



# Region I

East Texas Regional  
Water Planning Group



# Regional Water Planning Group Meeting

[etexwaterplan.org](http://etexwaterplan.org)

January 7, 2025

# East Texas Regional Water Planning Group Meeting

1. Call to Order
2. Invocation & Pledge of Allegiance
3. Notice of Meeting
4. Roll Call/Determination of Quorum
5. Public Comments (3 min each)

# Item 6

Consideration and Approval of the  
Minutes of the September 18, 2024  
Meeting

# Item 7

## Reports from City of Nacogdoches

# Item 8

## Reports of Adjoining Regions' Activity

Region C – David Montagne

Region D – John McFarland

Region H – Scott Hall

Interregional Liaison – Kelley Holcomb

# Item 9

## Reports from Standing Committees

Executive Committee – John Martin

Finance Committee – Kelley Holcomb

Bylaws Committee – David Alders

Technical Committee – Scott Hall

Nominations Committee – Monty Shank

# Item 10

Report from Consultant Team with  
Discussion by Regional Water Planning  
Group

# Today's Discussion

- a) Review of 6th Cycle Water Planning Schedule
- b) Updates and Review of Posted Draft Initially Prepared Plan (IPP) Chapters (1-4)
- c) Updated on and Overview of Draft IPP Chapters (5A, 5C, 7, 8)
  - a) Discussion of and Potential Action on Lake Fastrill
- d) Updates on Water Management Strategies (5B)
- e) Updates on Initially Prepared Plan Tasks and Chapters (5B, 6, 9)



# Review of 6th Cycle Water Planning Schedule (10a)



# 2026 Plan Schedule

## 3-month Look-Ahead

Date	Schedules Events/Tasks
<b>January 7, 2025</b>	<b>RWPG Meeting: IPP Updates and Review</b>
<i>February 3, 2025</i>	<i>Draft IPP Posting Deadline</i>
<b>February 6, 2025</b>	<b>RWPG Meeting: IPP Review/Approval (7-day Notice, 3-day posting)</b>
<i>February 25, 2025</i>	<i>RWPG Meeting Backup Date</i>
<b>March 3, 2025</b>	<b>Initially Prepared Plan Due</b>

**Abbreviations:**

RWPG = Regional Water Planning Group

IPP = Initially Prepared Plan

# 2026 Plan Schedule

## 12-month Look-Ahead

Date	Schedules Events/Tasks
March 3, 2025	Initially Prepared Plan Due
April/May 2025 (TBD)	IPP Public Comment Meeting (30-day Notice)
August 2025	<i>Socioeconomic Impact Report Released to RWPGs</i>
Sept/Oct 2025 (TBD)	RWPG Meeting: Final RWP Approval (2-week Notice, 7-day posting)
October 20, 2025	Final Regional Water Plan Due

**Abbreviations:**

RWPG = Regional Water Planning Group

IPP = Initially Prepared Plan

# Status of IPP Chapters

- ✓ Chapter 1: Description of the Regional Water Planning Area
- ✓ Chapter 2: Projected Population and Water Demands
- ✓ Chapter 3: Current Water Supplies
- ✓ Chapter 4: Water Needs
- Chapter 5: Water Management Strategies
- Chapter 6: Impacts of RWP
- Chapter 7: Drought Response
- Chapter 8: Unique Streams/Reservoirs & Legislative Recommendations
- Chapter 9: Comparison to Previous RWP
- Chapter 10: Public Participation

✓ *Completed/Posted*

■ *Presented/Drafted*

□ *Remains in development*

# Updates on and Review of Posted Draft Initially Prepared Plan Chapters (10b)

Chapters 1 - 4

# Draft Initially Prepared Plan Chapters

- Chapter 1: Description of the Regional Water Planning Area
- Chapter 2: Projected Population and Water Demands
- Chapter 3: Evaluation of Current Water Supplies
- Chapter 4: Water Needs

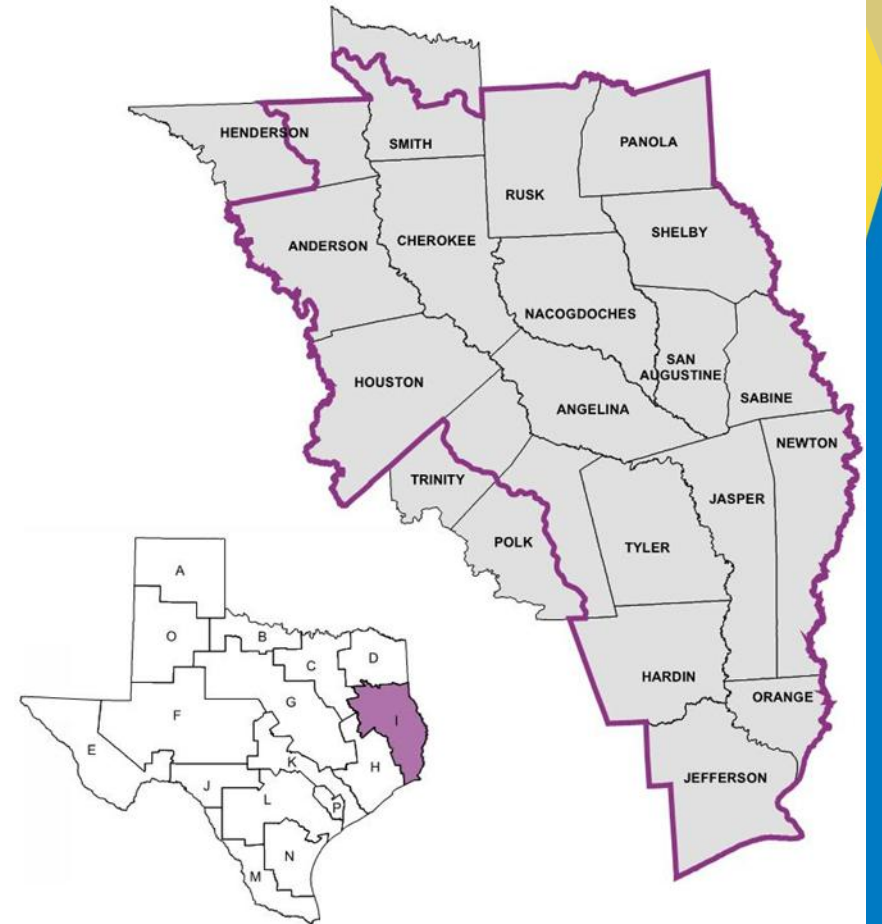
# Status of Chapter Review

- 2 to 4 members have reviewed and provided feedback to Chapters 1 through 4
- Feedback on major comments strongly encouraged by **January 20<sup>th</sup>, 2025** to incorporate into draft IPP
- Additional review and approval of IPP at **February 6, 2025 Meeting** for all chapters



# Chapter 1: Description of the Regional Water Planning Area

- Updated RWPG Member directory
- No major comments/comments



# Evaluation Process (Chapters 2 – 4)

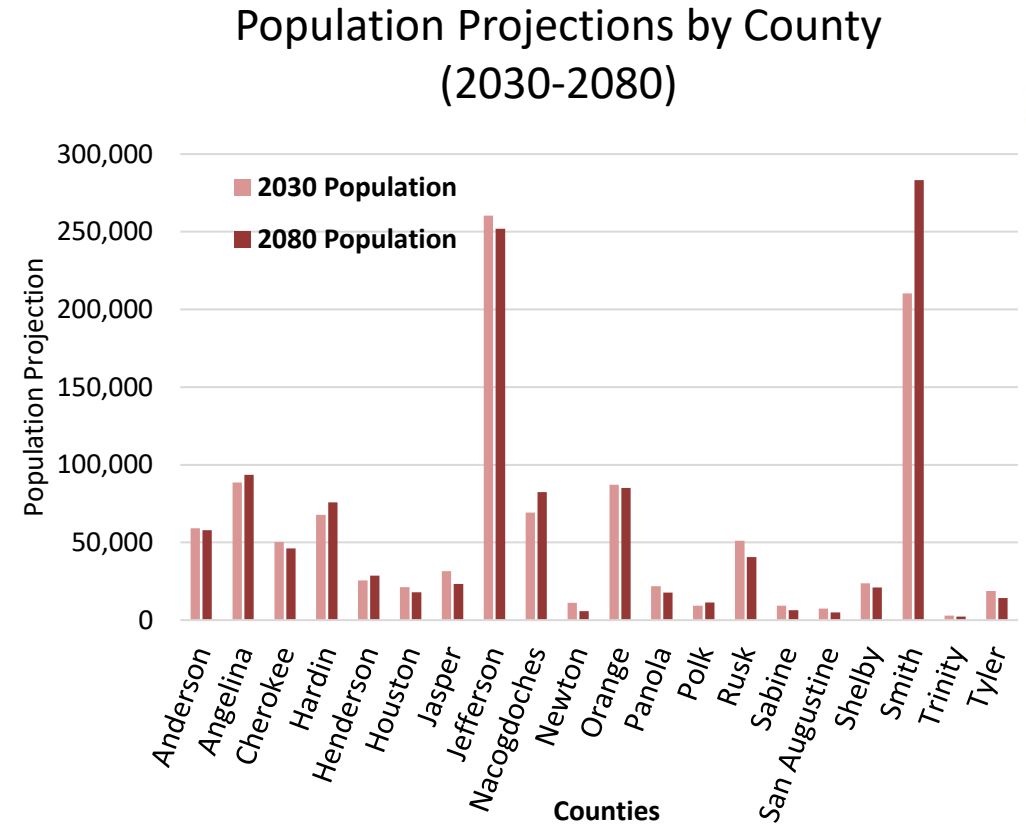
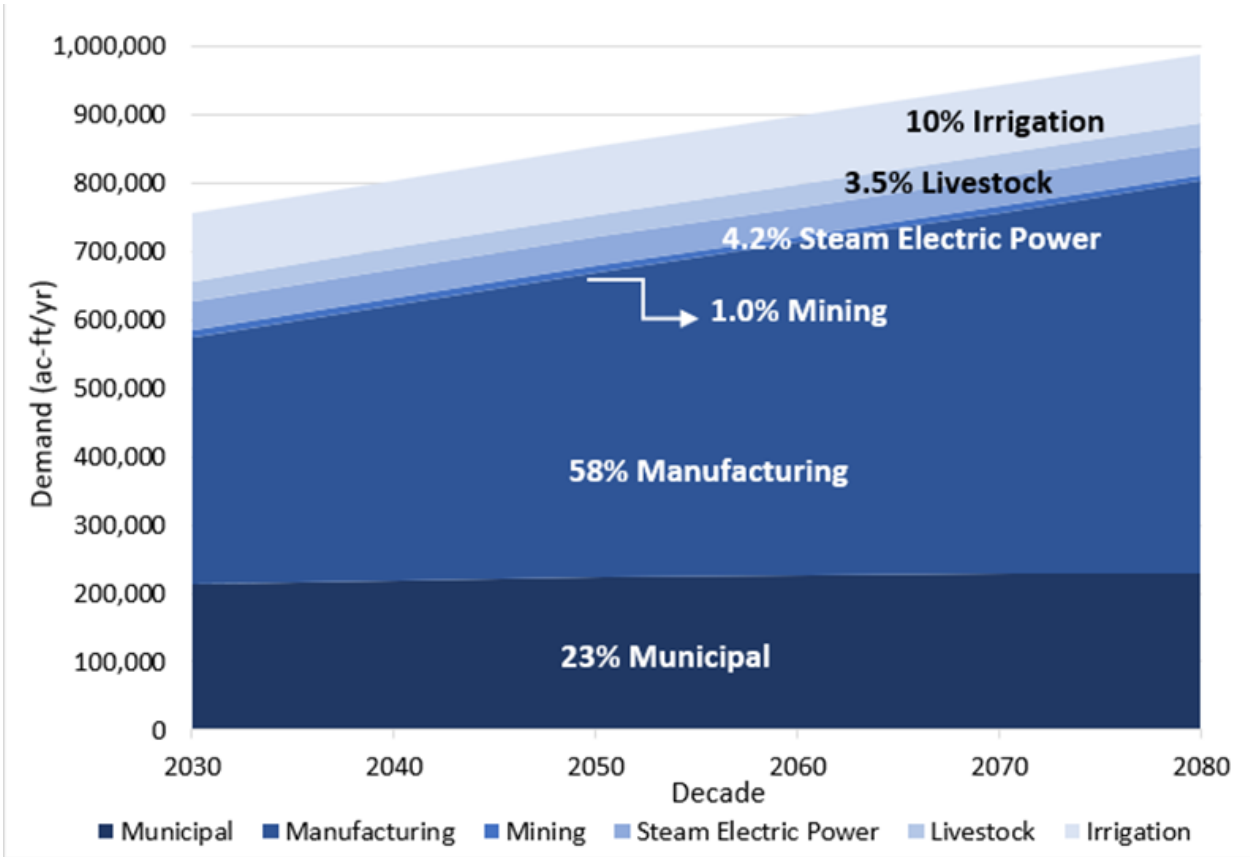
Chapter 2  
Identify Demand Projection and Existing Supply

Chapter 3

Allocate Existing Supplies to Meet Demands

Chapter 4  
Remaining Unmet Demand = Needs

# Chapter 2 – Current and Projected Population and Water Demand

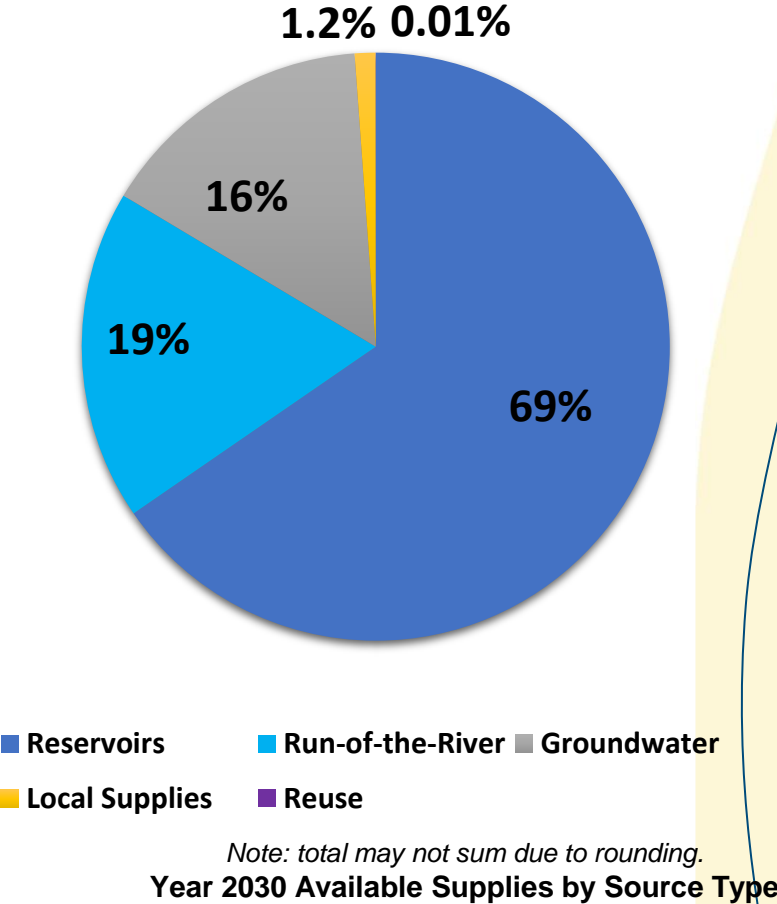


## Water Usage by Use Category

No major updates as projections are considered final; Updates will be made to the MWP sections.

# Chapter 3 – Evaluation of Current Water Supplies in the Region

- Reduced Jefferson County indirect reuse supply based on updated data
- Updates will be made to the MWP section per the coordination effort



# Chapter 4 – Water Needs

- Updates since last RWPG meeting
  - Increases in municipal needs but decrease in non-municipal needs
    - ✓ Updated existing supply allocations for MWPs based on feedback received during coordination efforts
  - Interregional coordination was able to reduce or eliminate needs of a few WUGs

# Initial List of WUGs with Needs

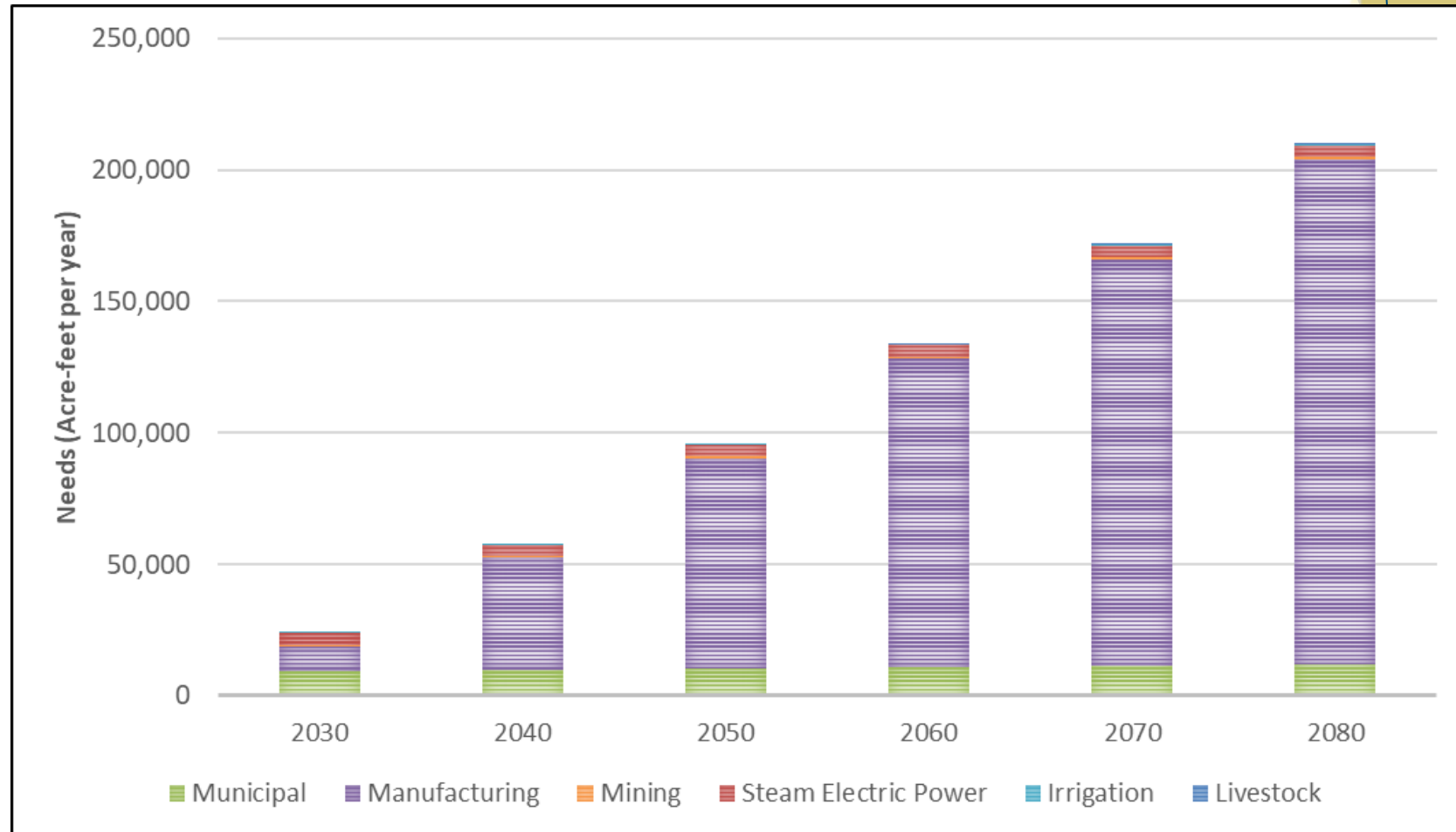
- Total of 12 municipal WUGs out of 190 WUGs with identified needs
- Needs in non-municipal categories for at least 11 counties

WUG Name	County
Alto Rural WSC	Cherokee
Athens*	Henderson
<del>Ben Wheeler WSC*</del>	<del>Smith</del>
<b>Beaumont</b>	<b>Jefferson</b>
Chandler	Henderson
County-Other	Smith
D & M WSC	Nacogdoches
Edom WSC*	Henderson
<del>Elysian Fields WSC*</del>	<del>Panola</del>
Jacobs WSC	Rusk
Liberty Utilities Silverleaf Water*	Smith
Southern Utilities*	Cherokee, Smith
TDCJ Eastham Unit	Houston
Trinity Bay Conservation District*	Jefferson
<del>West Gregg SUD*</del>	<del>Rusk</del>
Irrigation	Trinity
Livestock	Houston, Sabine, Henderson
Manufacturing	Angelina, Jasper, Jefferson, Shelby, Smith, Tyler
Mining	Angelina, Henderson, Smith
Steam Electric Power	Anderson, Henderson

\*WUG split across multiple regions

# Chapter 4 - Summary of Needs

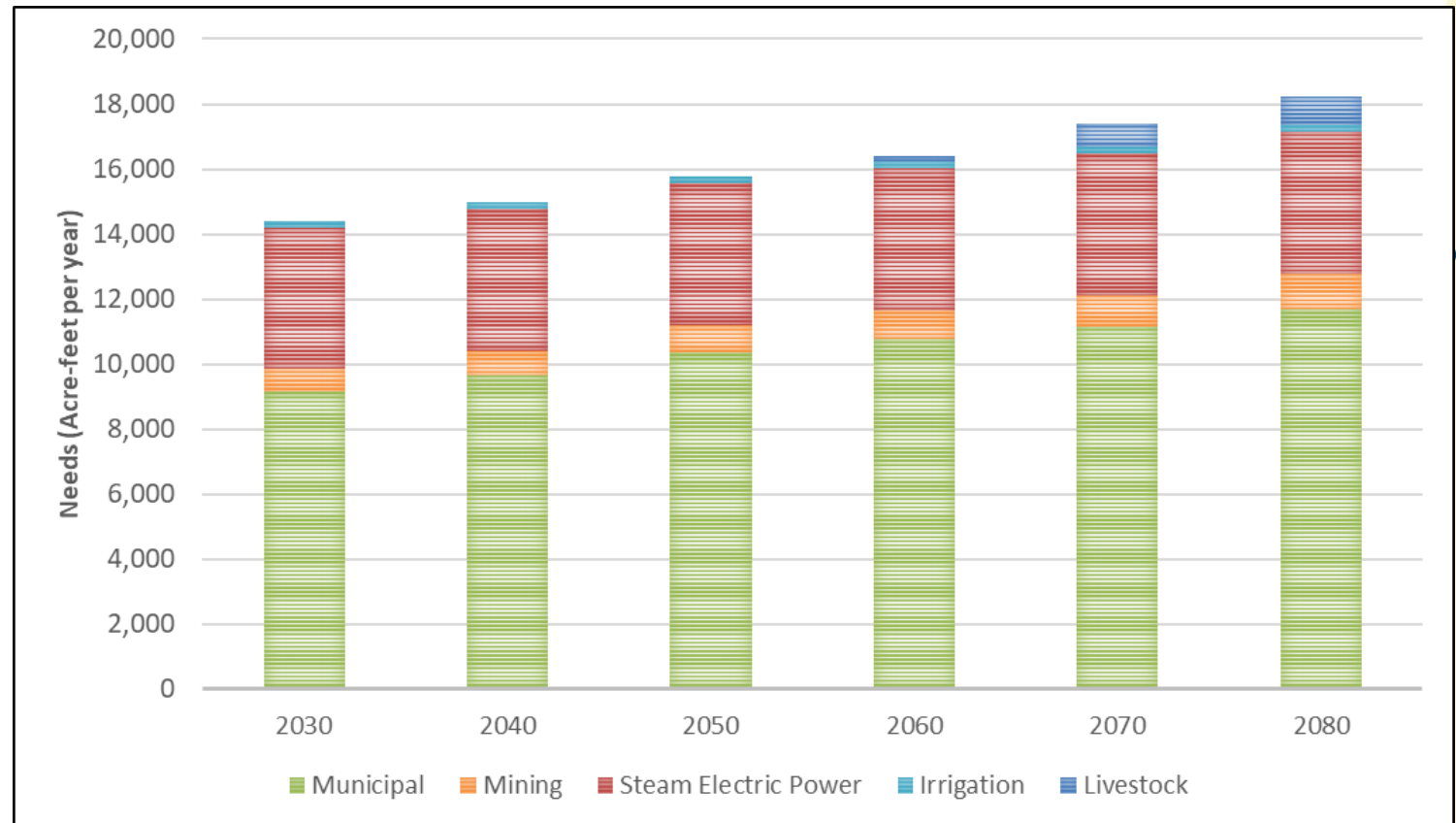
- Needs largely attributed to future manufacturing demand growth (no existing contracts yet)



*\*Note: Supply allocations are draft; the numbers above are subject to change.*

# Chapter 4 - Summary of Needs

- Increasing needs for identified municipal WUGs over time
- Needs for new power generation facilities in Anderson and Henderson counties
- Needs for other non-municipal needs are largely driven by MAG limitations



*\*Note: Supply allocations are draft; the numbers above are subject to change.*



# Updates on and Overview of Draft Initially Prepared Plan Chapters (10c)

Chapters 5, 7, & 8

# Chapter 5

- Includes 5A, 5B, and 5C Subchapters:
  - A. Potentially Feasible WMS and Projects
  - B. Evaluation of Recommended WMS and Projects
  - C. Conservation Recommendations

# Chapter 5A – Potentially Feasible WMSs

- Draft in progress
- Includes:
  - Water conservation
  - Direct and indirect wastewater reuse
  - Expanded use of existing supplies
    - ✓ Voluntary transfers (sales/contracts)
    - ✓ Expanded groundwater and/or local use
  - New supplies
  - Inter-basin transfers

# Chapter 5A - Reuse

- Considered potential direct and indirect non-potable reuse strategies
- Few opportunities identified
  - potentially feasible in long term
  - cost prohibitive in short term
- Two strategies considered
  - Athens MWA indirect reuse strategy
  - City of Center direct reuse strategy

# Chapter 5A - Existing Supplies

- Water rich region with existing developed or to-be developed supplies needing infrastructure or contracting
- Expanding existing supplies
  - Groundwater
  - Voluntary transfers (sales/contracts)
  - Infrastructure expansions
  - Local supplies

# Chapter 5A - New Supplies

- New surface water supply strategies
  - West Beaumont Reservoir (2030)
  - Lake Columbia (2040)
  - Neches Run-of-River with Lake Palestine (2070)

# Chapter 5A - Inter-basin Transfers

- Inter-basin Transfer WMSs in ETRWP
  - Neches-Trinity Basin Interconnect
  - Transfer from SRA to LNVA

# Chapter 5C – Water Conservation

- Draft in Progress
- Includes:
  - Current Conservation Effort
  - Future Conservation Recommendations



# Annual Water Conservation Reports

BMP	2016	2017	2018	2019	2020	2021	2022	Average
Conservation Coordinator	3	7	9	8	9	8	10	8
Metering New Connections & Retrofitting Existing Connections	9	15	12	14	17	13	10	13
Prohibition on Wasting Water	4	3	4	7	8	9	8	6
<b>Public Information</b>	17	20	16	18	18	21	17	18
Reuse for Plant Washdown	4	8	6	5	5	5	4	5
School Education	6	3	6	5	4	8	4	5
<b>Utility Water Audit &amp; Water Loss</b>	8	12	9	10	21	17	18	14
<b>Water Conservation Pricing</b>	3	2	5	6	8	7	6	5

*Note: Includes 42 Region I WUGs. Only the top 8 BMPs are included herein.*

# Water Use Reduction WMSs

# Funding Considerations

- SWIFT Funding

- “Eligible SWIFT projects are recommended water management strategy projects with an associated **nonzero capital cost** in the most recently adopted state water plan at the time abridged applications are due to TWDB for consideration.” – TWDB website
- Water Use Reduction WMSs are not eligible for SWIFT funding.

- Other Current Funding Opportunities

- Not linked to regional water planning effort

# Water Conservation Package

Water Use Reduction WMSs

- BMP 3.1 – Water Conservation Pricing
- BMP 6.0 – Education and Public Awareness Program
- BMP 4.2 – System Water Audit and Water Loss Control

Water Loss Mitigation WMS with a capital cost

# Water Loss Mitigation WMSs

# Considerations

- SWIFT Funding Eligibility
  - Water Loss Mitigation WMSs expected to qualify
- Recommendation
  - Recommend Water Loss Mitigation WMSs for all municipal WUGs.
  - Savings tied to existing water loss and TWDB water loss thresholds.
  - For WUGs without audit data or compliant with thresholds, assume minimal savings (0.5% of demand) for main replacement funding applications.

# Municipal Conservation Recommendation Criteria Summary

Strategy	Small and County-Other WUGs (a)	Baseline GPCD <u>below</u> Thresholds
Water Use Reduction WMSs	<b>X</b>	<b>X</b>
Water Loss Mitigation WMSs	<b>Recommended for All WUGs</b>	

(a) Small WUGs = WUGs with a current population of less than 1,000.

# GPCD Threshold for Conservation Recommendation

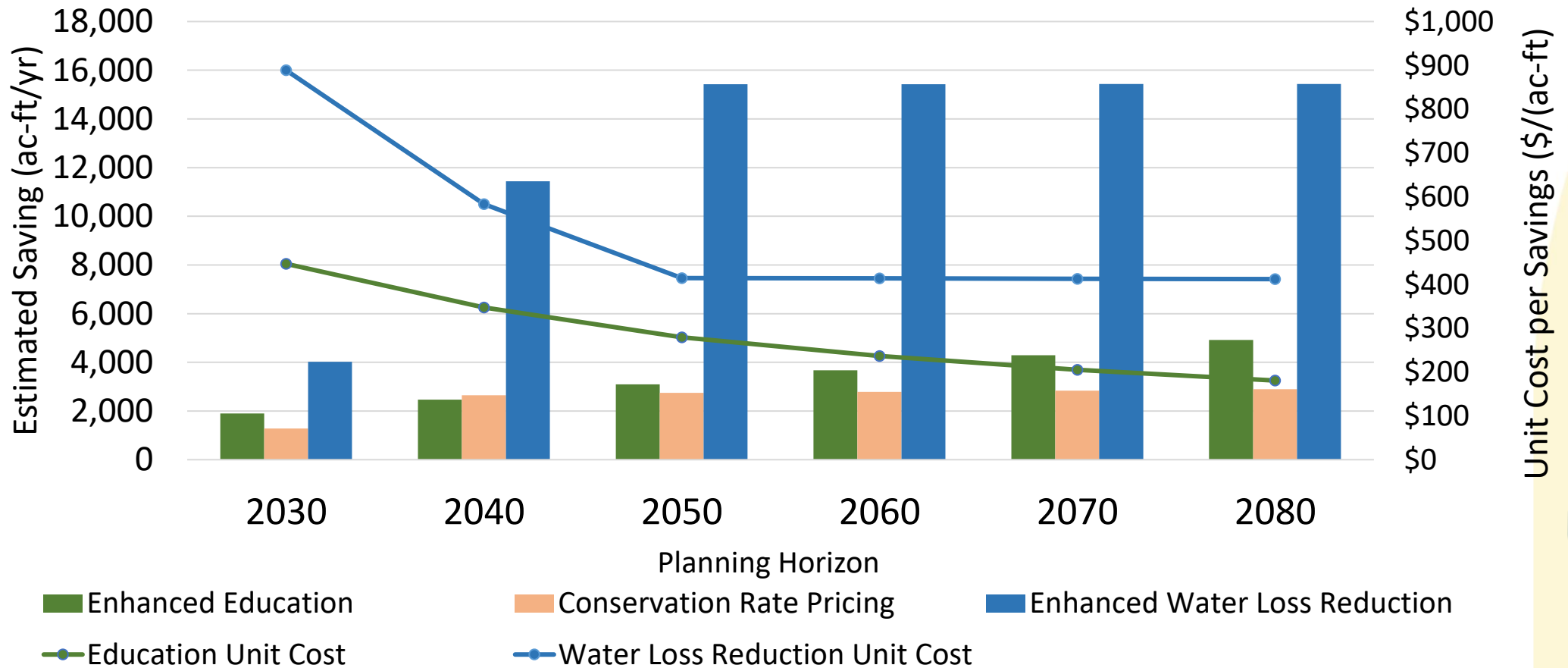
Category	25 <sup>th</sup> Percentile	GPCD Threshold
County Others	93	N/A
1 - Less than 1,000	144	N/A
2 - Between 1,000 and 10,000	104	104
3 - Between 10,000 and 100,000	105	105
4 - Between 100,000 and 500,000	226	140

- Conservation not recommended for:

- Small utilities (less than 1,000 population) and county other WUGs due to lack of resources
- WUGs with a baseline GPCD below GPCD threshold
  - ✓ 25<sup>th</sup> percentile of the GPCD distribution by population category
  - ✓ Consistent with the 2021 Plan, cap at 140 GPCD



# Municipal Conservation Summary



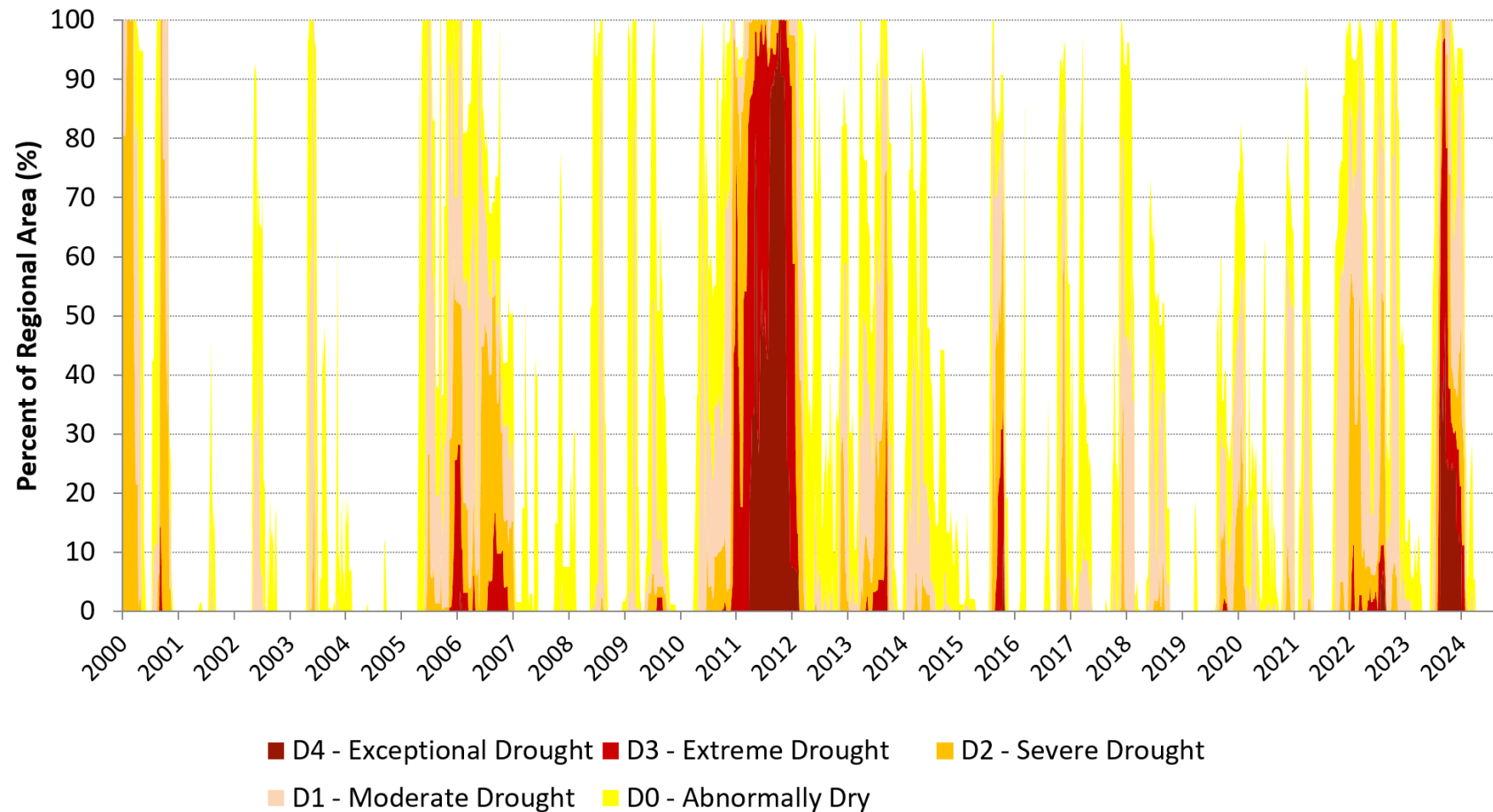
Annual unit costs are decreasing due to the increased rate of implementation.

# Non-municipal Conservation

- Consistent with the 2021 RWP, conservation is not recommended for non-municipal users.
  - Manufacturing
    - ✓ Conservation is industry- and site-specific
    - ✓ ETRWPG lacks data for evaluation or recommendation
  - Irrigation
    - ✓ LNVA (i.e., the largest water provider) has implemented several conservation measures
    - ✓ Site-specific strategies encouraged; no further recommendations due to data gaps
  - Other Industries (Steam-electric, livestock, and mining)
    - ✓ Account for 11% of 2030 demand
    - ✓ Conservation not economically beneficial

# **Drought Management Task 7**

# Chapter 7 - Composite Drought Monitor Index for East Texas

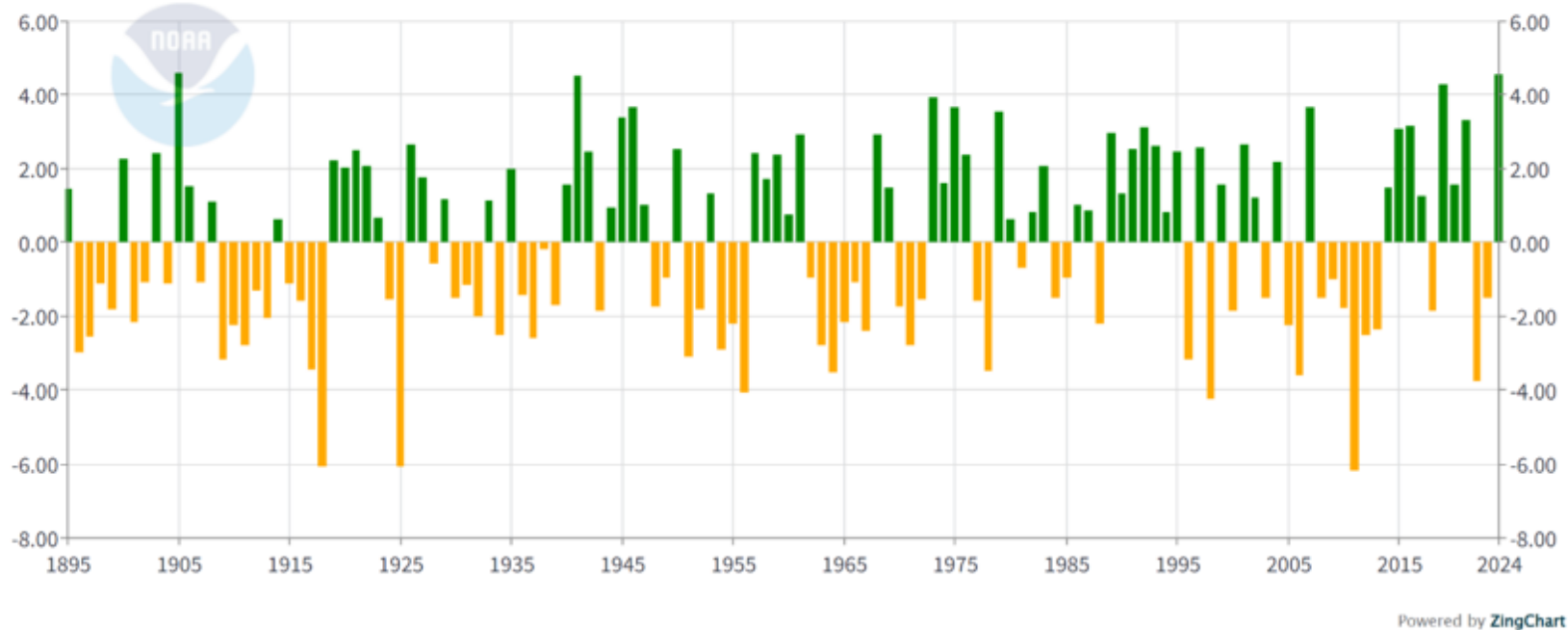


SOURCE: DATA OBTAINED FROM THE U.S. DROUGHT MONITOR, SEPTEMBER 2024.

# Chapter 7 – Palmer Hydrological Drought Index for East Texas

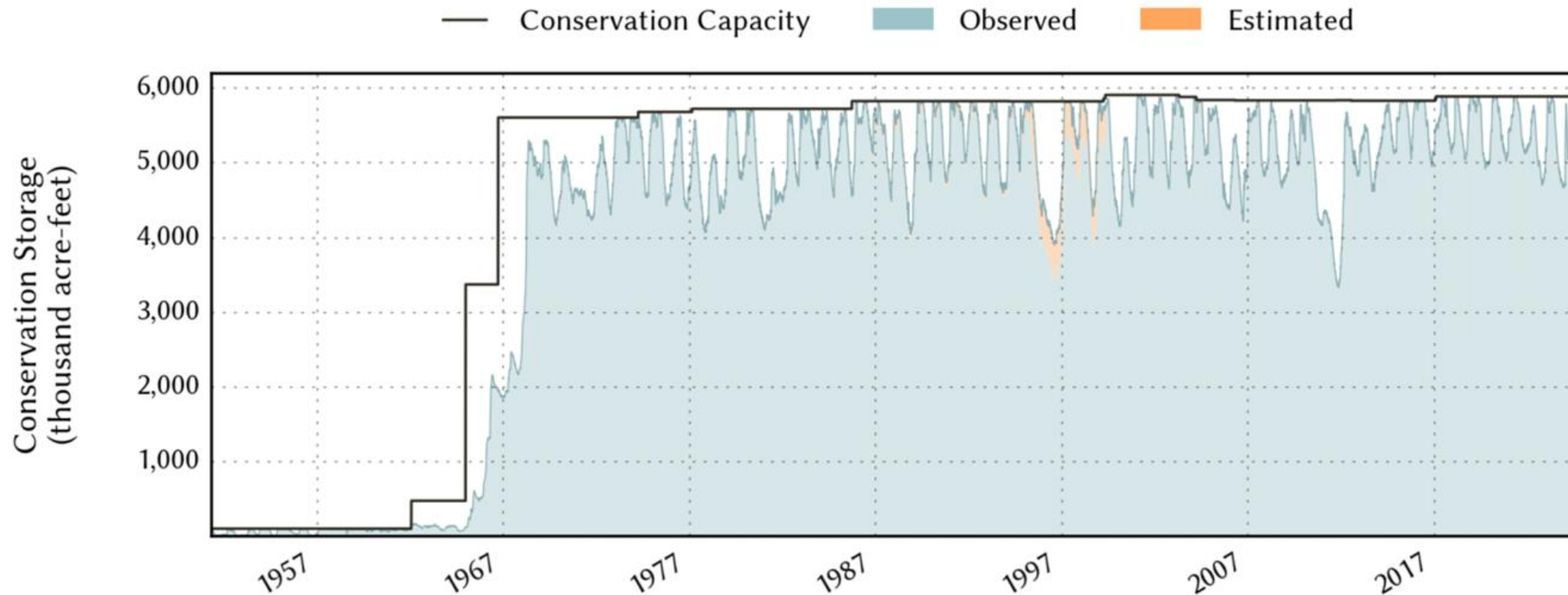
Texas, Climate Division 4 Palmer Hydrological Drought Index (PHDI)

July



SOURCE: NOAA, NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION, <https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/divisional/time-series/4104/phdi/1/7/1895-2024>

# Chapter 7 – Reservoir Storage in East Texas



SOURCE: TEXAS WATER DEVELOPMENT BOARD: EAST TEXAS PLANNING REGION RESERVOIRS,  
URL: [HTTP://WATERDATAFORTEXAS.ORG/RESERVOIRS/REGION/EAST-TEXAS](http://waterdatafortexas.org/reservoirs/region/east-texas), ACCESSED SEPTEMBER 2024.

# Chapter 7 - Changes from Previous Cycle

- Sections added:
  - Drought Worse than Drought of Records
- Updates on:
  - DCPs, drought triggers, goals, and response measures
  - Emergency interconnects, and
  - Emergency responses to local drought conditions or loss of municipal supply
  - Recommendations from the Drought Preparedness Council

# **Unique Stream Segments, Unique Reservoir Sites, and Legislative Recommendations**

## **Task 8**

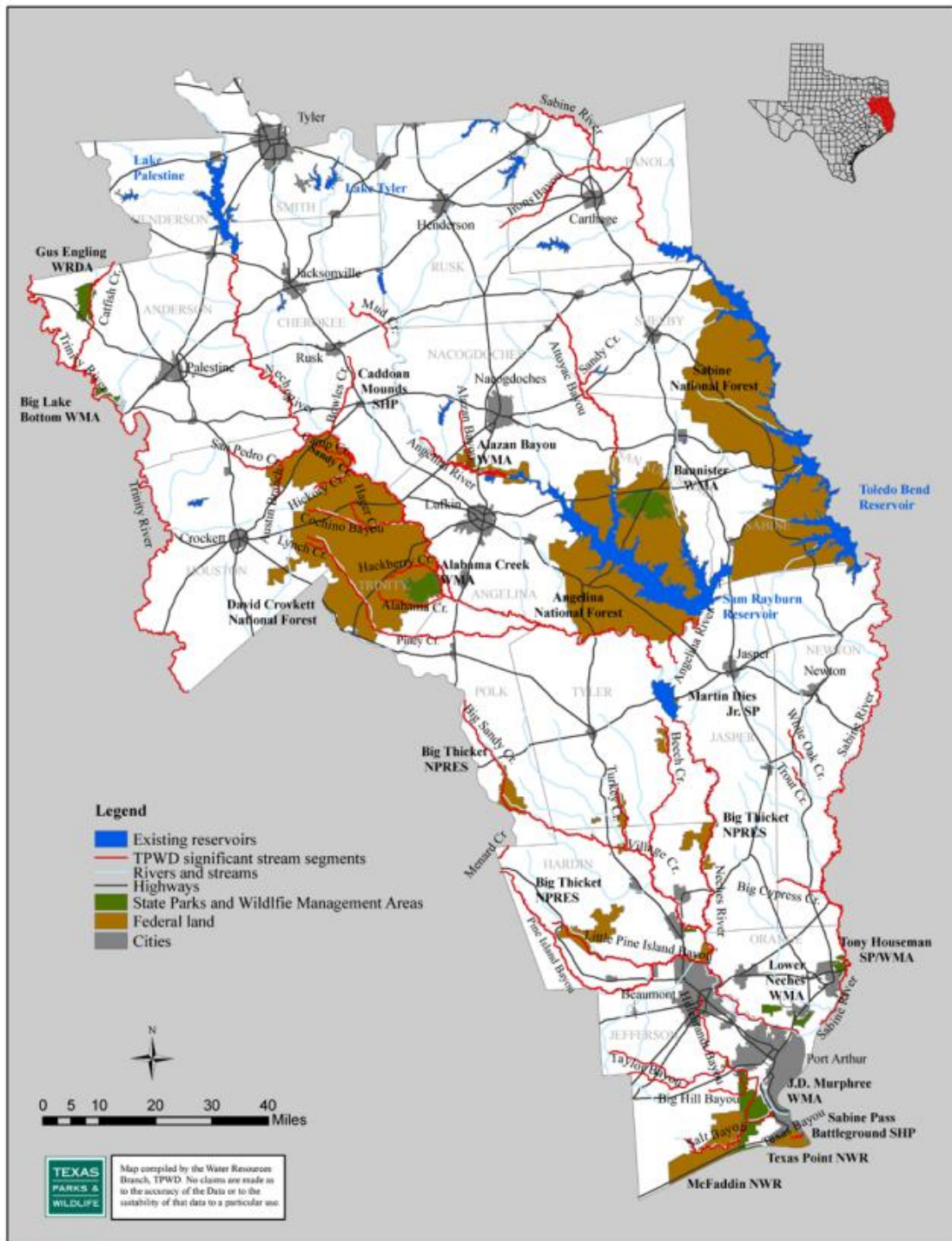


# Status of Recommendations

- Comments Summary
  - 3 reviewer feedback received and incorporated
- Recommendations Review
  - Most recommendations from the previous cycle remain relevant, except those already addressed
- New Recommendations
  - Provide funding for Groundwater Management Areas to support the development of Desired Future Conditions (DFCs)

# Chapter 8 – Ecologically Unique River and Stream Segments

- Criteria for Unique Ecological Value:
  - Biological function
  - Hydrologic function
  - Riparian conservation areas
  - High water quality/exceptional aquatic life/high aesthetic value
  - Threatened or endangered species/unique communities



- Texas Parks and Wildlife Department (TPWD):
  - 41 possibly ecologically significant river and stream segments in Region I
  - 9 of 41 segments meet 3 or more criteria

# Chapter 8 – Ecologically Unique River and Stream Segments

The intent of the Texas Legislature regarding the purpose of the unique stream segment designation is stated in Section 16.051(f) of the Texas Water Code:

*This designation solely means that a state agency or political subdivision of the state may not finance the actual construction of a reservoir in a specific river or stream designated by the legislature under this subsection.*

Based on this section of the law, it would be irrelevant to consider recommending a segment for designation if it does not have potential to be a reservoir site.

# Chapter 8 – Ecologically Unique River and Stream Segments

Four segments include reaches that have previously been identified as potentially suitable for a reservoir site as follows:

- Upper and Lower Neches River (Segment 0601/0602/0604) – Rockland Reservoir
- Piney Creek (Segment 0604D) – Rockland Reservoir
- Upper Sabine River (Segment 0505; Panola County) – Lake Stateline and Lake Carthage

# Chapter 8 – Ecologically Unique River and Stream Segments

- In previous cycles, the ETRWPG voted not to recommend any stream segments in the region for unique status.
- Sufficient programs in place to protect streams from inappropriate reservoir construction.
- Prefer to allow TWDB to study issues associated with unique stream segment designation before further considering potential designations in the ETRWPA.
- Recommendation:
  - *“Working group, comprised of representatives from TWDB, TPWD, TCEQ, and each of the sixteen water planning regions, be convened to provide clarity, purpose, and direction to the code language regarding the identification of ecologically unique river and stream segments”.*

# Chapter 8 – Unique Reservoir Sites

*“Numerous sites have been identified as being hydrologically and topographically ideal for reservoir development.*

*Two sites in the ETRWPA are currently designated as unique reservoir sites: **Lake Columbia and Fastrill Reservoir.***

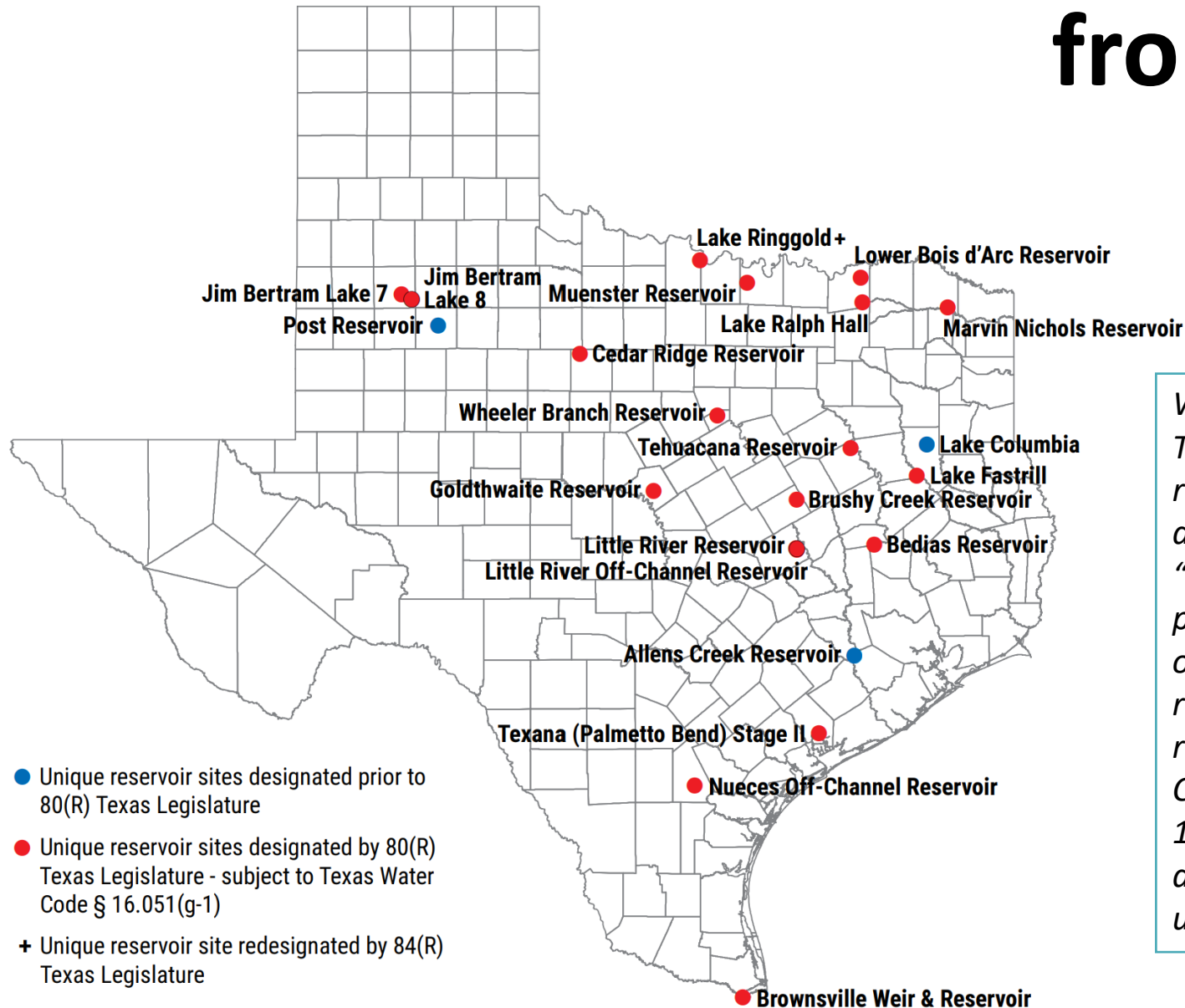
*Fastrill Reservoir was designated by the 79th Legislature through 2007 Texas Legislature Senate bill 3. Lake Columbia received its unique designation by the State Legislature, Senate Bill 1362. Lake Columbia is currently being pursued for development.*

*The ETRWPG fully supports the designation of these two reservoir sites as unique.”*



Figure 2-2. Unique reservoir sites previously designated by the Texas Legislature

# Recommendations from the 2022 SWP



*With the passage of Senate Bill 3 in 2007, the 80th Texas Legislature designated an additional 19 reservoir sites with a provision whereby the designations would expire on September 1, 2015, “unless there is an affirmative vote by a proposed project sponsor to make expenditures necessary in order to construct or file applications for permits required in connection with the construction of the reservoir under federal or state law” (Texas Water Code § 16.051[g-1]). With the passage of House Bill 1042 in 2015, the 84th Texas Legislature re-designated the Lake Ringgold reservoir site as unique. – 2022 State Water Plan (SWP)*



# Chapter 8 – Unique Reservoir Sites

Major Water Provider	Reservoir Site
Angelina Neches River Authority	<b>Lake Columbia (Already Unique Site)</b>
	Ponta
Lower Neches Valley Authority	Rockland Reservoir (Alternative WMS)
Sabine River Authority	Big Cow Creek
	Bon Wier
	Carthage Reservoir
	Kilgore Reservoir
	Rabbit Creek
	State Hwy. 322, Stage I
	State Hwy. 322, Stage II
	Stateline
Upper Neches River Municipal Water Authority	<b>Fastrill Reservoir (Already Unique Site)</b>

# Chapter 8 – Legislative Recommendations

*Regional water planning groups are to consider and make recommendations to the legislature regarding regulatory, administrative, or legislative issues that the group believes are needed and desirable to achieve the stated goals of state and regional water planning, including to:*

- (1) Facilitate the orderly development, management, and conservation of water resources;*
- (2) Prepare for and respond to drought conditions; or*
- (3) Facilitate more voluntary water transfers in the region.*

# Chapter 8 – Legislative Recommendations

- Flexibility in Determining Water Plan Consistency
  - TWDB and the TCEQ should continue to interpret existing legislation to give the maximum possible flexibility to water suppliers as they seek to serve the public and provide new supplies.
  - Willing buyer/willing seller transactions of water rights and treated water should continue to not be controlled by this regulation.
  - TWDB and TCEQ should encourage and continue to make use of their ability to waive consistency requirements if local water suppliers elect strategies that differ from those in the regional plan.
  - RWPG will consider the creation of sub-WUG planning at the request of an existing utility, public water system, or representative of a geographic area within an ETRWPA WUG that meets the TWDB criteria for a sub-WUG.

# Chapter 8 – Legislative Recommendations

- Continued Funding by the State of the Regional Water Planning Process on a Five-Year Cycle
  - Grassroots planning effort created by Senate Bill 1 is important to the state of Texas and should be continued.
  - ETRWPG believes that the most fair and efficient method of financing continuation of this effort for future planning cycles is to continue funding of this effort by the state with administrative expenses for the region being provided from sources within the region.
- Unique Reservoir Designation
  - Designation of unique reservoir site for Lake Columbia and Lake Fastrill be retained through the current planning horizon, 2080.
- Water Reuse
  - Current regulations as they pertain to the reuse of treated wastewater (i.e., water reuse) should continue to be reviewed and amended, as necessary, to encourage the development of these resources.

# Chapter 8 – Legislative Recommendations

- Funding
  - TWDB expand existing programs to assist entities with funding replacement and repairs to aging infrastructure and/or allow replacement of water supply infrastructure to be funded through the Water Implementation Fund program.
  - Increased flexibility in categorical exclusions for Environmental Information Documents that are required for funding of water projects.
  - Increased flexibility in Economically Distressed Areas Program (EDAP) funding requirements
- Uncommitted Surface Water
  - To support adequate supply for future needs and encourage reliable water supply planning, the ETRWPG:
    - Opposes unilateral cancellation of uncommitted water contracts/rights;
    - Supports long term contracts that are required for future projects and drought periods; and
    - Supports “interruptible” water supply contracts as a way to meet seasonal and short-term needs before long-term water rights are fully utilized.

# Chapter 8 – Legislative Recommendations

- Standardized Processes for Regional Water Plan Development
  - TWDB develop guidelines for regional water planning evaluations of federally permitted water projects that will produce documentation that can be integrated and used in the NEPA process.
  - TWDB is encouraged to continue to develop relationships with federal authorities to allow the use of the state and regional water planning population projections to streamline permitting process.
- Funding for Additional Groundwater Modeling
  - Funding for groundwater modeling for development of desired future conditions (DFCs) and modeled available groundwater (MAGs) be provided to the TWDB.
  - Funds should be made available to assist the Groundwater Management Areas (GMAs) with the expenses related to developing the DFCs.

# Chapter 8 – Legislative Recommendations

- Clarification of Unique Stream Segment Criteria
  - House Bill 1016 of the 84th Texas Legislature proposes language specific to the Region L Water Planning Area, providing clarification on the designation of a river or stream segment as being of unique ecological value. The ETRWPA supports the proposed clarifications found in House Bill 1016 and recommends that these clarifications be incorporated into the regional water planning process on a statewide basis.
- Allow Groundwater Supplies to Exceed the Modeled Available Groundwater
  - At a minimum, that MAG Peak Factors are continued to be allowed if all requirements are met. Ideally, the recommendation extends that the TWDB allow groundwater supplies to exceed the MAG in the regional water plan if the Regional Water Planning Group obtains written agreement from the relevant GCD.

# Updates on Water Management Strategies (10d) - Task 5B



# Water Management Strategies

- Coordination and Outreach Updates
  - Coordinated with all MWPBs but one
  - Coordination pending with City of Nacogdoches
- Identification of Water Management Strategies (WMSs)
  - WMSs have been identified to meet all needs in Region I
  - Coordination is still pending for non-Region I primary WUGs
- WMS Costs and Yields
  - Yields have been developed
  - Costs are mostly complete and are expected to be finalized by mid-January

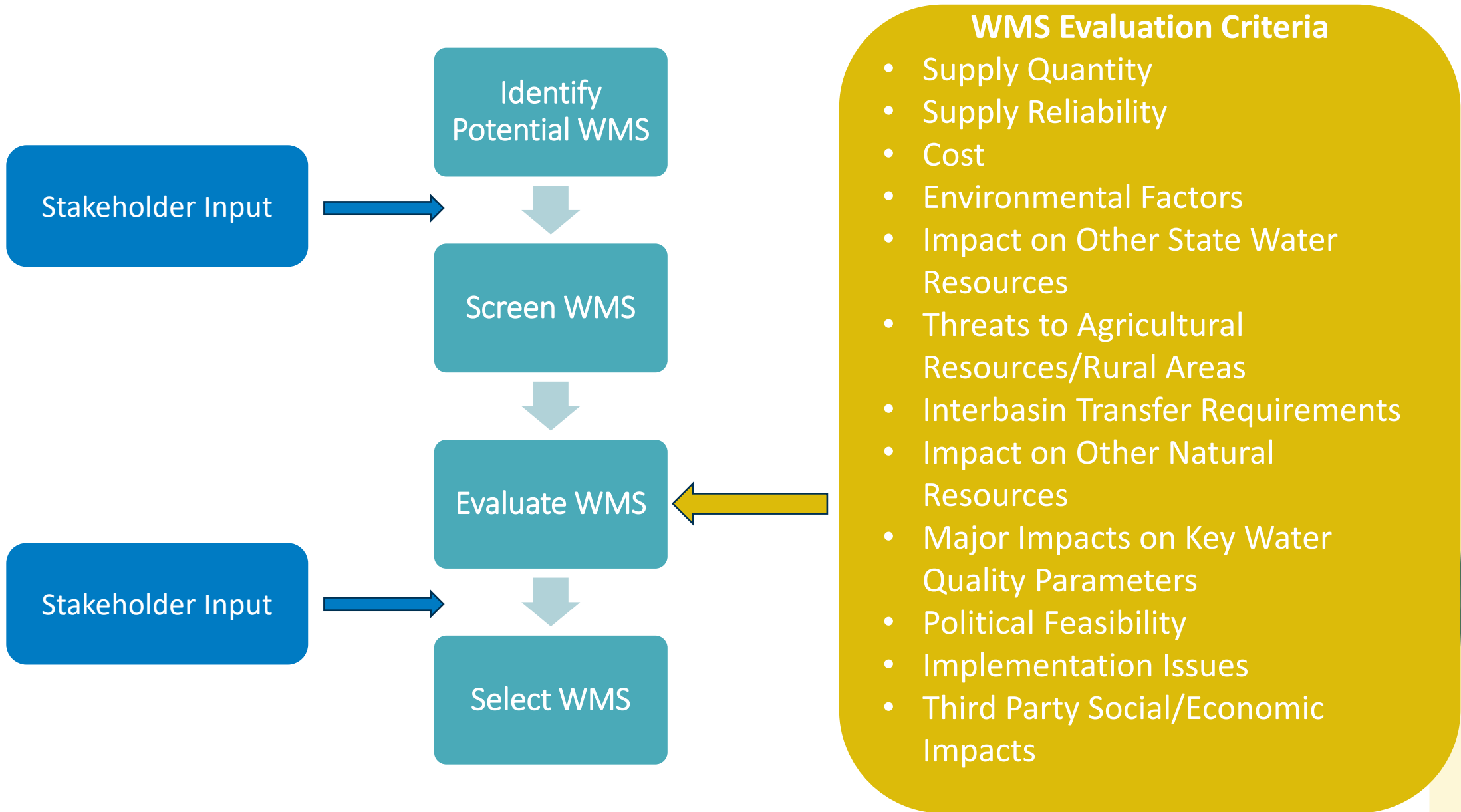
# Task 5B Overview

- Draft Chapter 5B to be posted by late January
- Evaluation of Water Management Strategies (WMSs) for all WUGs and MWP
- Summary of counties and MWPs
  - Recommended and alternative WMSs (quantities, cost estimate)
  - Shortage/surplus discussion
- WMS Technical Memoranda
  - Project description
  - Customers
  - Supply development
  - Environmental and permitting considerations
  - Cost estimate
  - Project evaluation

# Task 5B Evaluation

- 27 Region I WUGs with identified needs
  - 12 municipal, 15 non-municipal
  - Identified and evaluated WMSs for each
- Four WUGs without an identified need requested a WMS in survey (e.g., new GW well)
- Coordinated with MWPs regarding WMSs
- Coordinating with other regions (C, D, H) regarding interregional WMSs

# Task 5B Evaluation



# Task 5B – MWP WMS

- ANRA
  - Construction of Lake Columbia
  - Treatment plant and distribution system
- AN WCID #1
  - Lake Striker hydraulic dredging
- Houston County WCID #1
  - New groundwater wells (Carrizo-Wilcox)
- LNVA
  - Devers Pump Station Relocation (Region H)
  - Neches Pump Station Upgrade and Fuel Diversification
  - Beaumont West Regional Reservoir
  - Neches-Trinity Interconnect (Region H)
  - Purchase from SRA (Toledo Bend)

## Task 5B – MWP WMS

- Panola County FWSD
  - No unmet needs – no WMS identified
- SRA-TX
  - No WMS in Region I
- UNRMWA
  - Neches Run-of-River with Lake Palestine

# Task 5B – WMS Summary Table by County

Table 5B.1 2026 Needs and Water Management Strategies for Water User Groups by County (ac-ft per year)														
County	WUG	2026 Needs and Strategies	NEEDS		RECOMMENDED STRATEGY			ALTERNATIVE STRATEGY			Capital Costs (\$)	Annual Costs (\$)	Unit Costs During Amortization (\$ per acre-foot)	Unit Costs During Amortization (\$ per 1000 gal)
			2030	2040	2050	2060	2070	2080						
ANDERSON	B C Y WSC	Unmet Need	0	0	0	0	0	0	0	0	0	0	0	
		Municipal Conservation	5	7	8	8	8	8	9	\$310,000	\$24,200	\$4,500	\$13.81	
		New Wells (Carrizo-Wilcox)	0	170	170	170	170	170	170	\$4,254,000	\$525,000	\$3,088	\$9.48	
	STEAM ELECTRIC POWER	Unmet Need	-2,296	-2,296	-2,296	-2,296	-2,296	-2,296	-2,296	0	0	0	0	
		New Wells (Carrizo-Wilcox)	2,300	2,300	2,300	2,300	2,300	2,300	\$21,908,000	\$1,834,000	\$797	\$2.45		
ANGELINA	LUFKIN	Unmet Need	0	0	0	0	0	0	0	0	0	0	0	
		Develop Sam Rayburn Water Rights	Lufkin strategies discussed in Table 5B.2						Lufkin strategies discussed in Table 5B.2					
		Municipal Conservation	208	427	526	553	582	610	610	0	0	0	0	
	MANUFACTURING	Unmet Need	-2,145	-2,314	-2,488	-2,671	-2,859	-3,055	-3,055	0	0	0	0	
		Purchase from Lufkin (Sam Rayburn)	2,150	2,320	2,490	2,680	2,860	3,060	3,060	\$90,393,000	\$8,493,000	\$1,379	\$4.23	
	MINING	Unmet Need	-373	-412	-448	-480	-508	-533	-533	0	0	0	0	
Purchase from ANRA (Run of River, Angelina)		380	420	450	480	510	540	540	\$13,921,000	\$1,702,000	\$3,152	\$9.67		
CHEROKEE	ALTO RURAL WSC	Unmet Need	-124	-209	-306	-414	-533	-665	-665	0	0	0	0	
		New Wells (Carrizo-Wilcox)	670	670	670	670	670	670	670	\$7,612,000	\$970,000	\$1,448	\$4.44	
		Municipal Conservation	18	29	34	38	45	51	51	\$97,000	\$14,300	\$800	\$2.46	
	JACKSONVILLE	Unmet Need	0	0	0	0	0	0	0	0	0	0	0	
		Raw Water Transmission System from Lake Columbia	Jacksonville strategies discussed in Table 5B.2						Jacksonville strategies discussed in Table 5B.2					
		Municipal Conservation	114	279	349	348	345	343	343	0	0	0	0	
HARDIN	NO WUGS WITH UNMET NEEDS, NO STRATEGIES EVALUATED													
HENDERSON	ATHENS <sup>2</sup>	Unmet Need	0	0	-364	-1,053	-2,076	-2,701	-2,701	0	0	0	0	
		Municipal Conservation (Region C)	122	325	687	904	1,112	1,226	1,226	\$157,000	\$101,500	\$800	\$2.46	
		Athens MWA Strategies	0	0	364	1,222	2,055	1,989	1,989	Athens MWA strategies discussed in Table 5B.2				
		Unmet Need	-67	-75	-79	-83	-86	-87	-87	0	0	0	0	
	EDOM WSC <sup>2</sup>	Pending information from Region D												
		Municipal Conservation	Pending information from Region D											
	CHANDLER	Unmet Need	0	0	-43	-281	-573	-934	-934	0	0	0	0	
		Purchase from Tyler (Lake Palestine)	0	0	50	290	580	940	940	\$15,028,000	\$2,774,000	\$3,000	\$9.06	
		New Wells (Carrizo-Wilcox)	0	0	940	940	940	940	940	\$10,727,000	\$1,387,000	\$1,476	\$4.53	
		Municipal Conservation	13	23	30	40	52	77	77	\$38,000	\$9,700	\$700	\$2.15	
	LIVESTOCK <sup>2</sup>	Unmet Need	0	0	0	0	-321	-490	-490	0	0	0	0	
		Athens MWA Indirect Reuse	0	0	507	884	1,216	1,385	1,385	\$0	\$0	\$0	\$0.00	
	MINING <sup>2</sup>	Unmet Need	-15	-16	-17	-19	-47	-143	-143	0	0	0	0	
		New Wells (Queen City)	170	170	170	170	170	170	170	\$471,000	\$40,000	\$235	\$0.72	
STEAM ELECTRIC POWER <sup>2</sup>	Unmet Need	-2,061	-2,061	-2,061	-2,061	-2,061	-2,061	-2,061	0	0	0	0		
		This demand no longer exists, so no WMS was evaluated												

Values are draft and subjected to change.

# Task 5B – WMS Summary Table by MWP

Table 5B.2 2026 Needs and Water Management Strategies for Major Water Providers (ac-ft per year)											
		NEEDS	RECOMMENDED STRATEGY	ALTERNATIVE STRATEGY	BALANCE (Does not include Alternative totals)					Unit Costs During Amortization (\$ per acre-foot)	Unit Costs During Amortization (\$ per 1000 gal)
Major Water Provider	2026 Needs and Strategies	2030	2040	2050	2060	2070	2080	Capital Costs (\$)	Annual Costs (\$)		
ANRA	Unmet Needs	0	0	0	0	0	0	----			
	Lake Columbia	0	75,720	75,640	75,560	75,480	75,400	\$486,368,000	\$28,382,000	\$375	\$1.15
	ANRA Treatment and Distribution System	0	22,232	22,232	22,232	22,232	22,232	\$455,353,000	\$84,250,000	\$3,790	\$11.63
	<b>RECOMMENDED WMS TOTAL</b>	-	<b>97,952</b>	<b>97,872</b>	<b>97,792</b>	<b>97,712</b>	<b>97,632</b>	<b>\$941,721,000</b>	<b>\$112,632,000</b>	-	-
AN WCID#1	Unmet Needs	0	0	0	0	0	0	----			
	Hydraulic Dredging (Includes Volumetric Survey and Normal Pool Elevation Adjustment)	0	5,600	5,600	5,600	5,600	5,600				
	<b>RECOMMENDED WMS TOTAL</b>	-	<b>5,600</b>	<b>5,600</b>	<b>5,600</b>	<b>5,600</b>	<b>5,600</b>	<b>\$0</b>	<b>\$0</b>	-	-
ATHENS MWA	Unmet Needs	0	0	890	1,972	3,342	4,145	----			
	Athens Municipal Conservation (Region C)	122	325	687	904	1112	1226	\$157,000	\$101,500	\$800	\$2.5
	Amendment of Fish Hatcheries Permit for Reuse	2,872	2,872	2,872	2,872	2,872	2,872	\$0	\$0	\$0	\$0.00
	WTP Infrastructure Upgrades	0	0	4,592	4,592	4,592	4,592	\$3,116,000	\$308,000	\$67	\$0.21
	Additional Lake Athens Supply Used with WTP Infrastructure Upgrades	0	0	0	169	449	561				
	New Wells (Carrizo-Wilcox)	0	0	0	0	720	720	\$10,270,000	\$1,286,000	\$1,786	\$5.48
	<b>RECOMMENDED WMS TOTAL</b>	<b>2,994</b>	<b>3,197</b>	<b>3,559</b>	<b>3,945</b>	<b>4,433</b>	<b>4,659</b>	<b>\$3,273,000</b>	<b>\$409,500</b>	-	-

Values are draft and subjected to change.



# Updates on Additional IPP Tasks and Chapters (10e)

# Chapter 6 – Impacts of Plan and Consistency with Protection of Resources

1. Impacts of WMS
  - a) Key Water Quality Parameters in the State
  - b) Moving Water from Agricultural and Rural Areas
2. Consistency with the Long-term Protection of the State
  - a) Protection of Water Resources
  - b) Consistency with Protection of Agricultural Resources
  - c) Consistency with Protection of Natural Resources
3. Unmet Water Need
4. Socioeconomic Impacts of Not Meeting Identified Needs

# Chapter 9 – Implementation and Comparison to Previous Plan

- Includes:
  - Implementation
    - Degree of implementation of WMSs from the previous RWP
    - Impediments to implementation
    - Implementation results data table
  - Comparison to previous plan
    - Summary of how the new RWP compares to the previous RWP

# Chapter 10 – Public Participation

- Includes:
  - Public participation
  - Rural outreach
  - Interregional coordination
  - Public meetings
  - Eligible administrative and technical support activities
  - Other requirements and activities eligible for reimbursement

# Item 11

## Reports from other state agencies

- a) Texas Water Development Board – Lann Bookout
- b) Texas Department of Parks & Wildlife – Stephen Lange
- c) Texas Department of Agriculture – Manuel Martinez
- d) Texas Soil and Water Conservation Board – Trey Watson
- e) Groundwater Management Areas – John Martin/John McFarland

# Item 12

## General Discussion

# Questions?

**Next Meeting: February 6, 2025 (IPP ADOPTION)**



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