

Lavaca Regional Water Planning Group



Regular Planning Group Meeting

May 6, 2024

Jaime Burke, Black & Veatch



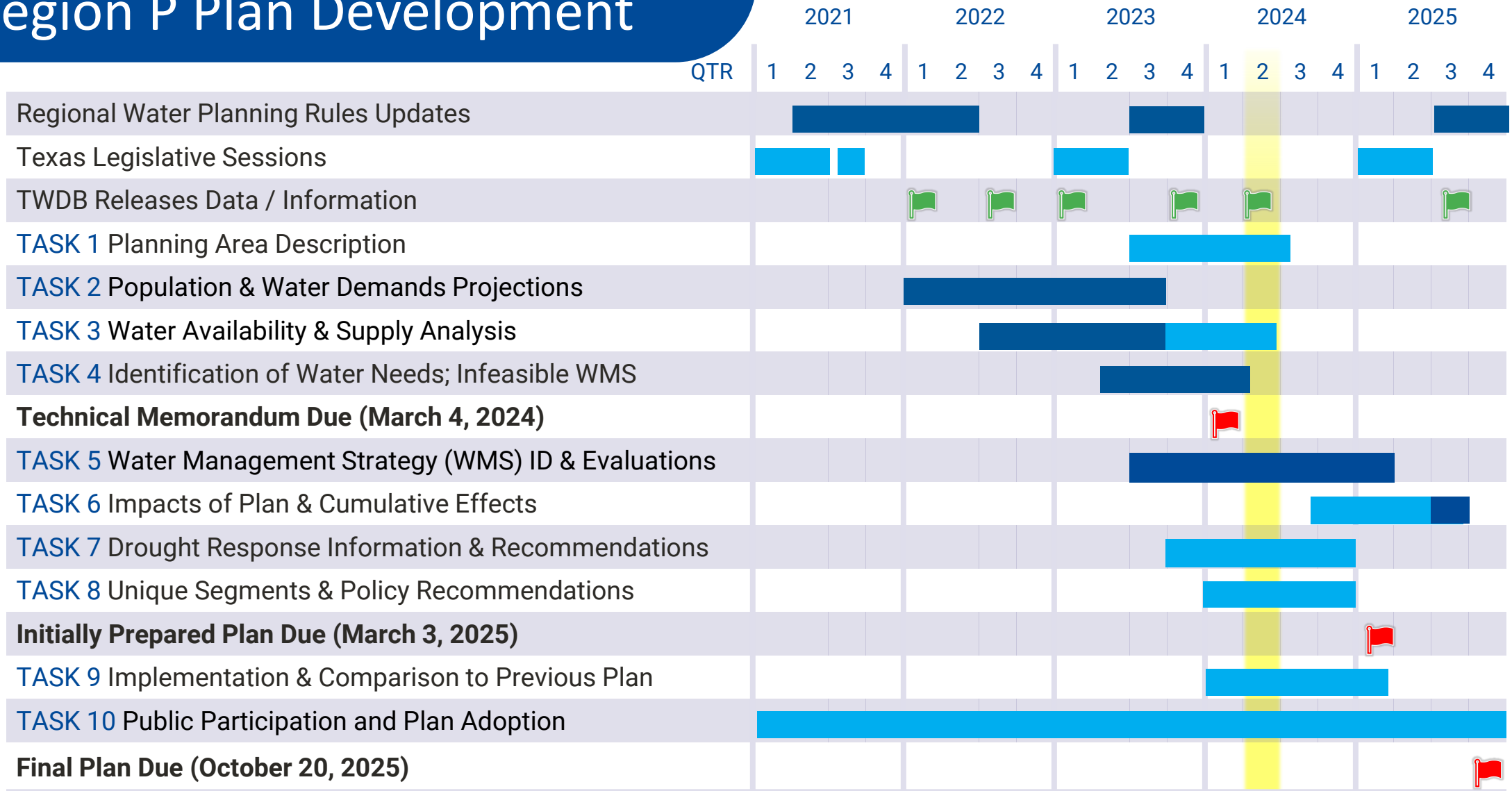
Agenda Items

1. Open meeting
2. Public comments
3. Consider approval of minutes
4. Consider nomination of new voting members
5. Conduct election of officers
6. Receive reports from regional liaisons and Interregional Planning Council reps
7. TWDB update
8. Receive briefing and update from Black & Veatch (technical consultant)
9. Schedule
10. Public comments
11. Adjourn

Briefing and Update from Black & Veatch

A. Schedule and Progress Update

Conceptual Schedule for Region P Plan Development



■ TWDB Conceptual Schedule

■ B&V Planned Schedule

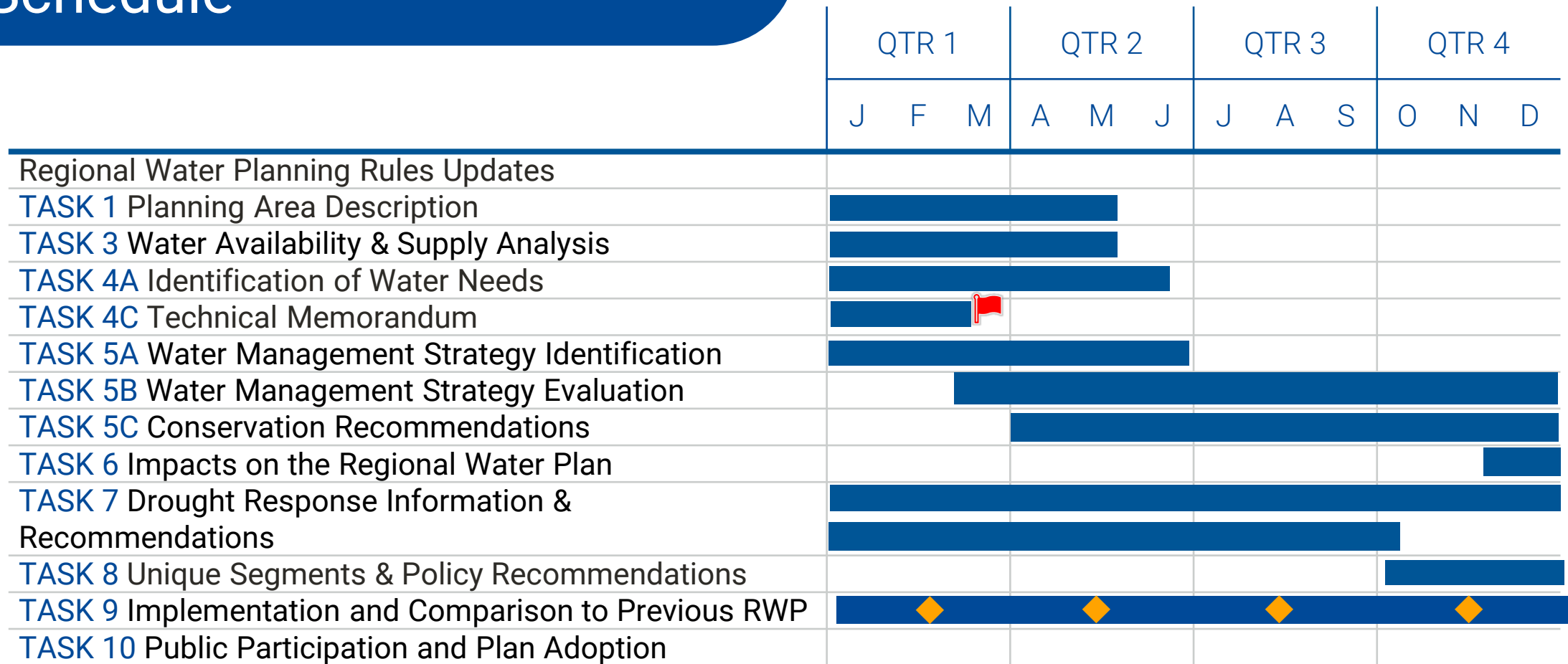


TWDB Data Release



TWDB Deadline

2024 Anticipated Region P Schedule



LEGEND

■ Region P RWPG Activities ◆ Tentative Region P RWPG Meeting 🚩 TWDB Deadline

Progress Since Last Meeting

- Worked on the following chapters:
 - Chapter 1 (planning area description)
 - Chapter 2 (population and demand projections)
 - Chapter 3 (water availability and supply)
 - Chapter 4 (water needs)
- Submitted Technical Memorandum to TWDB
- Submitted Scope of Work for Task 5B – Evaluating Water Management Strategies to TWDB

New or Ongoing Efforts

- Beginning water management strategy evaluations
- Sending communication out to defined “rural entities” within the region to provide information from TWDB and encourage engagement in the regional water planning process
- Review of Drought Contingency Plans and beginning work on Chapter 7
- Beginning updates on policy recommendations for Chapter 8

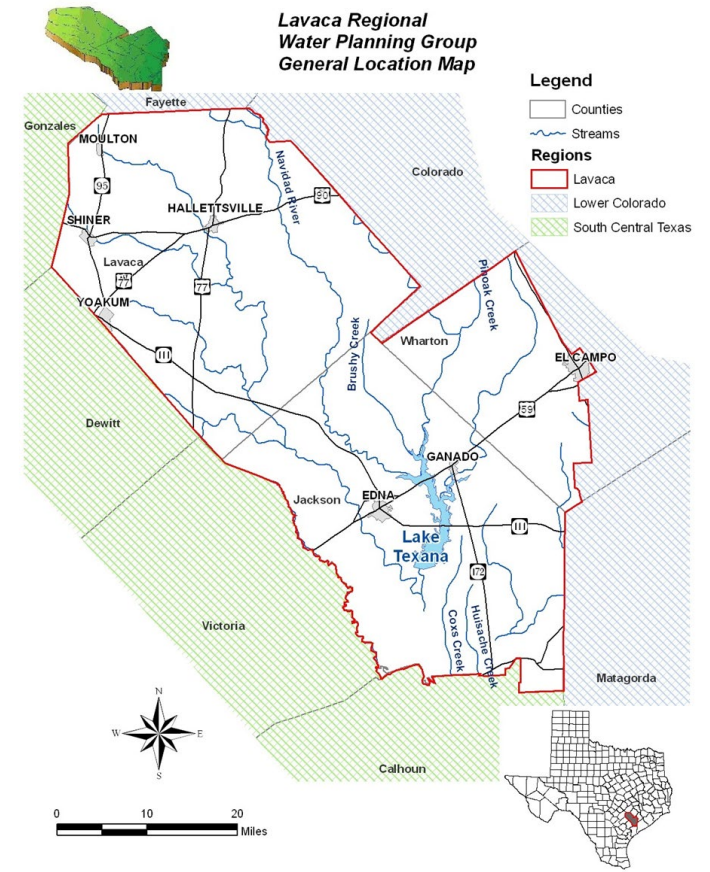
Briefing and Update from Black & Veatch

B. Briefing of Summaries of Chapters 1-4

Chapter 1

Regional Water Planning Area Description

- Introduction and Background
- Description of Area
 - Counties, Governmental Authorities
 - Land types, weather
 - Economic conditions
- Population and Water Use
- Water Sources
- Major Water Providers
- Water Quality
- Natural Resources
- Threatened and Endangered Species
- Navigation
- Threats to Agriculture
- Existing regional and local water plans
- Current preparations for drought
- Water loss audit data



Chapter 2

Population and Water Demands

- Introduction
- Methodology and Projections
 - General
 - Population Projections
 - Municipal Water Demand Projections
 - Irrigation Water Demand Projections
 - Steam-Electric Water Demand Projections
 - Manufacturing Water Demand Projections
 - Mining Water Demand Projections
 - Livestock Water Demand Projections
- Major Water Providers

Chapter 3

Analysis of Current Water Supplies

- Introduction
- Groundwater Sources
 - Use
 - Aquifer conditions
 - Water quality
 - Subsidence
- Groundwater Availability
- Surface Water Source Availability
- Major Water Providers
- Inter-regional Coordination
- Water Supply Allocations

Ground Water Source	RWPG	County	Basin	2026 Plan 2030 MAG (AFY)	2026 Plan 2080 MAG (AFY)
GULF COAST AQUIFER	P	JACKSON	COLORADO-LAVACA	28,157	28,157
GULF COAST AQUIFER	P	JACKSON	LAVACA	49,484	49,484
GULF COAST AQUIFER	P	JACKSON	LAVACA-GUADALUPE	12,930	12,930
Jackson County Total				90,571	90,571
GULF COAST AQUIFER	P	LAVACA	GUADALUPE	41	41
GULF COAST AQUIFER	P	LAVACA	LAVACA	19,942	19,942
GULF COAST AQUIFER	P	LAVACA	LAVACA-GUADALUPE	401	401
Lavaca County Total				20,384	20,384
GULF COAST AQUIFER	P	WHARTON	COLORADO	874	874
GULF COAST AQUIFER	P	WHARTON	COLORADO-LAVACA	14,100	14,100
GULF COAST AQUIFER	P	WHARTON	LAVACA	63,193	63,193
Wharton County (P) Total				78,167	78,167

- Lake Texana firm yield is 74,500 AFY for 2030-2080

Chapter 4

Identification of Water Needs

- Introduction
- Identification of Water Needs
 - Water User Groups
 - Major Water Providers
- Second-Tier Identified Water Needs
- Identified WUGs with Needs for 2026 Plan:
 - Irrigation, Jackson County – 1,000 AFY
 - Irrigation, Lavaca County – 500 AFY
 - Irrigation, Wharton County – 7,716 AFY
 - Manufacturing, Jackson County – 4,401 AFY
 - This need is also applied to LNRA as a Major Water Provider

Timeline/Process for Chapters Review

- Will be sending out draft chapters 1-4 for RWPG members' review over next couple of months
- Anticipate providing links to documents where all members can provide comments and see others' comments
- Would like to finalize comments before end of 2024
 - Initially Prepared Plan due March 3, 2025

Briefing and Update from Black & Veatch

C. Briefing and Discussion of Irrigation Conservation Measures

Irrigation Conservation Measures

- 2016 Plan

- On-farm conservation (recommended)
 - Land leveling, multiple inlets, moisture meters, replacement of canal ditches with pipelines
- Tail Water Recovery (recommended)
 - Collection of a portion of irrigation return flows for reuse
- Sprinkler irrigation (was not recommended)
- Crop conversion (was not recommended)

- 2021 Plan

- On-farm conservation (recommended)
 - Land leveling, multiple inlets, moisture meters, replacement of canal ditches with pipelines
- Tail Water Recovery (recommended)
 - Collection of a portion of irrigation return flows for reuse
- Alternate Wetting and Drying (alternative)
 - Intermittent irrigation through monitoring of soil moisture
- Row-Irrigated Rice (not recommended or alternative due to no appreciable water savings)

Example WMSs from Other Regions

A

Region A

- Irrigation Scheduling
- Irrigation Equipment Changes
- Soil Management
- Advances in Plant Breeding
- Conversion to Dryland Farming
- Changes to Crop Type
- Changes to Crop Variety

J

Region J

- Irrigation Scheduling

K

Region K

- On-Farm Conservation
- Irrigation Operations Conveyance Improvements
- Conversion to Sprinkler Irrigation
- Real-Time Use Metering and Monitoring
- Drip Irrigation

M

Region M

- On-Farm Conservation
- Drip Irrigation
- Dry Year Option Contracts

Discussion

Briefing and Update from Black & Veatch

D. Briefing of 2021 Plan Chapter 8 and Discussion of Path Forward for Legislative and Policy Recommendations



CHAPTER 8 OF THE REGIONAL WATER PLAN

31 TAC §357.43 specifies that the RWP shall include recommendations on regulatory, administrative, or legislative issues, such as

- Ecologically Unique River and Stream Segments
- Unique Sites for Reservoir Construction
- Other Recommendations

CHAPTER 8: Policy Recommendations and Unique Sites

Other Recommendations

RWPGs may include any additional regulatory, administrative, or legislative recommendations to achieve the stated goals of state and regional water planning, including but not limited to the following:

1. To facilitate the orderly development, management, and conservation of water resources in Texas and to prepare for and respond to drought conditions
2. Ways the RWPG believes the state and regional planning process would be improved
3. Information regarding the potential impacts of recommendations enacted into law once proposed changes are in effect
4. Facilitate more voluntary water transfers in the region



CHAPTER 8 Policy Recommendations

2021 RWP

1. Environmental Issues
2. Ongoing Regional Water Planning Activities
3. Inter-Regional Water Coordination
4. Conservation Policy
5. Sustainable Yield of the Gulf Coast Aquifer
6. Support of the Rule of Capture
7. Groundwater Conservation Districts
8. Establishment of Fees for Groundwater Export
9. Limits for Groundwater Conservation Districts



CHAPTER 9 Financial Policy Recommendations (need to be moved to Chapter 8 this cycle)

2021 RWP

1. Agricultural Water Conservation Programs
2. Drinking Water State Revolving Fund Program
3. State Loan Program
4. Water and Waste Disposal Loans and Grants from the USDA's Rural Utilities Service
5. TWDB Funding Through Taxation of Bottled Water Sales
6. Desalination Research and Demonstration Projects
7. Water Research Program – Agriculture

Other Recommendations

In the development of other recommendations, the RWPGs should consider TWDB feedback on the implementation of the planning group's legislative, administrative, and regulatory recommendations, as applicable to the TWDB, in the previous RWP.

1. Ongoing Regional Water Planning Activities. Lavaca Regional Water Planning Group (LRWPG) recommends that the Texas Legislature establish funding through TWDB for the continued existence of the regional planning groups...

Status: The legislature has appropriated funds to support the regional water planning process as of December 2022. The TWDB has requested additional funding for RWPGs through the agency's Legislative Appropriations Request (LAR). If additional funding is received, it will be allocated to the RWPGs to assist in the development of their plans.

2. Limits for Groundwater Conservation Districts. LRWPG recommends that the sustainable yield of the aquifer be used for all GCDs in the region as the upper limit of groundwater available for all uses. For this region, there is no overall surplus of groundwater and any use of groundwater contemplated outside the region must be subject to the same rules for protection of the basin of origin as interbasin transfers of surface water.

Status: The conditions considered in the development of desired future conditions (DFCs) are determined by the GCDs. As of December 2022, the most recent DFCs in Jackson, Lavaca, and Wharton counties are the same from the previous round of joint planning.

Other Recommendations

The RWPGs should also consider recommendations from the Interregional Planning Council as directed to the planning groups. (from 2020 IPC Report – no new items in 2024 IPC report)

1. Enhance interregional coordination efforts and include standing agenda items for reports from interregional liaisons.
2. Receive the early input from project consultants and sponsors, planning liaisons, and stakeholders to improve interregional coordination and mitigate future interregional conflict.
3. Involve the appropriate parties and coordinate timely on potentially feasible interregional water management strategy opportunities and issues.
4. Collaborate with other RWPGs early in the planning process for multi-regional project opportunities.
5. Provide new member orientations.
6. Utilize educational programs and subject matter speakers at RWPG meetings.
7. Develop better methods to encourage public participation.
8. Follow recommendations in the Best Management Practices Guide.
9. Read and disseminate the Best Management Practices Guide and New Member Guide.
10. Consider adding TCEQ as an ex-officio member if not required by the Legislature.
11. Include requests for funding in Chapter 8 recommendations of the regional water plans.

Discussion of Path forward for 2026 Plan

- Chapter 8 is largely RWPG-member led
 - New policy recommendations?
 - How to make changes/edits to 2021 Plan recommendations?
 - Schedule?

Discuss and Schedule Future Meeting Dates



TWDB Update

- **County Summary and Rural Entities Documents**
 - Summarizes key water supply planning information, data, and resources
 - Assists RWPGs in conducting rural outreach
 - List of rural entities, as defined by the Texas Water Code, attached in distribution email
 - County documents posted [online](#) on the RWP documents page
- **Uniform Costing Model**
 - Used to cost WMSPs in the 2026 Regional Water Plans
 - HDR conducted training on 3/22
 - Tool and User Manual posted [online](#) on the RWP documents page



TWDB Update

- **Drought Management Costing Tool**
 - Optional tool to estimate costs and water savings for drought management strategies
 - Examples of drought management strategies in Exhibit C
 - Tool and User Manual posted [online](#) on the RWP documents page
- **Water Conservation Advisory Council Survey Results**
 - Drought demand management survey related to voluntary curtailment, enforcement, AMI, etc.
 - Results shared in Drought Management Costing Tool distribution email

TWDB Update

- **Water Service Boundary Viewer**
 - Boundary editing for public water systems open until July 1, 2024
- **Technical Memorandum**
 - Administratively Complete (March 11)
 - Informal comments from TWDB staff, if applicable, will be sent in early June
- **RWPG Chairs Call**
 - Next Chairs call will be Friday, May 10th at 10:00 AM



TWDB Update

- **Texas Water Fund**
 - Surveys for public input closed April 30th
 - Board to begin considering rule proposal for publication
- **TCEQ 180-day list**
 - Municipal public water systems that reported to the TCEQ with less than 180 days of water between January 2016 and November 2023
 - Drought Preparedness Council recommendation
- **Water Loss Audits, Water Conservation Plans, Water Conservation Plan Annual Reports**
 - Were due May 1st

TWDB Update

- **Drought Preparedness Council Recommendations**
 1. The DPC encourages regional water planning groups to consider planning for drought conditions worse than the drought of record, including scenarios that reflect greater rainfall deficits and/or higher surface temperatures.
 2. The DPC encourages regional water planning groups to incorporate *projected future* reservoir evaporation rates in their assessments of future surface water availability.
 3. The DPC encourages regional water planning groups to identify in their plans utilities within their boundaries that reported having less than 180 days of available water supply to the TCEQ during the current or preceding planning cycle.



Conservation Resources for Development of the 2026 RWPs



Resources for RWPGs

The *Conservation Resources Guide for Development of the 2026 Regional Water Plans* details resources available for RWPGs, including

1. Data Reported to TWDB
2. TWDB Conservation Information Dashboard for Water Supply Planning
3. Best Management Practices
4. WCAC Suggestions to RWPGs
5. Example Water Loss Strategies from 2021 RWPs
6. Water Loss Performance Indicators
7. Resources for GPCD Goal Setting

Conservation Resource Guide for Development of the 2026 Regional Water Plans

This document outlines conservation resources that are available to support regional water planning group (RWPG) development of conservation water use reduction strategies, water loss mitigation strategies, and the conservation subchapter of the 2026 Regional Water Plans (RWP). Information is provided on how to access resources and how they can be used to support RWP development. Available data reported to the Texas Water Development Board (TWDB) by utilities through water use surveys, water loss audits, water conservation plans, and water conservation plan annual reports are summarized in Table 1.

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Table 1. Summary of data reported to the TWDB by utilities through water use surveys, water loss audits, water conservation plans, and water conservation plan annual reports 11

Data Reported to TWDB

Report	Statute/Rule Reference	Required for	Frequency	Next Due Date	Data Available
Water Use Survey	TWC 16.012(m) 31 TAC §358.5	Public water systems, manufacturers, mining facilities, and electric power generating plants	Annually	3/1/25	Fall of following year
Water Loss Audit	TWC 16.0121 31 TAC §358.6	Utilities with >3,300 connections or a financial obligation to the TWDB	Annually	5/1/24	Fall of following year
		Utilities with <3,300 connections and no financial obligation to the TWDB	Every 5 years	5/1/26	Fall of following year
Water Conservation Plan	31 TAC §363.15	Entities with 3,300 connections or more, loans greater than \$500,000 from the TWDB, or a TCEQ surface water right	Every 5 years	5/1/24	By due date; Copies submitted to RWPG sponsors
Water Conservation Plan Annual Report	31 TAC §363.15(g)	All entities with a Water Conservation Plan	Annually	5/1/24	Fall of following year

Data Reported to TWDB

Report	Data Reported	Examples of How RWPGs Can Use This Data
Water Use Survey	<ul style="list-style-type: none"> • Monthly volumes of water intake sources • Percentage treated • Annual volumes of water sold • Retail population • Number of retail service connections • Distribution, connection count, and volume sold by customer classification 	<ul style="list-style-type: none"> • Analyze recent trends in water use • Indicate or correct suspect water use for future accuracy of demand projections
Water Loss Audit	<ul style="list-style-type: none"> • Water utility information • System input volumes by source • Population and connections served • Length of main lines • Volume of water treated for distribution • Meter accuracy • Volume of authorized consumption • Volume of water lost due to breaks and leaks • Retail price of water • Variable production cost of water • Assessment validation for audit components 	<ul style="list-style-type: none"> • Review water loss audit data including regional water loss balance reports • Describe water loss audit information for the region in Chapter 1 of the RWP • Analyze water loss trends and consider strategies to address issues • Compare reported real and/or apparent water loss to performance indicators when evaluating water loss mitigation strategies • Use reported number of connections in meter replacement estimates • Use reported length of main lines in line replacement estimates

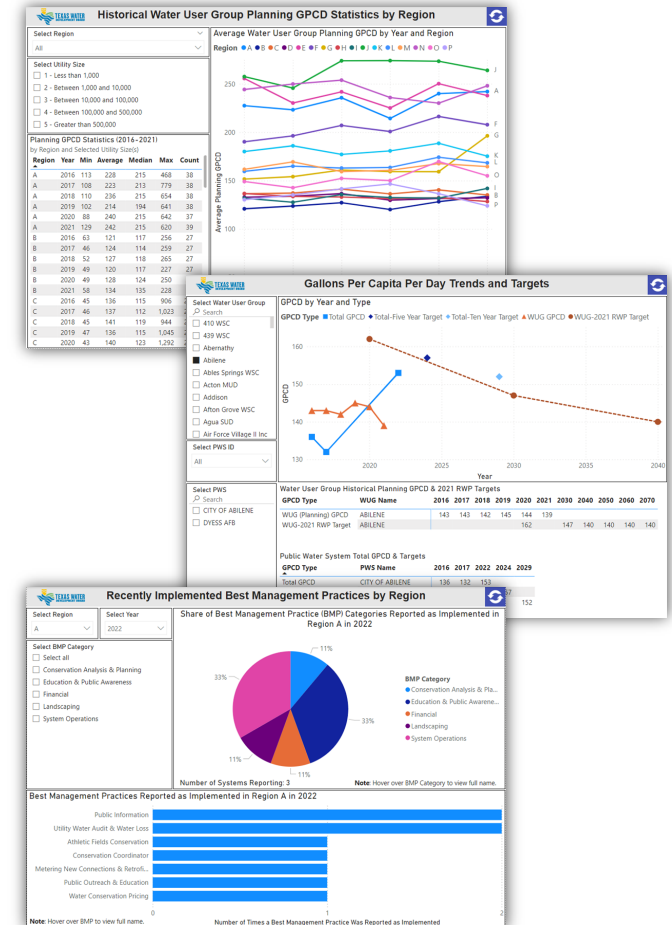
Data Reported to TWDB

Report	Data Reported	Examples of How RWPGs Can Use This Data
Water Conservation Plan	<ul style="list-style-type: none"> • Utility profile • 5 and 10-year goals in GPCD • Schedule for implementing the plan • Method for tracking targets and goals • Production meter(s) • Specific conservation measures or BMPs included in the conservation program • Documentation of RWPG notification 	<ul style="list-style-type: none"> • Develop WUG-specific conservation strategies based on conservation measures or BMPs included in an associated WCP • Summarize the number and types of measures and BMPs reported in WCPs • Summarize utility 5 and 10-year total GPCD goals and consider when setting RWPG GPCD goals
Water Conservation Plan Annual Report	<ul style="list-style-type: none"> • System data: number of connections and gallons of metered retail water use by customer category • Water use: input volumes, authorized consumption, and water losses • BMPs implemented & estimated gallons saved • Leaks detected and meter testing/repair • Total, residential, and water loss GPCD and water loss percentage 	<ul style="list-style-type: none"> • Review and consider trends in utility annual total GPCD • Review details of BMPs implemented and estimated gallons saved to inform conservation water use reduction and water loss mitigation strategies • Summarize BMP implementation and results (gallons conserved, gallons reused, meters tested, and leaks repaired) in the RWP

TWDB Conservation Information Dashboard for Water Supply Planning

- Historical WUG Planning GPCD Statistics by Region
- Water Use, Loss, and Conservation Reporting Requirements
- GPCD Trends and Targets
- Municipal Conservation BMPs & Recommended Projects
- Recently Implemented BMPs by Region

<https://www.twdb.texas.gov/waterplanning/data/dashboard/conservation.asp>





RWPG GPCD Goal Setting

- TWDB Conservation Information Dashboard for Water Supply Planning
 - Regional planning GPCD statistics,
 - Historical WUG planning GPCDs,
 - GPCD goals as set by RWPGs in the 2021 RWPs,
 - 5 and 10-year total GPCD targets from utility water conservation plans
- SARA Report ID 102 - WUG Adjusted Planning GPCD with Water Efficiency and Conservation Savings
- Spreadsheet of 2026 RWP Baseline GPCDs and WUG Adjusted GPCD based on WCAC methodology



Additional Resources for RWPGs

1. Best Management Practices
2. TWDB Municipal Water Conservation Planning Tool
3. WCAC Suggestions to RWPGs
4. Example Water Loss Strategies from 2021 RWPGs
5. Water Loss Performance Indicators



Interregional Planning Council Report to TWDB



Interregional Planning Council Report to TWDB

Council adopted their final report on February 8, 2024.

Three statutory charges for recommendations:

1. Improve coordination among the regional water planning groups, and between each regional water planning group and the Board, in meeting the goals of the state water planning process and the water needs of the state as a whole;
2. Facilitate dialogue regarding water management strategies that could affect multiple regional water planning areas; and
3. Share best practices regarding operation of the regional water planning process.

Interregional Planning Council Report to TWDB

Council recommendations to the Legislature:

1. Appropriate additional funds to the planning process to
 - support RWPGs' task to identify and facilitate interregional coordination;
 - accommodate tasks associated with long-range, visionary planning;
 - fund better methods of disseminating information for the regional water planning process; and
 - accommodate labor costs for administering RWPGs
2. Provide financial incentives for local sponsorship of innovative, visionary, multi-benefit projects
3. Provide initial sponsorship of projects by the State without guarantees from local sponsors
4. Establish a coordination process amongst state agencies for installation of infrastructure during planning and construction of large-scale projects.
5. Strike simplified planning from the statute
6. Authorize the use of one-way conferencing or webinars

Interregional Planning Council Report to TWDB

Council recommendations to the Texas Water Development Board:

1. Develop protocols to include annual discussions to evaluate and document best practices for regional water planning in Chairs' conference calls.

Council recommendations to Future Interregional Planning Councils:

1. Monitor the effectiveness of efforts to promote interregional coordination and review how best to utilize interregional liaisons in the development or use of shared water resources;
2. Utilize state agencies' expertise to assist regions in developing a vision of planning resources for the state as a whole;
3. Consider holding work sessions as needed to “deep dive” into more complicated topics;
4. Review materials and meeting notes from the TWDB's “lessons learned” technical meetings with RWPG consultants; and
5. Review progress on all recommendations in the 2027 SWP Council's report and submit its assessment to the TWDB.



Interregional Planning Council Report to TWDB

Council included several observations on topics not related to its statutory charge:

1. Water loss
2. Unaccounted water use
3. Long-range and visionary planning

The final report is available online at:

<http://www.twdb.texas.gov/waterplanning/rwp/ipc>