REGION H
Water Planning Group

MEETING MATERIALS

November 2, 2022

Common Region H Terms and Conversion Factors

List of Abbreviations

CRU	Collective Reporting Unit
DCP	Drought Contingency Plan
DFC	Desired Future Condition
DOR	Drought of Record
EA	Executive Administrator
EPA	Environmental Protection Agency
FWSD	Fresh Water Supply District
GAM	Groundwater Availability Model
GCD	Groundwater Conservation District
GMA	Groundwater Management Area
GPCD	Gallons Per Capita Per Day
GRP	Groundwater Reduction Plan
IFR	Infrastructure Finance Report
IPP	Initially Prepared Plan
MAG	Modeled Available Groundwater
MPC	Master Planned Community
MUD	Municipal Utility District
MWP	Major Water Provider
PDSI	Palmer Drought Severity Index
PWS	Public Water Supply
RFPG	Regional Flood Planning Group
RHWPG	Region H Water Planning Group
ROR	Run-of-River
RWP	Regional Water Plan
RWPA	Regional Water Planning Area
RWPG	Regional Water Planning Group
SWIFT	State Water Implementation Fund for Texas
SWP	State Water Plan
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TPWD	Texas Parks and Wildlife Department
TWC	Texas Water Code
TWDB	Texas Water Development Board
UCM	Unified Costing Model
URS	Unique Reservoir Site
USS	Unique Stream Segment
WAM	Water Availability Model
WCID	Water Control and Improvement District
WCP	Water Conservation Plan
WMS	Water Management Strategy
WRAP	Water Rights Analysis Package
WUD	Water Utility Database
WUG	Water User Group
WWP	Wholesale Water Provider

Water Measurements

1 acre-foot (AF) = 43,560 cubic feet = 325,851 gallons

1 acre-foot per year (ac-ft/yr) = 325,851 gallons per year = 893 gallons per day

1 gallon per minute (gpm) = 1,440 gallons per day = 1.6 ac-ft/yr

1 million gallons per day (mgd) = 1,000,000 gallons per day = 1,120 ac-ft/yr

Region H Water Planning Group
10:00 AM Wednesday
November 2, 2022
San Jacinto River Authority Office
1577 Dam Site Rd, Conroe, Texas 77304
AGENDA

1. Call to order.
2. Introductions.
3. Review and approve minutes of the August 3, 2022 meeting.
4. **Receive public comments on specific issues related to agenda items 5 through 7**. (Public comments limited to 3 minutes per speaker)
5. Special Items and Informational Presentations
    a. Receive presentation from the Consultant Team regarding the proposed application by the Lower Neches Valley Authority to amend the 2021 Region H Regional Water Plan (RWP) and consider approving the submittal of the application package to Texas Water Development Board (TWDB) for the determination of minor amendment status.
6. Plan Development and Administration
    a. Receive update from the Consultant Team and Non-Population Demands Committee regarding data and projections for the 2026 Region H RWP.
    b. Receive update from the Consultant Team, Population Demands Committee, and Subsidence Districts regarding data and projections for the 2026 Region H RWP.
7. General Updates and Outreach
    a. Receive update regarding schedule and milestones for the development of the 2026 Region H RWP.
    b. Receive update from liaisons to other planning groups.
    c. Receive report regarding recent and upcoming activities related to communications and outreach efforts on behalf of the RHWPG.
    d. Agency communications and general information.
8. **Receive public comments**. (Public comments limited to 3 minutes per speaker)
9. Next Meeting: February 1, 2023.
10. Adjourn.

Persons with disabilities who plan to attend this meeting and would like to request auxiliary aids or services are requested to contact Sonia Zamudio at (936) 588-3111 at least three business days prior to the meeting so that appropriate arrangements can be made.

Agenda Item 3

Review and approve minutes of August 3, 2022 meeting.

REGION H
Water Planning Group

REGION H WATER PLANNING GROUP
MINUTES OF REGULAR MEETING
AUGUST 3, 2022

MEMBERS PRESENT:
Gary Ashmore, David Bailey, John Bartos, Brad Brunett, Jun Chang, James Comin, Mark Evans, Jace Houston, Robert Istre, Ken Kramer, Ivan Langford, Marvin Marcell, Byron Ryder, and Michael Turco.

ALTERNATES: Mrs. Bruner for Danny Pierce, Mike Uhl for Glenn Lord, Jake Hollingsworth for Brandon Wade, and Jim Sims for Kevin Ward.

MEMBERS ABSENT:
W.R. Baker, Carl Burch, Caleb Cooper, Yvonne Forrest, and Loyd Smith.

NON-VOTING MEMBERS:
Lann Bookout

CONSULTANT TEAM:
Philip Taucer and Jason Afinowicz

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1. **CALL TO ORDER**
   The meeting was called to order at 10:00 a.m.

2. **INTRODUCTIONS**
   There were no introductions

3. **REVIEW AND APPROVE MINUTES OF MAY 4, 2022, MEETING**

   Mr. Langford made a motion to approve the minutes of May 4, 2022. The motion was seconded by Mr. Chang and carried unanimously.

4. **RECEIVE PUBLIC COMMENTS ON SPECIFIC ISSUES RELATED TO AGENDA ITEMS 5 THROUGH 8**

   There were no public comments.

5. **PLANNING GROUP MEMBERSHIP**

   a. **Receive Nominating Committee report and consider taking action to approve members to fill vacancies on the Region H Water Planning Group.**

Mr. Evans stated that the Nominating Committee met at 9:30 a.m., on August 3, 2022, and recommended Mike O'Connell to fill the vacancy for Small Business and Arthur Breedhoff to fill the vacancy for Water Utility. Mr. Chang made a motion to accept the resignation of Judge Bob Hebert, to declare the vacancies of Small Business and Water Utility positions, and to approve Mike O'Connell and Arthur Breedhoff to fill the positions of Small Business and Water Utility, respectively. The motion was seconded by Mr. Marcell and carried unanimously.

6. SPECIAL ITEMS AND INFORMATIONAL PRESENTATIONS

a. Receive presentation from the City of Houston regarding the City's water conservation and efficiency initiatives.

Ms. Paula Paciorek, Division Manager for Houston Public Works, presented information relative to the evolution of the City of Houston's water conservation initiatives through education, incentive programs, rebate programs, etc. She explained the various upcoming campaigns that will continue to educate the public about water conservation and drought response.

b. Receive presentation from consultant team regarding the proposed application by Brazosport Water Authority to amend the 2021 Region H Regional Water Plan and consider approving the submittal of the application package to the Texas Water Development Board for the determination of minor amendment status.

Mr. John Nyland of Invenergy spoke about a request to amend both the 2021 Region H Water Plan and the 2022 State Water Plan to reflect the most updated project information and details to the Freeport Seawater Desalination Project that were previously listed in both documents. He explained that the project was listed as a dormant project, however Brazosport Water Authority ("BWA") and its partners have been actively advancing it and are now seeking to sponsor the project. Mr. Nyland stated that BWA partnered with Invenergy Clean Water ("Invenergy") and IDE Technologies to develop the desalination plant in Freeport's industrial park. He explained that the desalination capacity of the project is listed in the 2021 Region H Water Plan and the 2022 State Water Plan as 11,200 acre-feet per year or 10 million gallons a day ("MGD"), with the potential to scale to 100 MGD. He stated that BWA is requesting to change the acre-feet per year to 28,000-56,000 AFY or 25-50 MGD as a result of the new information indicating considerably larger and more diverse water needs than previously expected due to growth in the region and expansion into other areas. Furthermore, Mr. Nyland stated that BWA is interested in the benefits of additional resilient capacity that can replace ground and surface water withdrawals and mitigate the drought and subsidence conditions of the State. Discussion ensued. Mr. Houston made a motion to approve the submittal of the application package to the Texas Water Development Board to determine if the request is considered a minor amendment or a major amendment. The motion was seconded by Mr. Chang and carried unanimously.

7. PLAN DEVELOPMENT AND ADMINISTRATION

a. Receive update from consultant team regarding TWDB funding of the sixth round of regional water planning for Region H and take action authorizing the San Jacinto River Authority to execute amended contracts with subconsultants.

Mr. Taucer explained the process of amending the contact with the subconsultants and outlined the various tasks that would be affected. Mr. Chang moved approval to authorize the San Jacinto River Authority to execute the amended contracts with subconsultants. The motion was seconded by Mr. Bartos and carried unanimously.

b. Receive update from Consultant Team and Non-Population Demands Committee regarding data and projections for the 2026 Region H RWP.

Mr. Taucer provided an update to the data and projections related to the non-municipal water demand. He stated that committee activities would include detailed review of the historical data and demand basis and recommendation of proposed changes to the projections aa appropriate. Further, Mr. Taucer explained efforts related to the 2026 Regional Water Plan WUG survey and the Major Water Provider list evaluation.

c. Receive update from Consultant Team and Population Demands Committee regarding data and projections for the 2026 Region H Regional Water Plan.

Mr. Taucer provided an update related to the Population Demands Committee's review of the WUG list, stating only minor changes were determined. He stated that the committee was engaged in coordination with Subsidence Districts, TWDB, and RWPGs to review historical data and demand basis, and to provide recommendations of proposed changes to projections.

d. Receive update from Consultant Team and Population Demands Committee regarding the sub-WUG planning option and consider taking action to authorize the Population Demands Committee to evaluate potential sub-WUGs and submit requests for sub-WUGs to TWDB.

Mr. Taucer provided information related to sub-WUG planning options that were requested by several RWPGs. He stated that they are primarily for rural areas or small entities that are buried in "County-other". He stated that the regions will develop and track the data with information support from TWDB. Mr. Taucer provided an outline of the benefits and potential applications. Mr. Kramer made a motion to authorize the Population Demands Committee to evaluate potential sub-WUGs and submit requests for sub-WUGs to TWDB. The motion was seconded by Mr. Turco and carried unanimously.

8. GENERAL UPDATES AND OUTREACH

a. Receive update regarding the schedule and milestones for the development of the 2026 Region H RWP

Mr. Taucer provided an overview related to the schedule and milestones for the development of the 2026 Region H Regional Water Plan by providing dates of scheduled events/tasks.

b. Receive updated from liaisons to other groups.

It was reported that TWDB met in July and accepted Mark Evans and Jace Houston as representative and alternate on the Interregional Planning Council.

c. Receive report regarding recent and upcoming activities related to communications and outreach efforts on behalf of the RHWPG.

There were no recent activities to report.

d. Agency communications and general information.

Mr. Bookout provided an overview of the 2026 Regional Water Plans Projections Methodology.

9. RECEIVE PUBLIC COMMENTS

There were no public comments.

10. NEXT MEETING

It was announced that the next meeting of the Region H Water Planning Group will take place on November 2, 2022.

11. ADJOURN

The meeting was adjourned at 11:42 a.m.

Agenda Item 5a

Receive presentation from the Consultant Team regarding the proposed application by the Lower Neches Valley Authority to amend the 2021 Region H Regional Water Plan (RWP) and consider approving the submittal of the application package to Texas Water Development Board (TWDB) for the determination of minor amendment status.

REGION H
Water Planning Group

Agenda Item 5a
Proposed RWP Amendment

- Proposed by Lower Neches Valley Authority
  - Expanded pumping capacity in the LNVA Devers system
  - Adjacent to existing plant
  - Support current and future needs of customers

- Anticipated minor amendment
  - WMS / WMS adjustment
  - WMS Project(s)
  - Impacts to other strategies limited

Agenda Item 5a
Proposed RWP Amendment

- Executive Summary

- Chapter 5 – Water Management Strategies
  - Revisions to text
  - Table 5-3: Region H Potentially Feasible WMS and Projects
  - Table 5-4: WMS and Key Project Relationships
  - Table 5-5: Key Project Overview
  - Figure 5-2: Region H Capital and Annual Costs
  - Appendix 5-A: Water Management Strategy Tables
  - Appendix 5-B: Project Technical Memoranda
  - Appendix DB

Agenda Item 5a
Proposed RWP Amendment

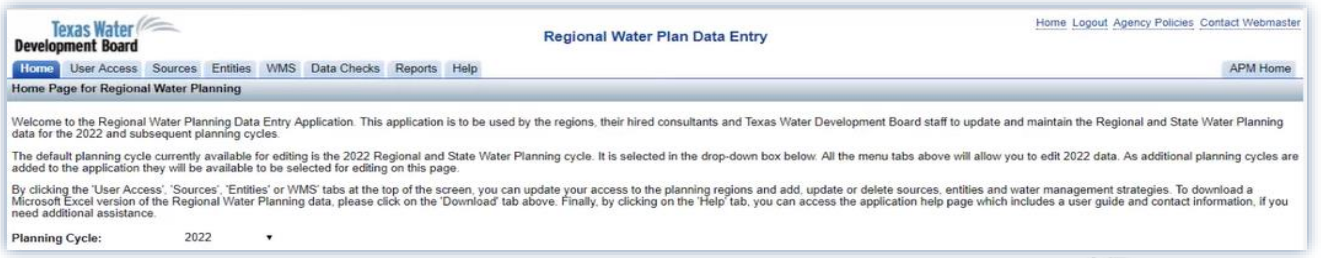
- Chapter 6 – Impacts of the RWP
  - Revisions to text
  - Table 6-1: Key Recommended WMS and Projects
  - Appendix 6-B: Impacts to Resources

- Chapter 9 – Financing
  - Revisions to text
  - All tables and figures
  - Appendix 9-A: Tabulated Survey Results

Agenda Item 5a
Proposed RWP Amendment

- Chapter 11 – Implementation and Comparison
  - Revisions to text
  - WMS figures and tables
  - Appendix 11-A: Implementation Report

- DB22 data entry



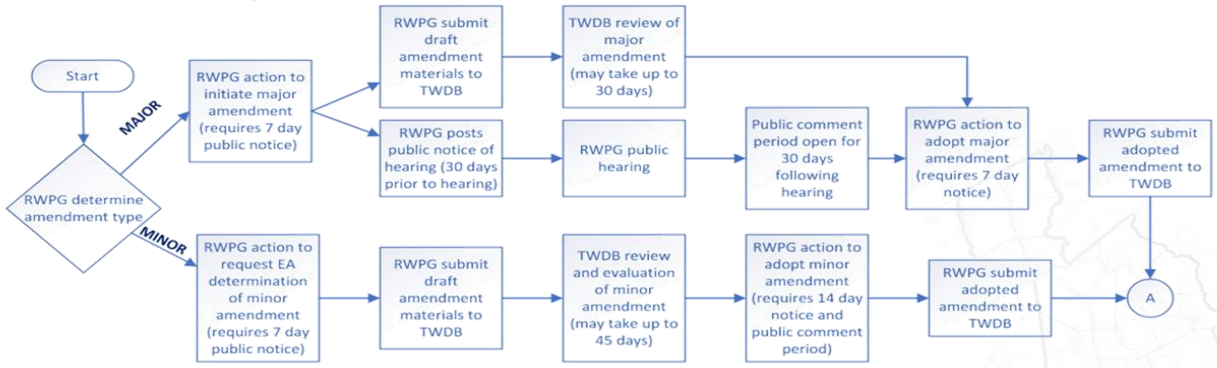
Freese and Nichols, Inc. | INTERA Inc.

Agenda Item 5a
Proposed RWP Amendment

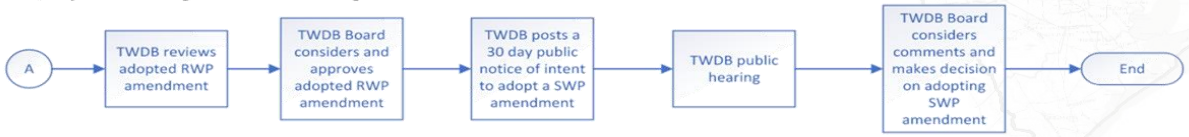
1. RWPG considers concept for referral to TWDB
2. TWDB determines minor or major amendment status
3. Public process
4. RWPG considers approval of amendment
5. TWDB considers approval of amendment

RWPG Amendment Process for RWP
Major amendment process may take approximately three (3) months and includes two (2) RWPG meetings and one (1) hearing. Minor amendment process may take approximately 2.5 months and includes two (2) RWPG meetings.

Regional and State Water Plan Amendment Process



TWDB Amendment Process for SWP
TWDB amendment process may take approximately three (3) months, subject to the timing of TWDB Board meetings.



Adapted from TWDB RWP Amendment Flowchart

Agenda Item 5a
Proposed RWP Amendment

Action:

Approve the submittal of the application package to TWDB for the determination of minor amendment status.

Texas Water Development Board

Amending an Approved Regional Water Plan

Background

Every five years, the 16 regional water planning groups must develop and adopt regional water plans, which are then submitted to the Texas Water Development Board (TWDB) for approval. The TWDB then compiles the regional water plans into a state water plan. During the five-year span between the regular regional water plan adoptions, the plans may need to be amended to identify long-term water supplies.

How is an amendment to a regional water plan initiated?

A regional water planning group (RWPG) may initiate an amendment on its own or an entity planned for in the regional water planning process may request an amendment. A political subdivision of the state of Texas in the regional water planning area may also request an amendment from the RWPG on the basis of changed conditions or new information[1].

The following general principles govern the amendment process:

- The RWPG must formally consider an amendment request within 180 days of its submittal.
- The RWPG may, at its discretion, accept or reject the proposed amendment request.
- If a RWPG rejects a political subdivision's request for an amendment, the political subdivision may file a petition to the TWDB's Executive Administrator in accordance with 31 Texas Administrative Code (TAC) § 357.51(a).
- If the RWPG takes action to proceed with an amendment, the RWPG must follow the existing amendment process in 31 TAC § 357.51, in accordance with whether the amendment is a substitution of an alternative strategy, minor amendment, or major amendment.

What are the ways a regional water plan may be modified?

A. Substitutions

Substitutions of water management strategies that have already been fully evaluated and are explicitly identified as "alternative" water management strategies in the adopted regional water plans may be made if[2]

- the water management strategy originally recommended is no longer recommended, and
- the proposed substitution of the alternative water management strategy is capable of meeting the same water need without over-allocating any source.

The substitution process requires the following steps:

1. An entity requests that the RWPG make a substitution.
2. The RWPG considers the proposed substitution request as an action item on an agenda at one of its regular meetings.
3. Proposed substitution materials are submitted to the TWDB Executive Administrator for

[1] 31 TAC §357.51 (a). Any amendment proposed must meet rules and guidelines for development of a regional water plan.
[2] 31 TAC §357.51 (e).

consideration[3].

4. The Executive Administrator provides written approval of the substitution if it is in accordance with 31 TAC § 357.51(e).
5. The RWPG adopts the substitution at a public meeting with an opportunity for public input. This meeting requires at least a 14-day notice[4]. The RWPG considers public comments and may adopt the amendment at the meeting.
6. The RWPG submits evidence of the substitution to the TWDB, including a summary of public comments.
7. 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.

B. Minor amendments

Minor amendments may be made to incorporate changes that do not

- result in over-allocation of an existing or planned source of water,
- relate to a new reservoir,
- increase unmet needs or produce new unmet needs in the adopted regional water plan unless the increase in unmet needs or new unmet needs is the result of removing infeasible water management strategies and/or projects in accordance with 31 TAC § 357.51(g),
- have a significant effect on instream flows, environmental flows, or freshwater flows to bays and estuaries,
- have a significant substantive impact on water planning or previously adopted management strategies, or
- delete or change any legal requirements of a plan[5].

The minor amendment process requires the following steps:

1. An entity requests the RWPG to amend a regional water plan.
2. The RWPG considers the 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 Executive Administrator.
4. The Executive Administrator reviews the request and issues a determination to the planning group.
5. If the Executive Administrator determines that it is a "minor amendment," the RWPG considers adopting the amendment at a public meeting with an opportunity for public input. This meeting requires at least a 14-day notice, including a 14-day written comment period[6]. The RWPG considers public comments and may adopt the amendment at the meeting[7].
6. The RWPG submits the adopted minor amendment materials, including a summary of public comments, to the TWDB for approval.
7. The TWDB reviews the adopted minor amendment and, if acceptable, the TWDB Board will

[3] 31 TAC §357.51 (e).
[4] 31 TAC §357.21 (g)(2) and posted under the Texas Open Meetings Act.
[5] 31 TAC §357.51 (c).
[6] 31 TAC §357.21 (g)(2) and posted under the Texas Open Meetings Act.
[7] Amendment adoption must include response to public comment and must otherwise comply with TWDB technical guidelines and rules.

consider approval of the 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.

C. Major amendments

Major amendments may be made to incorporate changes that cannot be addressed through a minor amendment. Major amendments may not result in an over-allocation of an existing or planning source of water and must conform with all other rules for regional water plan development[8].

The major amendment process requires the following steps:

1. An entity requests that the RWPG make an amendment.
2. The RWPG considers the 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 for consideration at a public hearing, and the RWPG submits the draft amendment packet to the TWDB Executive Administrator for review.
4. The RWPG holds a public hearing on the proposed amendment[9]. This process requires 30 days between published notice of the hearing and the hearing date. A 30-day written comment period following the hearing is also required.
5. The Executive Administrator reviews the request and issues a response letter to the planning group.
6. The RWPG considers all public comments received and may adopt the regional water plan amendment at a regular planning group meeting[10] after the 30-day comment period[11].
7. The RWPG submits the adopted amendment materials, including a summary of public comments and responses to comments, to the TWDB for approval[12].
8. The TWDB reviews the adopted major amendment and, if acceptable, the TWDB Board will consider approval of the amendment at a regular Board meeting.
9. 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.

Who pays for an amendment?

Typically, the entity requesting the amendment pays for the costs related to developing regional water plan amendment materials. TWDB regional water planning grant funds may not be used to pay for an amendment to a regional water plan with the exception of those amendments required to be address the region's analysis of infeasible water management strategies and/or projects.

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[8] 31 TAC §357.51 (b).
[9] 31 TAC §357.21 (g)(3).
[10] Posted under the Texas Open Meetings Act; see also 31 TAC §357.21 (g)(1).
[11] Amendment adoption must include response to public comment and must otherwise comply with TWDB technical guidelines.
[12] Amendments to an approved regional water plan shall include a technical report and data in accordance with TWDB specifications, executive summary, and summaries of all written and oral comments received with a response. Data must be transferred to the TWDB (31 TAC §357.50(g)).

Why might a regional water plan need to be amended?

If a project sponsor seeks funding from the TWDB for a water supply project or a water rights permit from the Texas Commission on Environmental Quality, 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 already 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 must be amended, or a waiver of statutory requirements regarding consistency with such plans must be obtained from the TWDB and/or Texas Commission on Environmental Quality[13].

Additionally, in order for projects to be eligible for funding from the State Water Implementation Fund for Texas, projects must be recommended in the most recent regional and state water plans and have an associated capital cost.

RWPGs must also amend their regional water plan if they have identified any water management strategies and/or projects that are infeasible in accordance with Texas Water Code §16.053(h)(10).

Revisions to TWDB Board-adopted Projections during regional water plan development

Amendments to TWDB Board-adopted projections may be requested whenever current projections are no longer reasonable owing to changed conditions or the availability of new information[14]. These revision requests are typically requested for current plans under development and the resulting revisions are typically incorporated directly into the regional water plan under development prior to plan adoption.

The process requires the following steps:

1. An RWPG must submit a revision request, usually based on a request from a political subdivision, to the TWDB.
2. The regional water planning group must provide at least 14 days notice for a meeting and make the proposed population and/or water demand projection revisions available for public inspection prior to the meeting.
3. The RWPG must accept oral and written public comments at the meeting in which the request is considered and written comments for 14 days prior to the meeting.
4. The RWPG submits the revision request to the TWDB, including a summary of all comments the planning group received at the meeting and during the comment period.
5. The TWDB reviews the request in accordance with contract guidelines and consults with the Texas Department of Agriculture, Texas Commission on Environmental Quality, and Texas Parks and Wildlife Department. Within 45 days of receipt of a revision request from an RWPG, the executive administrator responds to the request.
6. Acceptable revisions will be presented for consideration of approval at an upcoming TWDB Board meeting.

If the RWPG pursues revisions to TWDB Board-adopted population and/or demand projections

[13] 31 TAC §357.60 (b)(5).
[14] 31 TAC §357.31.

in a previously adopted plan, the RWPG would need to take steps to pursue a minor or major amendment to the regional water plan after TWDB Board approval of the revision to adopted projections.

It is important to note that TWDB regional water planning grant funds are **prohibited** to be used for amendments related to the revision of TWDB Board-adopted population and demand projections.

Statute and Rules

- Texas Water Code, Chapter 16, Subchapter C: http://www.statutes.legis.state.tx.us/Docs/WA/htm/WA.16.htm
- 31 TAC Chapter 357: https://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=31&pt=10&ch=357&rl=Y

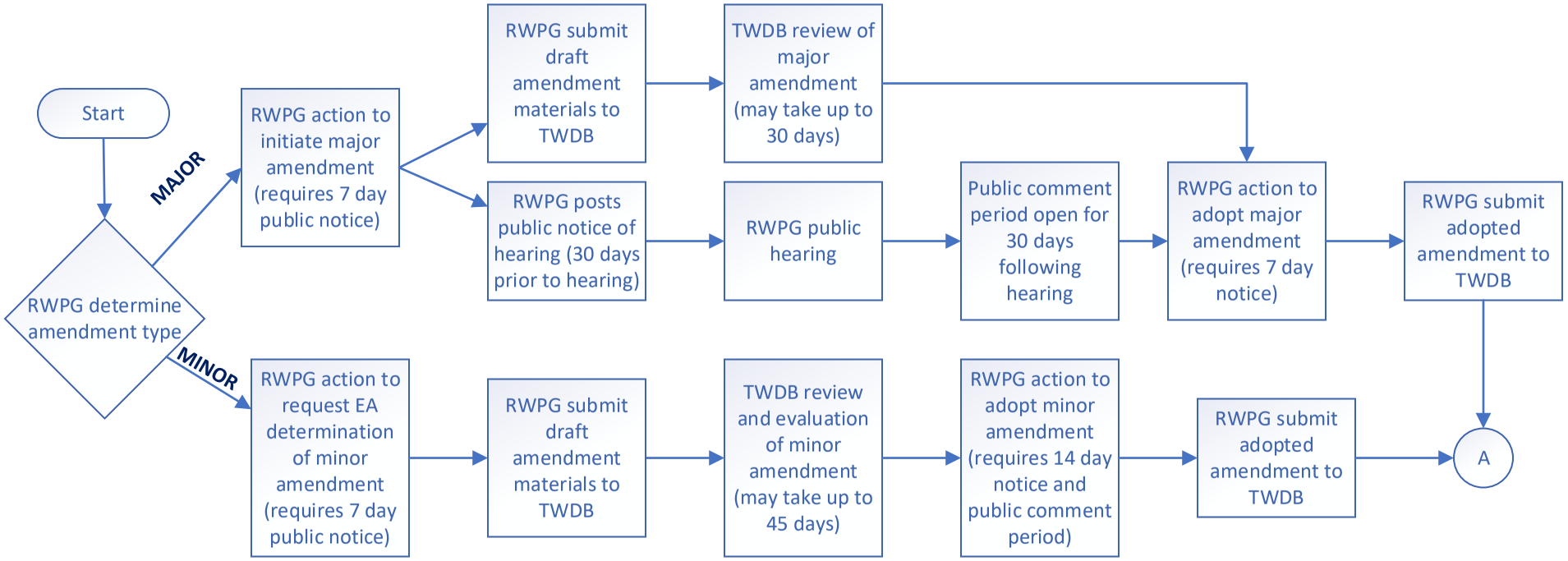
For more information on regional water planning and related guidance, please visit the following Web site: https://www.twdb.texas.gov/waterplanning/rwp/index.asp

Note: *This guidance document does not cover all procedural and substantive requirements applicable to water plan amendments. For this reason, this document should not be used as a substitute for the regulations as written. In case of doubt, consult the Texas Water Code, Chapter 16, Subchapter C, and 31 TAC Chapter 357. Regional water planning groups or political subdivisions with legal questions regarding changes to the regional water plans should consult with their own attorneys or the Texas Attorney General's Office.*

Regional and State Water Plan Amendment Process

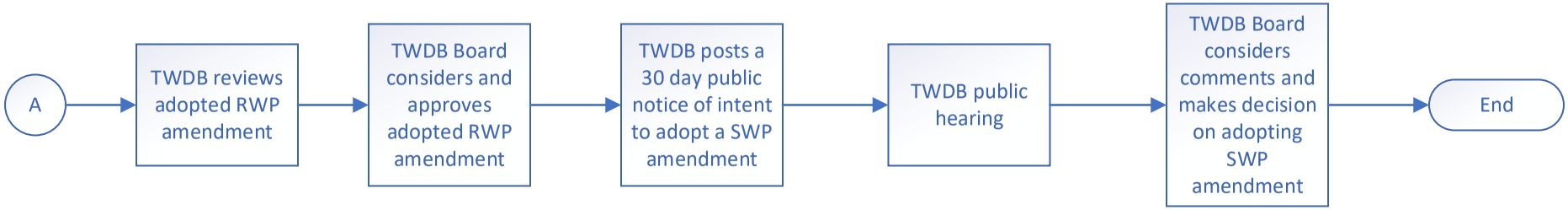
RWPG Amendment Process for RWP

Major amendment process may take approximately three (3) months and includes two (2) RWPG meetings and one (1) hearing. Minor amendment process may take approximately 2.5 months and includes two (2) RWPG meetings.



TWDB Amendment Process for SWP

TWDB amendment process may take approximately three (3) months, subject to the timing of TWDB Board meetings.



Acronyms:
TWDB: Texas Water Development Board
RWPG: Regional Water Planning Group
RWP: Regional Water Plan
SWP: State Water Plan

Updated September 2022

Agenda Item 6a

Receive update from Consultant Team and Non-Population Demands Committee regarding data and projections for the 2026 Region H RWP.

REGION H
Water Planning Group

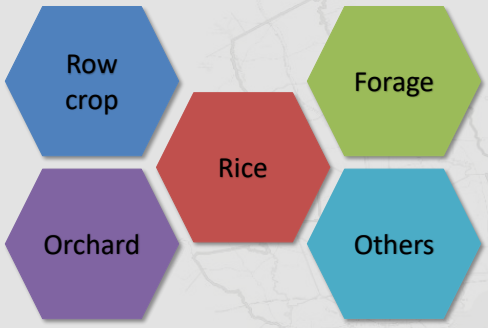
Agenda Item 6a
Non-Municipal Water Demand – New Projections

Agenda Item 6a
Non-Municipal Water Demand - Irrigation

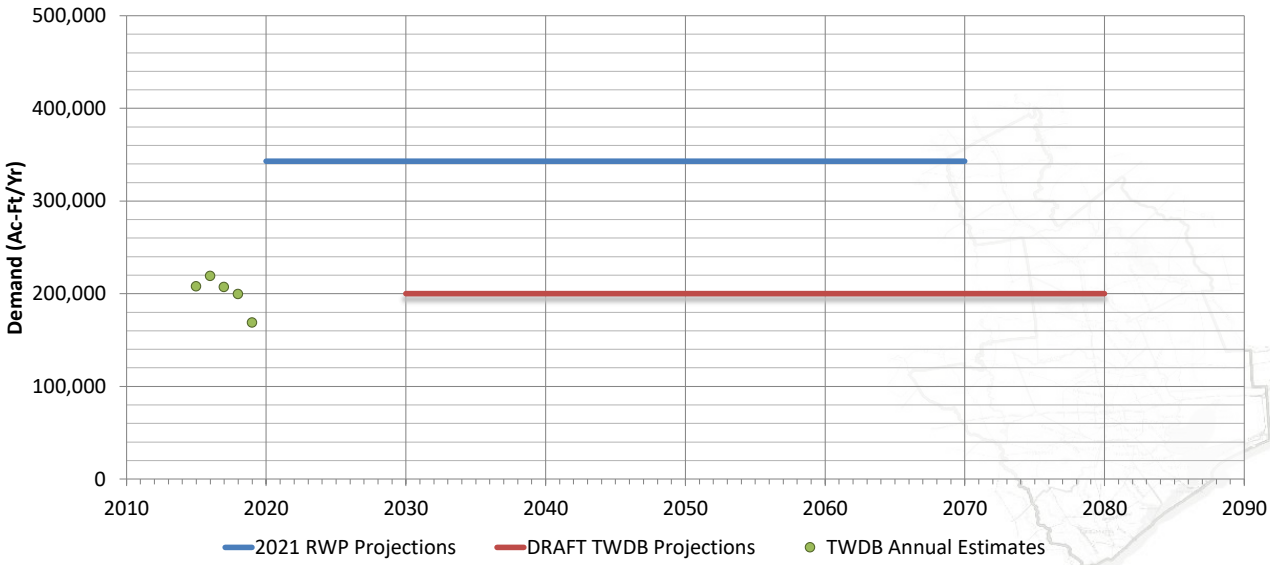
Methodology

- 2015-2019 average as baseline
- Constant through 2080

What's Included

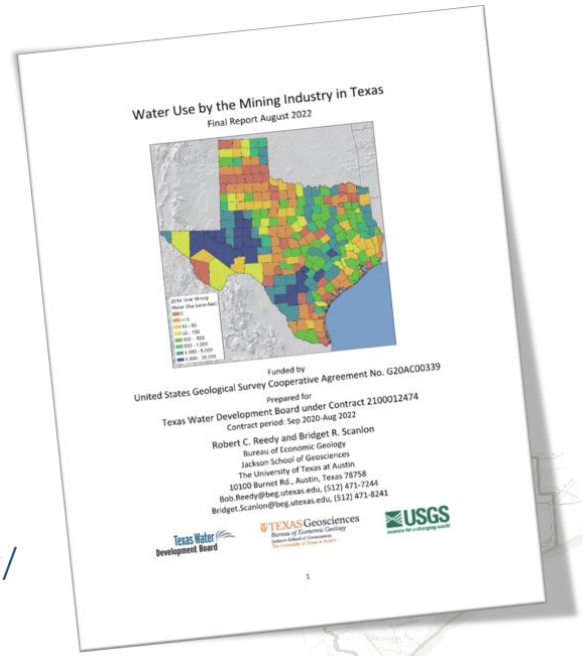


Agenda Item 6a
Non-Municipal Water Demand - Irrigation



Agenda Item 6a
Non-Municipal Water Demand - Mining

- BEG study for TWDB
- Detailed look at mining demands
- Available on TWDB Website
  - Report
  - Data dashboard
  - Summary video
- https://www.twdb.texas.gov/waterplanning/data/projections/MiningStudy/index.asp

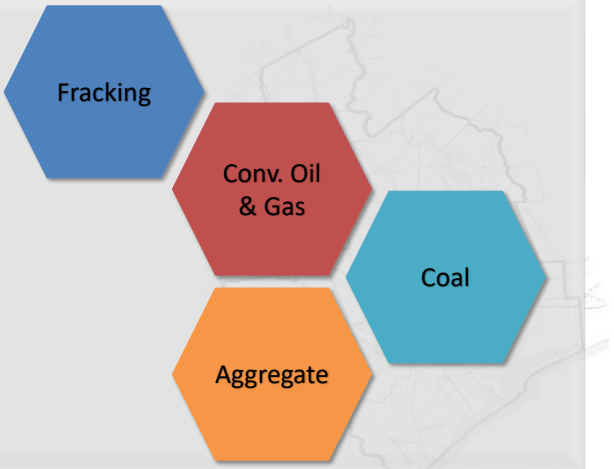


Agenda Item 6a
Non-Municipal Water Demand - Mining

Methodology

- Historical use by mining type
- Demand locations and water sources
- Industry and agency data
- Projections by mining type

What's Included



Agenda Item 6a
Non-Municipal Water Demand - Mining

Freese and Nichols, Inc. | INTERA Inc.

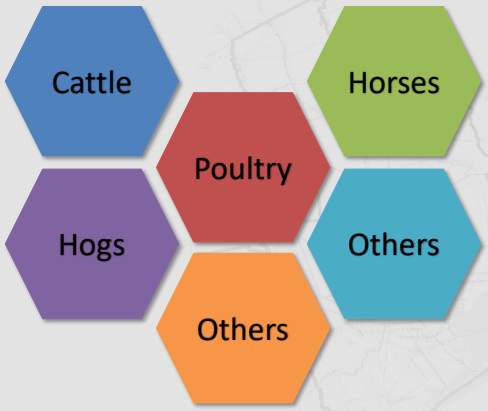
Agenda Item 6a
Non-Municipal Water Demand – Recap of Earlier Releases

Agenda Item 6a
Non-Municipal Water Demand - Livestock

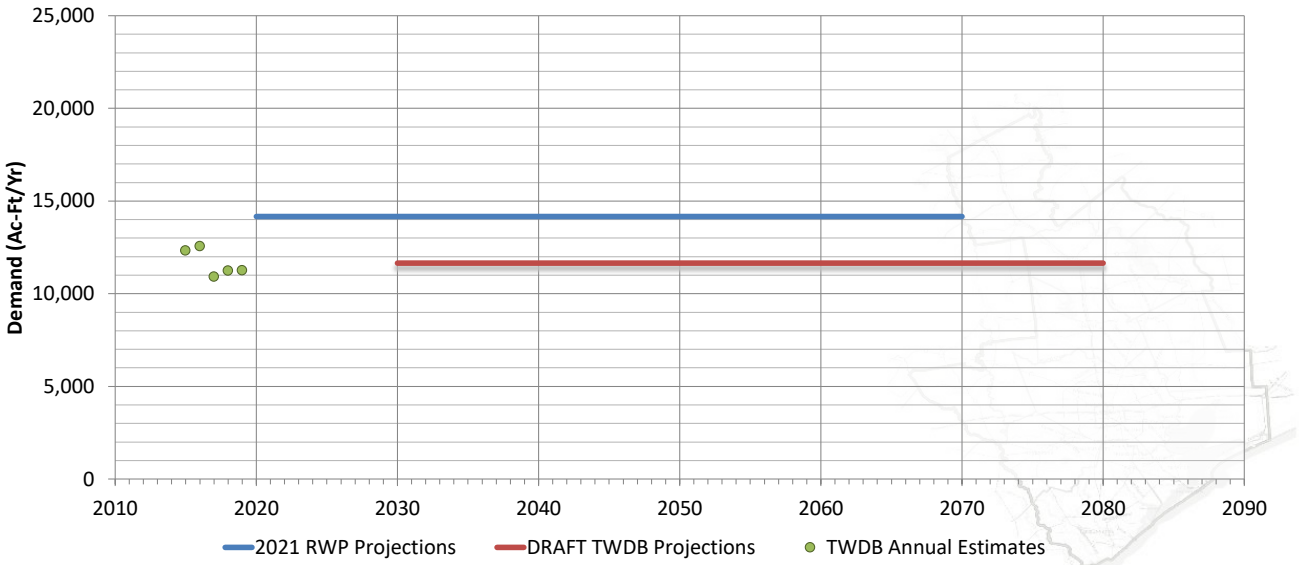
Methodology

- 2015-2019 average as baseline
- Updated headcounts and use rates
- Growth rates from 2021 RWP
- Constant after 2070

What's Included



Agenda Item 6a
Non-Municipal Water Demand - Livestock

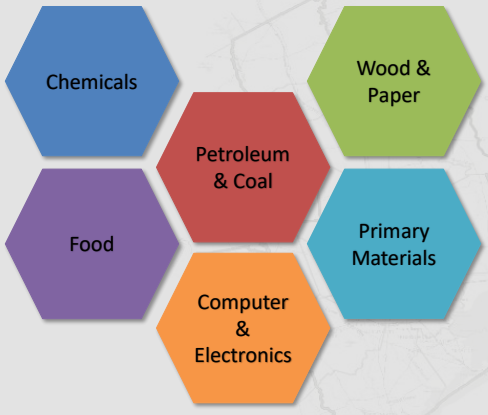


Agenda Item 6a
Non-Municipal Water Demand - Manufacturing

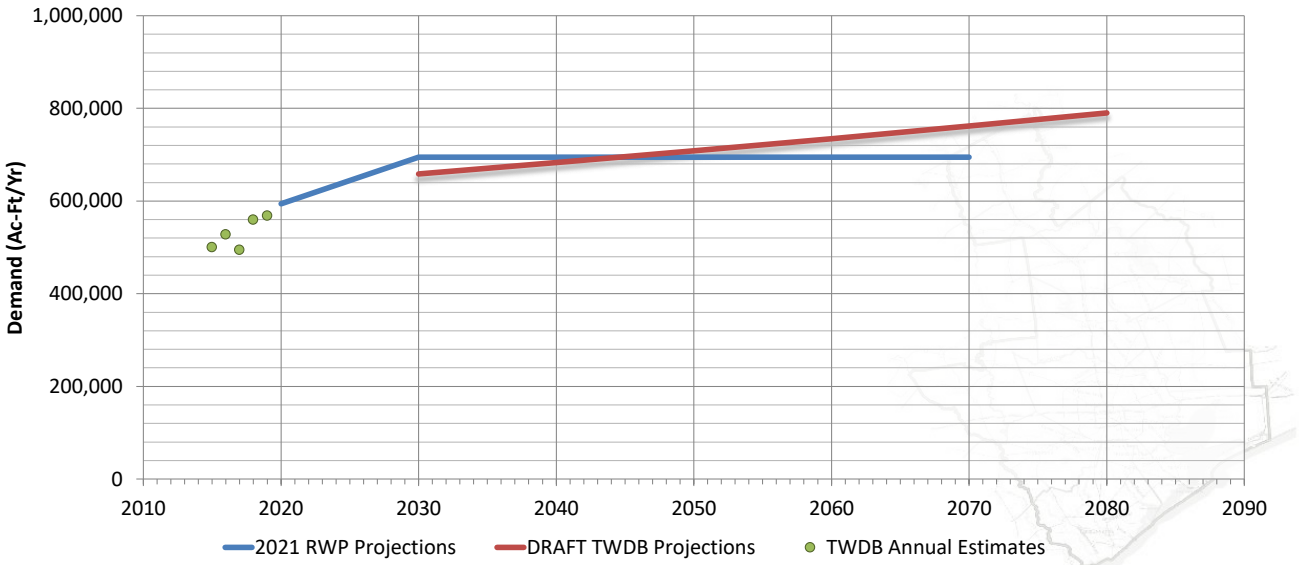
Methodology

- 2015-2019 max as baseline
- Excludes saline demand
- 2030 based on 2010-2019 statewide historical trend
- After 2030, linear based on 2010-2019 Census Bureau CBP facility counts

What's Included



Agenda Item 6a
Non-Municipal Water Demand - Manufacturing

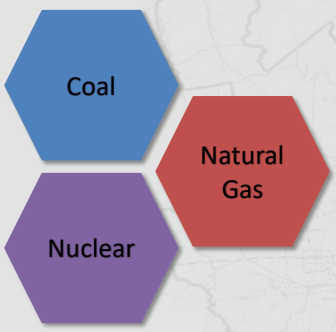


Agenda Item 6a
Non-Municipal Water Demand – Steam Electric

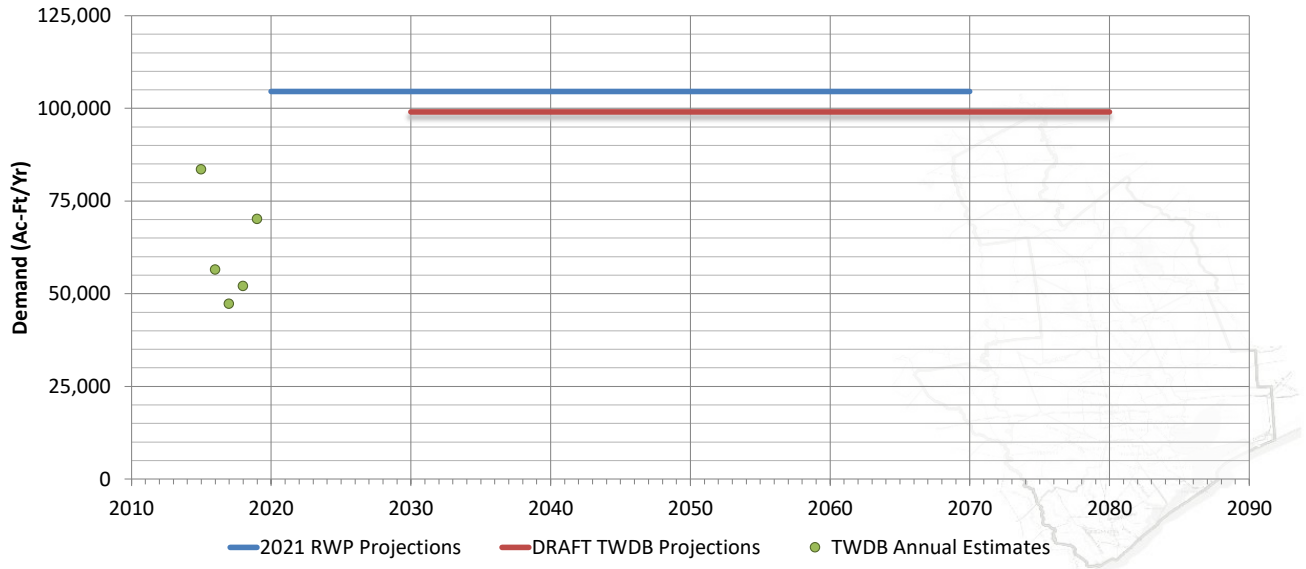
Methodology

- 2015-2019 max as baseline
- 2030 based on statewide trend
- After 2030, linear using Census Bureau CBP facility counts
- Excludes
  - Saline demand
  - Cogeneration
  - Solar, wind, hydro, landfill gas

What's Included

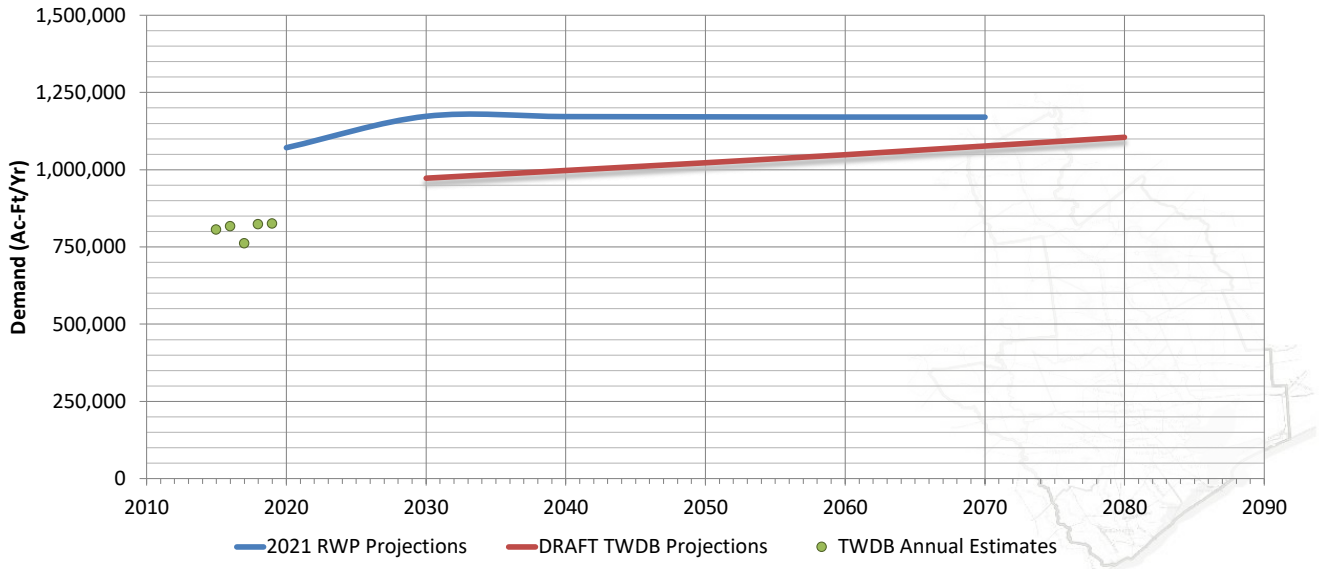


Agenda Item 6a
Non-Municipal Water Demand – Steam Electric



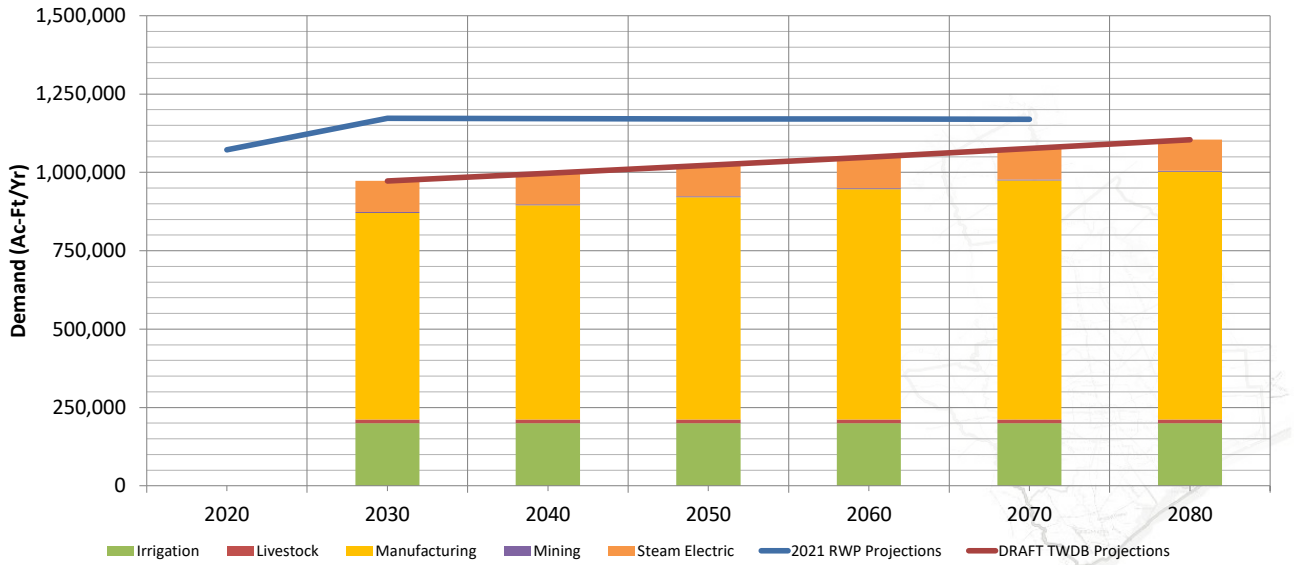
Freese and Nichols, Inc. | INTERA Inc.

Agenda Item 6a
Non-Municipal Water Demand – Summary



Freese and Nichols, Inc. | INTERA Inc.

Agenda Item 6a
Non-Municipal Water Demand – Summary



Agenda Item 6a
Non-Municipal Water Demand – Path Forward

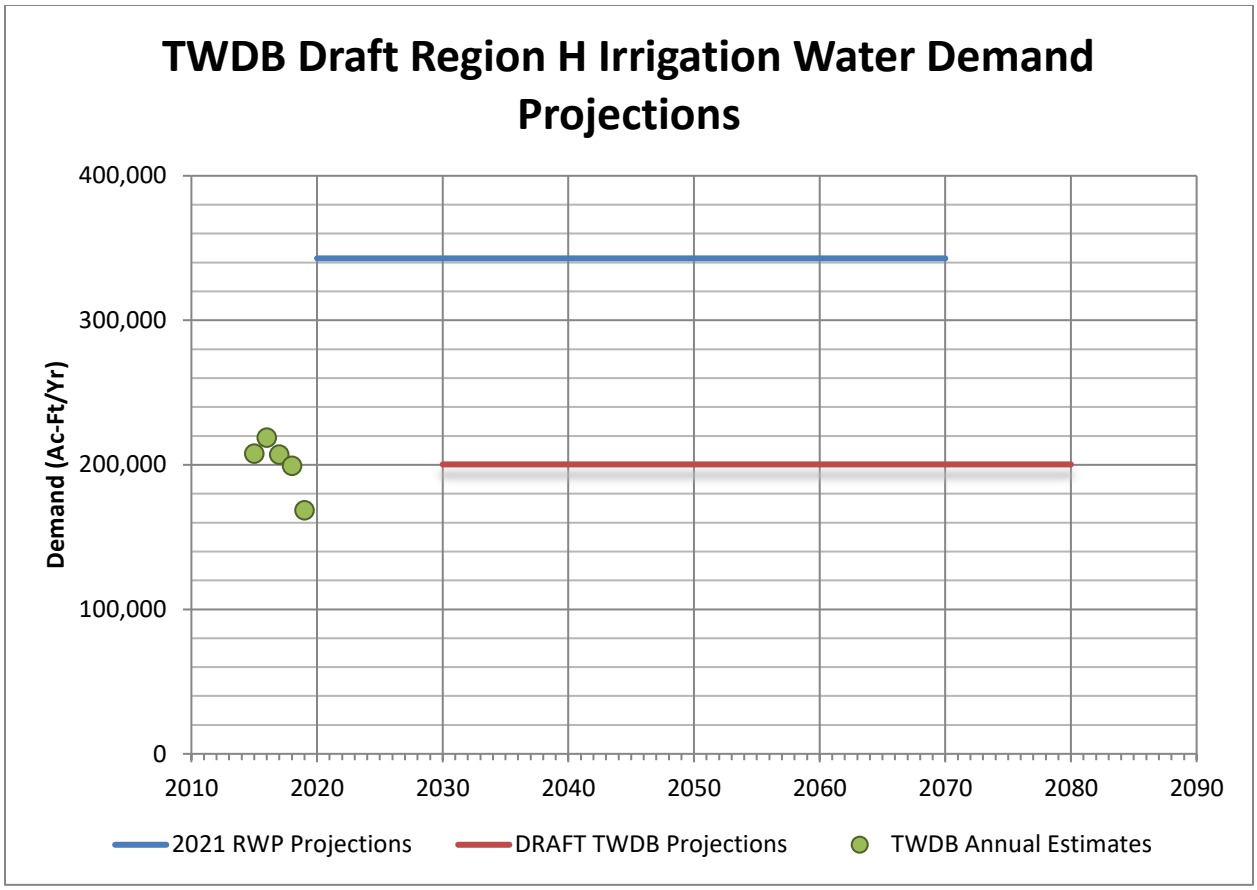
Non-Population Demand

- W.R. Baker
- Carl Burch
- James Comin
- Robert Istre
- Glenn Lord

- Detailed look at background data
- Look for evidence of:
  - Data errors
  - New or missed facilities
  - Planned facilities
  - Closures
  - Major difference in long-term demand
- Revision requests due July 14, 2023

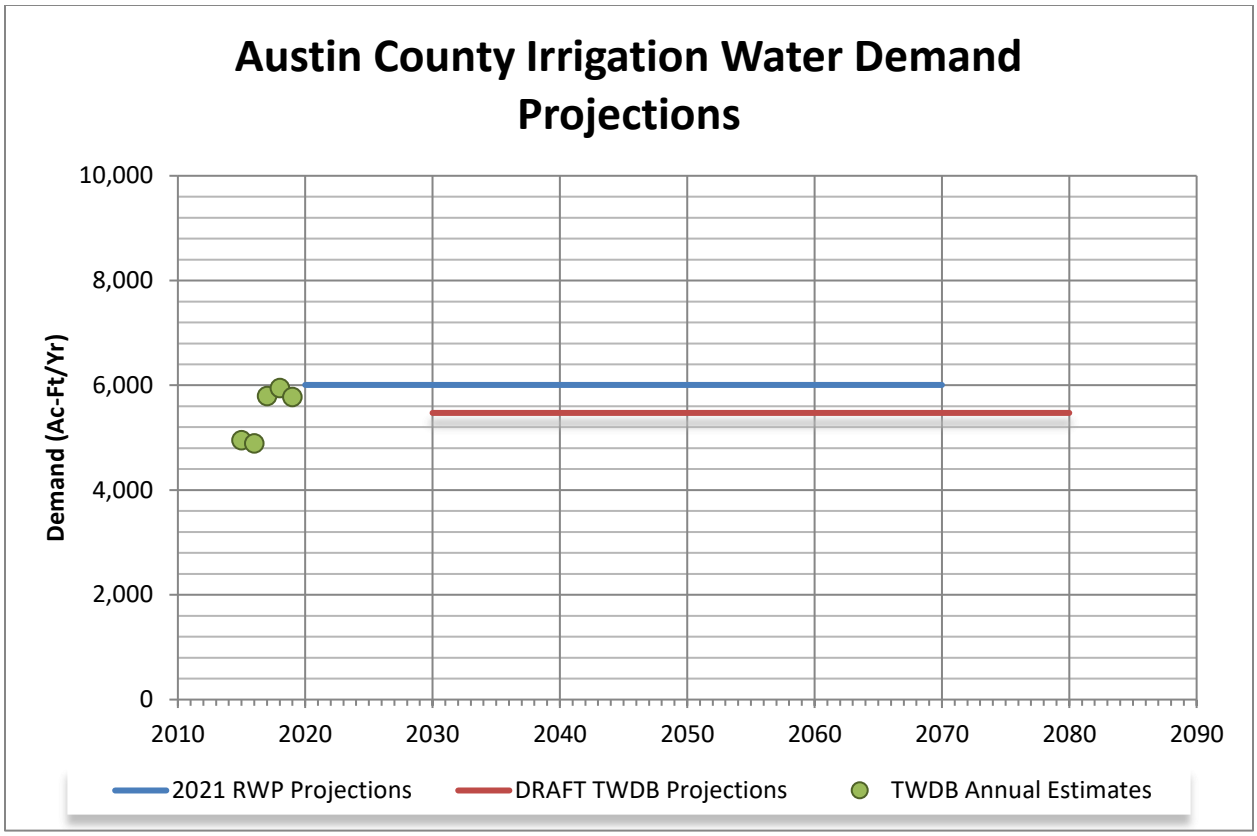
TWDB Draft 2026 RWP
Irrigation Water Demand
Projections for Region H

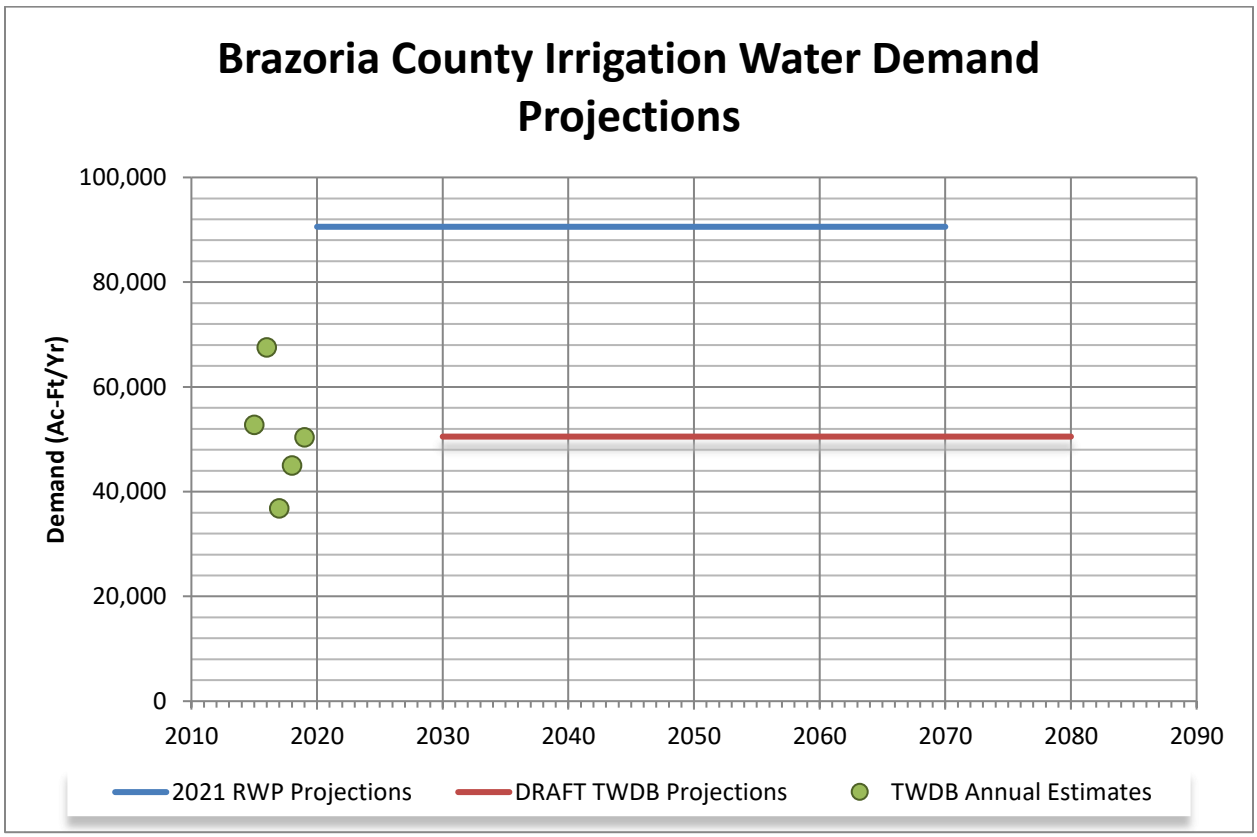
REGION H
Water Planning Group



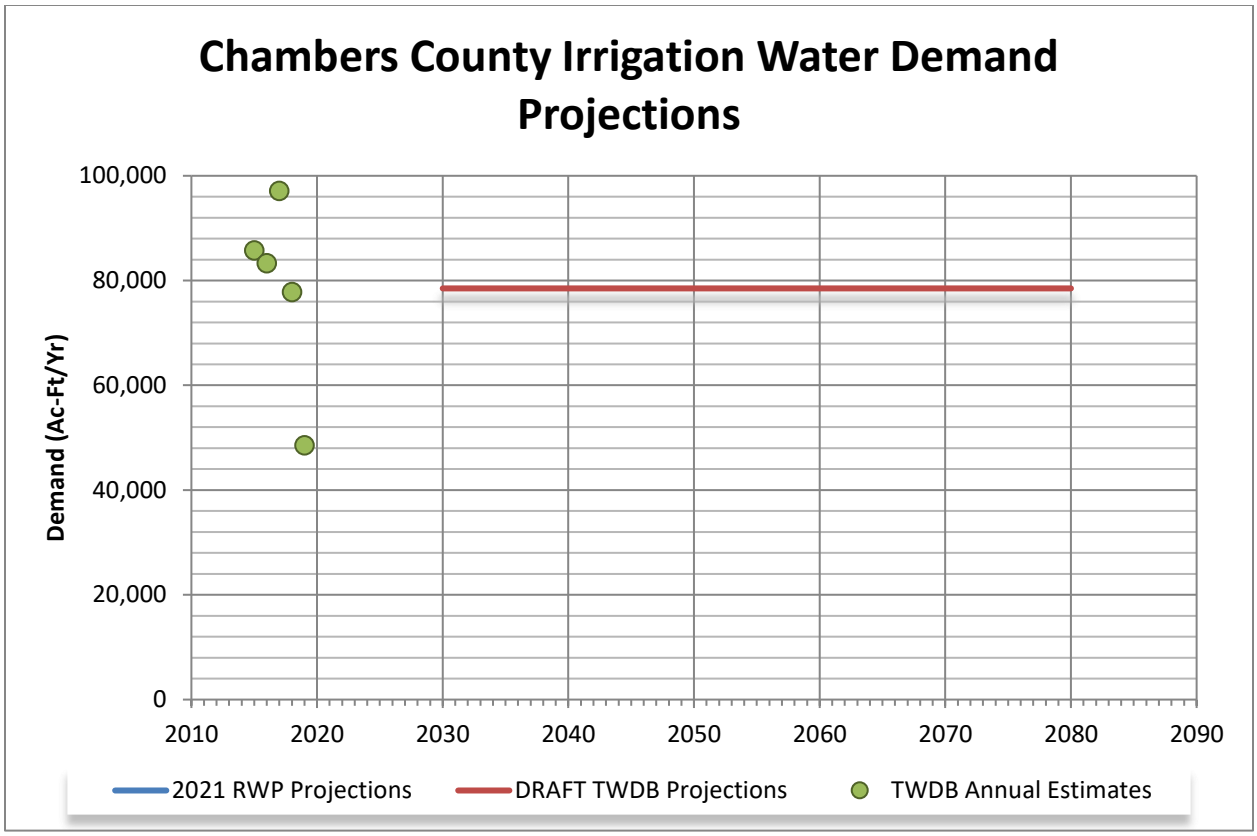
County	TWDB Draft Region H Irrigation Water Demand Projections (ac-ft)					
	2030	2040	2050	2060	2070	2080
Austin	5,473	5,473	5,473	5,473	5,473	5,473
Brazoria	50,518	50,518	50,518	50,518	50,518	50,518
Chambers	78,499	78,499	78,499	78,499	78,499	78,499
Fort Bend	22,530	22,530	22,530	22,530	22,530	22,530
Galveston	6,223	6,223	6,223	6,223	6,223	6,223
Harris	6,460	6,460	6,460	6,460	6,460	6,460
Leon	331	331	331	331	331	331
Liberty	15,129	15,129	15,129	15,129	15,129	15,129
Madison	178	178	178	178	178	178
Montgomery	3,206	3,206	3,206	3,206	3,206	3,206
Polk	99	99	99	99	99	99
San Jacinto	79	79	79	79	79	79
Trinity	68	68	68	68	68	68
Walker	299	299	299	299	299	299
Waller	11,187	11,187	11,187	11,187	11,187	11,187
Total	**200,279**	**200,279**	**200,279**	**200,279**	**200,279**	**200,279**

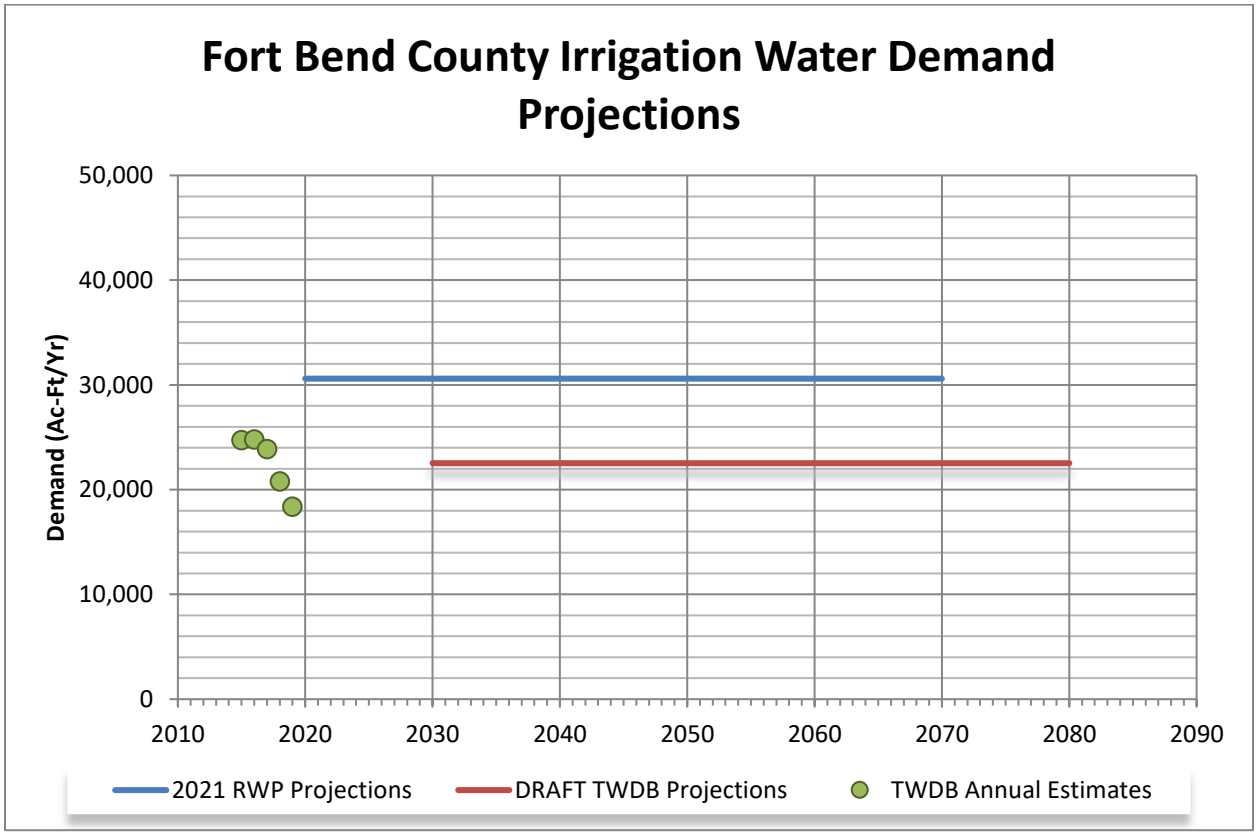
REGION H
Water Planning Group



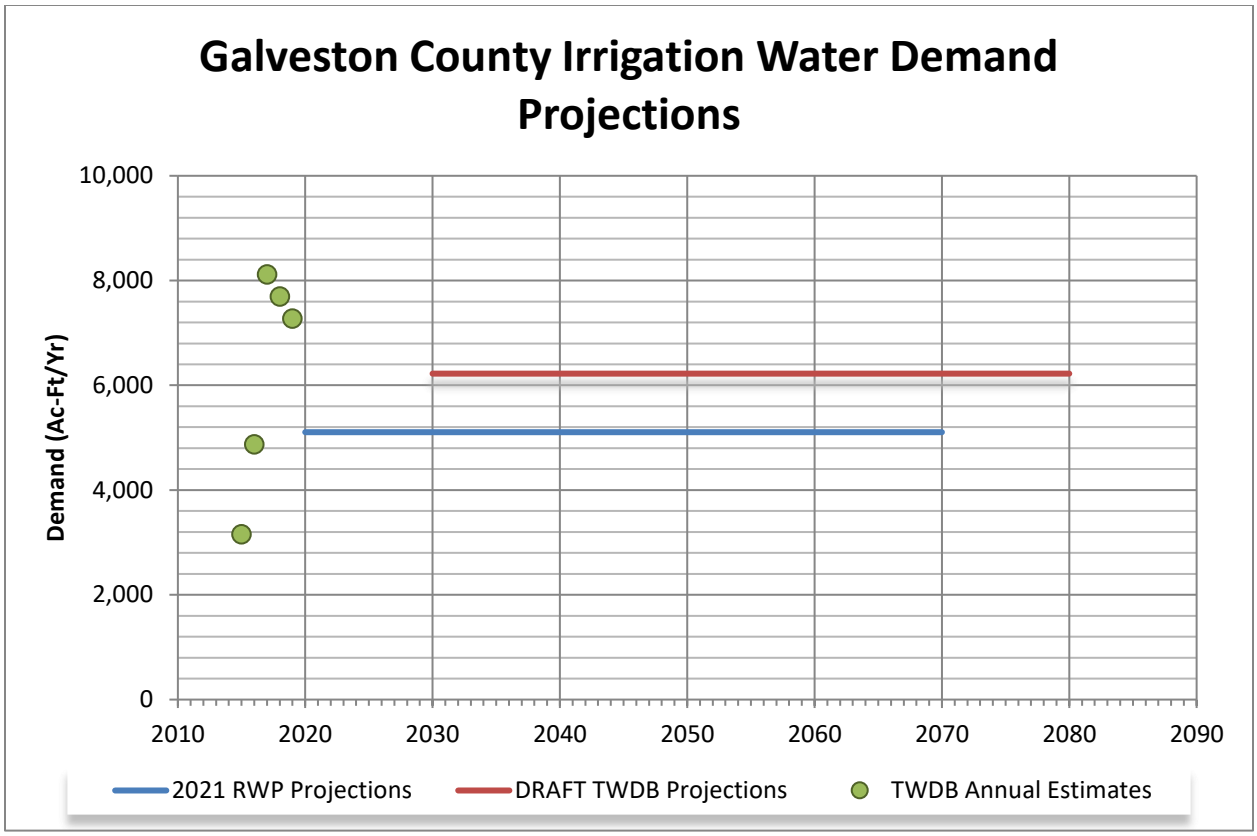


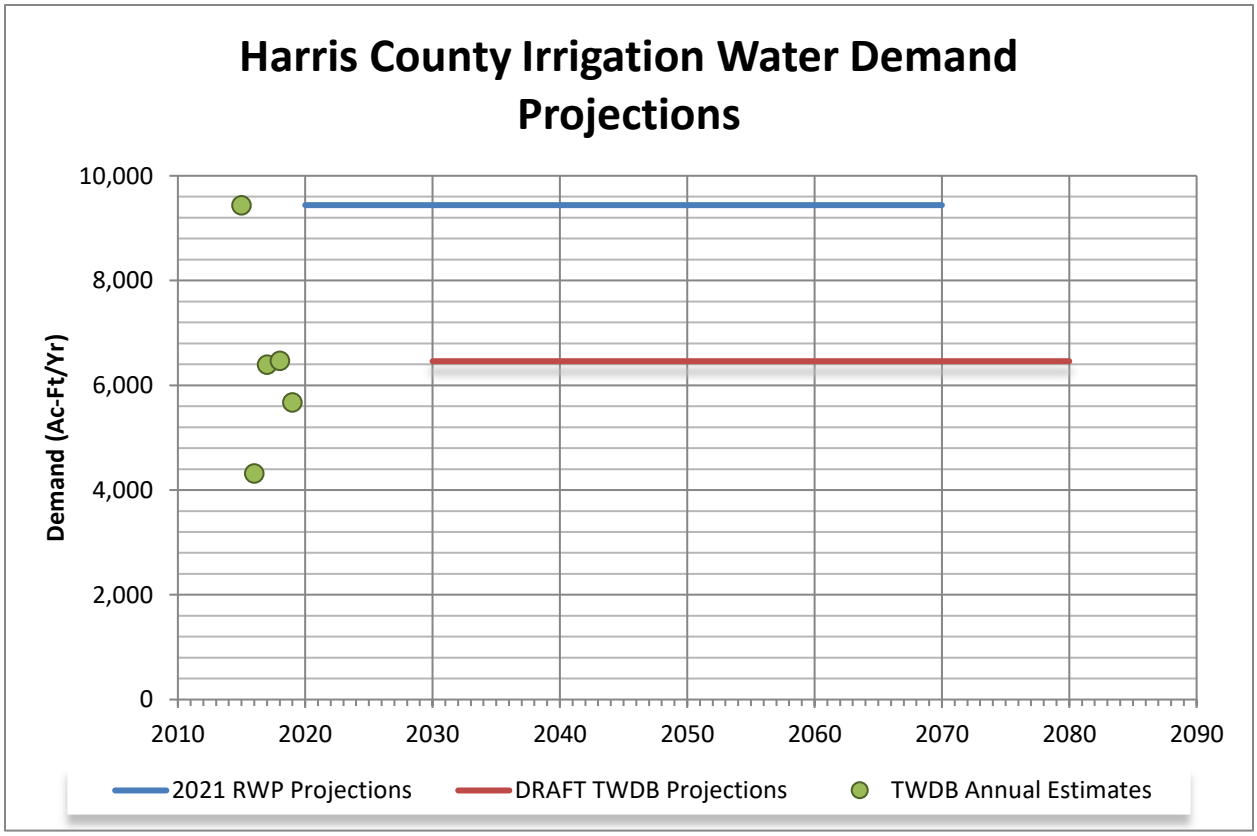
REGION H
Water Planning Group

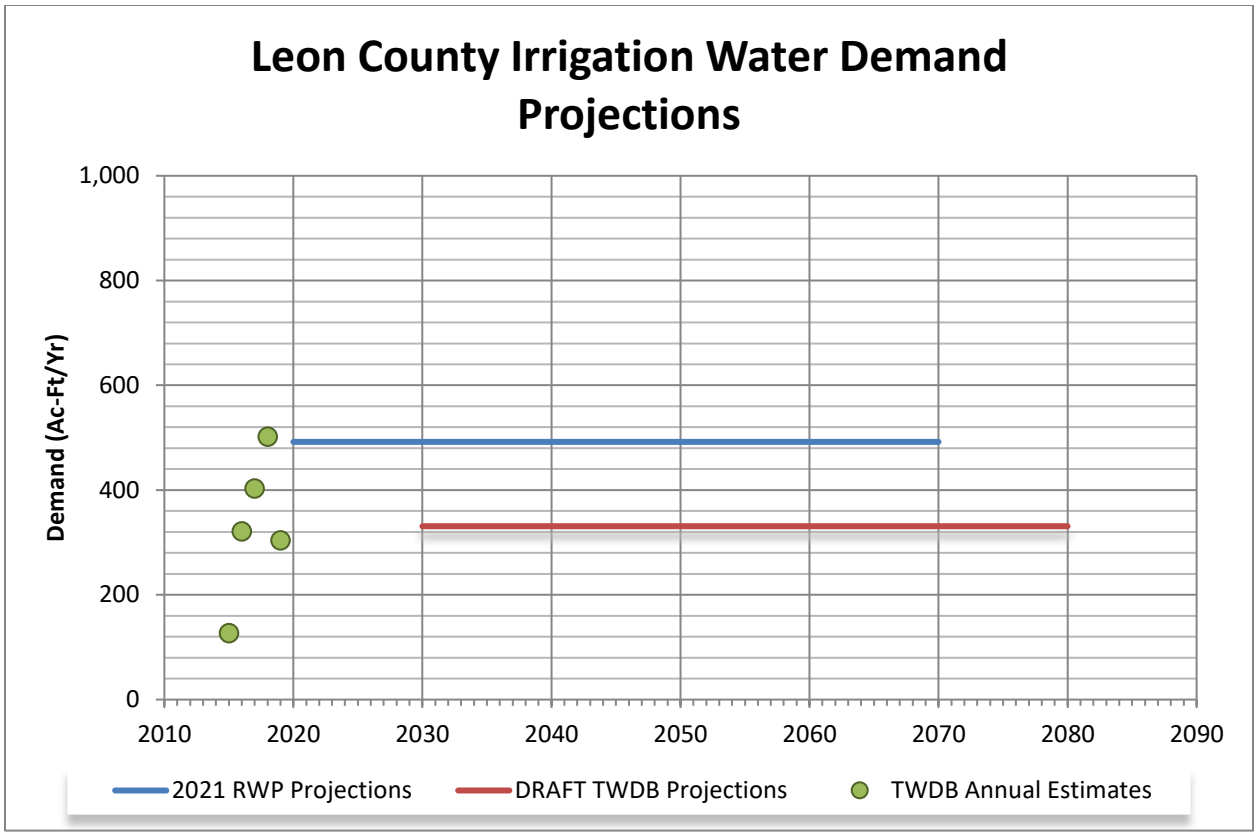


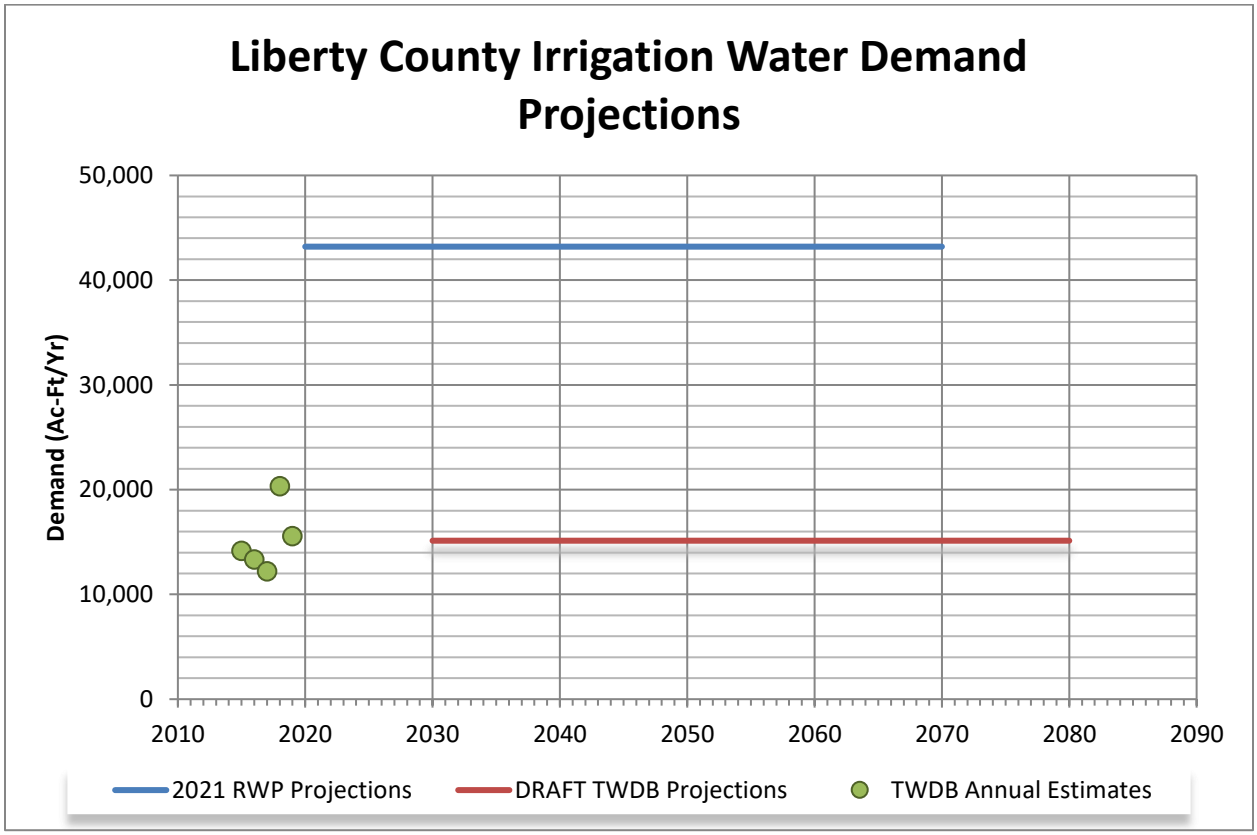


REGION H
Water Planning Group

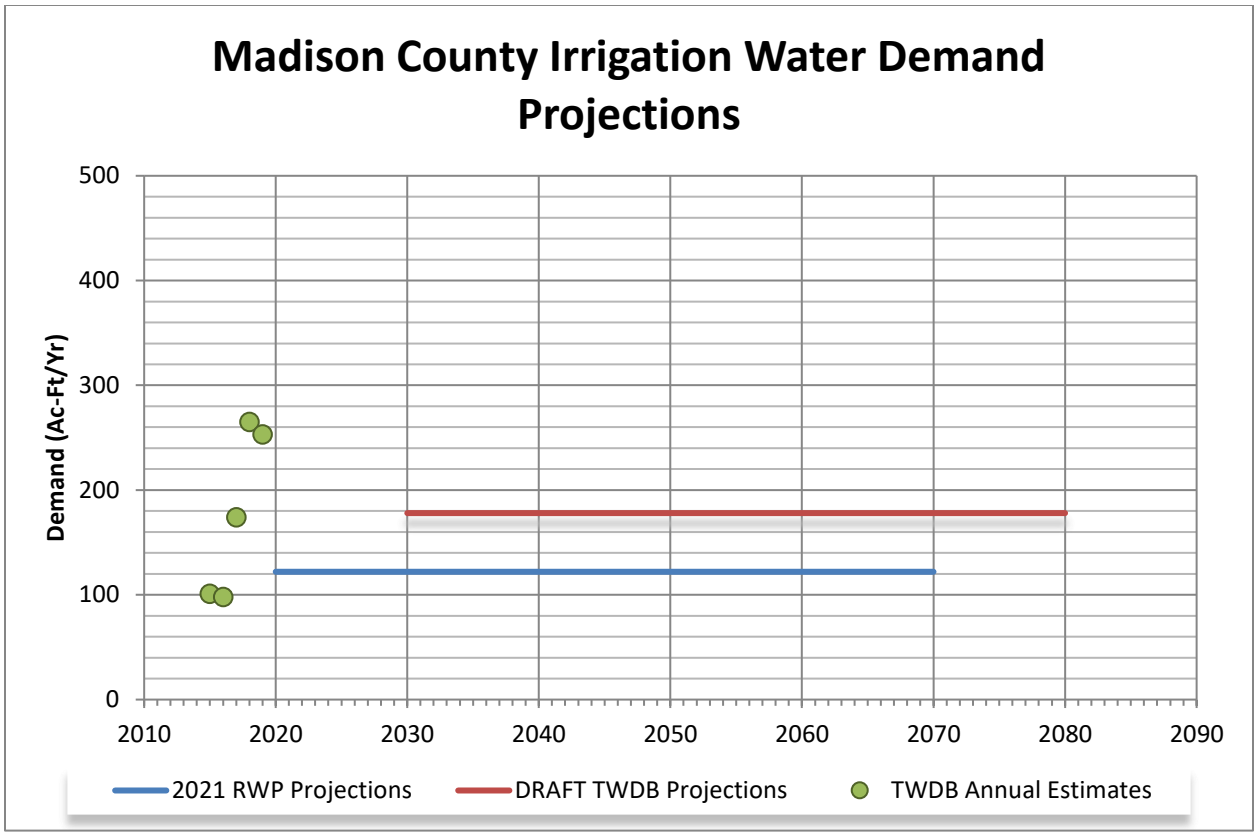

Galveston County Irrigation Water Demand Projections
Demand (Ac-Ft/Yr)
10,000
8,000
6,000
4,000
2,000
0
2010
2020
2030
2040
2050
2060
2070
2080
2090
2021 RWP Projections
DRAFT TWDB Projections
TWDB Annual Estimates

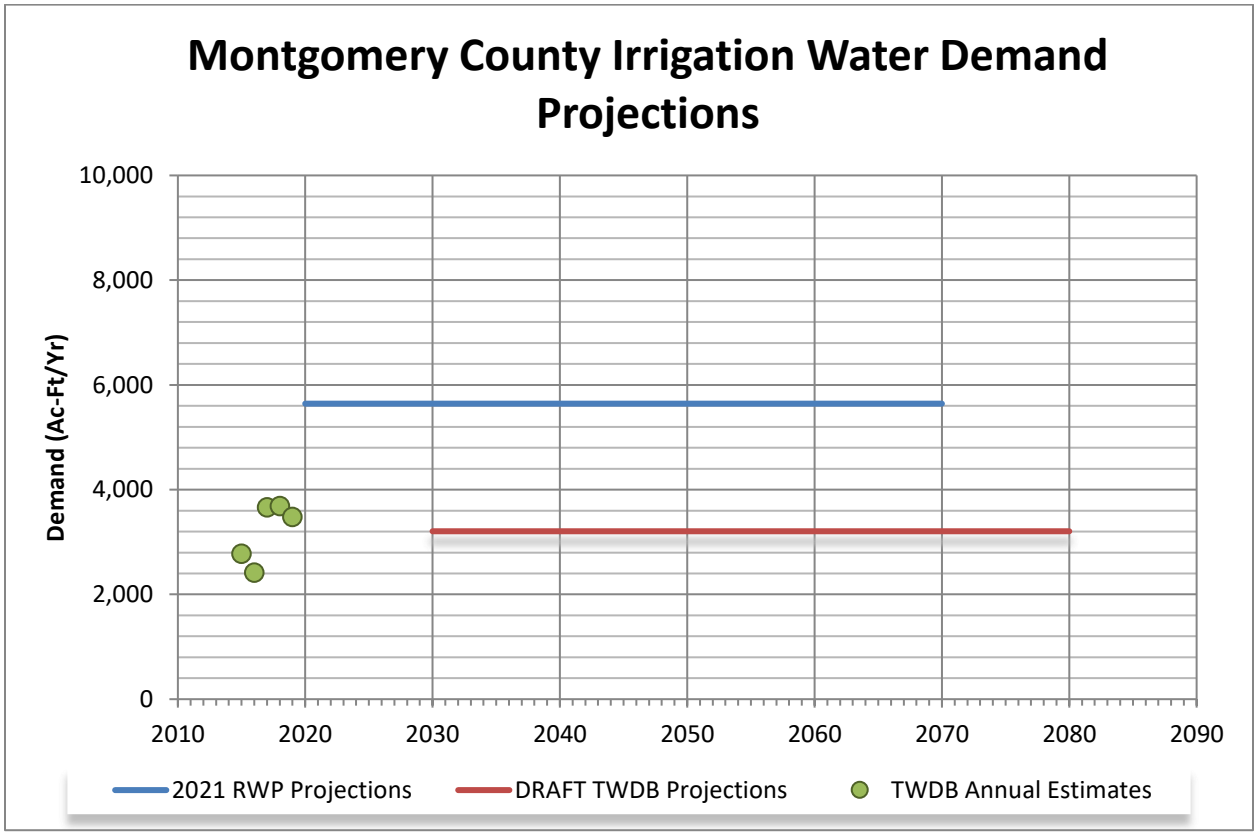

Harris County Irrigation Water Demand Projections
Demand (Ac-Ft/Yr)
10,000
8,000
6,000
4,000
2,000
0
2010
2020
2030
2040
2050
2060
2070
2080
2090
2021 RWP Projections
DRAFT TWDB Projections
TWDB Annual Estimates



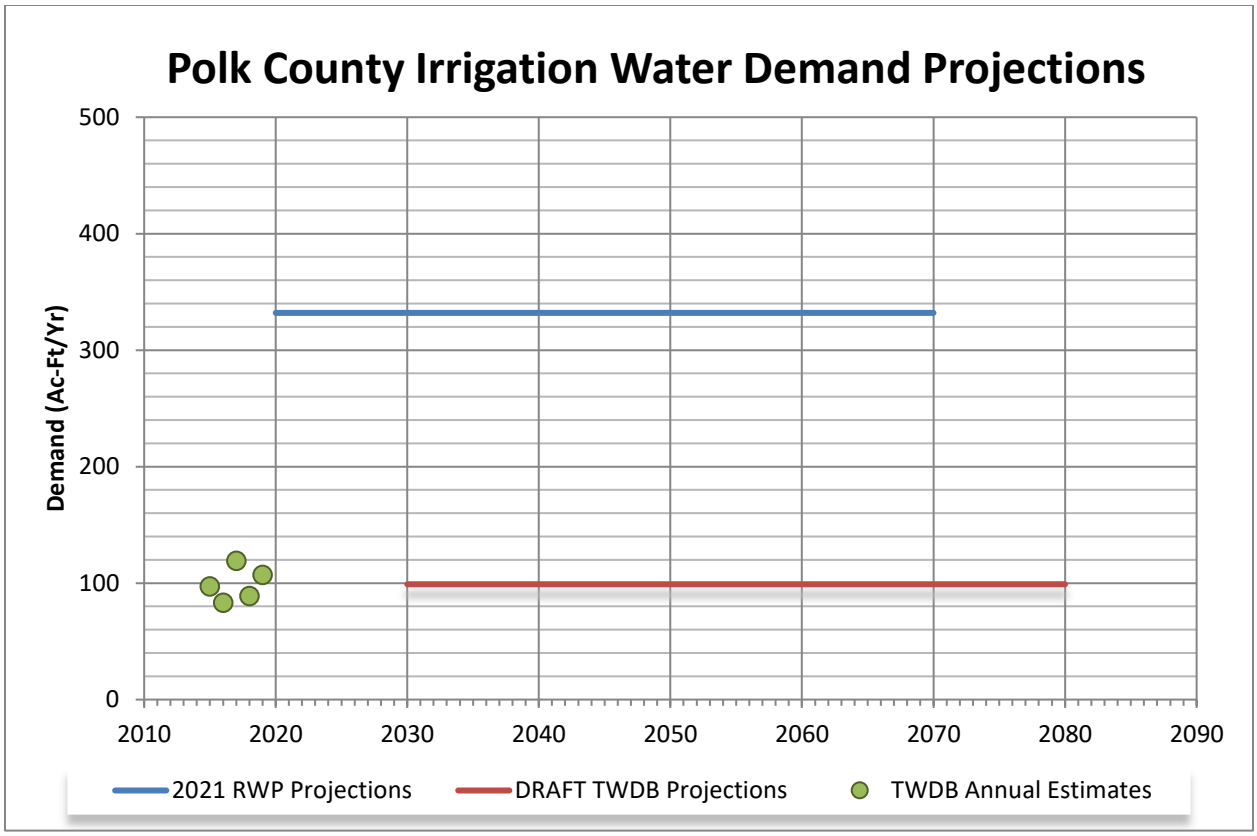


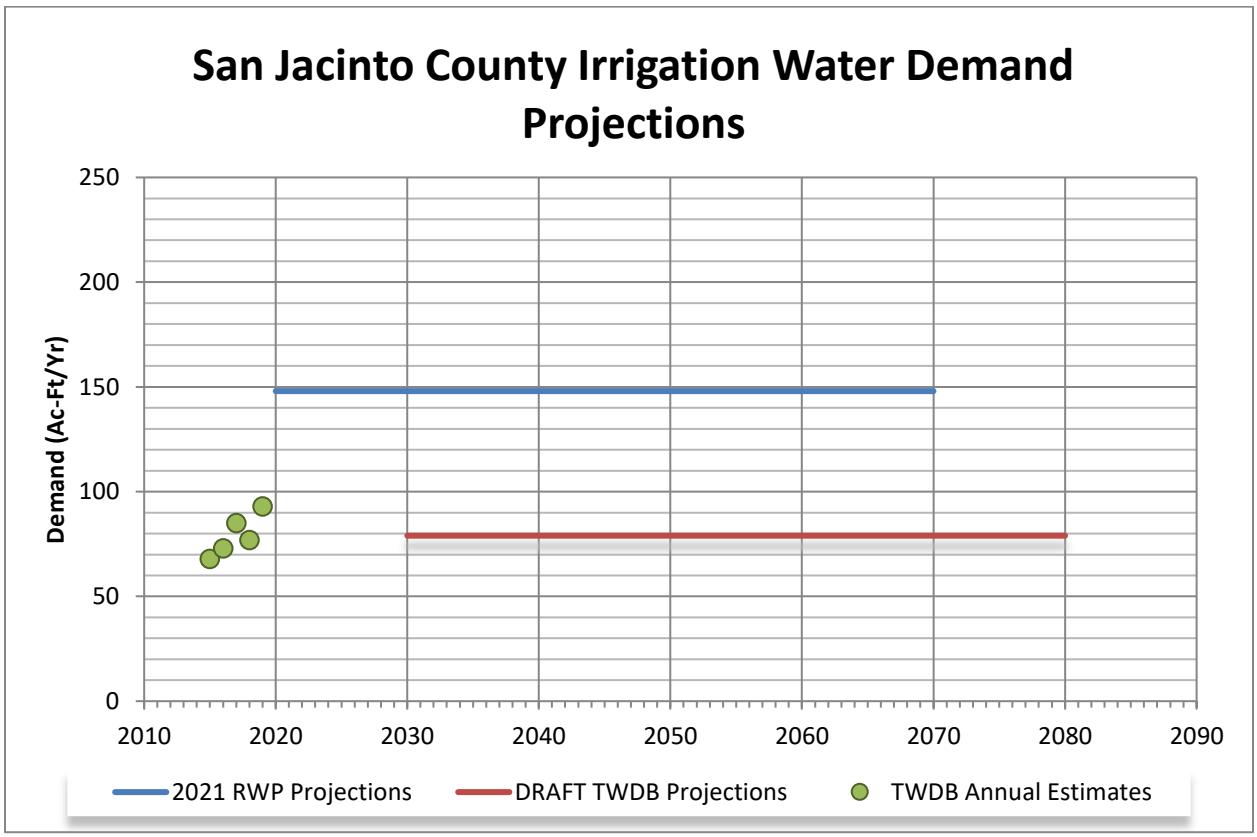
REGION H Water Planning Group



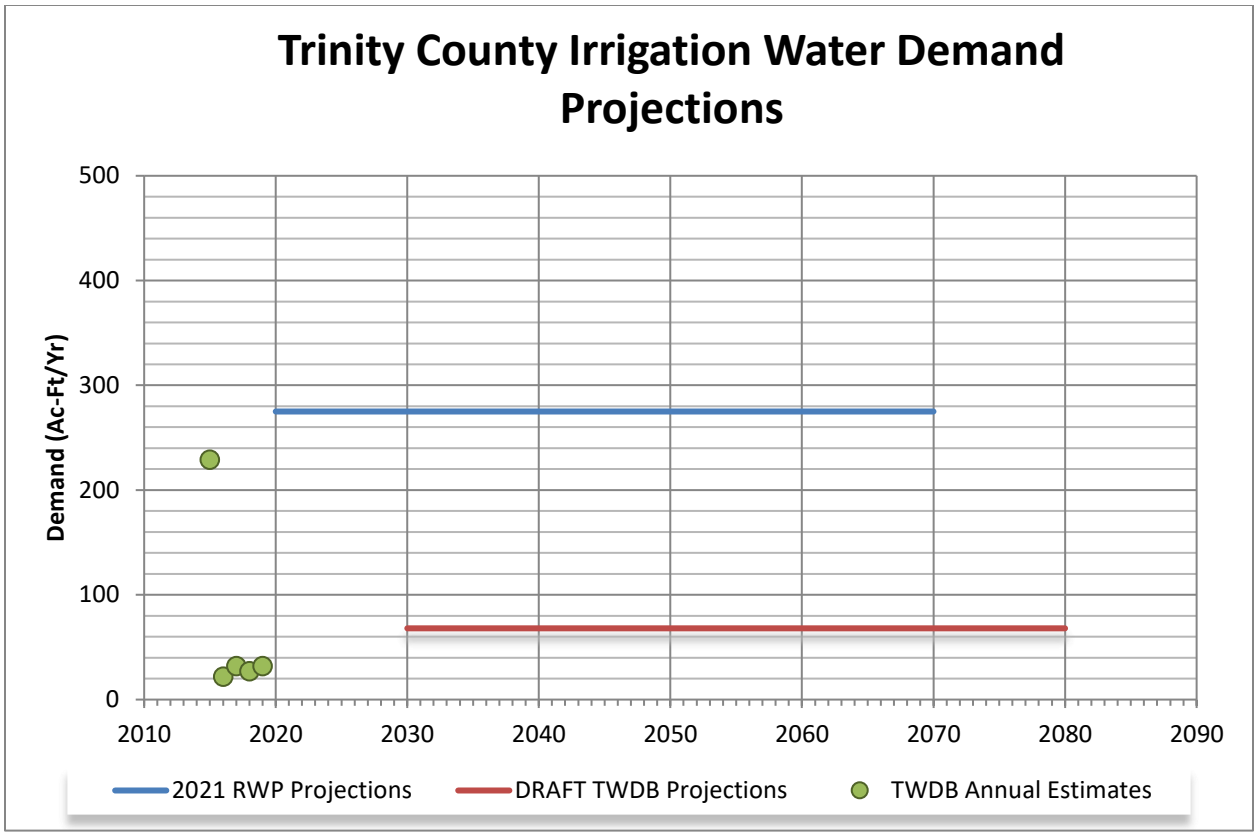


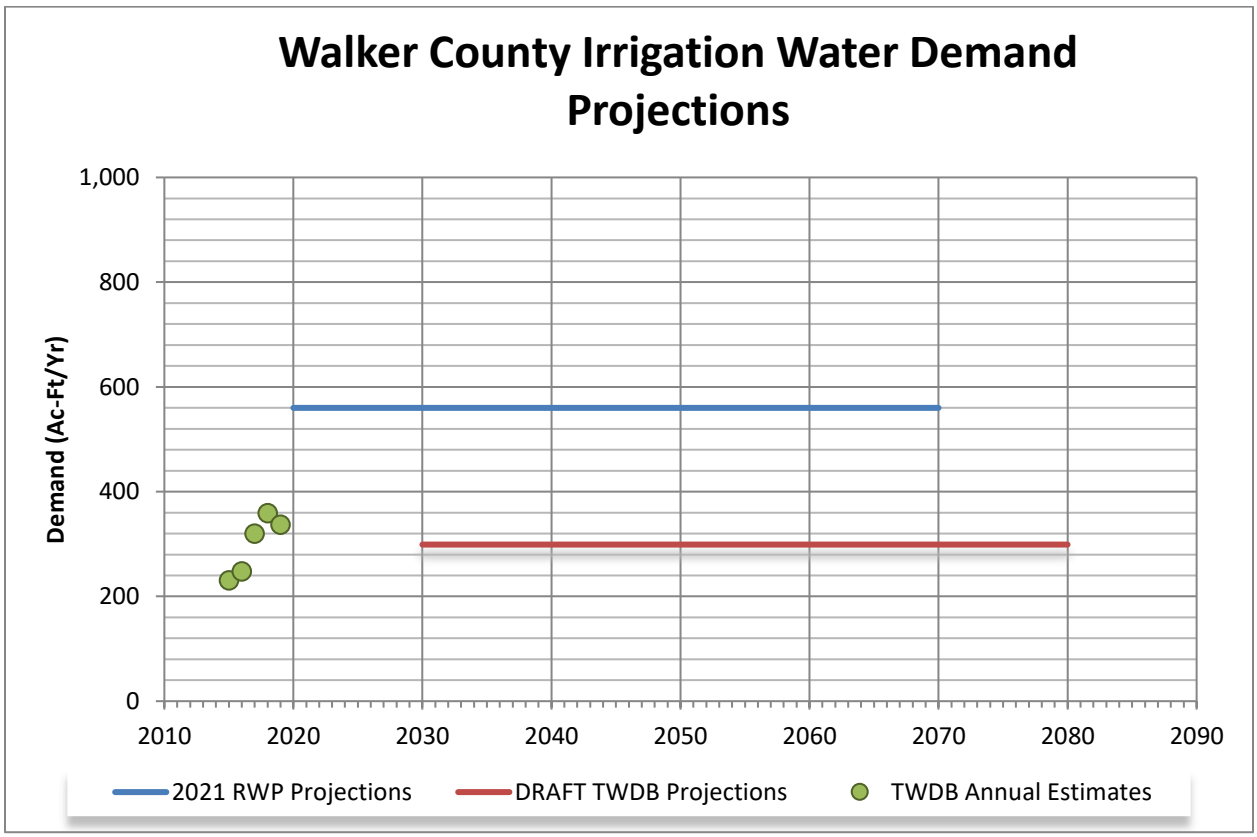
REGION H
Water Planning Group

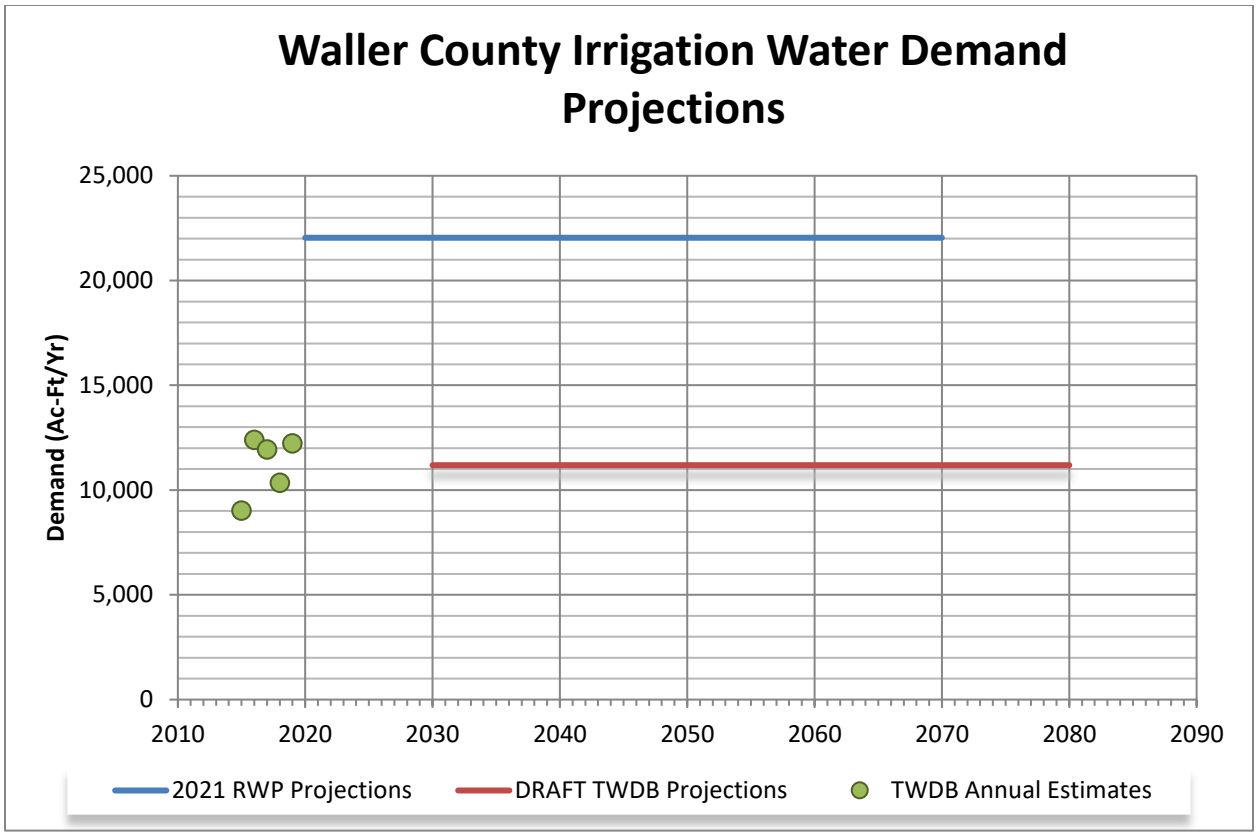




REGION H
Water Planning Group

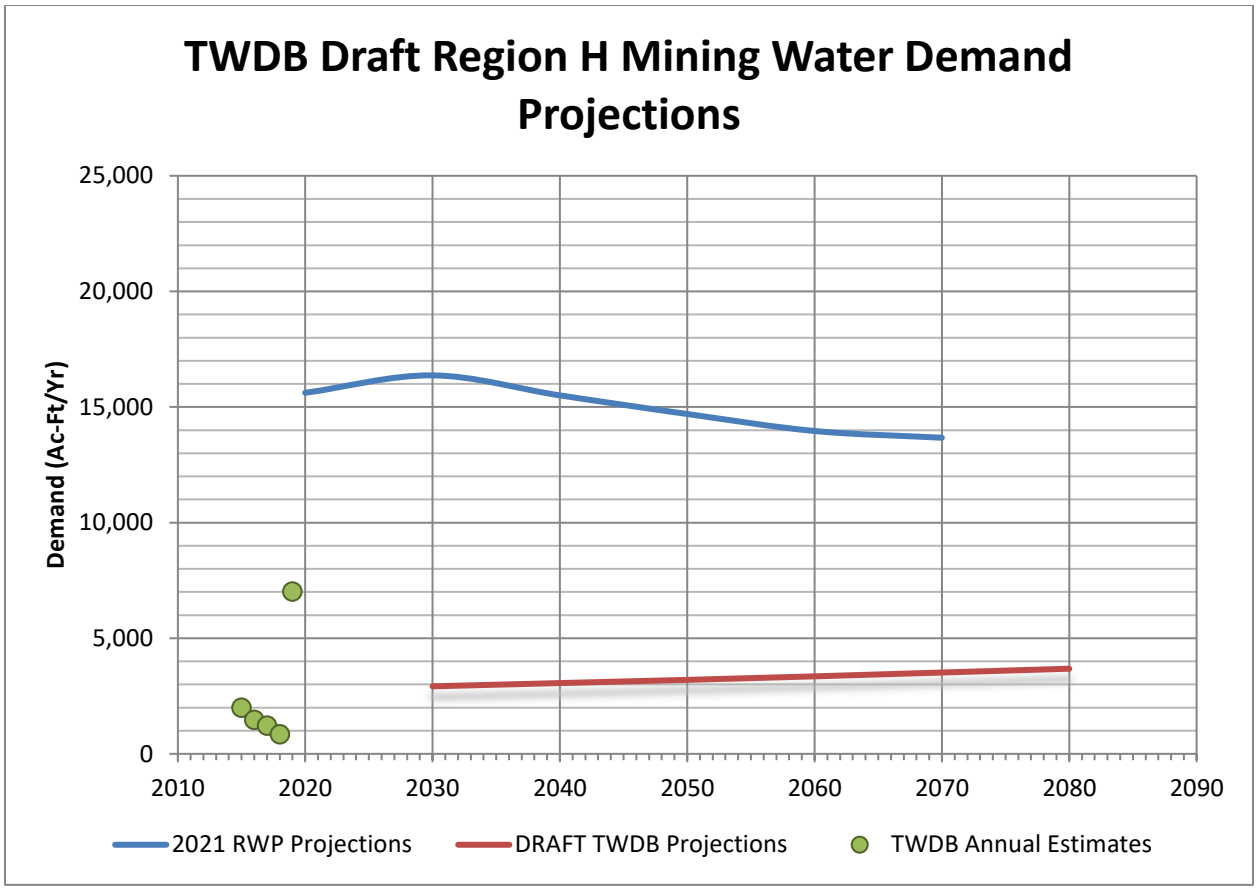

Trinity County Irrigation Water Demand Projections
Demand (Ac-Ft/Yr)
500
400
300
200
100
0
2010
2020
2030
2040
2050
2060
2070
2080
2090
2021 RWP Projections
DRAFT TWDB Projections
TWDB Annual Estimates


Walker County Irrigation Water Demand Projections
Demand (Ac-Ft/Yr)
1,000
800
600
400
200
0
2010
2020
2030
2040
2050
2060
2070
2080
2090
2021 RWP Projections
DRAFT TWDB Projections
TWDB Annual Estimates

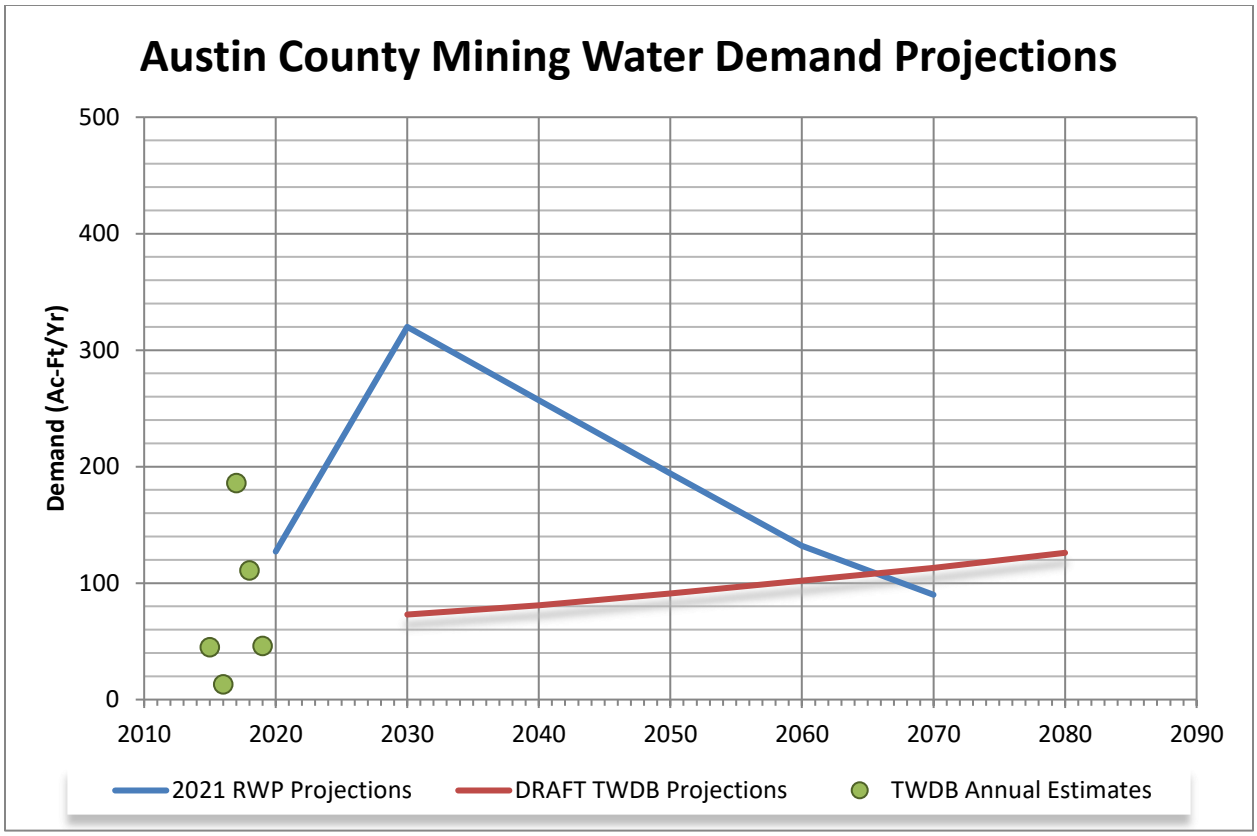

Waller County Irrigation Water Demand Projections
Demand (Ac-Ft/Yr)
25,000
20,000
15,000
10,000
5,000
0
2010
2020
2030
2040
2050
2060
2070
2080
2090
2021 RWP Projections
DRAFT TWDB Projections
TWDB Annual Estimates

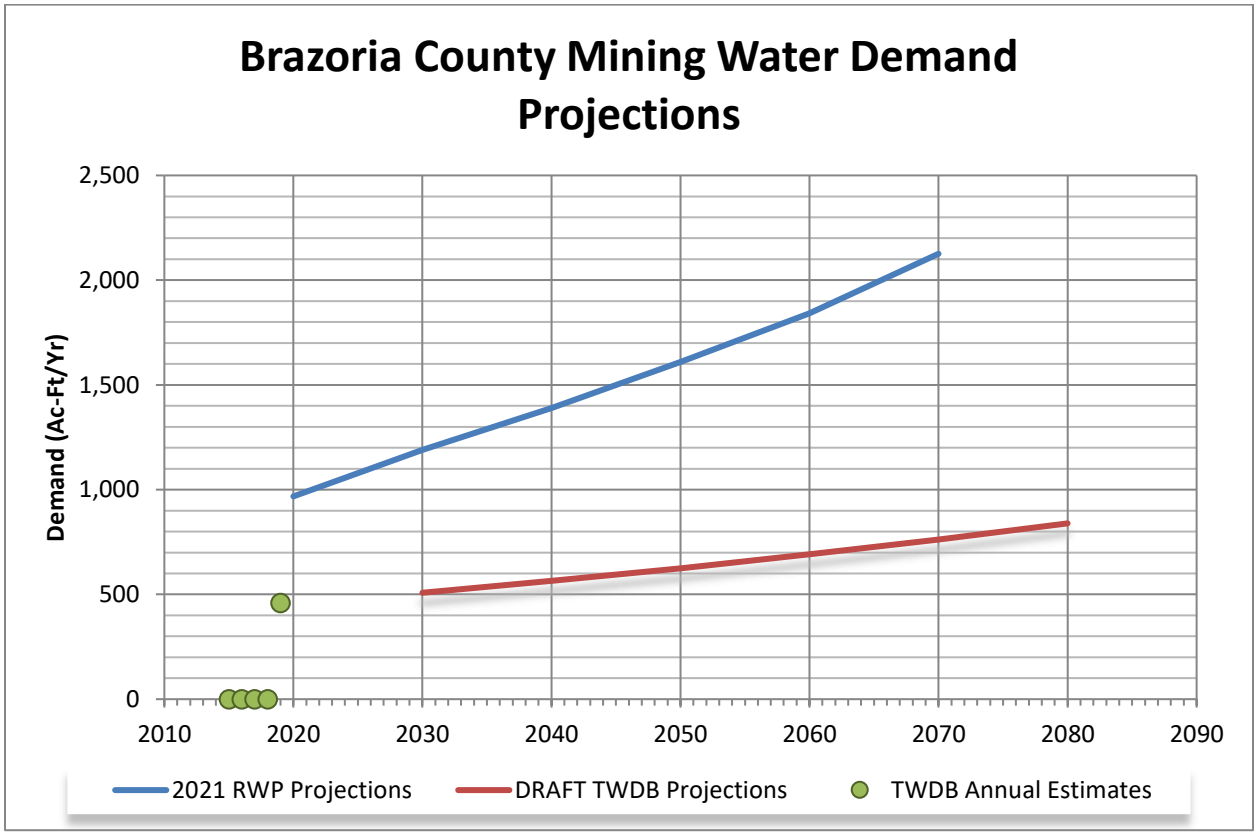
TWDB Draft 2026 RWP
Mining Water Demand
Projections for Region H

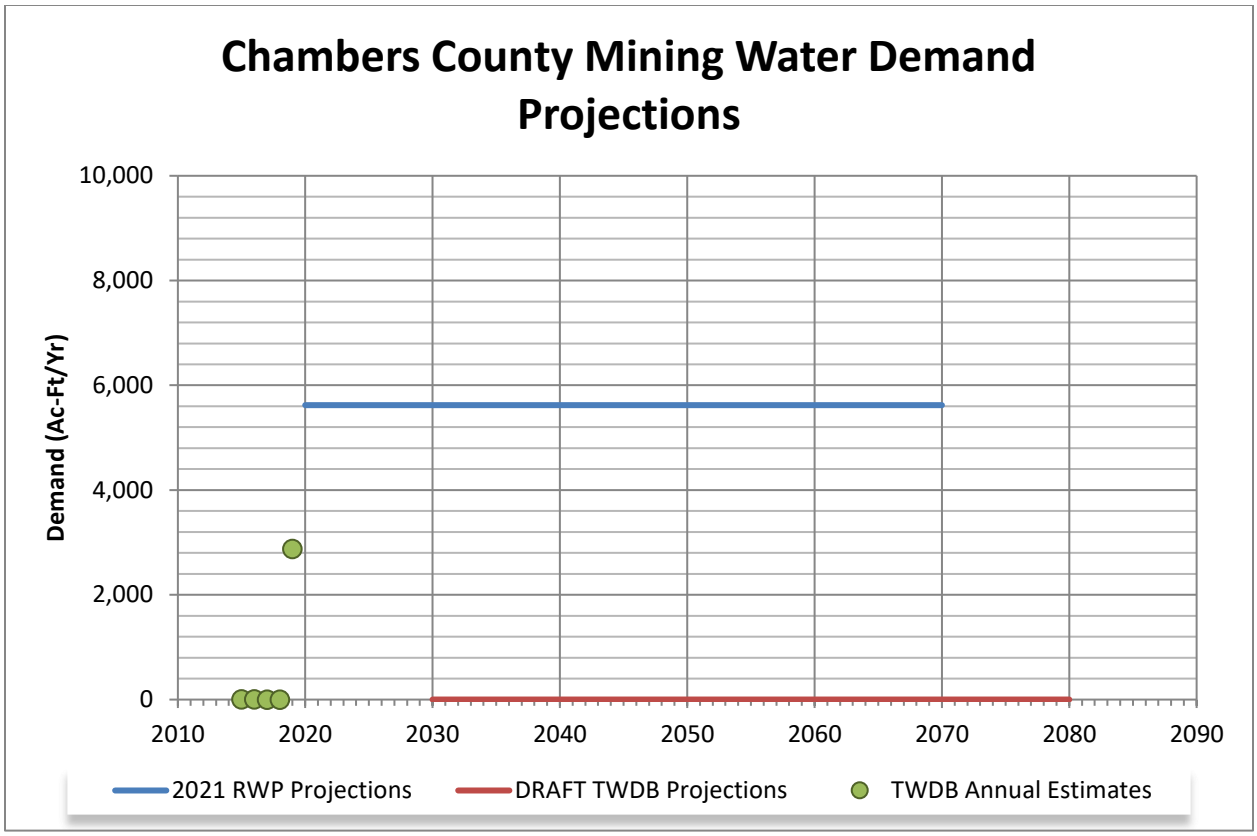
REGION H
Water Planning Group

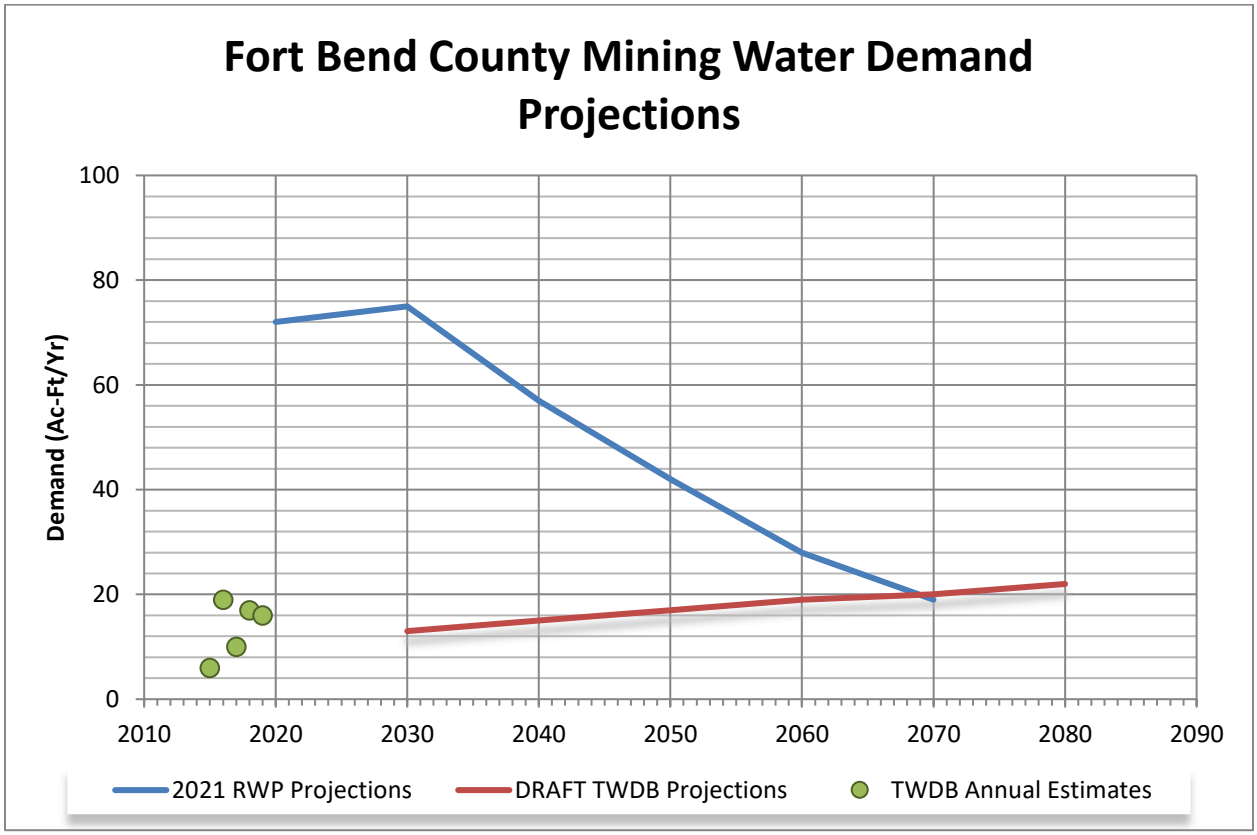


County	TWDB Draft Region H Mining Water Demand Projections (ac-ft)					
	2030	2040	2050	2060	2070	2080
Austin	73	81	91	102	113	126
Brazoria	508	565	625	691	762	839
Chambers	1	1	1	1	1	1
Fort Bend	13	15	17	19	20	22
Galveston	-	-	-	-	-	-
Harris	521	552	581	610	639	668
Leon	337	337	337	337	337	337
Liberty	187	205	223	241	257	273
Madison	975	975	975	975	975	975
Montgomery	32	36	41	47	54	62
Polk	26	27	28	29	30	30
San Jacinto	56	56	56	56	56	56
Trinity	9	9	9	9	9	9
Walker	73	73	73	73	73	73
Waller	109	127	145	166	188	211
Total	**2,920**	**3,059**	**3,202**	**3,356**	**3,514**	**3,682**

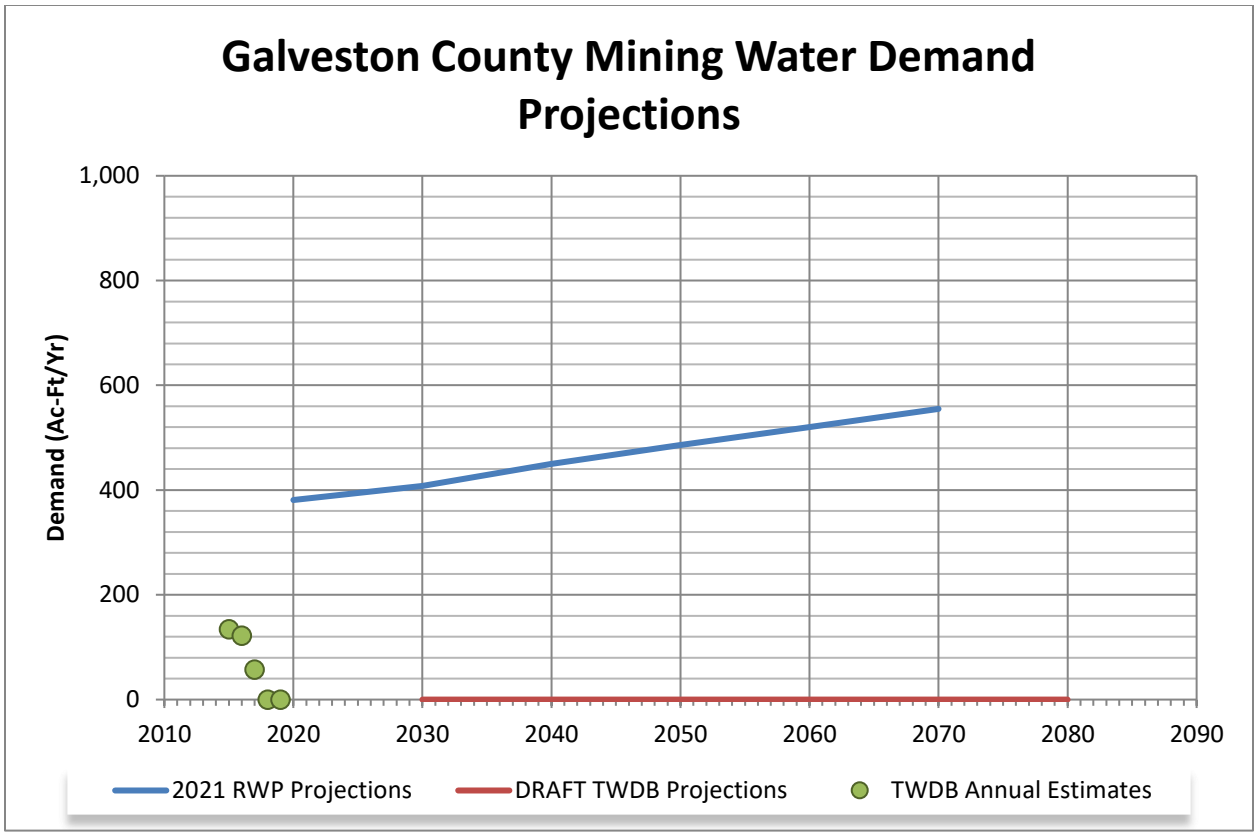

Austin County Mining Water Demand Projections
Demand (Ac-Ft/Yr)
500
400
300
200
100
0
2010
2020
2030
2040
2050
2060
2070
2080
2090
2021 RWP Projections
DRAFT TWDB Projections
TWDB Annual Estimates

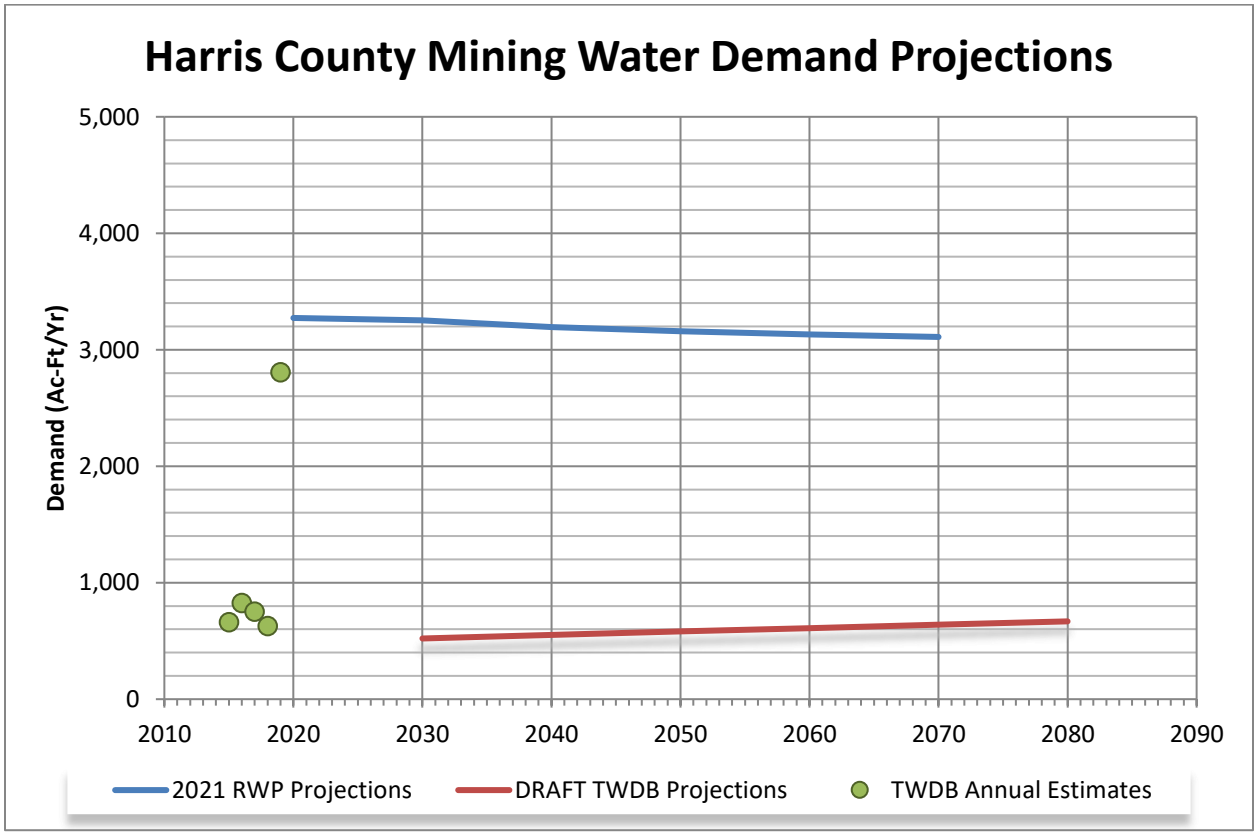

Brazoria County Mining Water Demand Projections
Demand (Ac-Ft/Yr)
2,500
2,000
1,500
1,000
500
0
2010
2020
2030
2040
2050
2060
2070
2080
2090
2021 RWP Projections
DRAFT TWDB Projections
TWDB Annual Estimates



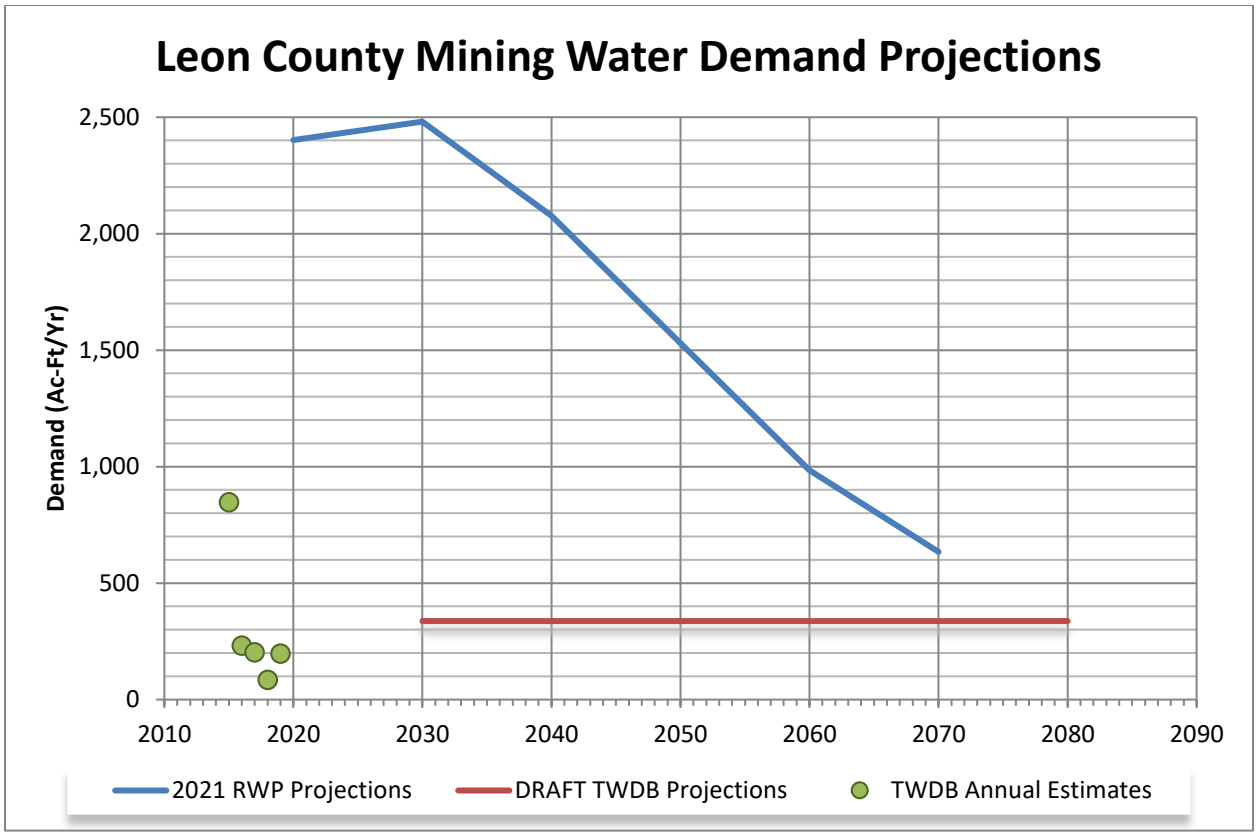


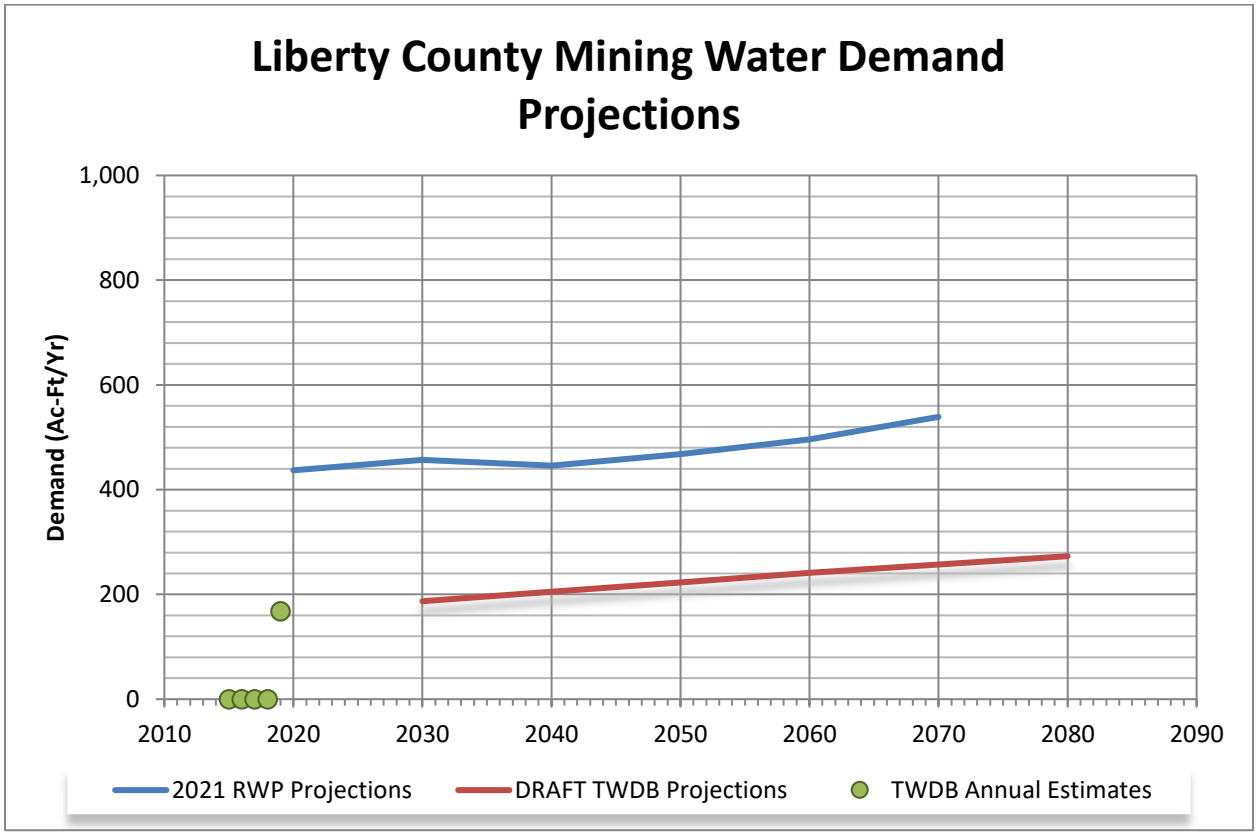
REGION H
Water Planning Group

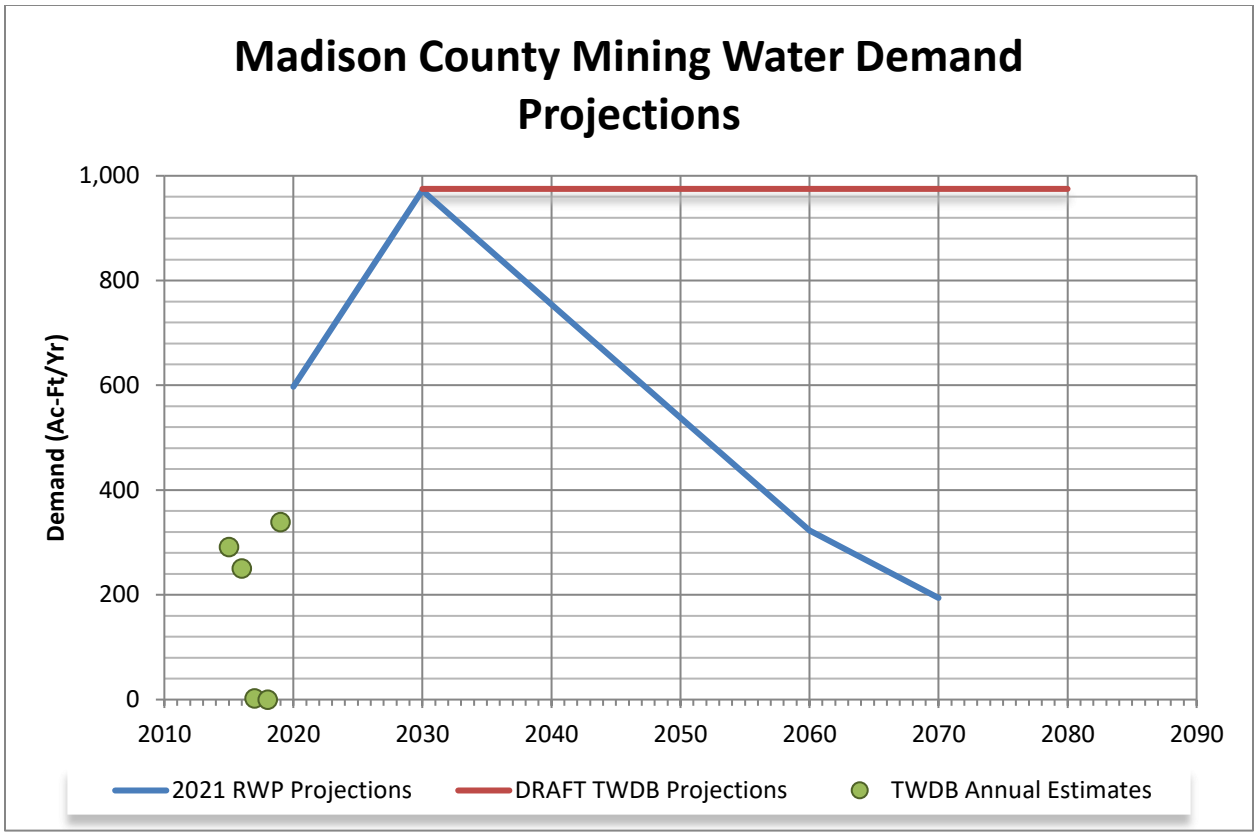


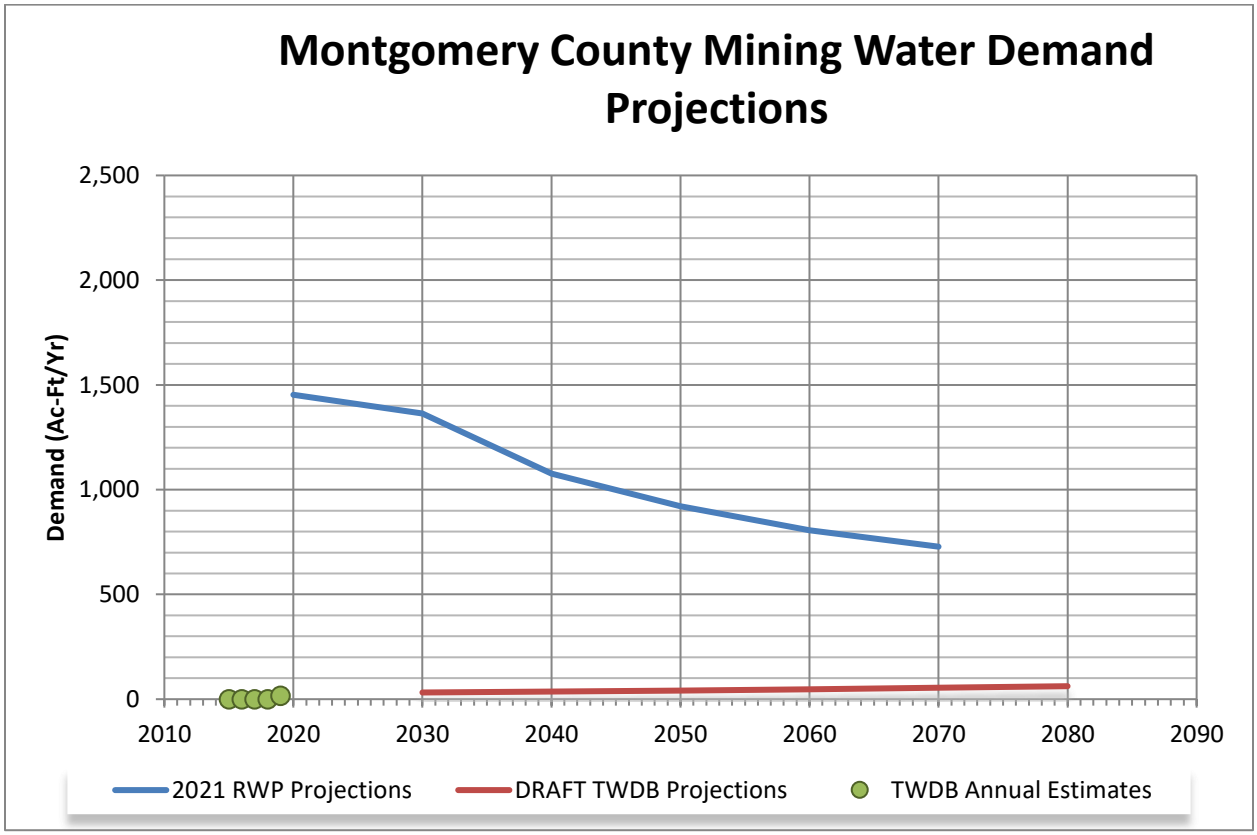


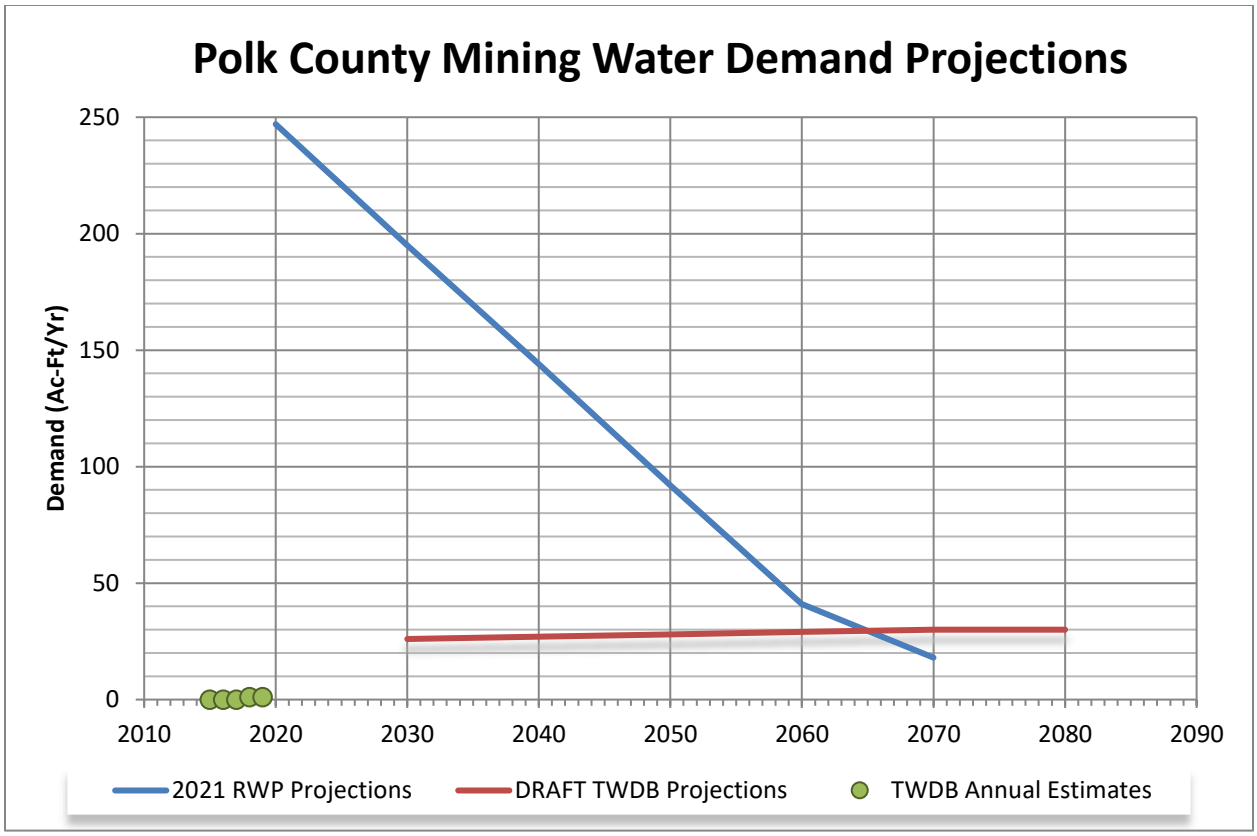
REGION H
Water Planning Group

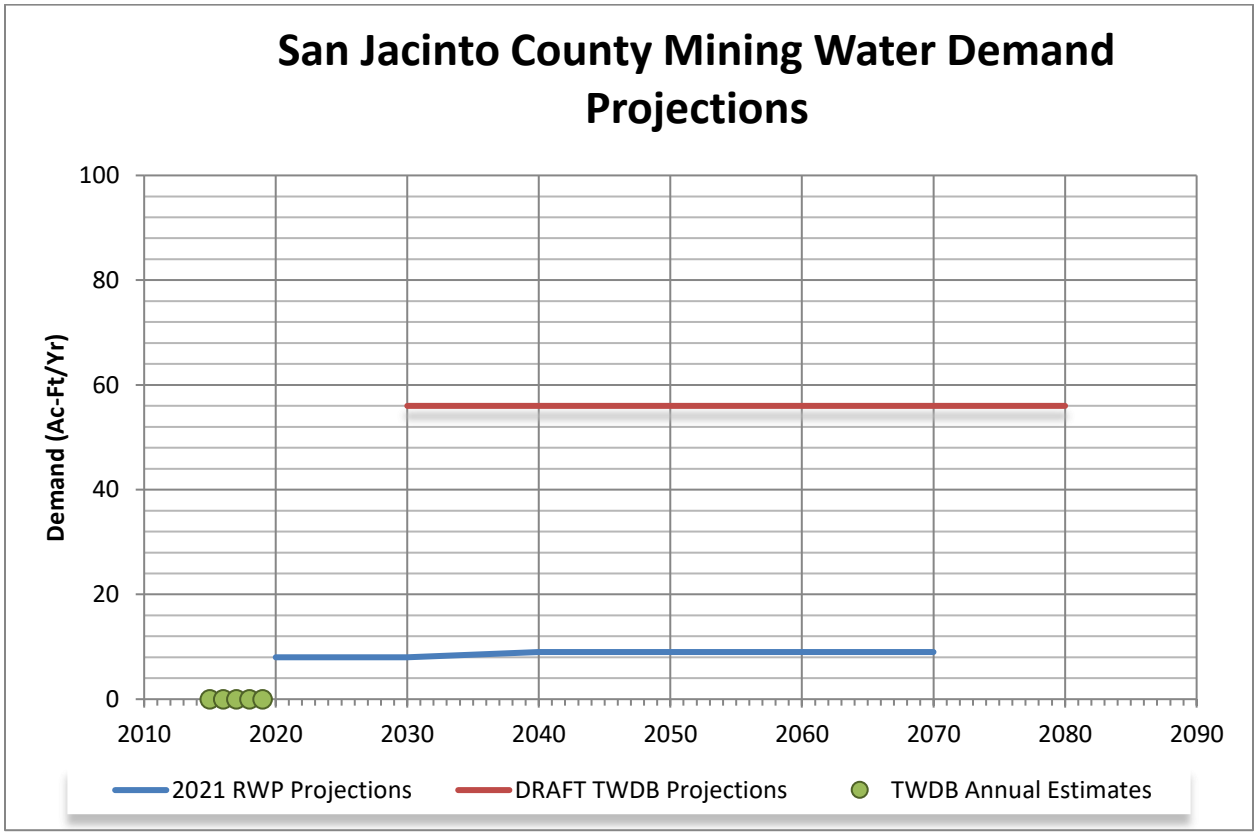

Leon County Mining Water Demand Projections
Demand (Ac-Ft/Yr)
2,500
2,000
1,500
1,000
500
0
2010
2020
2030
2040
2050
2060
2070
2080
2090
2021 RWP Projections
DRAFT TWDB Projections
TWDB Annual Estimates

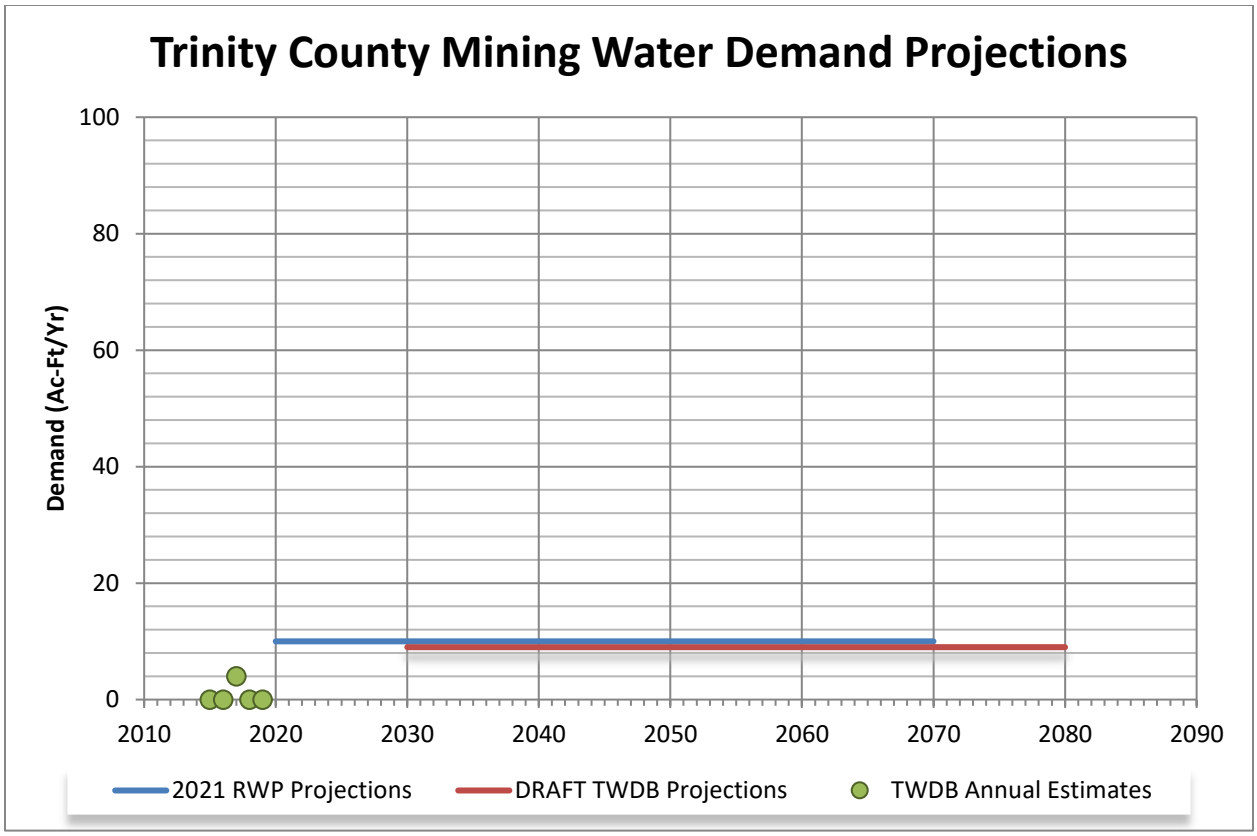

Liberty County Mining Water Demand Projections
Demand (Ac-Ft/Yr)
1,000
800
600
400
200
0
2010
2020
2030
2040
2050
2060
2070
2080
2090
2021 RWP Projections
DRAFT TWDB Projections
TWDB Annual Estimates

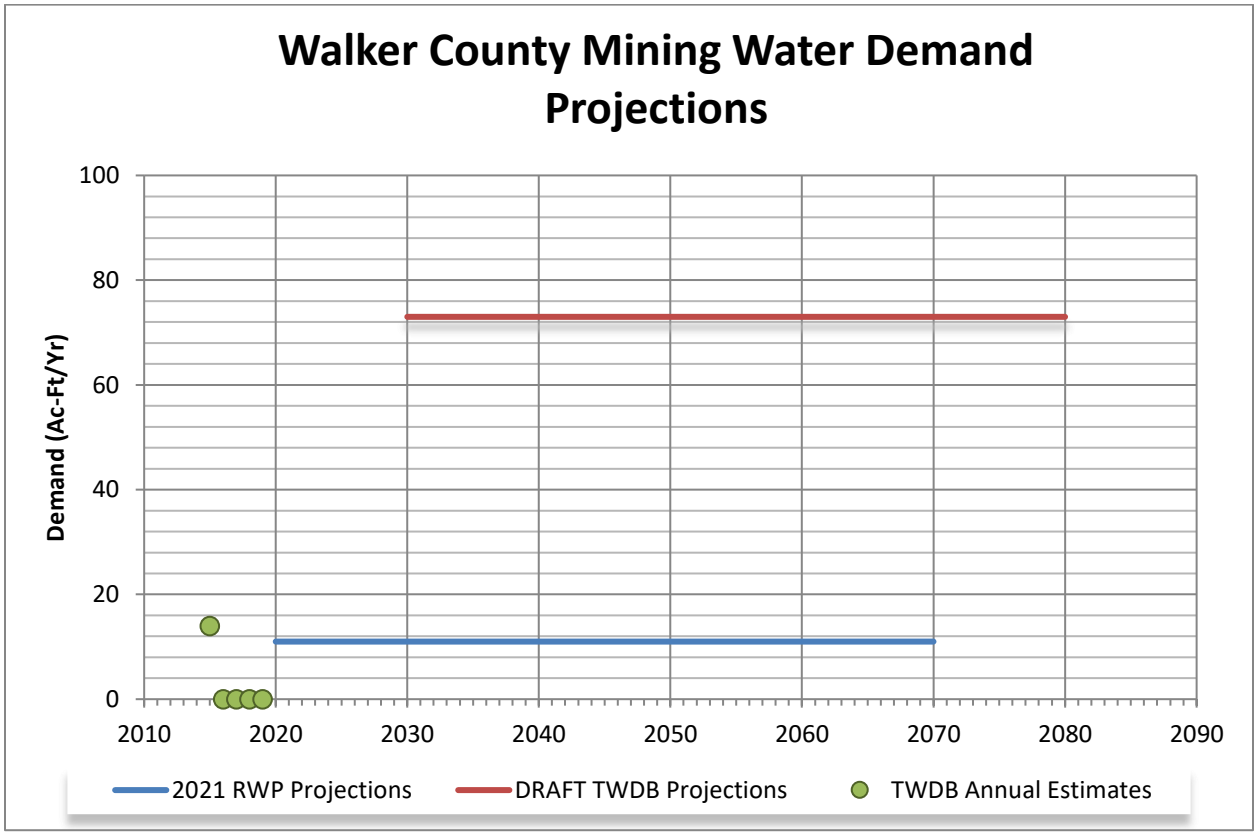

Madison County Mining Water Demand Projections
Demand (Ac-Ft/Yr)
1,000
800
600
400
200
0
2010
2020
2030
2040
2050
2060
2070
2080
2090
2021 RWP Projections
DRAFT TWDB Projections
TWDB Annual Estimates

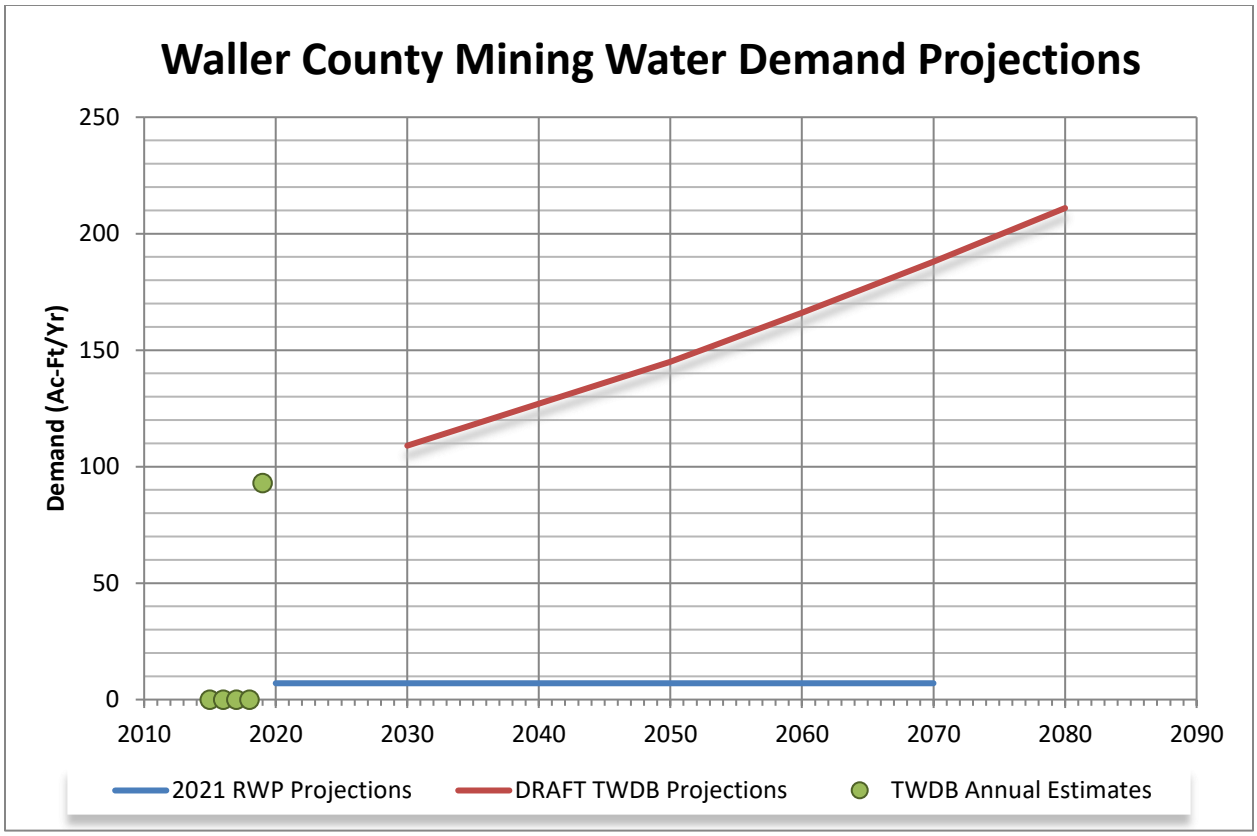

Montgomery County Mining Water Demand Projections
Demand (Ac-Ft/Yr)
2,500
2,000
1,500
1,000
500
0
2010
2020
2030
2040
2050
2060
2070
2080
2090
2021 RWP Projections
DRAFT TWDB Projections
TWDB Annual Estimates


Polk County Mining Water Demand Projections
Demand (Ac-Ft/Yr)
250
200
150
100
50
0
2010
2020
2030
2040
2050
2060
2070
2080
2090
2021 RWP Projections
DRAFT TWDB Projections
TWDB Annual Estimates


San Jacinto County Mining Water Demand Projections
Demand (Ac-Ft/Yr)
100
80
60
40
20
0
2010
2020
2030
2040
2050
2060
2070
2080
2090
2021 RWP Projections
DRAFT TWDB Projections
TWDB Annual Estimates


Trinity County Mining Water Demand Projections
Demand (Ac-Ft/Yr)
100
80
60
40
20
0
2010
2020
2030
2040
2050
2060
2070
2080
2090
2021 RWP Projections
DRAFT TWDB Projections
TWDB Annual Estimates


Walker County Mining Water Demand Projections
Demand (Ac-Ft/Yr)
100
80
60
40
20
0
2010
2020
2030
2040
2050
2060
2070
2080
2090
2021 RWP Projections
DRAFT TWDB Projections
TWDB Annual Estimates



REGION H
Water Planning Group

Agenda Item 6b

Receive update from the Consultant Team, Population Demands Committee, and Subsidence Districts regarding data and projections for the 2026 Region H RWP.

REGION H
Water Planning Group

Agenda Item 6b
Population Water Demand

- TWDB projections est. 02/2023
- Potential alignment with HGSD/FBSD Joint Regulatory Plan Review
  - Highly detailed local analysis
  - Enhanced spatial resolution
  - 9 Region H counties
- Ongoing coordination with RHWPG and TWDB

Agenda Item 6b
Population Water Demand

Population Demand

- Robert Istre
- Ivan Langford
- Marvin Marcell (chair)
- Byron Ryder
- Mike Turco

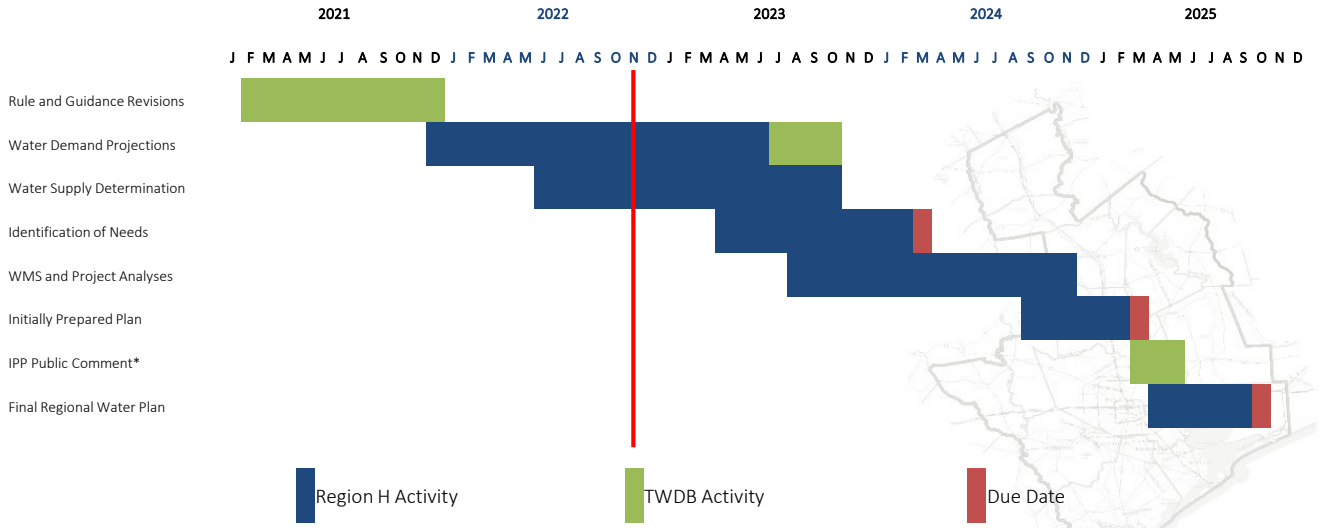
- Detailed examination of projections
- Translation of JRPR projections to WUGs
- Coordination with:
  - TWDB
  - HGSD / FBSD
  - RWPG
- Revision requests due August 11, 2023

Agenda Item 7a

Receive update regarding the schedule and milestones for the development of the 2026 Region H RWP.

REGION H
Water Planning Group

Agenda Item 7a
2026 RWP Schedule



*Region H accepts public comment throughout the planning cycle and at each RWPG and committee meeting.

Agenda Item 7a
2026 RWP Schedule

Date	Scheduled Events/Tasks
11/2022	RWPG Meeting
02/2023	RWPG Meeting
02/2023	Draft Population and Municipal demand projections released
07/2023	Non-municipal adjustment requests due to TWDB
08/2023	Municipal projection review concludes / requests due to TWDB
10/2023	TWDB adoption of projections

Agenda Item 7b

Receive update from liaisons to other groups.

REGION H
Water Planning Group

Agenda Item 7b
Liaison Updates

Region C	Brazos G	Region 6	Region 8
Kevin Ward	Zach Holland	Brandon Wade	Glenn Lord

IPC / Chairs	GMA 12	GMA 14	Other
Mark Evans	David Bailey	Gary Ashmore	RWPG Members

Agenda Item 7d

Agency communications and general information.

REGION H
Water Planning Group

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
DUE: 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
DUE: RWPGs request revisions for non-municipal demand projections	July 14, 2023
DUE: RWPGs request revisions for population and municipal demand projections	August 11, 2023
TWDB Board Meeting to Adopt Projections	Fall 2023
DUE: 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

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, 86th 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, 87th 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, 87th 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, 87th 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

Texas Water Development Board

Regional Water Planning Group Member Overview

Sixth Cycle of Regional Water Planning

Water Supply Planning Division
Regional Water Planning

Texas Water Development Board **September 2022**

Table of Contents

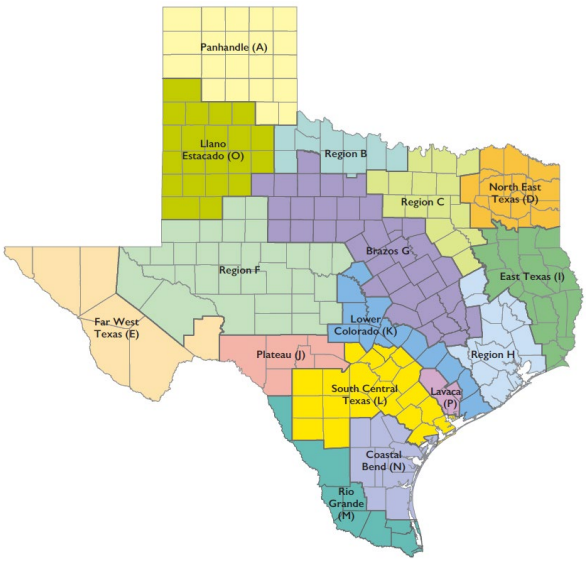
1 Background on the regional water planning process

The goal of Texas' water planning process is to ensure that we have adequate water supplies in times of drought. Water is Texas' most precious natural resource and is routinely impacted during recurring periods of drought. Texas has a long history of drought, and there is no sign of that pattern changing; in fact, recent droughts remind us that more severe drought conditions could occur in the future.

In response a severe statewide drought (1950-1957), the Texas Legislature initiated the state's water planning efforts with the passage of the Water Planning Act of 1957, which assigned the responsibility of water planning on a statewide level to the Board of Water Engineers. Statewide water planning was assigned to the Texas Water Development Board (TWDB) in 1965. Between 1961-1997, six state-level water plans were developed.

Following intense drought conditions in the mid-1990s, the Texas Legislature passed Senate Bill 1 in 1997 to improve the development and management of the state's water resources. Senate Bill 1 established the regional water planning process based on a bottom-up approach to encourage involvement by those directly responsible for providing water and affected by water supply.

FIGURE 1 - REGIONAL WATER PLANNING AREAS



With extensive stakeholder input, the TWDB established the 16 regional water planning areas (RWPAs) (**Figure 1**). Each RWPA has its' own regional water planning group (RWPG) which coordinates the water planning process. Each RWPG is made up of an average of about 20 voting members that represent the following statutorily required interest group categories:

- public
- counties
- municipalities
- industry
- agriculture
- environment
- small business
- electric-generating utilities
- river authorities
- water districts
- water utilities
- groundwater management areas

Every five years, each RWPG develops and adopts a 50-year water supply plan. The TWDB considers the 16 regional water plans (RWPs) for approval and incorporates information from those plans and other sources to produce the corresponding state water plan (SWP). From 1997 to the present, five sets of regional and state water plans have been developed.

All planning group work must be performed, and all deadlines must be met in accordance with statute, agency rules, and the grant contracts with the TWDB. RWPGs conduct all business during open meetings in a transparent and participatory manner. Public involvement helps direct planning efforts.

2 Key roles and responsibilities

The overarching goal of each RWPG is to produce an RWP covering a 50-year planning horizon every five years. There are several entities that are involved in the regional water planning process, and each has a role to play and responsibilities to carry out. These entities include RWPG voting members, RWPG non-voting members, RWPG liaisons, the RWPG's sponsors, technical consultants, and the TWDB (**Figure 2**). Stakeholders, including the public and project sponsors (water providers responsible for implementing the projects recommended in the plans), also play a crucial, participatory role along the way.

FIGURE 2 - REGIONAL WATER PLANNING PARTICIPANTS

2.1 RWPG member roles and responsibilities

2.1.1 Voting member role and responsibilities

The core functions of regional water planning process revolve around the RWPG voting members—the variety of expertise they bring to the planning group, and the decisions that they make in developing their plans. Each voting member is appointed to represent one of the 12 statutorily required interest group categories identified in Section 1. RWPGs may add additional interest categories as they see fit; examples include real estate, travel and tourism, economic development, higher education, and recreation.

Key responsibilities of voting members include the following:

- Attend meetings and represent their interest category in the planning process
- Become familiar with and follow the bylaws of their respective RWPG
- Become informed on regional water planning rules and guidelines as well as topics on which RWPG voting members are asked to make decisions
- Review meeting materials in advance of meetings
- Actively participate in, and contribute supporting information to, the development of the RWP and take into consideration the water needs of all interests in the region
- Engage or solicit information relevant for the interest category they represent in the region
- Consider local plans developed by local entities when developing the RWP
- Participate in directing work the technical consultants perform on the RWPG's behalf to develop the RWP
- Review and provide feedback on draft plan content developed by consultants
- Coordinate with other RWPGs for data consistency, opportunities for shared water management strategies and projects, and conflict avoidance where possible

- Ensure adoption of an RWP that meets all requirements by the statutory deadline
- Complete the Office of Attorney General's Open Meetings Act and Public Information Act training

2.1.2 Non-voting member role and responsibilities

RWPGs include non-voting members from the TWDB; Texas Department of Agriculture (TDA); Texas Parks and Wildlife Department (TPWD); State Soil and Water Conservation Board; a liaison from each adjacent RWPG; and a representative of any entity that holds surface water rights of 1,000 acre-feet per year in the RWPA, whose headquarters are in another RWPA.

Key responsibilities of non-voting members include the following:

- Attend meetings to represent and act as a liaison for their affiliated entity in the regional water planning process
- Provide input on their areas of expertise and become familiar with planning issues
- Support the voting membership in the development of the RWP

2.1.3 Liaison role and responsibilities

Planning rules require RWPGs to assign liaisons to all adjacent RWPGs. RWPG liaisons serve as voting members in their primary region and as non-voting members of the adjacent region to which they are assigned as a liaison.

Responsibilities of RWPG liaisons can vary by region, but generally include the following:

- Attend neighboring RWPG meetings, as assigned, and act as a liaison for their primary RWPG
- Become informed on planning activities in their assigned region(s)
- Provide updates at meetings, as requested, on planning activities in their primary or assigned liaison regions
- Look for opportunities for interregional coordination and collaboration

2.2 RWPG Sponsor role and responsibilities

RWPGs must designate a political subdivision to act as the representative of the RWPG and oversee the administration of the regional water planning process on behalf of the RWPG, i.e the Sponsor of the RWPG. Examples of sponsors for RWPGs include river authorities, municipalities, and councils of government.

Key responsibilities of the RWPG sponsors include the following:

- Apply for and receive grant funds from the TWDB for the development of an RWP or a plan revision, pursuant to 31 Texas Administrative Code (TAC) §355 and §357
- Execute the primary regional water planning grant contract with the TWDB
- Procure the technical consultant that will assist the RWPG with plan development in accordance with Texas Government Code Chapter 2254
- Execute a subcontract with the technical consultant(s)
- Administer regional water planning contracts with TWDB and subcontracts with consultants, including invoicing and payment for eligible activities
- Organize the RWPG meeting locations, public notices, agendas, meeting presentations, handouts, meeting minutes, and new member solicitations

- Ensure all regular, committee, and subcommittee meetings of the RWPG are posted and held in accordance with the Texas Open Meetings Act, the Texas Public Information Act, and regional water planning statutes and rules
- Maintain the RWPG website and member contact information

2.3 Technical consultant roles and responsibilities

Technical consultants are procured at the beginning of each planning cycle to assist the planning group in the development of the RWP. The RWPG sponsor procures and enters into a contract with technical consultants on behalf of the RWPG.

Key responsibilities of technical consultants include the following:

- Enter into subcontracts with the sponsors on behalf of the RWPGs
- Perform the regional water planning contract scope of work tasks
- Receive direction from the RWPG and sponsors
- Present their work at RWPG meetings for consideration and approval
- Provide documentation of, and invoices for, their work to the sponsors
- Develop complete RWPs under direction of the RWPGs
- Populate data into the state water planning database
- Produce all final contract deliverables to be submitted to the TWDB, in accordance with statute, rule, and contract requirements
- Participate in RWPG meetings, committees, and sub-committees

2.4 Texas Water Development Board role and responsibilities

The TWDB is the agency designated by the Texas Legislature to provide technical and financial assistance to the regional water planning process. Each RWPG has an assigned regional water planner from the TWDB who serves as a non-voting member of the planning group and is the liaison between the agency and the planning groups, sponsors and indirectly, the consultants.

Key responsibilities of the TWDB regional water planners include the following:

- Serve as non-voting members of their assigned RWPGs
- Provide and clarify administrative and technical guidance and agency data to the RWPGs, sponsors, and consultants in the development of the RWPs
- Orient new members and facilitate communication
- Administer the TWDB contract with the RWPG sponsor
- Help to ensure that the final RWPs meet statute, rule, and contract requirements

The TWDB is also responsible for the following tasks related to regional water planning:

- Provide financial assistance to RWPGs in the development of the RWPs
- Adopt rules and guidance that govern the development and adoption of RWPs
- Consult with several state agencies prior to the adoption of final population and water demand projections, including the Texas Commission on Environmental Quality (TCEQ), the TDA, and the TPWD
- Review and update state water planning guidance principles at least every five years, in coordination with the TCEQ, the TDA, and the TPWD
- Review and update the designation of RWPAs at least every five years

- Review and approve RWPs that meet statute, rule, and contract requirements
- Maintain the state water planning databases
- Incorporate information from approved RWPs in the corresponding SWP
- Develop and adopt a comprehensive SWP every five years

2.5 Stakeholder role and responsibilities

Regional water planning stakeholders include water user groups, project sponsors (e.g., water providers), and the public. Stakeholders provide important information and direction throughout the planning process.

Key stakeholder responsibilities include the following:

- Provide local information and local water plans to the RWPG for consideration and incorporation into the RWP
- Water providers in the region are presented as 'sponsors' of projects in the regional water plans and are responsible for implementing the strategies and infrastructure projects recommended in the regional water plans
- Respond to RWPG surveys and requests for information
- Complete and submit required water use reports, water loss audits, conservation annual reports, water conservation plans, and drought contingency plans, as these reports and plans provide valuable data for the planning process
- Coordinate with the RWPG to ensure local information is accurately represented in the RWP
- Provide public comments throughout the planning cycle at RWPG meetings
- Review and provide comments on the draft RWP

3 How the planning process is funded

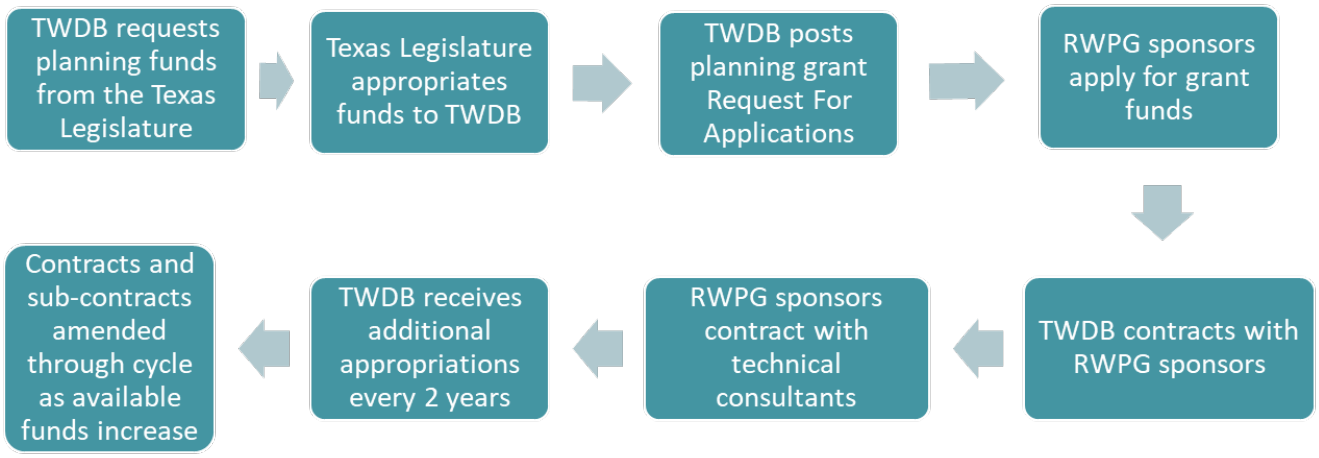
The five-year regional water planning process and development of the RWPs is funded through grants administered by the TWDB based on appropriations received from the Texas State Legislature. The overall process is illustrated in **Figure 3**. During each legislative session (every two years), the Texas Legislature appropriates funds that will be spent during the next biennium, and each session the TWDB requests funding for the regional and state water planning process.

Each regional water planning cycle, the sponsor must apply for grant funding through a Request for Applications issued by the TWDB. After regional water planning grant contract execution with the TWDB, the sponsor will be responsible for procuring and executing a subcontract with a technical consultant selected by the RWPG in accordance with the procurement requirements in Texas Government Code Chapter 2254.

Since regional water planning funds are appropriated every two years, the regional water planning contracts include an estimated total project cost that is the total anticipated funding amount for the entire five-year contract period. The contracts are then amended throughout the cycle to increase the amount of available (committed) funds per region, as the additional appropriated funds become available.

Regional water planning grant contracts and sub-contracts contain detailed information regarding eligible and ineligible expenses for the sponsors, consultants, and RWPG members.

FIGURE 3 - REGIONAL WATER PLANNING FUNDING PROCESS

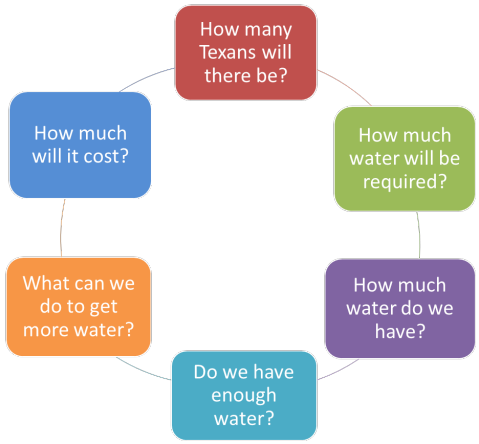


4 Regional water planning considerations and plan contents

To develop their RWP, RWPGs collect and evaluate information for their region and seek to answer the key planning questions outlined in **Figure 4**. RWPGs evaluate population projections, water demand projections, water availability, and existing water supplies. Each RWPG then identifies water needs (shortages) and recommends water management strategies and water management strategy projects to address those needs. RWPGs also consider the impacts and costs of their RWP.

The six categories of water use planned for include municipal, manufacturing, mining, irrigation, livestock, and steam-electric power generation. Data developed through the planning process for water user groups are broken-down geographically by region, county, and river basin.

FIGURE 4 – KEY PLANNING QUESTIONS



The key documents that form the legal framework hierarchy of Texas' state and regional water planning include statute, agency rules, and the contract and related guidance, in the following order:

1. Water Planning Statute - Texas Water Code §16.051 and §16.053
2. TWDB Water Planning Rules - 31 Texas Administrative Code Chapter 357 and Chapter 358
3. TWDB grant contract including contract boilerplate, scope of work, and guidance documents

It is recommended that RWPG members become familiar with these documents as they are the basis of the regional water planning effort.

It is also important to note that RWPGs are not regulatory entities and the information and policy recommendations presented in RWPs are not enforceable by the RWPGs. RWPs are high level, long-term water supply plans. Recommended water management strategies and projects included in an RWP may require additional detailed evaluations by the project sponsor prior to permitting and implementation.

4.1 Guidance principles and general considerations

TWDB rules include 28 guidance principles that guide development of the regional and state water plans. RWPs are required to be consistent with these guidance principles. TWDB rules also specify certain general considerations that RWPGs must take into account when developing the RWP including existing local, regional, and state water planning efforts when developing the RWP.

4.2 Regional water plan content and deliverables[1]

The sixth cycle of regional water planning consists of 10 tasks that are identified in the TWDB's regional water planning rules, guidelines, and contract scope of work. The RWPGs will be required to meet regularly to accomplish the following tasks:

1. Description of the regional water planning area
2. Projected population and water demands (quantification of projected population and water demand for all identified water user groups over a 50-year planning horizon)
3. Water supply analysis (evaluation of existing water supplies and source availability)
4. Identification of water needs (comparison existing water supplies and projected water demands to identify water supply needs—*a need is a potential shortage where a water demand cannot be met with existing supplies*), identification of infeasible water management strategies, and submittal of a technical memorandum
5. Identification and evaluation of potentially feasible water management strategies and recommendation of water management strategies and projects
6. Impacts of the RWP (evaluation of impacts of the RWP and description of how the plan is consistent with long-term protection of the state's water, agricultural, and natural resources).
7. Drought response information, activities, and recommendations
8. Recommendations regarding any regulatory, administrative, or legislative changes relevant to the regional water planning process; recommendations regarding unique stream segments and unique reservoir sites
9. Implementation and comparison to the previous RWP (status of implementation of the region's previously recommended water management strategies and projects and summary of how the RWP differs from the previously adopted RWP)
10. Public participation and plan adoption (adoption of the plan, ensuring the required level of public participation in this process, and submittal of the adopted plan to the TWDB for approval by the deadline disseminated by the TWDB)

TWDB's regional water planning grant contract scope of work and guidance documents provide further details for how to meet technical data and information requirements for each task. These requirements are important because they facilitate the TWDB incorporation of the 16 RWPs into the SWP. The regional water planning grant contract also includes several required deliverables described below.

Revision requests to modify the draft population and water demand projections
Revision requests to modify the draft population and water demand projections is the first deliverable of each planning cycle. Draft population and water demand projections are initially developed by the TWDB and then provided to the RWPGs for an opportunity to review and request revisions (with

[1] For full details, see 31 TAC §357-358 and the General Guidelines for Sixth Cycle of Regional Water Plan Development.

acceptable justification and documentation). Local input during the review process is important for improving the accuracy of the projections, which are the backbone of data in the planning process.

All requests to adjust draft projections must be submitted to the TWDB along with associated quantified data. If adequate justification is provided, draft projections may be adjusted by the TWDB in consultation with TDA, TCEQ, and TPWD. The TWDB will then incorporate approved adjustments to the projections prior to the Board's consideration of adoption of the population and water demand projections. The RWPGs must use the Board-adopted projections when preparing their RWPs.

Technical Memorandum

The technical memorandum is a midpoint deliverable which presents a preliminary analysis of population, water demand projections, water availability, existing water supply, and water needs. The technical memorandum also includes the following:

- The RWPG's process to identify potentially feasible water management strategies and a list of all potentially feasible water management strategies identified to date
- A summary of the RWPG's interregional coordination efforts to date
- A list of infeasible water management strategies and projects, or a statement that no infeasible water management strategies and projects were identified by the RWPG
- Declaration of intent to pursue simplified planning in off-census planning cycles

Initially Prepared Plan

Prior to adoption of the final RWP, the RWPGs must submit a draft plan, the Initially Prepared Plan (IPP), concurrently to the TWDB and the public for review. There is a significant public comment period associated with the IPP that allows time for the draft plan to be reviewed by the public. The RWPG must also present the IPP for comment at a public hearing.

The public comment period is 60 days for the public and state and federal agencies and 120 days for the TWDB. During the 120-day comment period, the TWDB thoroughly reviews the plans to ensure they meet statute, rule, and contract requirements. All comments received on the IPP are required to be addressed in the final RWP.

Within 60 days of submitting the IPP to the TWDB, RWPGs must also notify the TWDB and other affected RWPGs of potential interregional conflicts. Negotiated resolutions or TWDB resolutions regarding interregional conflicts will be incorporated into the final RWPs.

Final Regional Water Plan

The final, adopted RWP must meet requirements outlined in statute, administrative rules, and TWDB planning grant contract scope of work and guidance documents. The final RWP must include a copy of TWDB comments on the IPP and summaries of all other comments received with a response by the RWPG explaining how the plan was revised or why changes were not warranted. The final RWP must submitted to the TWDB for approval. RWPs approved by the TWDB Board are then incorporated into the SWP.

State Water Planning Database

RWPGs are required to populate the state water planning database with data generated during development of the RWP. Planning groups rely on this database to produce portions of their regional water plans, including calculating water needs for each water user group, meeting certain data reporting requirements, and to help avoid over-allocating water sources. Data from the state water planning database is used to develop the state water plan and interactive state water plan.

4.3 Public notice and participation

The planning process is a transparent process that includes many opportunities for public input throughout the planning cycle. Each RWPG and any committee or subcommittee of the group are subject to the Open Meetings Act and Public Information Act. In addition to meeting the public notice requirements of the Open Meetings Act, RWPGs must follow public notice requirements outlined in the TWDB's regional water planning rules. Public notice requirements vary depending on the activity or action to be taken at a RWPG meeting. A link to the TWDB's public notification quick reference guide is included in Section 5.

Notable public input opportunities with specific notice requirements that every RWPG must adhere to include the following:

- Pre-planning public meetings to obtain input on development of the RWP
- Approval of the process for identifying potentially feasible water management strategies and presenting the analysis of infeasible water management strategies
- Public hearing and written comment periods on the IPP
- Approval and submission of the IPP, final plan, and plan amendments

5 TWDB regional water planning resources

The TWDB provides a wide variety of online information relevant to the regional water planning process. Below are links to resources that RWPG voting and non-voting members should become familiar with:

General Regional Water Planning Resources

- Regional Water Planning Main Page
- New RWPG Member Page
- Regional Water Planning Educational Documents
- Regional Water Planning FAQs
- Useful Water Planning Links and Resources
- Water Planning Rules and Texas Statute Reference Pamphlet
- Regional Water Planning Public Notification Quick-Reference Document

Current Planning Cycle Documents

- RWPG Meeting Schedule
- Sixth Cycle Working Documents Page
- 2026 RWP Draft Demand Projections Data Dashboard

Regional and State Water Plans

- Approved 2021 Regional Water Plans
- 2022 State Water Plan
- 2021 Regional Water Plan Summaries
- Interactive State Water Plan

TWDB Agency Information and Planning Staff Contacts

- Agency Program Information Sheets
- Water Supply Planning Staff Contact List

Please feel free to ask your region's TWDB regional water planner for assistance navigating any of the resources provided above.

6 Terminology primer

Below are a few key terms frequently used in the regional water planning process. A more extensive definitions list can be found at the beginning of the regional water planning rules (31 TAC §357.10).

- **Availability** – The maximum amount of raw water that could be produced by a source during a repeat of the drought of record, regardless of whether the supply is physically connected to, or legally accessible by, water user groups.
- **Drought of Record (DOR)** – The period of time when historical records indicate that natural hydrological conditions would have provided the least amount of water supply.
- **Existing Supply** – The maximum amount of water that is physically and legally accessible from existing sources for immediate use by a water user group under a repeat of drought of record conditions.
- **Major Water Provider (MWP)** – A water user group or a wholesale water provider of particular significance to the region's water supply as determined by the RWPG. This may include public or private entities that provide water for any water use category.
- **Unmet Need** – The portion of an identified water need that is not met by recommended WMSs.
- **Water Demand** – The volume of water required to carry out the anticipated domestic, public, and/or economic activities of a water user group during drought conditions.
- **Water Management Strategy (WMS)** – A plan to meet a need for additional water by a discrete water user group, which can mean increasing the total water supply or maximizing an existing supply, including through reducing demands. A WMS may or may not require an associated WMSP(s) to be implemented.
- **Water Management Strategy Project (WMSP)** – A water project that has a non-zero capital cost and that when implemented, would develop, deliver, and/or treat additional water supply volumes, or conserve water for water user groups or wholesale water providers. One WMSP may be associated with multiple WMSs.
- **Water Need** – A potential water supply shortage based on the difference between projected water demands and existing water supplies. Needs can often be met by recommended strategies in the plans.
- **Water User Group (WUG)** – Identified user or group of users for which water demands and existing water supplies have been identified and analyzed and plans developed to meet water needs.
- **Wholesale Water Provider (WWP)** – Any person or entity, including river authorities and irrigation districts, that delivers or sells water wholesale (treated or raw) to WUGs or other WWPs or that the RWPG expects or recommends to deliver or sell water wholesale to WUGs or other WWPs during the period covered by the plan. The RWPGs shall identify the WWPs within each region to be evaluated for plan development.

High-level summary of changes from the *First Amended General Guidelines for Development of the 2026 Regional Water Plans* (Exhibit C) as compared to the *Second Amended General Guidelines for Fifth Cycle of Regional Water Plan Development (2021 Regional Water Plans)*

General document

- Document structure reorganized into three (3) main sections: 1) Introduction, 2) Scope of work task specific guidelines, and 3) Appendix
- Removed guidance for the infrastructure financing survey and project prioritization (these tasks are no longer in the scope of work for regional water planning)
- Provided template tables in an accompanying Excel file rather than included in the pdf document.

Section 2.3: Water availability and existing supplies

- Moved water management strategy (WMS) availability guidance to Section 2.5.
- Clarified that the methodology used for calculating anticipated sedimentation rate and revising the area-capacity rating curves must be described in the Technical Memorandum, Initially Prepared Plan (IPP), and final regional water plan (RWP).
- Clarified that reuse availability should be presented as a separate subsection within Chapter 3 of the IPP and final RWP and that the subsection must describe the data sources and methodology used to calculate reuse availability.
- Clarified that planning groups are strongly encouraged to consider the physical compatibility with adjacent or nearby desired future conditions (DFC)s of the regional aquifers in the development of RWPG-estimated groundwater availability. TWDB's DFC compatible water volumes for non-relevant groundwater sources developed from modeled available groundwater runs will be prepopulated into the state water planning database (DB27) by the TWDB.
- Clarification on the required materials to be submitted for a modeled available groundwater peak factor request, including the requirement to provide adjusted model well files.
- Added expectations and submittal requirements for groundwater availability determined for an regional water planning group (RWPG) with no groundwater conservation districts within its planning area.
- Clarified plan documentation and reporting requirements for water availability if hydrologic variances are approved.
- Provided updated examples of surface water hydrologic variances associated with extended hydrology and future projected reservoir inflow and reservoir evaporation.
- New requirement to complete a hydrologic variance checklist for surface water hydrologic variance requests.
- Clarified additional reporting requirements for existing supplies.

Section 2.5: Water management strategies and water management strategy projects

- New sub-sections that provide guidance for specific WMS types.
- Guidance included to address requirements from House Bill (HB) 807 (Aquifer Storage and Recovery (ASR) assessments for significant needs and GPCD goals).
- Clarified that the TCEQ has not added the Chapter 298 environmental flow standards to all water availability models (WAM) for basins with adopted standards. In some basins, the RWPG may have to add the relevant Chapter 298 environmental flow standards to the WAM to evaluate a WMS. The RWPG must document what steps were taken to account for environmental flows.
- Clarified information that must be provided to review for a source request associated with a brackish groundwater production zone.
- Clarified that ASR WMSs must report expected percent of recovery.
- Clarified that water conservation *measures* must be included for any WUG with an identified need to which TWC §11.1271 and TWC §13.146 apply.
- New requirement that conservation WMSs must be separated into either a *Conservation – water loss mitigation* or *Conservation – water use reduction* WMS type.
- Clarified that drought management *measures* must be included for each WUG with an identified need to which TWC §11.1272 applies.
- New requirement to include a sub-section documenting the status of certain recommended WMS types.
- Clarification on costing allowances for direct reuse WMSs.
- Previously supplemental guidance on developing the scope of work for region-specific WMSs incorporated into document.

Section 2.7: Drought response information, activities, and recommendations

- New guidance provided for planning groups to optionally address droughts worse than the drought of record.
- New requirement to include sub-section addressing 1) how the RWPG has incorporated planning for uncertainty in its RWP (if applicable), 2) how the RWPG is currently planning for droughts worse than the drought of record (if applicable) and 2) what measures are not included in the plan but may be available for water providers to address a drought worse than the drought of record.
- Guidance included to address requirements from HB 807 (unnecessary or counterproductive drought response).
- Clarification that planning groups must identify rather than recommend drought response triggers and actions for existing sources in the region.
- Clarification on existing and potential emergency interconnect minimum requirements.

Section 2.9: Implementation and comparison to the previous regional water plan

- Clarification on reduced content for the implementation survey.

- Guidance included to address requirements from HB 807 (RWPA's progress in achieving economies of scale).

Section 2.10: Adoption of plan and public participation

- Guidance included to document and present interregional coordination efforts during the planning cycle.

Section 2.11: Infeasible water management strategies

- New guidance included to address requirements from Senate Bill (SB) 1511 regarding the identification of infeasible water management strategies in the previous plan and amendments to remove infeasible water management strategies from the previous RWP.

Section 2.13: Deliverable requirements

- Clarification on deliverable requirements for the Technical Memorandum, IPP, and final RWP.

Section 2.14: Data provisions and data reporting

- New guidance that the IPPs and final RWPs must include the required DB27 data reports by reference in the Executive Summary to TWDB's Database Reports application, including instructions on how the public may access such reports.