

NOTICE OF OPEN MEETING OF THE  
SOUTH CENTRAL TEXAS REGIONAL  
WATER PLANNING GROUP

TAKE NOTICE that a meeting of the South Central Texas Regional Water Planning Group (SCTRWPG) as established by the Texas Water Development Board will be held on Thursday, November 3, 2022 at 9:30 AM both in person and virtually. The in person meeting will be held at the San Antonio Water System's Customer Service Building, Room CR-145, 2800 US Hwy 281 North, San Antonio, TX 78212. You can attend virtually on WebEx at <https://saws.webex.com/saws/j.php?MTID=mdce181cb94d9373757389fa3e3d6f627>. The planning group members will consider and may take action regarding:

1. (9:30 AM) Roll-Call
2. Public Comment
3. Approval of the Minutes from the Previous Meeting of the South Central Texas Regional Water Planning Group (SCTRWPG)
4. Status Reports and Communications by TWDB
5. Status Reports and Communications Related to Regional Water Planning including reports by the Chair, Regional Liaisons, Groundwater Management Area Representatives, and Members of the Planning Group
6. Discussion and Appropriate Action Regarding Filling the Existing Vacancies for Industries, Water Utilities, and Electric Generating Utilities Interest Groups
7. Presentation by Technical Consultant Regarding Released Draft Data from TWDB
  - a. Schedule and Progress Updates
  - b. Irrigation and Mining Water Demands Projections and Supporting Data
8. Discussion and Appropriate Action Regarding the Establishment of Additional Subcommittees
9. Schedule 2023 SCTRWPg Meetings
10. Schedule and Potential Agenda Items for the Next Meeting of the SCTRWPg
11. Public Comment
12. Adjourn

Comments and submissions may be submitted through email to [khayes@sariverauthority.org](mailto:khayes@sariverauthority.org). Any written documentation can be sent to Tim Andruss, Chair, South Central Texas Regional Water Planning Group, c/o San Antonio River Authority, Attn: Kendall Hayes, 201 W. Sheridan Street, San Antonio, TX 78204. Please direct any questions to Kendall Hayes at (210) 302-3641.

**AGENDA ITEM NO.3 – APPROVAL OF THE MINUTES FROM THE PREVIOUS MEETING OF THE SCTRWPG**

**Minutes of the South Central Texas Regional Water Planning Group  
August 4, 2022**

Chair Andruss called the hybrid meeting to order at 9:30 a.m., held both in person and through WebEx online platform.

**25 of the 29** voting members, or their alternates, were present.

**Voting Members Present:**

Tim Andruss	Weldon Riggs
Amber Beard	Roland Ruiz
John Byrum	Dianne Savage
Curt Campbell	Andrew Young for Mitchell Sowards
Debbie Farmer	Jonathan Stinson
Charlie Flatten	Terrell Graham for Heather Sumpter
Steve Graham	Thomas Taggart
Tom Jungman	Ryan Kelso for Ian Taylor
Russell Labus	Dianne Wassenich
Glenn Lord	Adam Yablonski
Matt Shaw for Dan Meyer	
Gary Middleton	
Robert Puente	
Vanessa Puig Williams	
Humberto Ramos	

**Voting Members Absent:**

Will Conley  
Darren Simmons  
Vic Hilderbran  
Travis Pruski

**Non-Voting Members Present:**

Elizabeth McCoy, Texas Water Development Board (TWDB)  
Marty Kelly, TX Department of Parks and Wildlife  
Jami McCool, TX Dept. of Agriculture  
Ronald Fieseler, Region K Liaison

**Non-Voting Members Absent:**

Iliana Delgado, TCEQ  
Don McGhee, Region M Liaison  
Charles Wiedenfeld, Region J Liaison  
Carl Crull, Region N Liaison  
Rusty Ray, Texas Soil & Water Cons. Board

*Beginning with the February 11, 2016, meeting of the South Central Texas Regional Water Planning Group, all recordings are available for the public at [www.regionltexas.org](http://www.regionltexas.org).*

#### **AGENDA ITEM NO.1: ROLL CALL**

Ms. Kendall Hayes took roll call.

#### **AGENDA ITEM NO.2: PUBLIC COMMENT**

No public comments.

#### **AGENDA ITEM NO.3: APPROVAL OF THE MINUTES FROM THE PREVIOUS MEETING OF THE SOUTH CENTRAL TEXAS REGIONAL WATER PLANNING GROUP (SCTRWPG)**

Chair Andruss noted that Ms. Beard was not included under present and requested that the note about GMA 15's DFA be changed to DFC. Mr. Riggs motioned to approve the minutes with these amendments. Mr. Graham seconded the motion, motion passed.

#### **AGENDA ITEM NO.4: STATUS REPORTS AND COMMUNICATIONS BY TWDB**

Ms. McCoy provided an update from TWDB. TWDB approved increased funds for change in Scope of Work. TWDB approved the members nominated to the Interregional Planning Council. State Water Implementation Funds for Texas were committed to two Region L projects. In August 2022, draft irrigation and mining demands data will be released.

#### **AGENDA ITEM NO.5: STATUS REPORTS AND COMMUNICATIONS RELATED TO REGIONAL WATER PLANNING INCLUDING REPORTS BY THE CHAIR, REGIONAL LIAISONS, GROUNDWATER MANAGEMENT AREA REPRESENTATIVES AND MEMBERS OF THE PLANNING GROUP**

Chair Andruss notified the RWPG that the feedback on the draft municipal WUG list was submitted to TWDB.

Mr. Stinson attended the Region 11 RFPG and noted that the RFPG has submitted their draft RFP to TWDB. Mr. Graham attended the Region 12 RFPG and added that the RWPG should consider an occasional briefing from the RFPG. Encouraged collaboration between planning groups. This briefing was noted as a possible agenda item for the next RWPG meeting.

#### **AGENDA ITEM NO.6: DISCUSSION AND APPROPRIATE ACTION REGARDING FILLING THE EXISTING VACANCIES FOR WATER UTILITIES AND ELECTRIC GENERATING UTILITIES INTEREST GROUPS**

Chair Andruss introduced Mr. Scooter Mangold as the nominee for the Water Utilities interest group. He explained that the Executive Committee chose to forgo the interview as there was one nominee. Mr. Mangold introduced himself to the RWPG.

Mr. Bryum motioned to seat Mr. Mangold on the Region L Planning Group. Mr. Middleton seconded the motion, motion passed.

**AGENDA ITEM NO.7: PRESENTATION BY TECHNICAL CONSULTANT REGARDING SCHEDULE AND PROGRESS**

Ms. Lauren Gonzalez presented the conceptual schedule for Region L plan development. Her presentation is available online at [www.regionltexas.org](http://www.regionltexas.org).

**AGENDA ITEM NO.8: DISCUSSION AND APPROPRIATE ACTION REGARDING THE ESTABLISHMENT OF ADDITIONAL SUBCOMMITTEES**

No motion to create an additional subcommittee.

**AGENDA ITEM NO.9: SCHEDULE AND POTENTIAL AGENDA ITEMS FOR THE NEXT MEETING OF THE SCTRWPG**

The RWPG expressed interest in a briefing on the progress of the Regional Flood Planning Groups in Region L.

Mr. Young asked if the Region L would use the 6-year drought or the 9-year drought. Ms. Gonzalez explained that the Region is actively using the Drought of Record for each river basin. This is relative to Task 3: Existing Water Supplies.

The next SCTRWPG meeting is scheduled for November 3, 2022, at 9:30 AM.

**AGENDA ITEM NO.10: PUBLIC COMMENT**

Ms. Beard notified the RWPG that she has stepped down from the RWPG as she has accepted a position in the DFW area.

**AGENDA ITEM NO.11: ADJOURN**

Mr. Middleton motioned to adjourn. Mr. Riggs seconded the motion, motion passed.

**AGENDA ITEM NO.4 – STATUS REPORTS AND COMMUNICATIONS BY TWDB**

# Region L TWDB Update 11-3-22

## 1. RWP Contract Amendments

- Amendment to include anticipated total project cost, full scope of work, and updated contract guidance documents
- Sent to RWPG political subdivisions for execution

## 2. Interregional Planning Council

- Meeting on November 9 in Austin with a virtual component
- More information available online at:  
<http://www.twdb.texas.gov/waterplanning/rwp/ipc/2027IPC.asp>

## 3. New Educational Materials

- [Water supply and flood mitigation strategies one-pager](#)
- [RWPG Member Guide](#)
- [Administrative Guidance for RWPG Sponsors](#)



# 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 (cont.)

- 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

# 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/document\\_s.asp](https://www.twdb.texas.gov/waterplanning/rwp/planningdocu/2026/document_s.asp)

**AGENDA ITEM NO.6 – DISCUSSION AND APPROPRIATE ACTION REGARDING FILLING THE EXISTING VACANCIES FOR INDUSTRIES, WATER UTILITIES, AND ELECTRIC GENERATING UTILITIES**

Includes: Dan Yoxall's Nomination Form for Industries Vacancy

## SOUTH CENTRAL TEXAS REGIONAL WATER PLANNING GROUP

### Nomination for Interest Group (check one):

**X Industries**       **Water Utilities**       **Electric Generating Utilities**

Pursuant to official Bylaws and Guiding Principles adopted by the South Central Texas Regional Water Planning Group (SCTRWPG), nominators shall provide information regarding the nominee's current employer, and provide a description of the nominee's experience that qualifies him/her for the position in the interest group being sought to represent. Please refer to section 357.11 (e) (see *addendum*) of the Texas Administrative Code for the definitions of the interest categories represented on the SCTRWP.

### NOMINATOR

**NAME:** Patrick Garcia  
**ADDRESS:** Division Laundry & Cleaners 6649 W US Hwy 90, San Antonio, TX 78227  
**PHONE:** (210) 674-5110  
**FAX:** (210) 673-8510  
**EMAIL:** patrick.garcia@divisionlaundry.com  
**OCCUPATION:** President, Division Laundry & Cleaners

### NOMINEE

**NAME:** Dan Yoxall  
**ADDRESS:** 9706 Broadway, Suite C, San Antonio Tx 78217  
**PHONE:** (210) 979-7530 x102  
**EMAIL:** dan@sama-tx.org  
**INTEREST AREA:** Manufacturing  
**COUNTY:** Bexar  
**OCCUPATION:** President & CEO, San Antonio Manufacturers Association

**PLEASE GIVE A BRIEF DESCRIPTION OF THE NOMINEE'S EXPERIENCE THAT WOULD QUALIFY HIM/HER FOR THE POSITION:**

Dan Yoxall is President and CEO of the San Antonio Manufacturers Association (SAMA). A 108-year-old trade association, SAMA is the voice and advocate for the 1500 manufacturers located in Bexar, Atascosa, Wilson, Guadalupe, Comal, Kendall, Bandera, and Medina counties. Manufacturing in the Transportation, Aerospace Equipment and Metal Products, Diversified Products, Metals, and Electricity sectors and employing more than 51,000 skilled workers, manufacturing in this region has an economic impact of \$40 billion per year.

SAMA provides its members with continuing education, networking, advocacy, and an annual South Central Texas Trade Show. The issues of water and energy are important to manufacturers in terms of usage, conservation, regulation, and business.

Prior to joining SAMA in 2022, Dan Yoxall served four years with LiftFund, a nonprofit microlender based in San Antonio, as Vice President for Community Relations and Development covering the IH-35 corridor from the San Antonio region to North Texas. Before joining LiftFund, he worked in marketing and communications in higher education for 32 years with Our Lady of the Lake University (San Antonio) and Southwestern University (Georgetown).

Dan Yoxall's interests include manufacturing, economic development, and community improvement through private, public, and nonprofit organizations. He holds undergraduate degrees from the University of Texas at Austin and a masters in nonprofit management from Our Lady of the Lake University. He has lived in San Antonio since January 2008.

**PLEASE LIST ANY PERTINENT AFFILIATIONS:**

- Member, San Antonio Greater Chamber of Commerce, San Antonio Hispanic Chamber of Commerce, and the San Antonio Business Coalition,
- Vice Chair, Prosper West (formerly Westside Development Corporation) Board of Directors (2018-present)
- Member, Westside Development Corporation Board of Directors (2014-present)
- Treasurer, Planned Giving Council of San Antonio Board of Directors (2016-present)
- Co-Chair, History / Education Subcommittee, San Antonio Tricentennial Commission (2016-2018)
- Representative, Member Organization, Fiesta Commission of San Antonio (2010-2018)
- Founding Member, American Marketing Association, San Antonio Chapter, Higher Education Marketing Special Interest Group (2009-2018)

**DATE SUBMITTED:** October 6, 2022

Nominations must be received by **5:00 p.m., Friday, October 7, 2022**, addressed to Tim Andruss, Chair, South Central Texas RWPG, c/o San Antonio River Authority, Attn: Kendall Hayes, 201 W. Sheridan St., San Antonio, Texas 78204 or email to [khayes@sariverauthority.org](mailto:khayes@sariverauthority.org)

**AGENDA ITEM NO.7 – PRESENTATION BY TECHNICAL CONSULTANT REGARDING RELEASED DRAFT  
DATA FROM TWDB**

**Agenda Item 7.a:  
Presentation from Technical Consultant  
Regarding Schedule and Progress Update**

# CONCEPTUAL SCHEDULE FOR REGION L PLAN DEVELOPMENT

QTR	2021				2022				2023				2024				2025			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Regional Water Planning Rules Updates																				
Texas Legislative Sessions																				
TWDB Releases Data / Information																				
TASK 1 Planning Area Description																				
TASK 2 Population & Water Demands Projections																				
TASK 3 Water Availability & Supply Analyses																				
TASK 4 Identification of Water Needs																				
<b>Technical Memorandum Due (March 4, 2024)</b>																				
TASK 5 Water Management Strategy (WMS) Evaluations																				
TASK 6 Impacts of Plan & Cumulative Effects																				
TASK 7 Drought Response, Activities & Recommendations																				
TASK 8 Unique Segments & Policy Recommendations																				
TASK 9 Implementation & Comparison to Previous Plan																				
<b>Initially Prepared Plan Due (March 3, 2025)</b>																				
TASK 10 Public Participation and Plan Adoption																				
<b>Final Plan Due (October 20, 2025)</b>																				

## LEGEND

TWDB Conceptual Schedule
  B&V Planned Schedule
  TWDB Data Release
  TWDB Deadline



# Summary of TWDB Data Releases to Date

Type	Deadline for RWPG to Review and Submit Revisions to TWDB
Water User Group (WUG) List	July 29, 2022
Historical WUG data and Draft Baseline GPCD	August 11, 2023
Water Demand Projections: Livestock, Manufacturing, Steam-Electric, Irrigation, and Mining	July 14, 2023

2023 ANTICIPATED REGION L SCHEDULE (Based on Current and <b>Anticipated* Funded Tasks</b> )	QTR 1			QTR 2			QTR 3			QTR 4		
	J	F	M	A	M	J	J	A	S	O	N	D
	Regional Water Planning Rules Updates											
TASK 1 Planning Area Description												
TASK 2A Non-municipal Water Demand Projections												
• Livestock, Manufacturing, Steam-Electric												
• Mining and Irrigation												
TASK 2B Population and Municipal Demand Projections												
• GPCD, historical population and water use												
• Population and Municipal Water Demand Projections												
TASK 3* Water Availability & Supply Analysis												
TASK 4* Identification of Water Needs												
TASK 5* Water Management Strategy (WMS) Evaluations												
TASK 7* Drought Response Information & Recommendations												
TASK 8 Unique Segments & Policy Recommendations												
TASK 10 Public Participation and Plan Adoption												

## LEGEND

- Region L RWPG Activities
- TWDB Data Release
- Tentative Region L RWPG Meeting
- TWDB Deadline

# Ongoing Efforts

- Survey of Water User Groups (WUGs) for Updated Contact Information
- Population & Water Demands Workgroup Meetings to Review Draft Projections:
  - Livestock
  - Manufacturing
  - Steam-Electric
  - Irrigation
- WUGs Review Historical Data

# Draft Water Demands:

Livestock, Manufacturing, Steam-Electric Power, Irrigation, and Mining

**\*REMINDER\***

- RWPG Responsibilities:
  - Review and submit revisions via consultant
  - Feedback due to TWDB by **July 14, 2023**, but we can submit any time before then



<https://www.twdb.texas.gov/waterplanning/data/projections/2027/projections.asp>

# Draft Municipal Historical Data

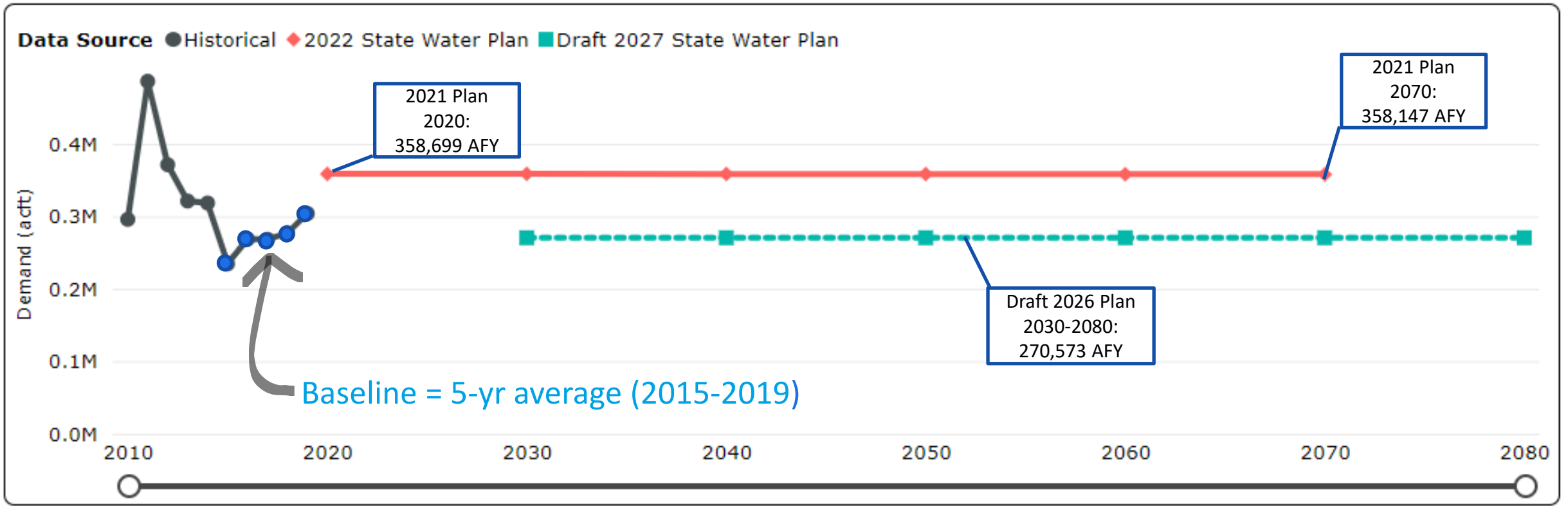
**\*REMINDER\***

- RWPG Responsibilities:
  - Review and submit revisions via consultant
  - Feedback due to TWDB by **August 11, 2023**, but we can submit any time before then



# **Agenda Item 7.b: Irrigation and Mining Demands Projections and Supporting Data**

# Draft Water Demand Projections: Irrigation



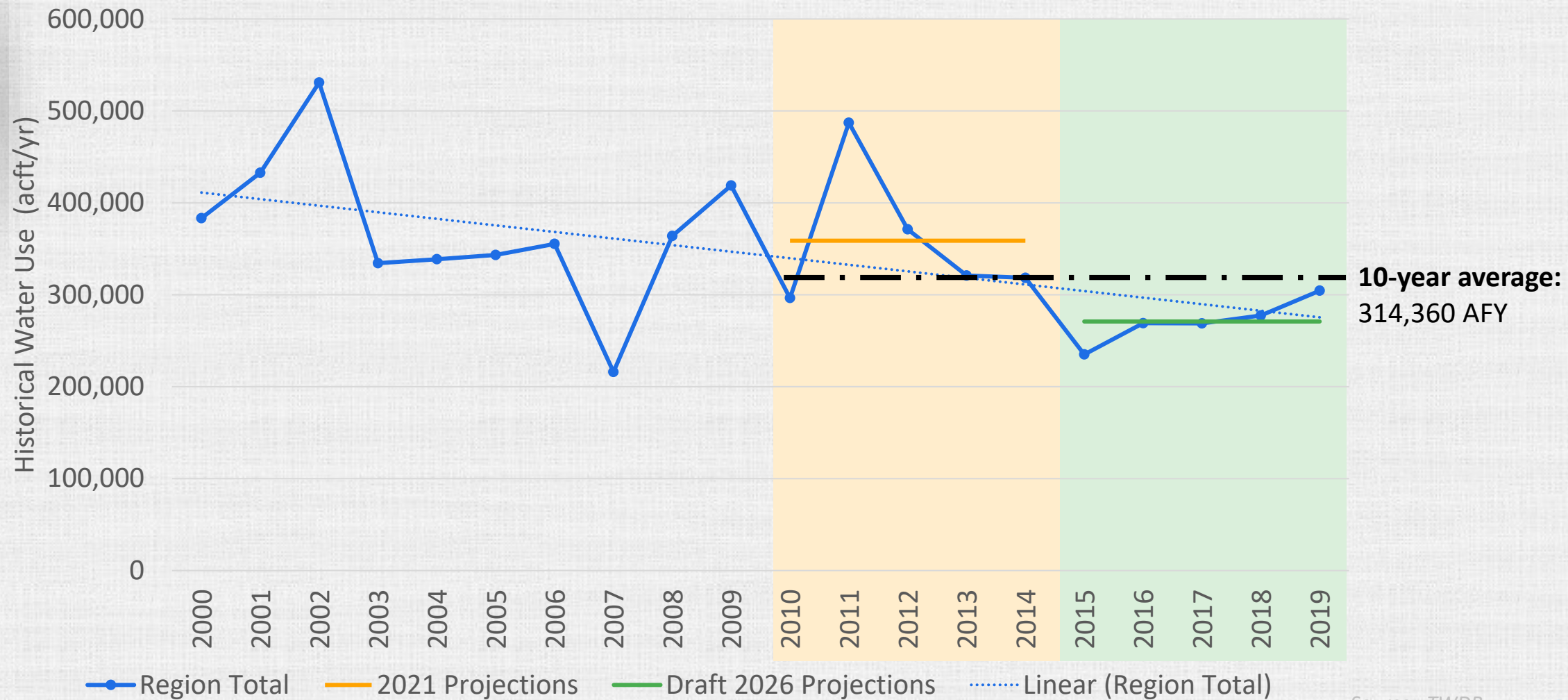
Source: TWDB

Same methodology as 2021 RWPs

- 2030-2080 held constant, except counties where Available Groundwater volumes (MAGs + non-MAGs) are less than groundwater portion of the demand projections – those counties demands will decrease.
- MAGs that have been reviewed and updated by July 2022 by the TWDB Groundwater staff were incorporated into the draft irrigation projections.

# Draft Water Demand Projections: Irrigation

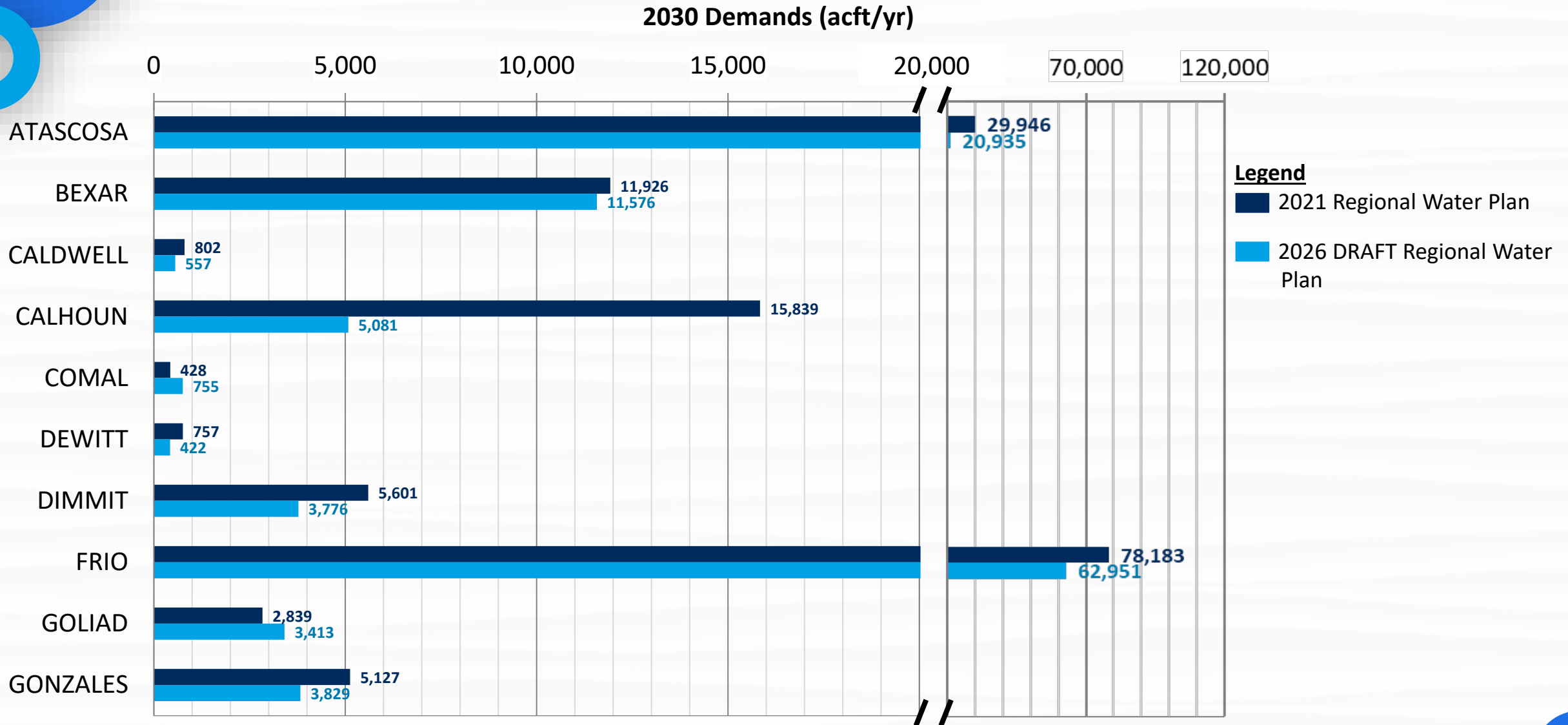
Historical Water Use for Irrigation in Region L (2000-2019)



Source: TWDB

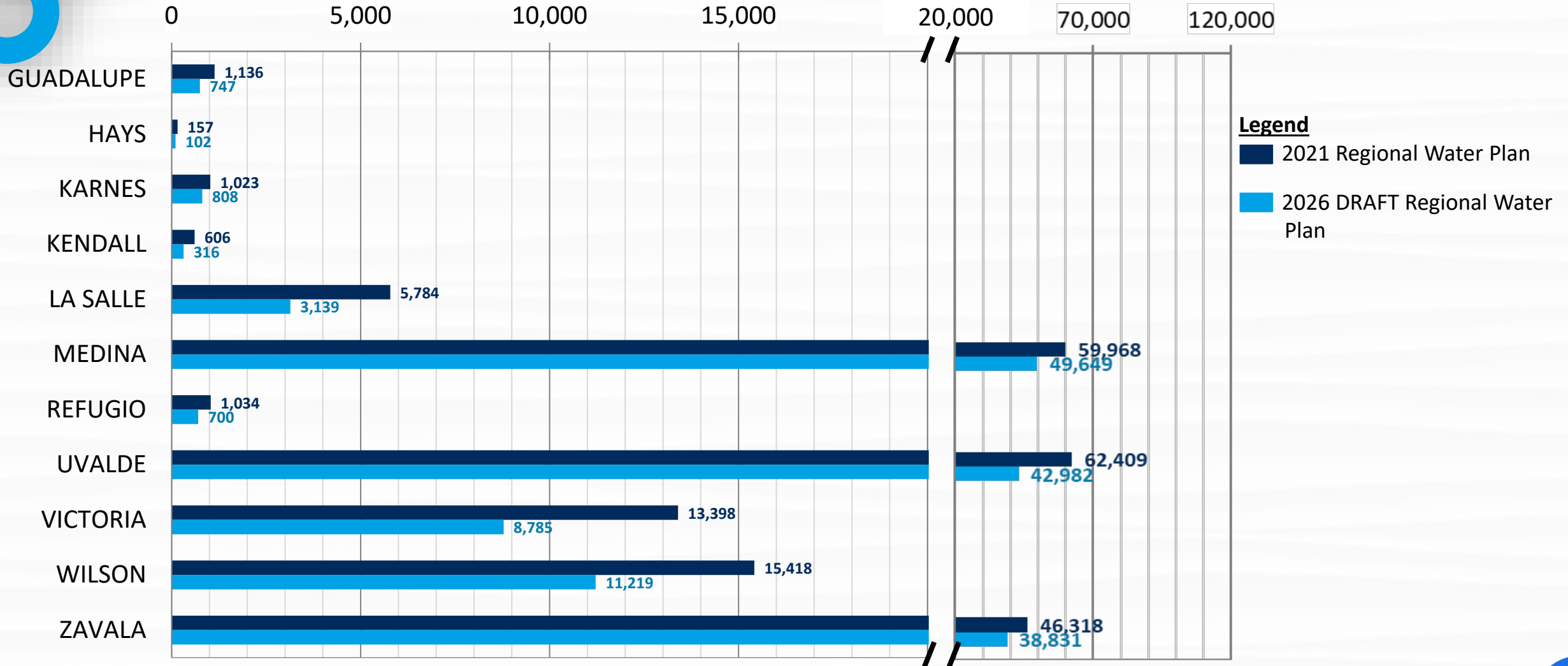


# Comparison with Previous Plan: Irrigation in 2030



# Comparison with Previous Plan: Irrigation in 2030

2030 Demands (acft/yr)



# Draft Water Demand Projections: Irrigation (1 of 2)

County	2026 DRAFT Irrigation Water Demand Projections (AFY)					
	2030	2040	2050	2060	2070	2080
ATASCOSA	20,935	20,935	20,935	20,935	20,935	20,935
BEXAR	11,576	11,576	11,576	11,576	11,576	11,576
CALDWELL	557	557	557	557	557	557
CALHOUN	5,081	5,081	5,081	5,081	5,081	5,081
COMAL	755	755	755	755	755	755
DEWITT	422	422	422	422	422	422
DIMITT	3,776	3,776	3,776	3,776	3,776	3,776
FRIO	62,951	62,951	62,951	62,951	62,951	62,951
GOLIAD	3,413	3,413	3,413	3,413	3,413	3,413
GONZALES	3,829	3,829	3,829	3,829	3,829	3,829
<b>REGION TOTAL</b>	<b>270,573</b>	<b>270,573</b>	<b>270,573</b>	<b>270,573</b>	<b>270,573</b>	<b>270,573</b>

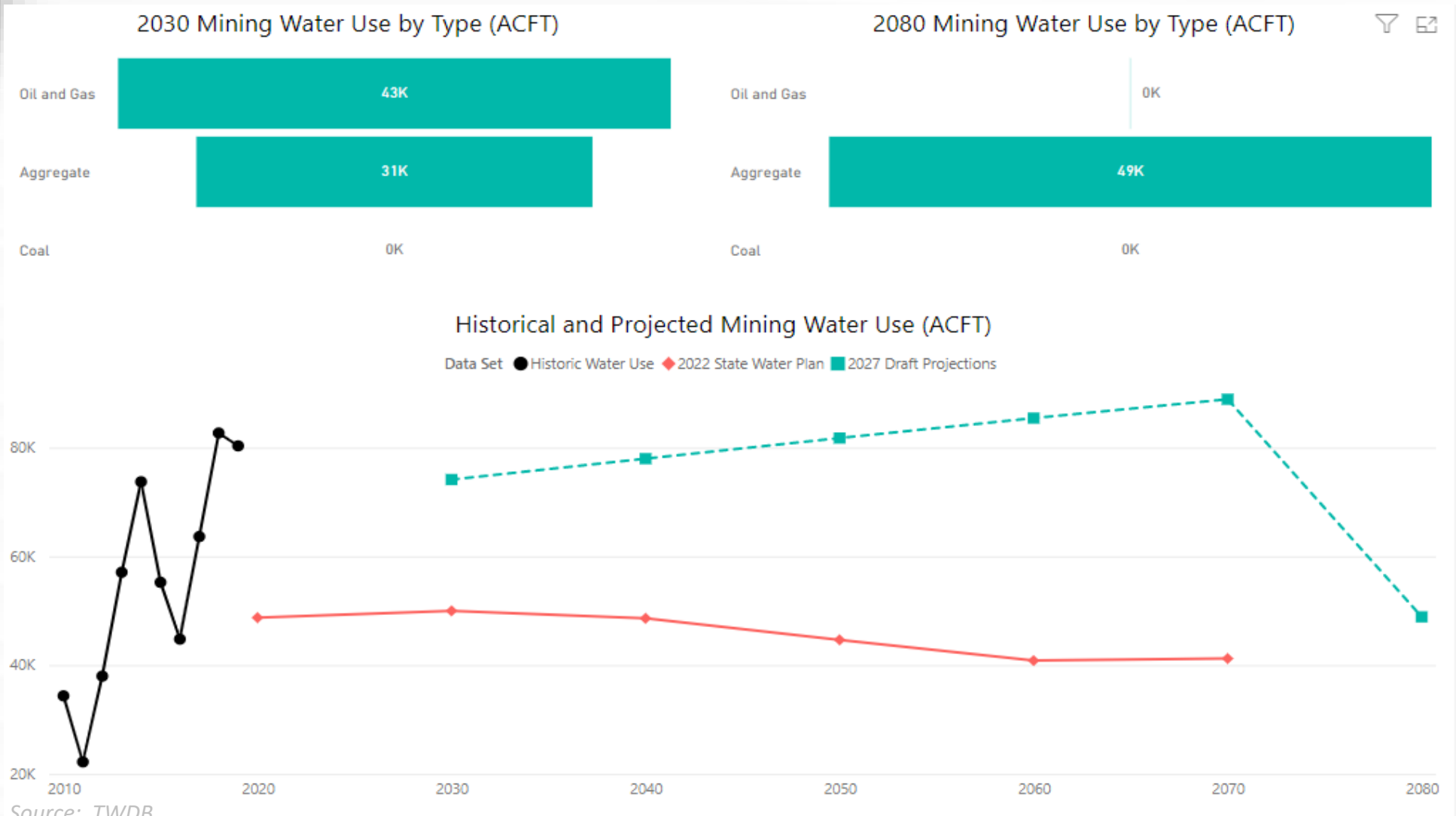
# Draft Water Demand Projections: Irrigation (2 of 2)

County	2026 DRAFT Irrigation Water Demand Projections (AFY):					
	2030	2040	2050	2060	2070	2080
GUADALUPE	747	747	747	747	747	747
HAYS	102	102	102	102	102	102
KARNES	808	808	808	808	808	808
KENDALL	316	316	316	316	316	316
LA SALLE	3,139	3,139	3,139	3,139	3,139	3,139
MEDINA	49,649	49,649	49,649	49,649	49,649	49,649
REFUGIO	700	700	700	700	700	700
UVALDE	42,982	42,982	42,982	42,982	42,982	42,982
VICTORIA	8,785	8,785	8,785	8,785	8,785	8,785
WILSON	11,219	11,219	11,219	11,219	11,219	11,219
ZAVALA	38,831	38,831	38,831	38,831	38,831	38,831
<b>REGION TOTAL</b>	<b>270,573</b>	<b>270,573</b>	<b>270,573</b>	<b>270,573</b>	<b>270,573</b>	<b>270,573</b>

# Unmet Irrigation Water Needs from the 2021 Plan

County	2021 Unmet Irrigation Water Needs (AFY)					
	2020	2030	2040	2050	2060	2070
BEXAR	4,152	4,152	4,152	4,152	4,152	4,152
CALHOUN	14,088	14,088	14,088	14,088	14,088	14,088
COMAL	33	33	33	33	33	33
DEWITT	318	318	265	265	0	0
DIMMIT	5,249	5,249	5,249	5,249	5,249	5,249
FRIO	0	0	1,838	3,612	5,332	7,146
GOLIAD	388	388	388	388	388	388
KARNES	352	352	911	911	911	911
KENDALL	1	1	1	1	1	1
LA SALLE	1,184	1,203	1,223	1,248	1,271	1,294
MEDINA	37,636	38,392	38,254	38,898	39,075	40,143
UVALDE	43,021	43,333	43,333	43,423	43,672	44,101
VICTORIA	5,791	5,791	5,791	5,791	5,791	5,791
WILSON	3,390	3,405	3,417	3,428	11,153	11,453
ZAVALA	21,235	21,350	21,109	20,733	20,148	19,865
<b>REGION TOTAL</b>	<b>136,838</b>	<b>138,055</b>	<b>140,052</b>	<b>142,220</b>	<b>151,264</b>	<b>154,615</b>

# Draft Water Demand Projections: Mining



Methodology: TWDB conducted a Mining Water Use Study in partnership with the U.S. Geological Survey and the University of Texas Bureau of Economic Geology.

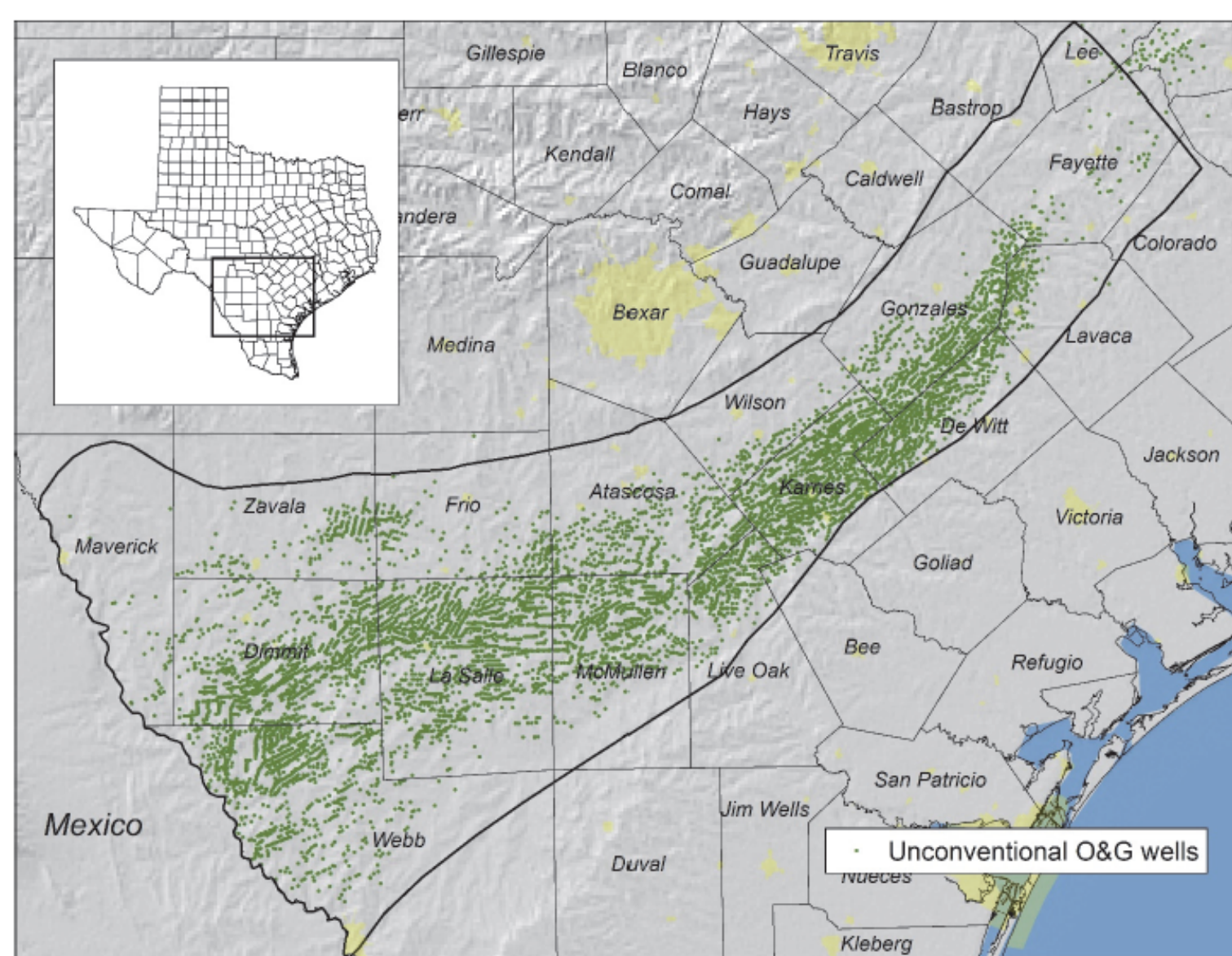
# Draft Water Demand Projections: Mining (1 of 2)

County	2026 DRAFT Mining Water Demand Projections (AFY)					
	2030	2040	2050	2060	2070	2080
ATASCOSA	8,039	8,352	8,658	8,947	9,217	4,281
BEXAR	7,634	8,366	9,072	9,724	10,322	10,851
CALDWELL	352	352	352	352	352	2
CALHOUN	0	0	0	0	0	0
COMAL	12,013	14,130	16,264	18,386	20,432	22,314
DEWITT	1,695	1,695	1,695	1,695	1,695	8
DIMMIT	6,146	6,146	6,146	6,146	6,146	3
FRIO	6,002	6,003	6,003	6,004	6,004	10
GOLIAD	8	8	8	8	8	8
GONZALES	6,592	6,625	6,663	6,701	6,740	606
<b>REGION TOTAL</b>	<b>74,126</b>	<b>77,971</b>	<b>81,760</b>	<b>85,423</b>	<b>88,890</b>	<b>48,880</b>

# Draft Water Demand Projections: Mining (2 of 2)

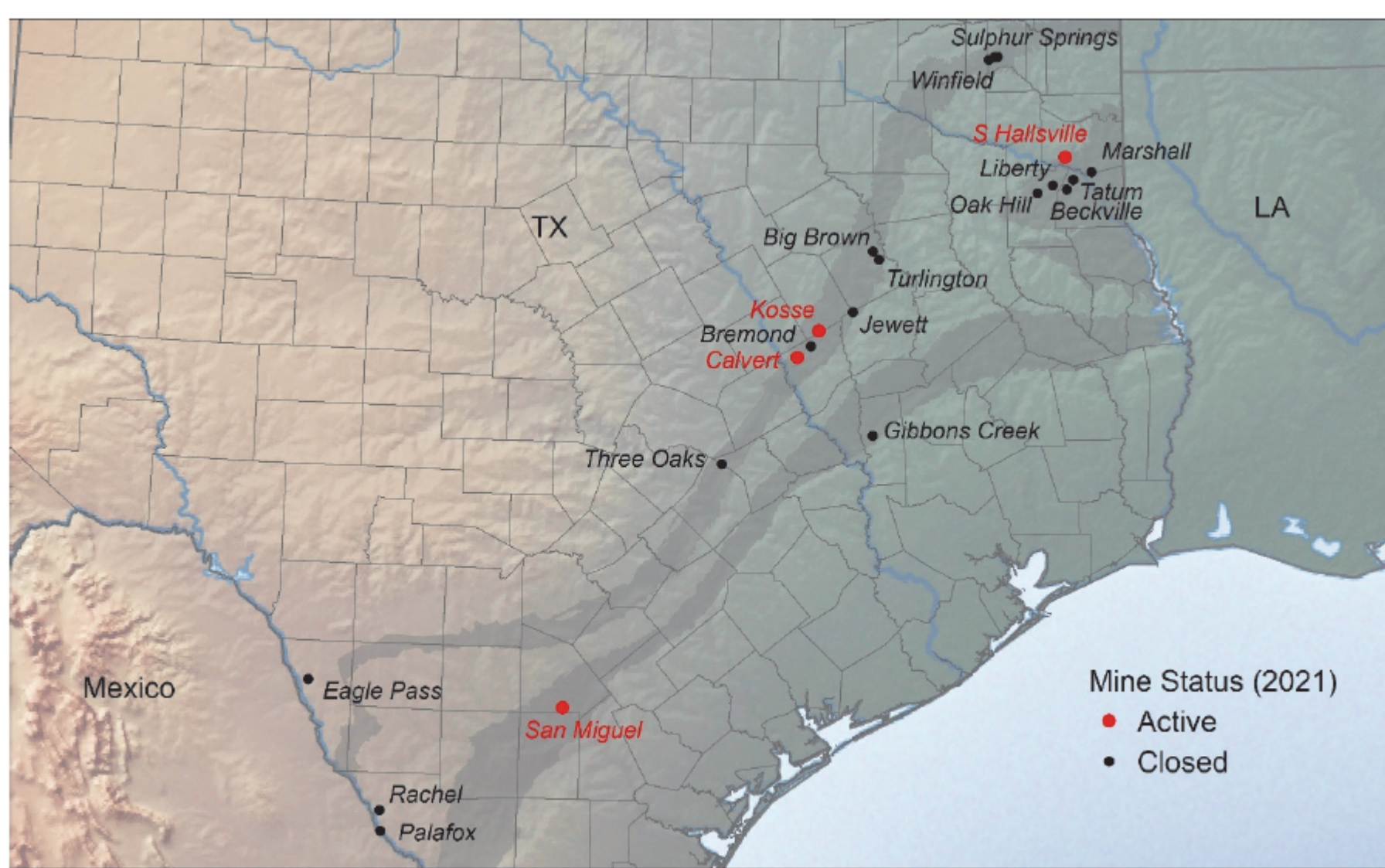
County	2026 DRAFT Mining Water Demand Projections (AFY):					
	2030	2040	2050	2060	2070	2080
GUADALUPE	770	770	770	770	770	0
HAYS	30	37	43	51	61	71
KARNES	1,919	1,919	1,919	1,919	1,919	3
KENDALL	0	0	0	0	0	0
LA SALLE	5,396	5,396	5,396	5,396	5,396	0
MEDINA	4,324	4,718	5,065	5,380	5,657	5,886
REFUGIO	0	0	0	0	0	0
UVALDE	3,204	3,423	3,650	3,866	4,074	4,271
VICTORIA	390	409	426	439	451	460
WILSON	4,680	4,690	4,698	4,707	4,714	105
ZAVALA	4,932	4,932	4,932	4,932	4,932	1
<b>REGION TOTAL</b>	<b>74,126</b>	<b>77,971</b>	<b>81,760</b>	<b>85,423</b>	<b>88,890</b>	<b>48,880</b>





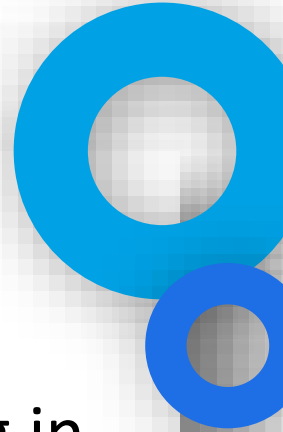
# From BEG Report: Completed Unconventional Oil and Gas Wells

Figure 1-22. Eagle Ford Play locations of unconventional oil and gas wells completed during 2008-2020



## From BEG Report: Coal Mining in Texas

Figure 2-1. Locations of active (red) and closed (black) coal mines in Texas. Shaded areas indicate the outcrop areas of the Carrizo-Wilcox formation (inland) and the Jackson Group.



## From BEG Report: Areas of Aggregate Mining in 2019

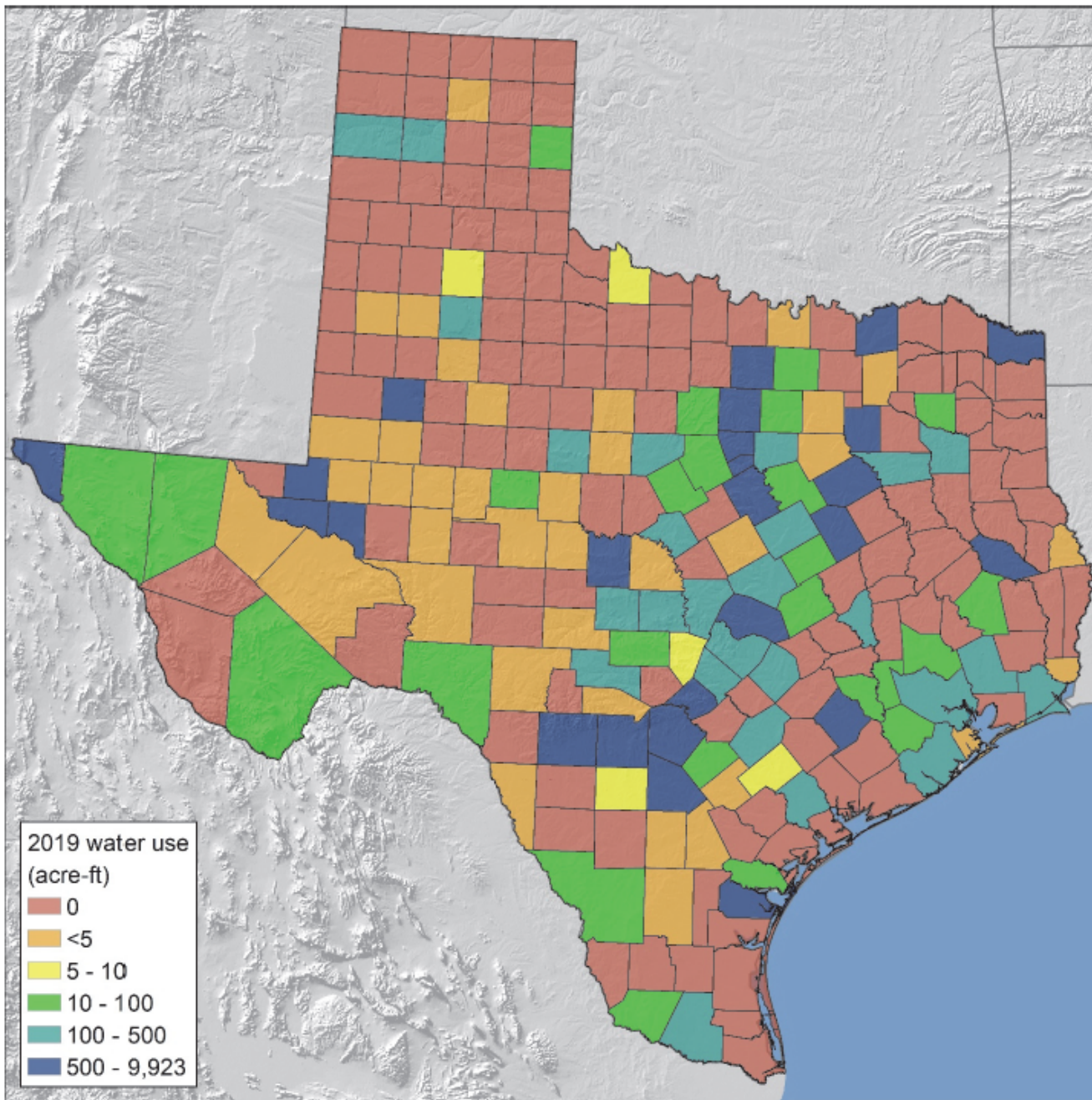


Figure 3-1. Distribution by county of 2019 aggregate industry water use. Total water use was 74,822 acre-ft.

# Questions?



# Contact Us

**Lauren Gonzalez, Region L Project Manager**

**[GonzalezL@bv.com](mailto:GonzalezL@bv.com)**

**(512) 782-4914**

**Jaime Burke, Region L Technical Lead**

**[BurkeJ@bv.com](mailto:BurkeJ@bv.com)**

**(512) 271-4472**