchanged assisting Files Valley WSC's representative in identifying necessary information. Simultaneous coordination with the technical consultants of the Region C RWPG have occurred as well over the course of the process to date.





## **Proposed Action**

“The Brazos G Regional Water Planning Group supports the Texas Water Development Board granting Files Valley WSC a waiver of consistency for developing the Files Valley WSC Groundwater Project and authorizes the technical consultant to work with the Brazos G Administrator to prepare and submit a letter of support, signed by the Brazos G Chairman, to the Texas Water Development Board.”

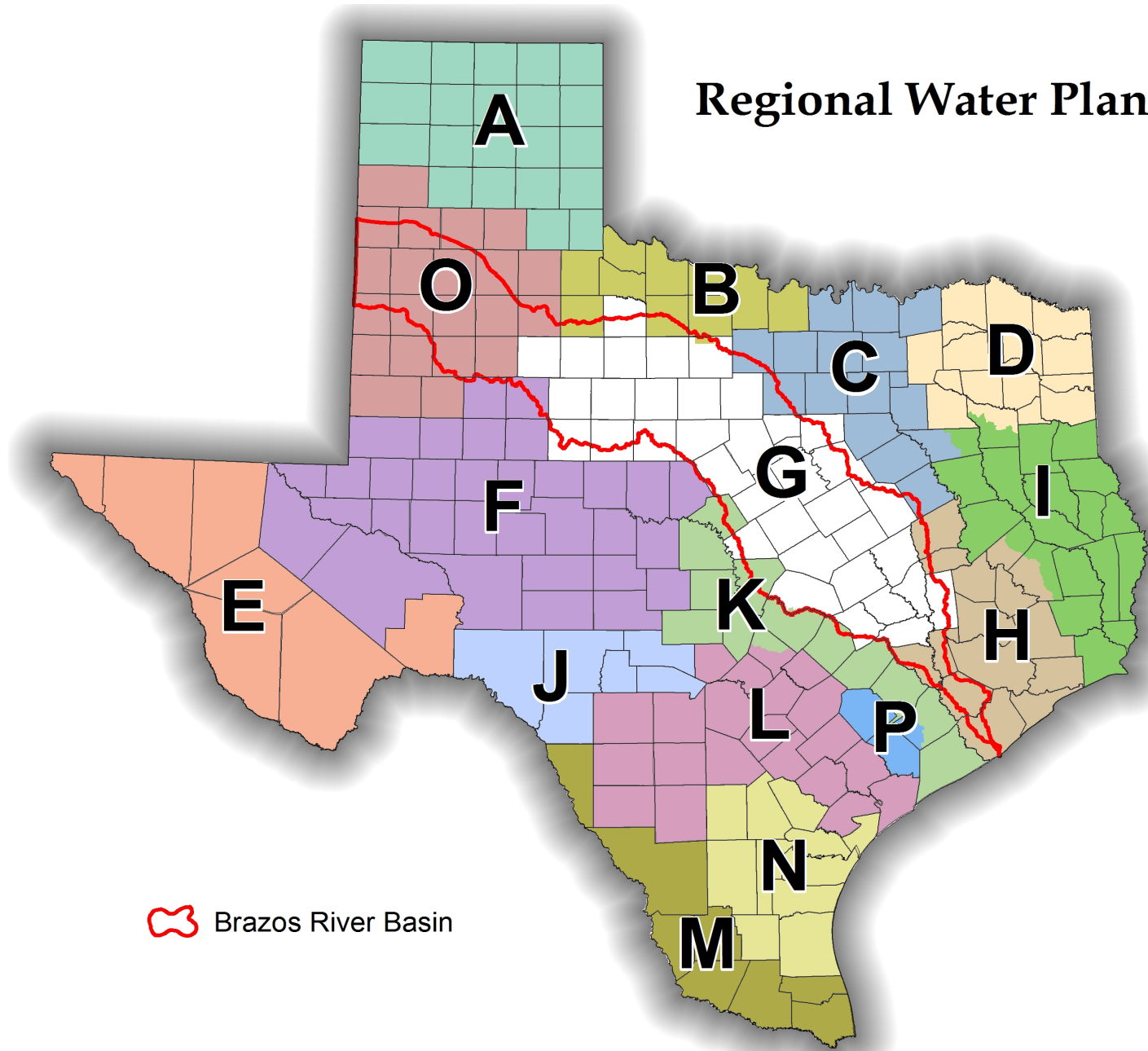


## **9. Report and discussion on the McLennan, Bell, and Williamson County Sub-regional Water Demand Meetings**



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

# Regional Water Planning Groups



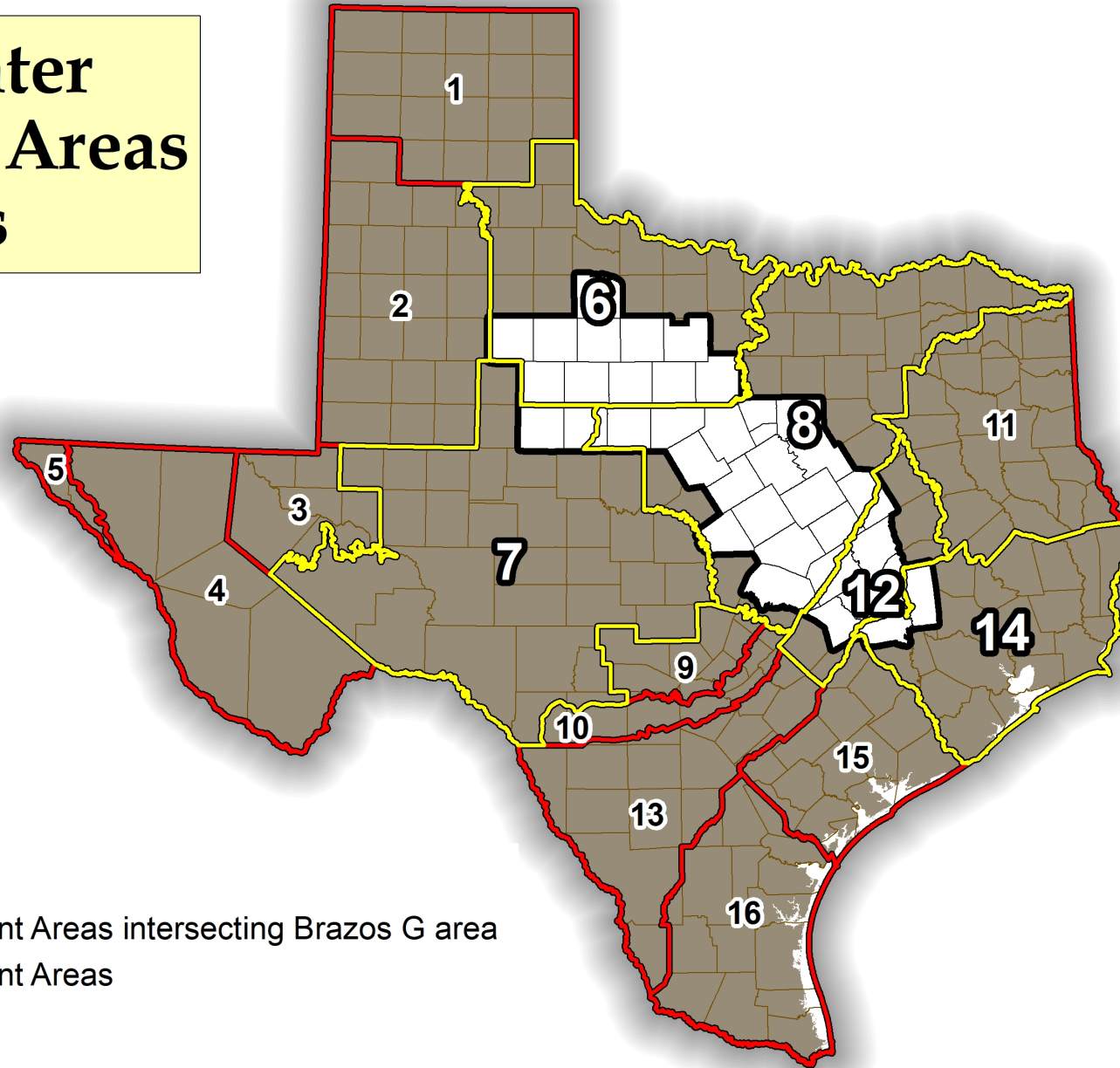
- A** Panhandle
- B** Region B
- C** Region C
- D** North East Texas
- E** Far West Texas
- F** Region F
- G** Brazos G
- H** Region H
- I** East Texas
- J** Plateau
- K** Lower Colorado
- L** South Central Texas
- M** Rio Grande
- N** Coastal Bend
- O** Llano Estacado
- P** Lavaca

 Brazos River Basin



# **11. 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



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



## **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**



Brazos River Authority  
**Brazos G**  
From 06/01/22 Through 09/30/22

	Current Period	Life to date	Total Budget	Budget Variance	% Budget Remaining
Revenues					
State Grants	29,780	55,887	338,173	282,286	83.47%
Interest Income	-	-			
<b>Total Revenues</b>	<b>29,780</b>	<b>55,887</b>	<b>338,173</b>	<b>282,286</b>	<b>83.47%</b>
<b>Reimbursable Expenditures</b>					
Salaries	292	1,486			
Benefits	129	651			
Indirect Costs	29	149			
Other Expenditures					
Printing/Publishing <sup>1</sup>	98	3,724			
Public Information/Notices <sup>2</sup>	636	3,009			
<b>Total Other Expenditures</b>	<b>1,184</b>	<b>9,019</b>	<b>42,000</b>	<b>32,981</b>	<b>78.53%</b>
Voting Planning Member Travel		1,809	26,000	24,191	93.04%
Subcontractor	28,595	45,060	270,173	225,113	83.32%
<b>Total Reimbursable Expenditures</b>	<b>29,780</b>	<b>55,887</b>	<b>338,173</b>	<b>282,286</b>	<b>83.47%</b>
Work in Kind					
Salaries/benefits	919	12,637			
Other	35	182			
<b>Total Work in Kind</b>	<b>955</b>	<b>12,818</b>			
<b>Net Revenue over expenditures</b>	<b>(955)</b>	<b>(12,818)</b>	<b>-</b>	<b>-</b>	

<sup>1</sup> Postage/copies

<sup>2</sup> Various Ads - public notices



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



**15. Discussion and possible action on new business to be considered at next meeting**



## **16. Confirmation of next meeting date**



## **17. Adjourn**