



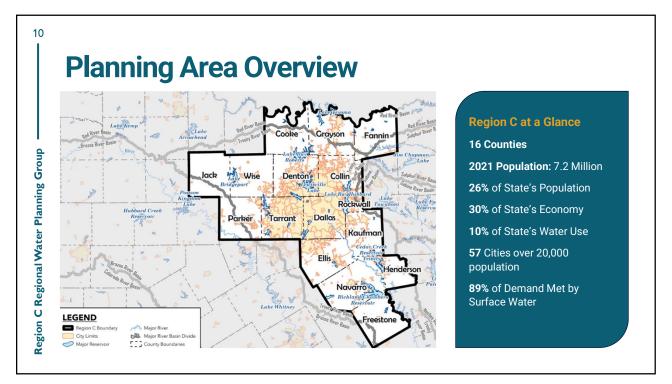


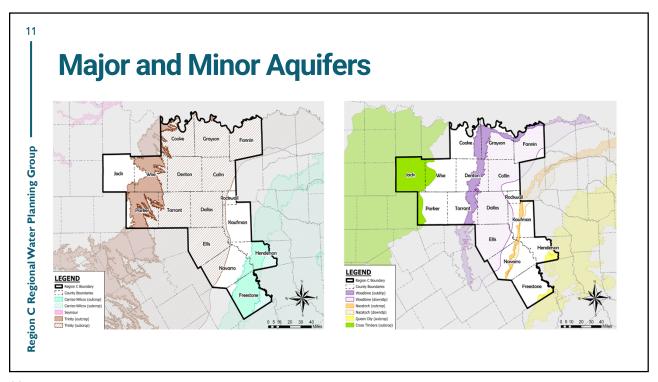
Region C Regional Water Planning Group

Draft Chapter 1 – Contents

- Regional water planning area overview
 - Population
 - Economics
- Sources of water
- · Current water uses and demand centers
- · Major/regional water providers

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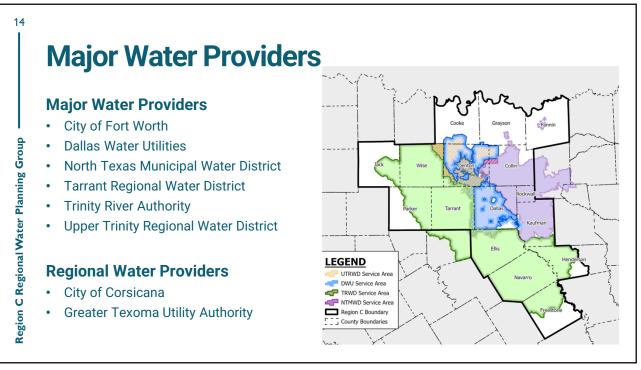




Surface Water • 5 river basins (mainly Trinity) • >20 major reservoirs | Cook | Grayson | Fanning | Grayson | Grayson | Fanning | Grayson | Gr

13 **Current Water Use and Demand Centers** 2021 Region C Water Use 2021 Water Use Total use of 1.39 million AF/Y Municipal use of 1.27 million AF/Y Region C Regional Water Planning Group 1% 1% 1% All other use of <0.12 million AF/Y 3% Municipal Manufacturing Mining SEP Irrigation ■ Livestock 91%

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Draft Chapter 1 – Contents Cont.

- · Pre-existing plans for water supply development
- Drought and water loss/water audit
- · Other water-related programs
- Agricultural and natural resources
 - Wetlands, endangered/threatened species, agriculture and prime farmland, etc.
- Threats and constraints to water supply
 - · Water quality, invasive species, over pumping
- Water-related threats to agricultural and natural resources

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Region C Regional Water Planning Group

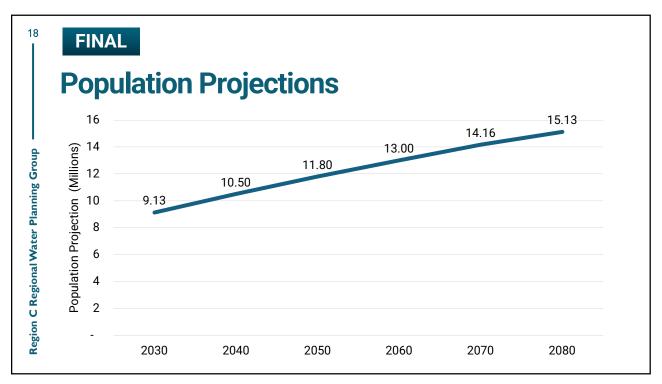


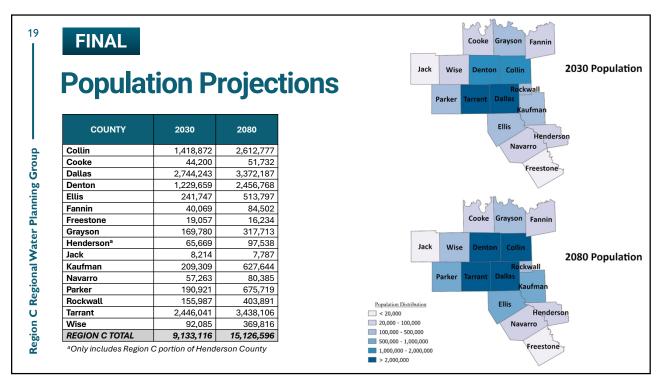
Draft Chapter 2 – Contents

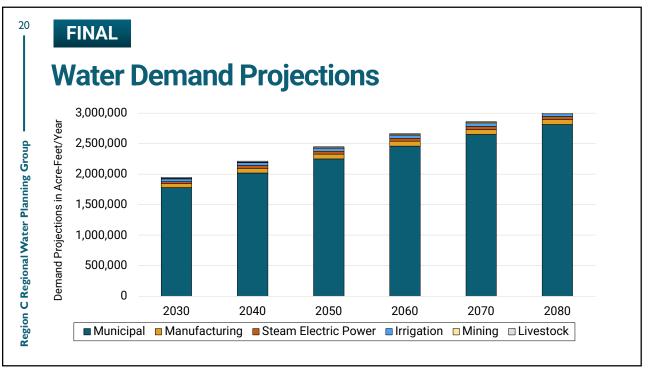
- Population projections
- · Water demand projections
 - Municipal
 - Irrigation
 - Livestock
 - Manufacturing
 - Mining
 - · Steam electric power
- Major Water Provider Demands

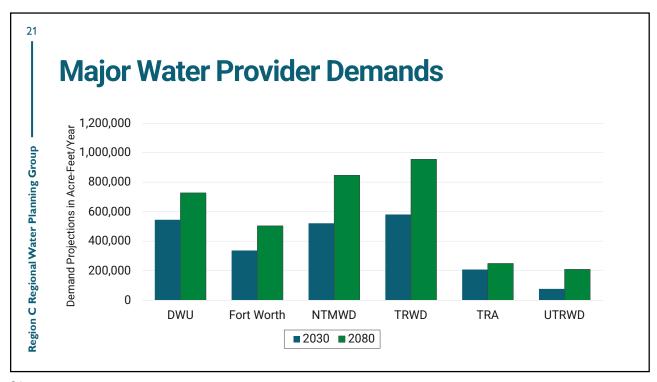
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Region C Regional Water Planning Group











Draft Chapter 3 – Contents

- Overall water supply availability
 - Surface water
 - Groundwater
- · Currently available water supplies
- Water availability by Major Water Provider

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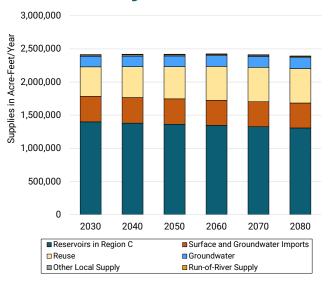
Region C Regional Water Planning Group

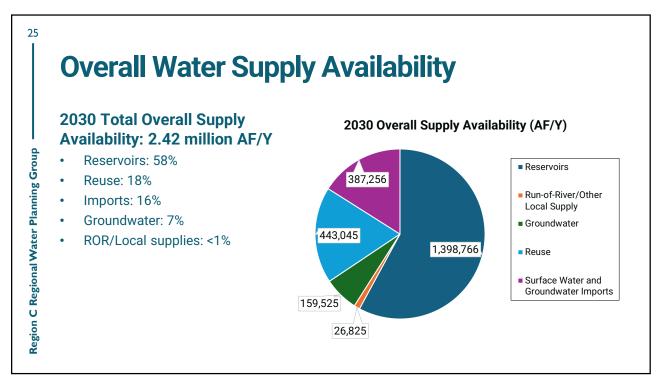
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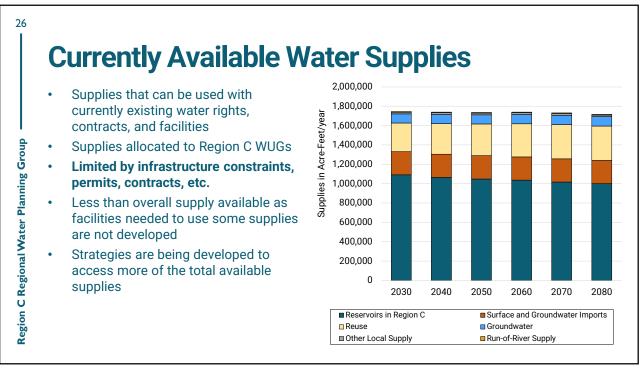
Region C Regional Water Planning Group

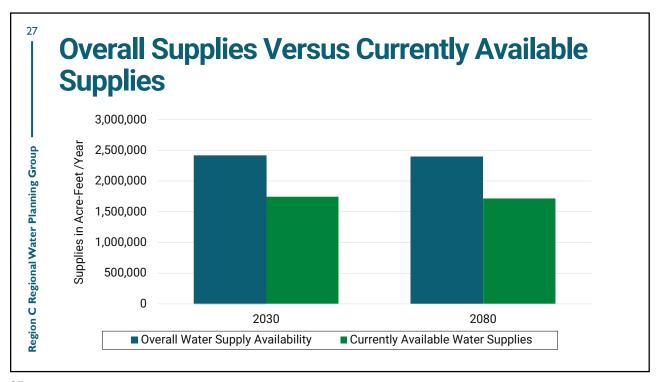
Overall Water Supply Availability

- Total availability at the source
- Reliable supply during a repeat of the drought of record
 - Modeled Available Groundwater (MAG)
 - Water Availability Model (Run 3)
 - Safe yield or droughts worse than drought of record
- Not limited by infrastructure or what an entity can actually use













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WUGs Strategy Survey

Survey sent out in June to municipal WUGs (except county-others)

- Survey included
 - Existing supplies
 - Water management strategies
 - Request for input on existing contracts, infrastructure capacity, and emergency interconnections
- Received feedback from 48 of 256 (19% response rate)
- Followed up via email and phone calls

Region C Regional Water Planning Group

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WUGs Strategy Survey – Wholesale Water Providers

- Emailed larger WWPs a specific summary workbook and offered to set up a teleconference to discuss
- Summary workbook included -
 - Population and water demands
 - **Existing supplies**
 - Needs before strategies
 - 2021 plan strategies
 - Request for input on existing contracts, infrastructure capacity, and emergency interconnections
- Received feedback from 5 and met with 2 WWPs
- Continuing to coordinate with all WUGs

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Major Water Providers

- Met with all the MWP/RWP
- Reviewed and received input on -
 - Population and water demands
 - **Existing supplies**
 - Needs before strategies
 - 2021 plan strategies
 - New strategies
 - Customers, etc.
- Held joint strategies meeting

Major Water Providers

Fort Worth Dallas (Dallas Water Utilities)

North Texas Municipal Water District **Tarrant Regional Water District Trinity River Authority**

Upper Trinity Regional Water District Regional Wholesale Water Providers

Corsicana

Greater Texoma Utility Authority

Region C Regional Water Planning Group

Marvin Nichols Reservoir Feasibility Study

- Recommended strategy for TRWD, NTMWD and UTRWD
- TWDB Feasibility Study published September 16
 - Comments due by October 25
 - Brief TWDB presentation later in agenda
- Does Region C want to submit comments?
- Types of comments
 - Acknowledge TWDB's assessment the project is feasible
 - · Clarify some statements regarding the economic impacts

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Region C Regional Water Planning Group



Scope of Work for Task 5C

Conservation Recommendations

Region C Regional Water Planning Group

- Evaluate WUGs' water conservation plans (WCPs) and Model WCPs to inform Water Management Strategies (WMSs)
 - New plans for this cycle: 57 out of 142 required received, 13 non-required
- Set drought-based GPCD goals for each municipal WUG
- Explain **non-recommendation** of conservation WMSs, if applicable
- Determine highest practicable water conservation levels for WUGs that have a WMS with an Interbasin Transfer (IBT)
- Develop separate water loss mitigation WMS

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Drought-Based GPCD Goal Approach

- 1. Review municipal WUGs' demand patterns and define GPCD threshold
- 2. Identify WUGs for whom conservation WMSs will be recommended
- 3. Develop conservation packages
- 4. Quantify conservation savings and set GPCD goals

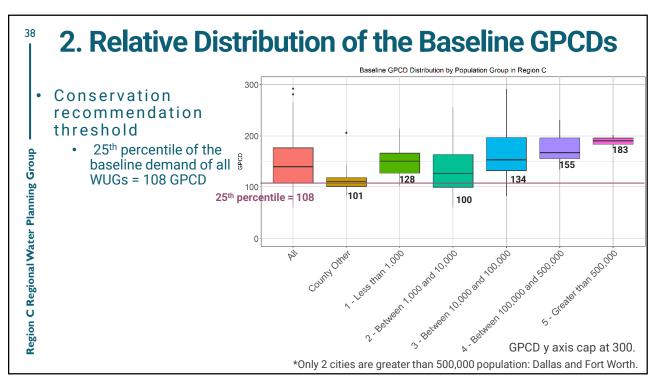
Region C Regional Water Planning Group

Region C Regional Water Planning Group

1. GPCD Threshold for Conservation Recommendation

- Previous threshold from the 2021 Plan: 140 GPCD
- Baseline GPCD by Population Group
 - Smaller utilities: rural areas, greater distance between connections
 - Mid-size utilities: primarily residential, less commercial/industrial activity
 - Larger utilities: more commercial/industrial activity, higher commuter population

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Recommendations in 2021 Plan

Water Conservation Package recommended for municipal WUGs include:

• Low flow plumbing fixture rules

- Efficient new residential clothes washer standards
- Efficient new residential dishwasher standards
- Enhanced public and school education
- Price elasticity/rate structure impacts

- Enhanced water loss control program
- Water waste prohibition
- Water conservation coordinator
- Time-of-day irrigation restriction
- Twice weekly irrigation restriction

Move from the Conservation Package to a separate water loss mitigation $\ensuremath{\mathsf{WMS}}$

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Region C Regional Water Planning Group

3. Municipal Conservation Packages for 2026 RWP

Region C Regional Water Planning Group -

Plumbing Code Related Strategies for all WUGs (1)	Best Management Practices for all WUGs (2)	Conservation Package for a Subset of WUGs (3)
Low flow plumbing fixture rules	Enhanced public and school education	Water conservation coordinator
Efficient new residential clothes washer standards	Price elasticity/rate structure impacts	Time-of-day irrigation restriction
Efficient new residential dishwasher standards	Enhanced water loss control program	Twice weekly irrigation restriction

Region C Regional Water Planning Group

Conservation Package 3 Recommendation

- Recommended Water Conservation Package (Package 3) for municipal WUGs that meet these criteria:
 - Per capita demand surpasses threshold (108 GPCD)
 - · Measure is not already implemented
 - Measure is applicable to the WUG
 - A sponsor is available for implementation
- The package is accessible to all WUGs, with flexibility to select appropriate strategies.

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4. Drought-Based GPCD Goal Estimate

RegionEvaluation

- Region C Water Conservation Planning Tool
 - Evaluated water savings/costs for the past four plans
 - Provides easy data updates for regional planning
 - Incorporates prior recommendations
- When reasonable, utilizes water savings and cost assumptions from:
 - TWDB Municipal Water Conservation Planning Tool
 - Alliance for Water Efficiency Tool

Region C Regional Water Planning Group



Drought Management

- Drought(s) of Record
- Uncertainty and Drought(s) Worse than Drought of Record [NEW]
- Current Drought Preparations and Response
- RWPA Drought Response Triggers & Actions
- · Existing and Potential Emergency Interconnects
- · RWPG Drought Management WMS
- Emergency Responses to Local Drought Conditions or Loss of Water Supply
- Other Drought-Related Considerations and Recommendations
- Region-Specific Model Drought Contingency Plans

RWPA = Regional Water Planning Area

Region C Regional Water Planning Group

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Discussion Items

Region C Regional Water Planning Group

Drought(s) of Record

- Previous Cycle:
 - 1950s Drought: Recognized as the Drought of Record (DOR) for the State
 - · Region C Evaluation Included:
 - Reservoir storage (TCEQ Water Availability Model)
 - Palmer Hydrological Severity Index (PHSI)
 - Evaluation suggested that the 1950s drought is also the DOR for most Region C area.
- · Approach for this cycle:
 - Follow similar evaluation as the previous cycle

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Uncertainty and Drought(s) Worse than Drought of Record

- · Newly required section in this cycle
- · Section should address the following components:
 - Planning for Uncertainty
 - Water availabilities and management strategies are based on sustainable supplies as defined through the Joint Planning and Regional Water Planning Processes
 - · Baseline demand reflective of dry year conditions
 - · Existing Measures for Preparation of the DWDOR
 - 3 MWPs conducted safe yield analyses or climate modeling
 - · Drought management measures outlined in Drought Contingency Plans (DCPs)
 - Management supply factor > 1.1
 - Potential Additional Measures for DWDOR Resilience
 - Multiple water sources for redundancy
 - Emergency interconnects and/or interim emergency purchases
 - Drought Planning Survey Results¹

https://savetexaswater.org/resources/doc/TAWWA-Drought-Survey-Summary-of-Findings_DRAFT1.pdf

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Region C Regional Water Planning Group

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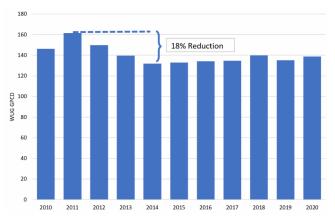
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Response to the 2010s Drought for Region C WUGs

 Achieved a 18% reduction from 2011 to 2013 on average

 Stabilizing GPCD trend indicates the challenge of achieving a similar magnitude of reduction

 Baseline demand reflective of dry-year demand provides a buffer for supply planning



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Management Supply Factor

- Management Supply Factor (MSF): Ratio of total existing and recommended water supplies to total decadal water demand.
- MSF > 1.0: Indicates surplus projected supplies.
 - Region C RWPG recommends a MSF of greater than 1.1 for all MWPs
- MSF < 1.0: Indicates a deficit or unmet need.

Region C Regional Water Planning Group



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Legislative Recommendations

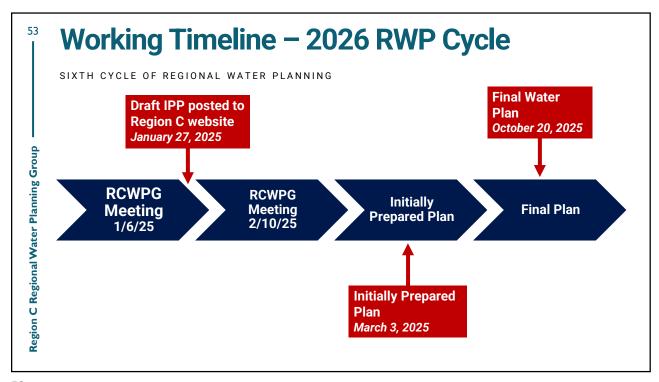
- Survey sent 9/3/24 to gather input from RWPG
 - Due date has passed: 9/17/2024
- 2 responses received so far:
 - North Texas Municipal Water District
 - Tarrant Regional Water District

Region C Regional Water Planning Group

Survey Results Gathered to Date Status of the 2021 Plan Recommendations Proposed for the 2026 Plan Category Convene a working group (not accepted) **Ecologically Unique River and TBD Stream Segments** Region C Regional Water Planning Group Ralph Hall Bois d'Arc Lake **Unique Sites for Reservoir TBD** Construction Marvin Nichols **Policy and Legislative** Tehuacana Recommendations Fastrill Columbia George Parkhouse (North) Sponsors of these proposed reservoirs continue to affirmatively vote to make expenditures necessary to construct or apply for required permits for these reservoirs and avoid termination of unique reservoir site designation. TBD **Policy and Legislative** Regional Water Planning Process (no changes) TBD TCEQ Policy and Water Rights (no changes)
State Funding and Water Supply Programs (some Recommendations Water Reuse and Desalination (some changes)
State and Federal Program – Water Supply Issues (no changes)

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Working Timeline – 2026 RWP Cycle SIXTH CYCLE OF REGIONAL WATER PLANNING Next Steps • Water Management Strategies • Evaluate strategies • Finalize MWP/RWP plans and strategies by December 2024 Next Region C Regional Water Planning Group Meeting January 6, 2025







Texas Water Development Board

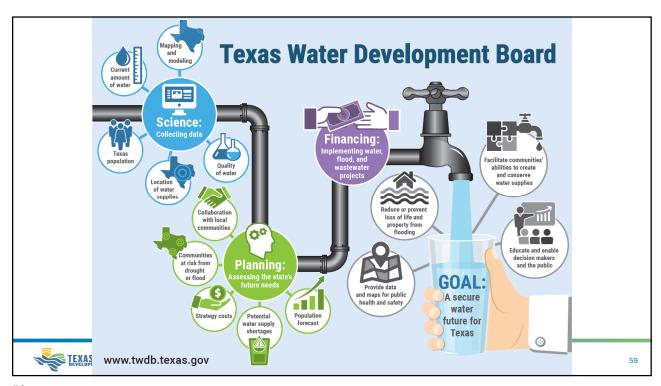
Financial Assistance Programs

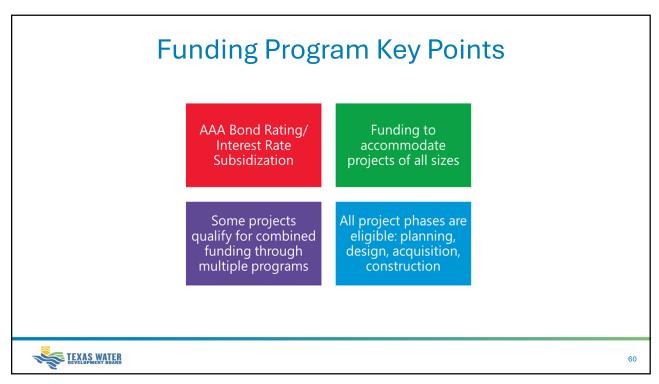
Update Briefing

September 30, 2024



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Examples of Eligible Projects

- Current Water Needs
- > Future Water Needs
- Water Transmission & Distribution
- Potable Reuse
- > Wastewater Collection
- > Water and Wastewater Treatment
- Non-Point Source Pollution Control
- > Flood Control & Storm Water Management
- Irrigation Systems Improvements
- > Demonstration and Technology Transfer
- > Equipment Cost Share



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Why?

Dollars Committed and Cost Saving Estimates

Enity	Rural	Commitment	Program	Commitment		Commitment Comm		mmitment
шпту	Kui ai	Date	Fiogram		Amount	Co	st Savings	
City	Yes	08/15/2024	DWSRF	\$	530,000	\$	280,712	
City	Yes	08/15/2024	CWSRF	\$	39,315,000	\$	12,036,859	
District	Yes	07/23/2024	SWIFT	\$	5,000,000	\$	1,343,310	
City	No	07/23/2024	SWIFT	\$	10,135,000	\$	1,215,549	
City	No	07/23/2024	CWSRF	\$	11,350,000	\$	2,267,150	
WSC	No	06/12/2024	WDF	\$	2,500,000	\$	111,183	
City	Yes	06/12/2024	CWSRF	\$	23,880,000	\$	9,046,292	
Water Authority	Yes	05/09/2024	WDF	\$	2,880,000	\$	199,682	
City	Yes	05/09/2024	WDF	\$	5,875,000	\$	222,633	
District	No	04/11/2024	WDF	\$	5,550,000	\$	1,123,182	



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Illustrative Lending Rates

CWSRF 30-year Term

Rating	Market ¹	TWDB ^{2, 3}
AAA	3.97%	2.38%
AA	4.09%	2.45%
Α	4.23%	2.54%
BAA	4.51%	2.71%

DWSRF 30-year Term

Rating	Market ¹	TWDB ^{2, 3}
AAA	3.97%	2.58%
AA	4.09%	2.66%
Α	4.23%	2.75%
RAA	4.51%	2.93%

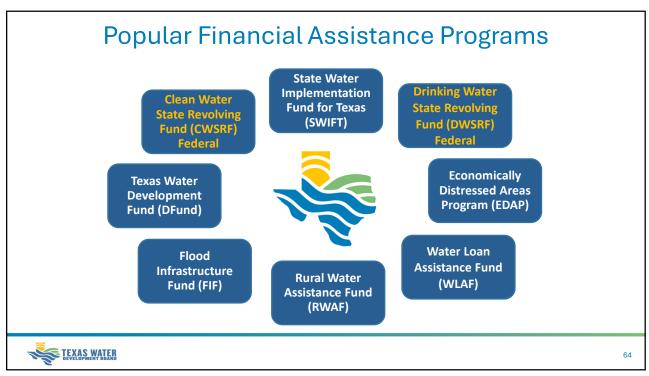
General Obligation Programs

Type of Funds	Terms	Market ¹	TWDB ²	Difference
Development Fund (Tax Exempt)	20	4.02%	4.04%	-0.02%
Development Fund (Tax Exempt)	30	4.44%	4.46%	-0.02%
Development Fund (Taxable)	20	5.82%	5.81%	0.01%
Agricultural Loans (Taxable)	7	4.95%	4.38%	0.57%
EDAP (Tax Exempt)	20	4.02%	3.60%	0.43%
EDAP (Taxable)	20	5.82%	4.91%	0.91%

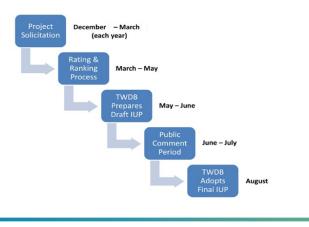


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Example of Project Information Form & Intended Use Plan Annual Cycle



TEXAS WATER DEVELOPMENT BOARD

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Texas Constitutional Amendment - Proposition 6

"The constitutional amendment creating the Texas water fund to assist in financing water projects in this state."

TEXAS VOTERS APPROVED √ 78% YES

- > Senate Bill 28
 - Created the Texas Water Fund, New Water Supply for Texas Fund, and the Statewide Water Public Awareness Account.
- > Senate Bill 30
 - Authorized a one-time, \$1 billion supplemental appropriation of general revenue to the Texas Water Fund, contingent on enactment of SB 28 and approval of SJR 75 by voters.
- > Senate Joint Resolution 75
 - Proposed constitutional amendment creating the Texas Water Fund to assist in financing water projects in Texas
 - Directed the TWDB to allocate no less than 25 percent to the New Water Supply for Texas Fund (\$250 million).



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Texas Water Fund (SB 28)

- > Allows the TWDB to transfer money to certain existing TWDB financial assistance programs.
- > TWDB must ensure that a portion of the money is used for:
 - water infrastructure projects for rural political subdivisions and municipalities with a population of less than 150,000
 - projects for which all required state or federal permitting has been substantially completed
 - water conservation strategies
 - water loss mitigation projects
 - the statewide water public awareness program
- Created to provide financial assistance to develop water supply projects that create <u>new water sources</u> for the state, including
 - desalination projects, including marine and brackish water desalination
 - · produced water treatment projects
 - aquifer storage and recovery projects
 - the development of infrastructure to transport water that is made available by these types of projects



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Texas Water Fund Distribution

Funding Description	i arget Amount
Rural Water Assistance Fund	
100 percent grant for conservation/water loss projects from SRF solicitation (under 1,000 population)	\$45,000,000
90 percent grant/10 percent loan or local match for conservation/water loss projects from SRF solicitation (1,000 to 10,000 in population)	\$130,000,000
High risk or need projects (100 percent grant)	\$20,000,000
Rural Water Assistance Fund subtotal	\$195,000,000
Water Loan Assistance Fund	
70 percent grant/30 percent loan or local match for conservation/water loss projects from 2025 SRF solicitation (10,001 to 150,000 in population)	\$90,000,000
Statewide water public awareness program	\$15,000,000
SWIFT program support	\$300,000,000
Potential bond leveraged funding through existing	
financial assistance programs	\$150,000,000
New Water Supply for Texas Fund	\$250,000,000
Grand total	\$1,000,000,000



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Timelines - State Fiscal Year 2024 September 1, 2023 – August 31, 2024

Program		Solicitation Open	Application Deadline
Clean Water State Revolving Fund	\$460M	12/15/2023 - 3/1/2024	
Drinking Water State Revolving Fund	\$435M		
Emerging Contaminants (CWSRF)	\$9.7M		
Lead Service Line Replacement (DWSRF)	\$146M	12/15/2023 - 4/1/2024	
Emerging Contaminants (DWSRF)	\$609M		
Asset Management Program for Small Systems	\$100K in services	9/18/2023	11/2/2023
Water Utilities Technical Assistance Program	\$150K in services	11/17/2023	1/31/2024
State Water Implementation Fund for Texas (water plan projects over next 50 years)	\$27B	12/7/2023	2/1/2024
Flood Infrastructure Fund (flood plan projects 2024-2025)	\$375M	12/15/2023	4/15/2024
Economically Distressed Areas Program (2024-2025)	\$100M	3/15/2024	5/15/2024
Texas Water Development Fund	Bond sell as needed	Spring	12/31/2024
Blue Text Federal Program. Black Text State of Texas Program.			



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Helpful Tip

- > Financial Audits
- Are they up to date?
- At the time of full application submittal, a current audit is required for the application to be deemed administratively complete.
- Costs can be captured in project budget.
- > Ability to Take on Debt
- Analysis will be completed.
- What rates and charges are in place? Will they need to be raised?
- > Updated Water use Survey and Water Loss Audit.
- > Water Conservation and Drought Contingency Plan (if applicable).
- > Talk early and often with TWDB staff we are happy to provide guidance and support



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Resource Links

* Texas Water Fund

https://www.twdb.texas.gov/financial/programs/twf/index.asp

* TWDB Financial Assistance Programs

https://www.twdb.texas.gov/financial/index.asp

* TWDB Financial Assistance Program Guidance Manuals and Forms Library

https://www.twdb.texas.gov/financial/instructions/index.asp

* TWDB Funding Application FAQ

https://www.twdb.texas.gov/financial/applications/faq.asp

* Clean Water State Revolving Fund Program

www.twdb.texas.gov/financial/programs/CWSRF/index.asp

* Drinking Water State Revolving Fund Program

www.twdb.texas.gov/financial/programs/DWSRF/index.asp



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Resource Links

* Regional Water Planning

www.twdb.texas.gov/waterplanning/index.asp

* Flood Programs

https://www.twdb.texas.gov/flood/index.asp

* Conservation

https://www.twdb.texas.gov/conservation/index.asp

* Texas Water Infrastructure Coordination Committee (TWICC)

https://twicc.org/resources/doc/TWICC_Funding_Resources_Guide.pdf

* TWDB Newsletter

https://www.twdb.texas.gov/newsmedia/signup.asp



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For more information

Visit

https://www.twdb.texas.gov/financial/index.asp

Or email:

financial_assistance@twdb.texas.gov

Stay connected:





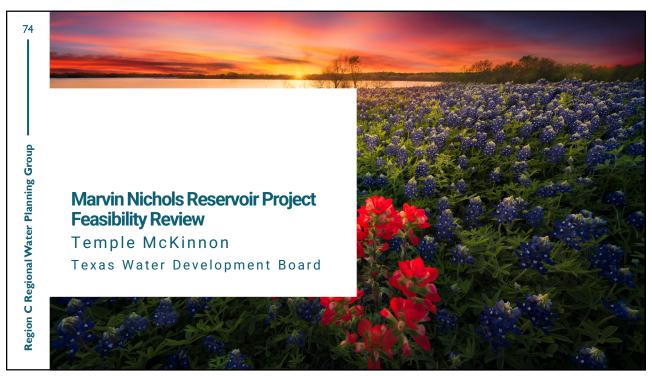








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Marvin Nichols Reservoir Project Feasibility Review



Pursuant to House Bill 1, 88th Regular Session, the Texas Water Development Board (TWDB) has conducted a project feasibility review of the proposed Marvin Nichols Reservoir project to be located on the Sulphur River and upstream of the confluence of the White Oak Creek in Franklin, Titus, and Red River Counties. This feasibility review considered the implementation timeline, associated costs, land acquisition considerations, and the economic impact of the proposed project. A report regarding the findings of this review shall be prepared and submitted by TWDB to the Legislative Budget Board and Governor no later than January 5, 2025.



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Marvin Nichols Reservoir Project Feasibility Review



- A draft report is now available for a 40-day public review and comment period after which the Executive Administrator will finalize and submit the report to the Legislative Budget Board and Governor by January 5, 2025.
- Your input must be received by October 25, 2024, at 11:59 p.m. in order to be considered by the Executive Administrator.
- You must email your comments to: feasibility@twdb.texas.gov
- A webpage containing information on how to submit public comment on this feasibility review is available here: https://www.twdb.texas.gov/waterplanning/rwp/feasibility/index.asp



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Marvin Nichols Reservoir Project Feasibility Review



- The report describes the TWDB's feasibility review of the proposed reservoir project and summarizes its findings to inform the governor and legislature with respect to the four factors in the legislative directive.
- Information solicited by the TWDB and received from the public in Fall 2023 to support this specific effort, as well as previously available information and documentation associated with the regional and state water planning processes, was reviewed.



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Marvin Nichols Reservoir Project Feasibility Review



As related to the implementation timeline, the TWDB did not identify any basis to conclude that the implementation timeline for the Marvin Nichols Reservoir to be online in 2050 would render the project infeasible.

- The timelines reviewed / compared are based upon the initiation of permitting activities, not long-range planning activities. Initiation of the water rights permit application at TCEQ is generally when the actual implementation timeline begins.
- So, a 20-year timeline of Marvin Nichols in the plan is not considered infeasible (2050 online date in 2022 SWP and it's now 2024, which equals about a 25-year window for 2022 SWP). If, however, it takes longer, this would just move the timing in the water plan – but that doesn't make the project itself infeasible.



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Marvin Nichols Reservoir Project Feasibility Review



As related to associated costs, the TWDB did not identify any basis to conclude that the estimated costs of implementing the Marvin Nichols Reservoir would render the project infeasible.

As related to land acquisition considerations, the TWDB did not identify any basis to conclude that land acquisition requirements would render the project infeasible.

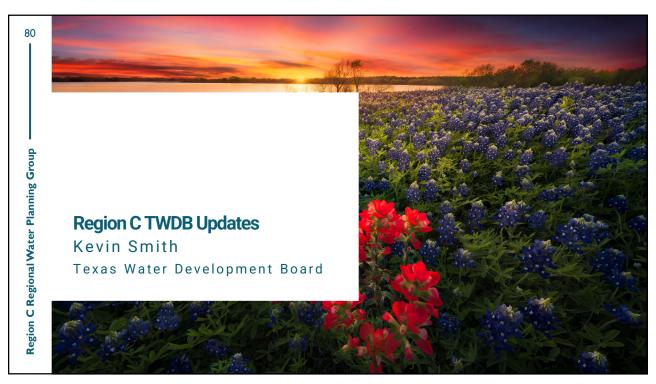
TWDB acknowledges that land acquisition is a big concern for any project, but until the permitting
process is initiated, the land requirements won't be known. To our knowledge, USACE does not
have a predictive formula in advance of the actual permitting process. But that land acquisition
uncertainty alone does not make the project infeasible.

As related to the economic impact, the TWDB did not identify any basis to conclude that economic impacts associated with the project would render the project infeasible.



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Region C TWDB Update September 30, 2024

2026 Regional Water Plan Water Supply Needs/Surplus Map

- Identify entities that might have similar needs in near proximity that could be met by a shared project
- https://twdb.maps.arcgis.com/apps/MapSeries/index.html?appid=383ac05ff15b4 e2694a21f2442d14a7d
 BACK



TEXAS WATER DEVELOPMENT BOARD

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Region C TWDB Update September 30, 2024

Flood Mitigation Projects with Water Supply Benefit List

- As part of the ranking for the Flood Infrastructure Fund, scoring identifies flood mitigation projects included in the regional flood plans that were identified as providing a water supply benefit.
- Planning groups are required to identify potentially feasible WMSs, that, in addition to providing water supply, could potentially provide non-trivial flood mitigation benefits or that might be the best potential candidates for exploring ways that they might be combined with flood mitigation features to leverage planning efforts to achieve potential cost savings or other combined water supply and flood mitigation benefits.
- List found here: https://www.twdb.texas.gov/financial/programs/fif/doc/FMP-Ranked-List.xlsx
- State Flood Plan, Section 8.3 for more detailed information.



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Region C TWDB Update September 30, 2024

Texas Water Fund Implementation Plan

- Implementation plan discussed at 7/23 Board meeting.
- Winter 2024/2025 Board consideration of adoption of New Water Supply for Texas Fund rules.
- Email list signup and Implementation Plan here:
 https://www.twdb.texas.gov/financial/programs/twf/index.asp



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