REGION C WATER PLANNING GROUP

TO: REGION C WATER PLANNING GROUP

FROM: J. KEVIN WARD, CHAIR

SUBJECT: APRIL 29th, 2024 PUBLIC MEETING

DATE: APRIL 22, 2024

This memorandum will serve as a notice that the Region C Water Planning Group (RCWPG) is holding a public meeting at **1:00 P.M. on Monday APRIL 29th, 2024,** at the **North Central Texas Council of Governments, 616 Six Flags Drive, Centerpoint Two Building, First Floor Transportation Council Room, Arlington, Texas, 76011**. An agenda (including information on how to participate in the public meeting) has been prepared for the meeting and is attached to this memorandum. The following is a brief overview of the agenda items to be discussed with relevant materials and handouts.

OPEN MEETING

I. ROLL CALL

II. APPROVAL OF MINUTES – NOVEMBER 6, 2023

Attachment II: RCWPG Minutes from November 6, 2023

III. PUBLIC COMMENTS (Limited to 3 minutes per speaker)

IV. PRIMARY ACTION ITEMS FOR CONSIDERATION

A. Announcement of Region C RWPG voting member vacancies: Bob Riley Representing Environment; Call for nominations to fill vacancy and vote to fill vacancy.

This action item will consider recommendations for replacement of RCWPG members who have resigned. Bob Riley resigned from the Region C Water Planning Group effective March 15, 2024. Bob nominated John Stevenson to fill the environmental interest vacancy.

Attachment IV.A: Recommendation for John Stevenson as the replacement for Bob Riley

B. Review and discuss Technical Memorandum.

The RCWPG will consider and discuss the Technical Memorandum (TM) due to TWDB on May 3, 2024. The TM contains data on population, demand, existing sources of supplies, connected supplies, needs, and potentially feasible water management strategies. Public comment will be accepted prior to approval (see Agenda Item IV.C).

Attachment IV.B: Region C Technical Memorandum

C. Accept public comment on the Technical Memorandum (limit three minutes per speaker).

Planning group and public comments on the Technical Memorandum will be accepted prior to the vote.

D. Consider approval of the Technical Memorandum and authorize the consultant to work with TWDB to make adjustments, as needed.

The RCWPG will consider approval of the Technical Memorandum for the 2026 Region C Plan as reviewed in the preceding Agenda Item IV.B and Agenda Item IV.C. The RCWPG may consider approval of consultants making minor changes to the TM based on RCWPG comment and/or public comment.

E. Consider approval of the scope of work for Task 5B and authorize the political subdivision to submit a request to the TWDB for a notice to proceed with the scope of work for Task 5B. Consider Authorizing TRA to Execute Contract Amendment with TWDB.

Each region is required to develop a region-specific scope of work for Task 5B (Evaluation of Water Management Strategies). Consultants have developed a scope of work and associated fee for the work to be done under this task. RCWPG will consider approval of the scope, fee, and request for Notice to Proceed from TWDB. RCWPG will also consider authorizing TRA to execute a contract amendment with TWDB to include this new scope of work.

Attachment IV.E: Task 5B Scope: Evaluation of Water Management Strategies

V. OTHER ITEMS (MAY RESULT IN ACTIONS)

F. Schedule Overview.

G. Status of contracts with TWDB, TRA and Consultants.

VI. OTHER DISCUSSION

A. Updates from the Chair.

B. Report from Regional Liaisons.

C. Report from the Interregional Planning Council.

D. Report from Texas Water Development Board.

E. Report from Texas Department of Agriculture.

F. Report from Texas Parks and Wildlife Department.

G. Report from Texas State Soil & Water Conservation Board.

H. Other Reports.

I. Confirm Date and Location of Next Meeting: TBD.

VII. ADJOURNMENT

The following items are enclosed with this memorandum:

I. RCWPG Agenda – April 29th, 2024
II. Meeting Handouts
   A. Agenda Item II – RCWPG Minutes from November 6th, 2023
   B. Agenda Item IV.A – Recommendation for John Stevenson as the replacement for Bob Riley
   C. Agenda Item IV.B. – Region C Technical Memorandum
   D. Agenda Item IV.E. – Task 5B Scope: Evaluation of Water Management Strategies

REGION C WATER PLANNING GROUP

NOTICE TO THE PUBLIC
OPEN PUBLIC MEETING

MONDAY, APRIL 29, 2024 AT 1:00 P.M.

THE MEETING WILL BE HELD AT
NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS
616 SIX FLAGS DRIVE, CENTERPOINT TWO BUILDING
FIRST FLOOR TRANSPORTATION COUNCIL ROOM
ARLINGTON, TX 76011

NOTICE

Notice is hereby given that, at 1:00 P.M. on April 29, 2024, the Region C Water Planning Group (Region C) will consider planning group and public comments on the Region C Technical Memorandum for the 2026 Region C Regional Water Plan. The meeting will take place at the North Central Texas Council of Governments, 616 Six Flags Drive, Centerpoint Two Building, First Floor Transportation Council Room, Arlington, Texas 76011. If you plan to attend this meeting and you have a disability that requires special arrangements at the meeting, please contact Alyssa Knox at (817) 608-2363 or by email at aknox@nctcog at least 72 hours in advance of the meeting. Reasonable accommodations will be made to assist your needs.

The Region C Water Planning Group will accept written and oral comments at the above-described meeting. If you wish to provide written comments prior to the meeting, please utilize the online form available at https://regioncwater.org/public-comment/.

General questions or requests for additional information may also be submitted by delivery to:

J. KEVIN WARD
RCWPG Chairman/Administrator
c/o Trinity River Authority of Texas
P.O. Box 60
Arlington, Texas 76004
info@regioncwater.org
(817) 467-4343

All meeting materials will be made available on the Region C website (https://regioncwater.org/) seven days prior to and 14 days following the above-identified meeting.

AGENDA

I. ROLL CALL

II. APPROVAL OF MINUTES – NOVEMBER 6, 2023

III. PUBLIC COMMENTS (Limited to 3 minutes per speaker)

IV. PRIMARY ACTION ITEMS FOR CONSIDERATION

A. Announcement of Region C RWPG voting member vacancies: Bob Riley Representing Environment; Call for nominations to fill vacancy and vote to fill vacancy.

B. Review and discuss Technical Memorandum

C. Accept public comment on the Technical Memorandum (limit three minutes per speaker).

D. Consider approval of the Technical Memorandum and authorize the consultant to work with TWDB to make adjustments, as needed.

E. Consider approval of the scope of work for Task 5B and authorize the political subdivision to submit a request to the TWDB for a notice to proceed with the scope of work for Task 5B. Consider Authorizing TRA to Execute Contract Amendment with TWDB.

V. OTHER ITEMS (MAY RESULT IN ACTIONS)

A. Schedule Overview.

B. Status of contracts with TWDB, TRA and Consultants.

VI. OTHER DISCUSSION

A. Updates from the Chair.

B. Report from Regional Liaisons.

C. Report from the Interregional Planning Council.

D. Report from Texas Water Development Board.

E. Report from Texas Department of Agriculture.

F. Report from Texas Parks and Wildlife Department.

G. Report from Texas State Soil & Water Conservation Board.

H. Other Reports.

VII. ADJOURNMENT

SUBMITTED BY: _____
J. KEVIN WARD, Administrative Officer

DATE: April 2024

POSTED BY: _____
DATE: _____
TIME: _____
LOCATION: _____

Agenda Item II – Attachment

RCWPG Minutes from November 6, 2023

REGION C WATER PLANNING GROUP

MINUTES OF AN OPEN PUBLIC MEETING

November 6, 2023

The Region C Water Planning Group (RCWPG) met in an open public meeting on Monday, November 6, 2023, at 1:00 P.M. The meeting was held at the North Central Texas Council of Governments located at 616 Six Flags Drive, Centerpoint Two Building, First Floor Transportation Council Room, Arlington, Texas. Notice of the meeting was legally posted.

Chairman Kevin Ward called the Region C Regional Water Planning Group meeting to order at approximately 1:00 P.M. and welcomed guests.

I. ROLL CALL

Chairman Ward conducted a roll call. The following members were in attendance:

David Bailey	Steve Mundt
Dan Buhman	Denis Qualls
Ryan Bayle	Bob Riley
Jenna Covington	Haley Salazar (Alternate for Stephen Gay)
Grace Darling	Rick Shaffer
Chris Harder	Doug Shaw
Harold Latham	Paul Sigle
Russell Laughlin	Connie Standridge
John Lingenfelder	Kevin Ward

Kevin Smith, TWDB, Michelle Carte, Region D, Adam Whisenant, TPWD, and Darrell Dean, TDA, were present. The registration lists signed by guests in attendance are attached.

II. APPROVAL OF MINUTES – July 17, 2023

The minutes of the June 12, 2023, RCWPG meeting were approved by consensus upon a motion by Russell Laughlin and a second by Jenna Covington.

III. PUBLIC COMMENTS (Limited to 3 minutes per speaker)

Andy Figuero, City of Celina, stated that the City of Celina population is underestimated by 39,000.

IV. PRIMARY ACTION ITEMS FOR CONSIDERATION

A. Negotiation and execution of an amendment to the TWDB contract to increase the total project cost and committed funds for the 2026 Regional Water Plan, and to amend and execute the associated Consultant's subcontract to include this additional funding.

Abigail Gardner, FNI, presented the proposed amendment to the 2026 Regional Water Plan, and the amendment to the associated Consultant's subcontract.

There were no public comments on this action item.

Upon a motion by Connie Standridge, and a second by Rick Shaffer, the Region C WPG voted unanimously to approve the execution of an amendment to the TWDB contract, and to amend the Consultant's subcontract to include additional funding.

B. Approval of revised Region C Bylaws, with additional action as necessary contingent upon the approval of the revised Bylaws, including the election of officers.

At the November 2021 RCWPG meeting, a bylaws subcommittee was appointed to review the Region C Bylaws and report suggested modifications to the RCWPG. Howard Slobodin, TRA General Counsel, led the discussion on this action item to consider the RCWPG's approval of revisions to the RCWPG Bylaws suggested by the bylaws subcommittee which met prior to the Region C WPG Open Meeting on November 6, 2023.

There were no public comments on this action item.

Upon a motion by Denis Qualls, and a second by Jenna Covington, the RCWPG voted unanimously to approve revisions to the RCWPG Bylaws as presented.

C. TWDB project feasibility review of the proposed Marvin Nichols Reservoir, and action to authorize submission of supporting documentation on behalf of the Region C Planning Group.

The Texas Legislature included in its budget legislation a requirement for the TWDB to conduct a feasibility review of the Marvin Nichols Reservoir. The TWDB has solicited public comments and input by December 1, 2023. The RCWPG will consider approval of a letter to TWDB containing supporting information from the 2021 Region C Regional Water Plan.

Kevin Smith, TWDB, led this discussion on the Marvin Nichols Reservoir Project Feasibility Review included in the TWDB Budget Rider Language, H.B. 1, 88th Regular Legislative Session. The TWDB is tasked to evaluate the feasibility of the project and submit a report on their findings to the Legislative Budget Board and Governor no later than January 5, 2025.

The Marvin Nichols Reservoir Feasibility Review work will be performed by TWDB agency staff. A Request for Information from stakeholders was posted in the Texas Register September 29, 2023, and must be submitted by December 1, 2023, to the TWDB. Once approved by the Executive Administrator, the final report will be delivered to the Legislative Budget Board and Governor.

There were no public comments on this item.

Upon a motion by Jenna Covington, and a second by Steve Mundt, the RCWPG approved submission of a letter from the RCWPG containing supporting information from the 2021 Region C Regional Water Plan concerning the feasibility of the Marvin Nichols Reservoir.

D. Designation of Major and Regional Water Providers.

Abbie Gardner, FNI, led the discussion on this action item for the purpose of selecting a list of major and regional water providers for the 2026 Region C Water Plan. Ms. Gardner pointed out that Region C has a lot of Wholesale Water Providers (WWP). The designation of a Major Water Provider (MWP) does not affect inclusion in the water plan, prioritization, or funding eligibility. The intent of the MWP category is to report data for entities of particular significance to the region instead of reporting data for every WWP as previously required. MWPs are entities that use, and/or are responsible for developing and/or delivering significant quantities of water.

The 2021 Region C Water Plan identified six major water providers (Dallas Water Utilities, City of Fort Worth, North Texas Municipal Water District, Tarrant Regional Water District, Trinity River Authority, and Upper Trinity Regional Water District) and two regional water providers (City of Corsicana and Greater Texoma Utility Authority). These eight water providers comprise 90% of total water sales in Region C.

Steve Mundt asked if there is a breakdown of who owns surface water rights for these major providers. Ms. Gardner advised that data will be included in the Technical Memo, but she can make the information available at the next Region C meeting. Rick Shaffer commented that data is available on the TCEQ Water Rights website. Jenna Covington added that the TWDB has a GIS website that shows water rights' holders.

There were no public comments on this item.

Upon a motion by Denis Qualls, and a second by Connie Standridge, the RCWPG approved retaining the same six Major and two Regional Water Providers in the 2026 Region C Water Plan as in the 2021 Region C Water Plan.

E. Process to identify potentially feasible water management strategies for the 2026 Regional Water Plan.

Abbie Gardner, FNI, led this discussion to review the process to be used to identify potentially feasible water management strategies (PFWMS) for the 2026 Region C Water Plan. The consultant prepared a memorandum included in the agenda packet outlining the proposed methodology to identify these PFWMS as required by the TWDB Regional Water Planning rules. This review process is to be conducted prior to the process set forth by the TWDB to evaluate each PFWMS.

For Region C, the methodology for identifying PFWMS will follow the sequence below:

1. Identify entities with needs.

2. Review recommended strategies in previous Regional Water Plan (RWP).

3. Contact WUG/WWPs for input.

4. Seek input from Region C members.

5. Accept input from the public.

To determine whether a strategy is potentially feasible, the first considerations are:

- A strategy must use proven technology and must be technically feasible
- A strategy should have an identifiable sponsor.
- A strategy must consider end use. This includes water quality, economics, geographic constraints, etc.
- A strategy must meet existing regulations.

The second consideration is whether a strategy would provide sufficient water to meet a projected need or a sizeable portion of the need. Considerations include:

- Is there available existing supply that is not already allocated to another user?
- Can new water be developed? If yes, identify potential sources.
- Does the water quality meet the end use requirements? If not, can it be treated?
- Are there any technical considerations that would preclude the feasibility of the strategy type? For example, are there suitable geologic formations for aquifer storage and recovery (ASR)?

Strategy types that will be reviewed for consideration as potentially feasible for Region C include:

- Water Conservation
- Reuse
- Management of existing water supplies
- Conjunctive use
- Acquisition of available existing water supplies
- Development of new water supplies
- Developing regional water supply facilities or providing regional management of water supply facilities
- Developing large-scale desalination facilities for seawater or brackish groundwater production zones identified by TWC

- Developing large-scale desalination facilities for marine seawater that serve local or regional entities
- Voluntary transfer of water
- Emergency transfer of water
- Interbasin transfers of surface water
- System optimization
- Reallocation of reservoir storage to new uses
- Enhancements of yields
- Improvements to water quality
- New surface water supply
- New groundwater supply
- Aquifer storage and recovery (ASRs)

There are several strategy types that likely are not appropriate for Region C water users. However, they may be considered if a project sponsor requests as a specific strategy. Strategy types likely not appropriate for Region C:

- Drought management
- Brush control
- Precipitation enhancement
- Rainwater harvesting

Not recommended for Region C:

- Cancellation of water rights

Next steps include:

- List of Potentially Feasible WMSs
- Strategy Specific Scope of Work for WMSs

There were no public comments on this item.

F. Planning group and public comments on the proposed process for identifying potentially feasible water management strategies for the 2026 Regional Water Plan.

Abbie Gardner, FNI, led the discussion on this item to consider approval of the process Region C will use to identify potentially feasible water management strategies (PFWMS) for the 2026 Region C Water Plan. This process was outlined in the preceding Agenda Item E. Planning group and public comments must be considered prior to action.

There were several comments and questions from the planning group members on this methodology. Steve Mundt commented that developers in Wise County need water because the county is in Stage 3 water restrictions. Chairman Ward asked the consultants if development is ahead of water distribution. Simone Kiel, FNI, stated rural areas are behind in construction and need sponsors in Wise and

Parker counties. Building infrastructure ahead of construction presents challenges for developers due to economic concerns. One option for developers could be to use wells instead of a regional facility. Ms. Kiel added that the TWDB realizes water planning groups focus on the larger wholesale providers.

Gracie Darling asked why rainwater harvesting is not considered feasible for Region C. Abbie Gardner, FNI, replied that a sponsor would be needed and that quantification is hard to apply to rainwater harvesting.

Jenna Covington stated that more information on local sponsors is needed in determining potentially feasible water management strategies. Russell Laughlin added that the availability of a common denominator to query a water provider for growth would be helpful.

Chairman Ward added that small cities have to go to Wholesale Water Providers for water sales He also stated that rural areas have not gotten enough money for feasibility studies. R. J. Muraski advised that the North Texas Municipal Water District has budgeted monies to look at rural areas.

There were no public comments on this item.

Upon a motion by Russell Laughlin, and a second by Bob Riley, the Region C Water Planning group voted unanimously to approve the proposed methodology for identification of potentially feasible water management strategies.

G. Results of analysis of infeasible water management strategies and/or projects in the 2021 Regional Water Plan.

Abbie Gardner, FNI, gave this presentation on the requirement passed by the Texas Legislature for the 2026 planning cycle that requires the regional water planning groups (RWPGs) to conduct a one-time, mid-cycle analysis of the previous regional water plan (RWP) to identify any newly infeasible water management strategies (WMSs) and water management strategy projects (WMSPs) that were feasible and recommended at the time of the adoption of the previous RWP but which have since become infeasible and must be modified or amended out of the previous RWP.

The methodology and criteria by which Region C should identify infeasible WMS and WMSPs were presented to the RCWPG at the public meeting held on July 17, 2023.

The TWDB conducted a preliminary screening of the 2021 Region C Plan and provided lists of WMS and WMSPs for review. Region C consultants conducted an initial screening of these WMS and WMSPs based on the following criteria:

1. Does the strategy require construction or permitting?
2. Is it recommended to be online in 2020?
3. Is there an identifiable sponsor (e.g., livestock has no sponsor)?
4. Is the WMS related to new major reservoirs, seawater desalination, DPR, brackish groundwater, ASR, or out of state transfers?

If a WMS met all the screening criteria, then the WMS was retained for further evaluation. Initial screening eliminated all conservation strategies, strategies for self-supplied aggregated WUGs, and infrastructure projects that were recommended to be online in 2030 or later.

The TWDB identified 710 strategies (WMS) and 356 projects (WMSP) for review by the Region C planning group. To assess whether these strategies and projects are feasible, the Consultants conducted a secondary screening process to refine the list of strategies that do not require a permit or construction or do not have an identifiable sponsor.

A strategy and/or project can be considered feasible if "affirmative steps" have been taken by the sponsor. These can include, but are not limited to:

- Spending money on the strategy or project
- Voting to spend money on the strategy or project
- Applying for a federal or state permit for the strategy or project

No WMS or WMSPs were identified as infeasible as a result of this analysis. If affirmative steps were taken by the project sponsor but the strategy/project has not yet been implemented, this will be updated as necessary in the 2026 Region C Plan.

There were no public comments on this item.

Upon a motion by Steve Mundt, and a second by Jenna Covington, the Region C WPG voted unanimously to approve the results of the Consultants' infeasibility analysis for submittal to TWDB.

V. OTHER ITEMS (MAY RESULT IN ACTIONS)

A. Update on TWDB Response to Requested Revisions

Abbie Gardner, FNI, made this presentation on the TWDB response to Region C requested revisions to population and municipal demand projections. The TWDB relies on the RWPGs to assist in developing credible municipal water demand projections for use in water planning by providing additional region, county and Water User Group (WUG) specific information.

The population and demand projection process is outlined below:

- TWDB developed draft projections
- FNI sent out survey requesting input and reviewed available data
- FNI submitted revision request to RCWPG for approval
- FNI submitted revision request to TWDB
- TWDB reviews requests and the EA provides final recommendations
- TWDB Board Meeting – November 9, 2023 (adopt revisions)

Region C requested revisions to the population projections for 175 WUG-county splits within the region. After review, TWDB recommended the revisions Region C requested for 136 of the 175 WUG-county splits. For 31 WUG-county split requests, TWDB is recommending further revisions. TWDB also determined that 8 WUG-county split requests were not supported by the documentation provided; and for these projections, the draft population projections are recommended.

Region C requested revisions to the baseline gallons per capita per day (GPCDs) for 89 WUG-county splits. All were recommended by TWDB, except one WUG-specific request GPCD request in Freestone County. Revision requests for WUGs in Cooke, Fannin, Jack and Navarro counties were all recommended as submitted by Region C.

In many counties, Region C notes that the last 5 or 10-year historical growth rate is higher than the growth rates in the draft projections provided by the TWDB. It should be noted that the draft projections utilized county-level projections from the Texas Demographic Center, who develops population projections using a cohort component model along with birth rates, mortality rates, and migration rates.

Region C requested an increase to the Celina WUG population projections compared to the TWDB draft projections. Because Celina WUG has reported significant growth via the TWDB Water Use Survey (WUS), the near-term projection revision requests were recommended. Region C also requested to revise the GPCD baseline for Celina to 211 from the draft 187. The TWDB EA felt that the increased GPCD request did not align with the historical data reported by the WUG in terms of commercial usage or overall net use. Therefore, the originally drafted GPCD in the amount of 187 was recommended by the TWDB.

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B. Update on Existing Supplies

This update on existing supplies was presented by Christina Gildea, FNI. Existing water supply is the maximum amount of water that is physically and legally accessible from existing sources for immediate use by a WUG, under drought of record conditions. RWPGs consider availability of three source types: surface water, groundwater, and reuse.

RWPGs estimate existing supplies using an entity-based analysis that evaluates the share of available water at each source that can be immediately accessed by end users to meet water demands in a drought.

Surface Water Supplies

- TWDB rules require the use of Water Availability Model (WAM) Run 3
- Most of Region C is in the Trinity River Basin
- Smaller portions are in the Red, Brazos, Sulphur and Sabine River Basins

Groundwater availability is estimated through a combination of policy decisions, made primarily by groundwater conservation districts (GCDs), and aquifer characteristics, such as the ability of an aquifer to transmit water to wells. The

TWDB uses the desired future conditions established by a groundwater management area to determine a modeled available groundwater (MAG) value for an aquifer or portion of an aquifer.

Groundwater Supplies

- Four Groundwater Management Areas (GMAs) cover Region C
  - GMA 6 - Doug Shaw
  - GMA 8 - Harold Latham
  - GMA 11 - Gary Douglas
  - GMA 12 - David Bailey
- All have completed MAG reports
- All aquifers modeled except Cross Timbers, Nacatoch and "Other" Aquifer

During each five-year planning cycle, regional water planning groups, supported by the TWDB, evaluate population projections, water demand projections, and existing water supplies. Each planning group then identifies potential water shortages under drought of record conditions (water needs), recommends water management strategies to address those potential shortages, and determines the socioeconomic impacts of not addressing the identified water needs.

Listed below are the processes involved:

1) Population and Demand Projections
2) Source Water Availability
3) Allocation of Existing Supplies (limited by water rights, infrastructure constraints, contracts, etc.)
4) Water Needs Analysis – Technical Memorandum due March 4, 2024
5) Water Management Strategies

Ms. Gildea presented comparisons of Surface Water Supplies and Groundwater Supplies that were in the 2021 Region C Water Plan to those proposed for the 2026 Region C Water Plan.

C. Presentation on SB 28/SJR 75

Kevin Smith, TWDB, gave this presentation on SB 28/SJR 75 that passed the 88th Legislative Session creating a new Texas Water Fund that will be administered by the TWDB and pay for new water supply projects. The bill also sets aside monies to upgrade water infrastructure, especially in rural communities. Specifics of the Texas Water Fund are listed below.

One-time $1B supplemental appropriation from Texas General Revenue

- New Water Supply for Texas Fund (at least $250 million)
- SWIFT
- CWSRF/DWSRF
- Rural Water Assistance Fund

- Texas Water Development Fund II
- Statewide Water Public Awareness Account (new)

Texas Water Fund Cannot Fund the following:

- Economically Distressed Areas Program (EDAP)
- Flood Infrastructure Fund (FIF)
- Agricultural Water Conservation Fund

Legislative Priorities for Fund Use (No particular order)

- Water infrastructure for rural political sub/municipalities with a population less than 150,000
- Projects where federal/state permitting has been completed
- Projects associated with the statewide public awareness program
- Water loss mitigation
- Water conservation strategies

New Water Supply for Texas Fund Use

- Financial assistance to political subdivisions to develop water supply projects that create new water sources for the state, including:
  - Desalination projects
  - Produced water treatment projects
  - Aquifer storage and recovery projects; and
  - Development of infrastructure to transport water that is made available by these types of projects
- To make transfers to:
  - SWIFT
  - Texas Water Development Fund II
  - Texas Water Bank Account

The TWDB is directed to undertake the financing of projects through the New Water Supply Fund for Texas that will lead to 7 million acre-feet of new water supplies by December 31, 2033.

Statewide Water Public Awareness Program

TWDB to develop and implement a statewide water public awareness program to educate residents about water. Program will take into account the difference in water needs of various geographic regions of the state and will be designed to complement and support existing local and regional water education or awareness programs.

Water Loss Audit of Technical Assistance Program

TWDB to establish a program that provides technical assistance to retail public utilities in conducting required water loss audits and in applying for financial assistance from the TWDB. TWDB is required to adopt rules by January 1, 2024, that establish the

program and provide for the prioritization of technical assistance to retail public utilities.

This directive will expand services provided by the Technical Assistance in Water Loss Control (TAWLC) program, currently in development, where TWDB staff will work with utilities one-on-one and conduct water loss data validation to improve the accuracy of their water loss data.

D. Presentation on Conservation Methodology

Brigit Buff and Qiwen Zheng, Plummer Associates, gave this presentation on conservation methodology. Listed below is the Scope of Work for Task 5C Conservation recommendations.

- Evaluate WUG's water conservation plans (WCPs) and Model
- 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)
- Set drought-based GPCD goals for municipal WUGs
- Develop separate water loss mitigation WMS

The recommendations in the 2021 Water Plan for each municipal WUG included:

- 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 education
- Enhanced water loss control program
- Water waste prohibition
- Water conservation coordinator
- Time-of-day irrigation restriction
- Twice weekly irrigation restriction (new for 2021 Plan)

Approach to Conservation WMSs for 2026 Water Plan

- Gather and review current WCPs and WMSs
- Consider changes to the Water Conservation Package while maintaining the following goals:
  - Practicable for implementation in Region C
  - Projected to provide long-term water savings
  - Projected to provide reasonable water savings at reasonable cost for a wide range of WUGs

- Recommend Water Conservation Package for municipal WUGs that meet the following criteria:
  - Projected total water demand exceeds existing water supply
  - Projected total water demand is greater than threshold (140 GPCD last cycle)

- Measure is not already implemented
- Measure is applicable to WUG
- Sponsor can be identified to implement the measure

- Conservation required for WUGs with needs, but considered for all municipal WUGs
- Present recommendations to the RWPG in next meeting

Recommendation for Evaluation of Conservation WMSs

- Region C Water Conservation Planning Tool
  - Evaluates water savings/costs for the past four plans
  - Less complex than TWDB Tool
  - Easy data updates for regional planning
  - Prior recommendations already implemented
- When reasonable, use water savings and cost assumptions from the TWDB Tool

Kevin Smith, TWDB, added that an update in conservation tools will be available in early 2024.

E. Schedule Overview- Christina Gildea, FNI, presented the following working timeline.

- March 4, 2024 - Technical Memorandum Due (**Note**: Post meeting the TWDB approved an extension to May 3, 2024)
- June 5, 2024 - 2021 RWP Amendments for Infeasible WMSs Due
- March 3, 2025 - Initially Prepared Plan Due
- October 20, 2025 - 2026 Region C Regional Water Plan Due

F. Status of contracts with TWDB, TRA and Consultants

Chairman Ward advised the planning group that all contracts are up to date.

VI. OTHER DISCUSSION

A. Updates from the Chair – Chairman Ward
B. Report from Regional Liaisons
   - Region B - None
   - Region D - None
   - Region G – None
   - Region H - None
   - Region I – None
C. Interregional Planning Council – Jenna Covington advised that the IRPC is meeting the following week to review draft plan and comments.
D. Report from Texas Water Development Board – Kevin Smith, TWDB, commented on the following:

RWPG Chairs Call Held September 28, 2023

- Update on Sixth Cycle of Regional Water Planning Activities:
  - Fall contract amendments, infeasible water management strategy analysis, upcoming RWPG tasks, upcoming TWDB Board items related to planning
- Update on the Interregional Planning Council: meetings held 11/9/22, 3/9/23, 5/30/23, 8/15/23; next meeting 11/30/23
- Secure Agency Reporting Application (SARA)
- Next Chairs call Scheduled TBD

E. Report from Texas Department of Agriculture – Adam Whisenant advised the planning group that the Sustainable Rivers Program met in October. This is a volunteer program formed to find creative ways to use flood pool water reservoirs. Next meeting will concern the downstream effects.
F. Report from Texas Parks and Wildlife Department - None
G. Other Reports – None
H. Confirm Date and Location of Next Meeting – TBD (February 2024); NCTCOG, 616 Six Flags Drive, Centerpoint Two Building, First Floor Transportation Council Room, Arlington, Texas 76011
I. Public Comments - None

VII. ADJOURNMENT

There being no further business, the meeting of the Region C WPG adjourned at approximately 3:30 PM.

_____
KEVIN WARD, Chairman

Agenda Item IV.A - Attachment

Recommendation for John Stevenson as the replacement for Bob Riley

Christina Gildea

From: Kevin Ward <wardk@trinityra.org>
Sent: Friday, March 15, 2024 3:19 PM
To: Bob Riley
Cc: Abigail Gardner; Bob Riley; Howard Slobodin; Carol Claybrook; Simone Kiel; Christina Gildea
Subject: RE: Region C Water Planning Group

Thanks Bob! We will need John's contact info so we can get a bio.

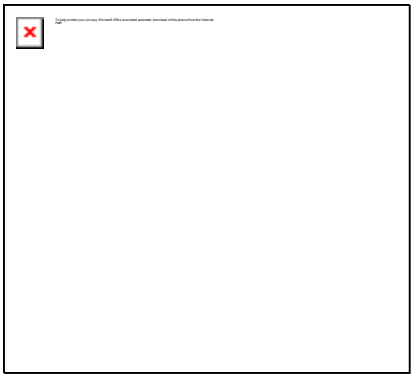
From: Bob Riley <briley@halff.com>
Sent: Friday, March 15, 2024 2:28 PM
To: Kevin Ward <wardk@trinityra.org>
Cc: abigail.gardner@freese.com; Bob Riley <rrttu77@aol.com>
Subject: Region C Water Planning Group

Mr. Ward,

After serving on the Region C Water Planning Group for nearly 10 years in one of the environmental position, I am rendering my resignation. I am moving more into retirement mode. While my service to the Group has been very awarding and informative, it is time to allow others the opportunity to ensure our regional water needs are well planned.

I have attached a short bio of an individual that I recommend as my replacement. John Stevenson serves as Vice Chair of the non-profit Streams and Valleys here in Tarrant County. I believe he is well qualified and available to serve the Planning Group.

If you have any questions please let me know. Thanks again for allowing me to serve as part of the Region C Water Planning Group.



Bob Riley, PLA
Client Advisor

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We improve lives and communities
by turning ideas into reality.

John Stevenson, PE

Executive Vice President
The Projects Group
301 Commerce Street, Suite 1301
Fort Worth, Texas 76102

Vice Chair
Streams and Valley, Inc.
2918 Wingate
Fort Worth, Texas 76107

Mr. Stevenson was born and raised in the Dallas / Fort Worth area. He received a BS in Mechanical Engineering from Bucknell. He holds an MBA from the University of Texas – Austin. He is a licensed Professional Engineer, Envision Sustainability Professional and LEED Accredited Profession.

John is Executive Vice President of The Projects Group that leads a talented team of owner's / tenant's representatives and project managers that use their skills and vast experience in real estate and project management to deliver their vision in the built environment, ranging from $700M arenas to $100,000 infrastructure projects.

John is presently Vice Chair of non-profit Streams and Valleys. This 50+ year old organization continues to be the river steward whose mission is to inspire, fund and advocate for projects that improv and expand community access and use of the Trinity River. Streams and Valleys plans and coordinates recreation enhancements, beautification efforts, and promotes the Trinity River and its tributaries in Fort Worth and Tarrant County. John has been on the Board of Directors for six years.

Contact Information:

Phone 817-201-9919
Email jstevenson@theprojectsgroup.com

Agenda Item IV.B – Attachment

Region C Technical Memorandum

Innovative approaches
Practical results
Outstanding service

REGION C WATER PLANNING AREA
TECHNICAL MEMORANDUM

Prepared for:

Texas Water Development Board
On behalf of the Region C Water Planning Group

April 2024

Prepared by:

FREESE AND NICHOLS, INC.
801 Cherry Street, #2800
Fort Worth, Texas 76102
817-735-7300

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EXECUTIVE SUMMARY

This Technical Memorandum is an interim deliverable for the sixth cycle of regional water plan development. It discusses population and water demand projections, existing water supplies, projected water supply needs, and potentially feasible water management strategies in Region C. Included in this report are the required TWDB DB27 reports along with the additional information required for the Technical Memorandum submittal as set forth in Section 2.12.1 of TWDB's *Second Amended Exhibit C (General Guidelines for the 2026 Regional Water Plans)* dated September 2023. A public meeting was held on April 29, 2024, to discuss the contents of this memorandum. Notice of the meeting was posted on April 15, 2024.

The information in this Technical Memorandum represents a "snapshot" of the existing supplies as they are understood at the time of submittal. Information will continue to be gathered throughout the course of the remainder of the planning cycle which may cause adjustments to be made to the existing supplies and allocations, affecting needs and strategies.

1.0 TWDB DB27 REPORTS

All required DB27 reports are located in **Appendix A** of this document. The seven required DB27 reports for this Technical Memorandum are summarized below.

1.1 POPULATION PROJECTION AND WATER DEMAND PROJECTIONS

In 2022, TWDB released draft non-municipal demand projections for all regions. Draft population and municipal projections were provided to the regions in 2023. Each Regional Water Planning Group (RWPG) was given the ability to make limited adjustments to the projections based on available data to support the requested revisions. The Region C Regional Water Planning Group (RCWPG) met on November 7, 2022, and approved revisions to the draft irrigation and steam electric power water demands. The RCWPG did not recommend revisions to the draft livestock and mining demands. The RCWPG met on June 12, 2023, and approved revisions to the manufacturing demands. Revisions were also approved by the RCWPG for the population and municipal demands on July 17, 2023. These revision requests were reviewed and modified by TWDB staff for submittal to the TWDB Board of Directors for final approval. TWDB approved the final projections in November 2023.

Appendix A contains two database reports related to population and demand. The reports are:

- **TWDB DB27 Report #1 – WUG Population Projections**
- **TWDB DB27 Report #2 – WUG Water Demand Projections**

TWDB DB27 Report #1 presents the projected populations for each municipal water user group. This includes water utilities or water systems that provide an average of more than 100 acre-feet per year to retail municipal customers, and rural/unincorporated areas of municipal water use, known as County-Other. **TWDB DB27 Report #2** provides the projected water demands for each water user group. This includes both municipal and non-municipal demands. The data in both reports are reported by entity, county, and river basin.

In addition to these summary tables, **Table 1-1** shows the population projections by county. The population for Region C is expected to increase from approximately 9.1 million to 15.1 million over the planning horizon.

Table 1-1: Adopted Population Projections for Region C by County

County	2030	2040	2050	2060	2070	2080
Collin	1,418,872	1,764,402	2,126,310	2,351,305	2,505,630	2,612,777
Cooke	44,200	45,693	46,466	47,694	49,742	51,732
Dallas	2,744,243	2,899,298	3,045,184	3,162,467	3,277,308	3,372,187
Denton	1,229,659	1,498,214	1,772,935	1,998,120	2,244,614	2,456,768
Ellis	241,747	290,486	346,554	397,716	455,844	513,797
Fannin	40,069	44,955	53,396	62,521	74,244	84,502
Freestone	19,057	18,648	18,067	17,514	16,905	16,234
Grayson	169,780	200,021	231,274	257,654	292,518	317,713
Henderson[1]	65,669	71,460	78,514	84,827	92,129	97,538
Jack	8,214	7,957	7,770	7,740	7,859	7,787
Kaufman	209,309	257,499	335,063	431,671	542,246	627,644
Navarro	57,263	61,718	65,957	70,146	75,206	80,385
Parker	190,921	254,388	340,869	442,691	566,315	675,719
Rockwall	155,987	214,364	280,320	340,099	378,980	403,891
Tarrant	2,446,041	2,749,019	2,878,997	3,093,389	3,272,494	3,438,106
Wise	92,085	125,921	176,629	234,863	311,934	369,816
Region C Total	**9,133,116**	**10,504,043**	**11,804,305**	**13,000,417**	**14,163,968**	**15,126,596**

[1]Projections for Henderson County only include the portion of Henderson County located within Region C.

Table 1-2 shows the demand projections by county. These include both municipal and non-municipal demands. The total demand for region C is expected to increase from approximately 1.9 million acre-feet per year to 3.0 million acre-feet per year over the planning horizon.

Table 1-2: Adopted Total Dry-Year Water Demand Projections for Region C by County

County	Demand in Acre-Feet/Year					
	2030	2040	2050	2060	2070	2080
Collin	315,084	376,604	445,569	487,945	513,708	532,582
Cooke	9,144	9,345	9,464	9,643	9,935	10,218
Dallas	588,041	617,407	645,928	669,521	692,645	712,879
Denton	236,318	283,138	329,838	366,045	405,842	441,009
Ellis	57,400	67,132	78,443	88,594	99,681	110,919
Fannin	19,627	20,619	22,364	24,540	27,177	29,580
Freestone	9,928	19,291	19,205	19,108	19,005	18,898
Grayson	54,245	67,933	73,732	78,945	85,660	90,355
Henderson[1]	12,965	15,951	17,245	18,385	19,713	20,664
Jack	5,852	5,813	5,805	5,820	5,865	5,872
Kaufman	43,359	49,805	60,450	73,713	88,988	100,484
Navarro	15,156	16,093	17,046	17,985	19,187	20,628
Parker	33,291	41,987	54,233	68,619	85,846	101,206
Rockwall	28,848	38,732	50,519	60,940	67,289	71,482
Tarrant	496,189	556,887	584,574	630,705	665,633	698,257
Wise	22,940	27,319	34,750	43,114	54,362	63,752
Region C Total	**1,948,387**	**2,214,056**	**2,449,165**	**2,663,622**	**2,860,536**	**3,028,785**

[1]Projections for Henderson County only include the portion of Henderson County located within Region C.

Table 1-3 shows the demand projections by water use category. Region C's largest water use category is municipal with the smallest being mining in 2030 through 2060 and livestock in 2070 and 2080.

Table 1-3: Adopted Total Dry-Year Water Demand Projections for Region C by Category

Category	Demand in Acre-Feet/Year					
	2030	2040	2050	2060	2070	2080
Municipal	1,778,862	2,019,784	2,250,802	2,460,446	2,651,780	2,813,551
Manufacturing	64,935	74,867	77,035	79,284	81,615	84,033
Steam Electric	32,639	47,229	47,229	47,229	47,229	47,229
Irrigation	45,584	45,584	45,584	45,584	45,584	45,584
Mining	10,467	10,692	12,615	15,179	18,428	22,488
Livestock	15,900	15,900	15,900	15,900	15,900	15,900
Region C Total	**1,948,387**	**2,214,056**	**2,449,165**	**2,663,622**	**2,860,536**	**3,028,785**

1.2 SOURCE WATER AVAILABILITY

Under the TWDB regional water planning guidelines, each region is to identify available water supplies within the region. Source water availability is the total amount of water available from a specific water source. Surface water sources include reservoirs, run-of-the-river, and local supplies. Groundwater sources are identified by aquifer, county, and river basin. Reuse and Aquifer Storage and Recovery (ASR) sources are defined by county and basin.

Appendix A contains one database report related to source water availability. The report is:

- **TWDB DB27 Report #3 – Source Water Availability**

Water availability is based on the supply available during drought of record conditions. For surface water reservoirs, this is generally the equivalent of firm yield supply or the permitted amount, whichever is lower. Several providers in Region C have chosen to use alternative yields to firm yield for planning purposes. Tarrant Regional Water District (TRWD) and Dallas Water Utilities (DWU) have elected to use safe yields for their sources (which is less than the firm yield and leaves a reserve at the end of the drought of record) as the available supply. Additionally, the Texas Legislature authorized the regional water planning groups to consider droughts worse than the drought of record in its planning efforts, which can reflect expected climatic uncertainties and trends in water availability. Several water providers in Region C consider such conditions in their long-term water planning. North Texas Municipal Water District (NTMWD) requested the use of the results of this type of analysis for the allocation and distribution of surface water supplies. For run-of-river supplies, the reliable supply is the minimum modeled annual diversion over the historical record.

Available groundwater supplies are defined through the Joint Planning Process that establishes Desired Future Conditions of the aquifers. Through this process, Modeled Available Groundwater (MAG) values were developed by the TWDB to define the long-term available groundwater supply for the major and minor aquifers. MAG values were not developed for aquifers or portions of aquifers that were declared “non-relevant” and other formation that are not modeled (such as “other aquifer” and Cross Timbers Aquifer). These supply amounts are the same as those used in the *2021 Region C Plan* and are based on historical pumping data obtained from the TWDB. Available Reuse supplies are determined by the reuse projects currently permitted and the estimated available return flow to supply those projects.

Table 1-4 shows the overall water supply source availability in Region C and does not include surface water and groundwater imports. Region C has approximately 1.9 million acre-feet per year of available water over the planning horizon (2030 – 2080). This includes both developed and undeveloped supplies. It should be noted that these supplies have not been limited by the current infrastructure that treats and delivers the water. The amount of supply available when considering infrastructure limitations is referred to as "Existing Water Supplies" and is discussed in Section 1.3 of this Technical Memorandum.

Table 1-4: Overall Water Supply Source Availability in Region C (Acre-Feet per Year)

Summary	2030	2040	2050	2060	2070	2080
Reservoirs & Reservoir Systems in Region C[1]	1,271,418	1,254,649	1,237,985	1,221,079	1,201,189	1,183,150
Run-of River	9,197	9,197	9,197	9,197	9,197	9,197
Other Local Supply	19,984	19,984	19,984	19,984	19,984	19,984
Groundwater	159,525	160,586	161,649	162,712	163,670	163,670
Reuse	433,211	460,019	484,039	512,164	524,605	525,743
Region C Total	**1,893,335**	**1,904,435**	**1,912,854**	**1,925,136**	**1,918,645**	**1,901,744**

[1]Includes Chapman. Although this Reservoir is physically located in another region, this source has been combined with other NTWMD supplies into a system in DB27 and is now included in the DB27 reports for Region C sources.

1.2.1 Surface Water

In regional planning, surface water supplies from reservoirs and run-of-river rights are derived from the Water Availability Models (WAMs) developed by the Texas Commission on Environmental Quality (TCEQ). The TWDB requires the use of Full Authorization Run (Run 3) of the approved TCEQ WAM for regional water planning. Full Authorization assumes that all water rights will be fully met in priority order. Local supplies are surface water supplies that do not require a State water permit. These supplies are mainly stock tanks for livestock use and are estimated from historical use information provided by the TWDB.

The surface water supplies available to Region C, including imports from other regions, are shown in

Table 1-5. Region C has nearly 1.7 million acre-feet per year of available reservoir surface water supplies in 2030 which decreases to 1.5 million acre-feet per year by 2080.

Table 1-5: Reservoir Surface Water Supplies Available to Region C (Not limited by infrastructure)

Source	Basin	Yields in Acre-Feet/Year					
		2030	2040	2050	2060	2070	2080
Systems in Region C							
Lost Creek/Jacksboro System	Trinity	1,397	1,397	1,397	1,397	1,397	1,397
West Fork (includes Bridgeport Local) [(a)]	Trinity	96,161	95,561	94,961	94,428	93,894	93,361
Elm Fork/Lewisville/ Ray Roberts/ Grapevine (Dallas) [(a)]	Trinity	174,899	174,109	173,319	172,059	170,799	169,539
Subtotal of Systems in Region C		**272,457**	**271,067**	**269,677**	**267,884**	**266,090**	**264,297**
Reservoirs in Region C							
Cedar Creek [(a)]	Trinity	157,400	155,590	153,780	152,047	150,313	148,580
Richland-Chambers (TRWD) [(a)]	Trinity	190,000	188,266	186,531	184,781	183,030	181,280
Richland-Chambers (Corsicana) and Halbert	Trinity	13,843	13,833	13,823	13,803	13,783	13,763
Moss	Red	4,900	4,800	4,700	4,633	4,567	4,500
Lake Texoma (Texas' Share - NTMWD)[c]	Red	69,054	70,399	71,744	72,753	71,968	71,520
Lake Texoma (Texas' Share - GTUA)	Red	83,200	83,200	83,200	83,200	83,200	83,200
Lake Texoma (Texas' Share - Denison)	Red	24,400	24,400	24,400	24,400	24,400	24,400
Lake Texoma (Texas' Share - Luminant)	Red	16,400	16,400	16,400	16,400	16,400	16,400
Lake Texoma (Texas' Share - RRA)	Red	2,250	2,250	2,250	2,250	2,250	2,250
Randell	Red	1,600	1,600	1,600	1,600	1,600	1,600
Valley	Red	2,800	2,800	2,800	2,800	2,800	2,800
Bonham	Red	4,148	3,924	3,811	3,699	3,587	3,475
Ray Roberts (Denton)	Trinity	18,600	18,480	18,360	18,207	18,053	17,900
Lewisville (Denton)	Trinity	5,200	5,075	4,950	4,800	4,650	4,500

Source	Basin	Yields in Acre-Feet/Year					
		2030	2040	2050	2060	2070	2080
Benbrook [a]	Trinity	3,371	3,371	3,371	3,371	3,371	3,371
Weatherford	Trinity	2,860	2,810	2,760	2,717	2,673	2,630
Grapevine (DCPCM)	Trinity	17,300	17,125	16,950	16,750	16,550	16,350
Grapevine (Grapevine)	Trinity	2,050	2,025	2,000	1,960	1,920	1,880
Arlington [a]	Trinity	7,500	7,385	7,270	7,157	7,043	6,930
Joe Pool	Trinity	14,050	13,725	13,400	13,133	12,867	12,600
Mountain Creek	Trinity	6,400	6,400	6,400	6,400	6,400	6,400
North	Trinity	70	70	70	70	70	70
Ray Hubbard (Dallas)[a]	Trinity	46,239	45,450	44,660	43,927	43,194	42,461
White Rock [a]	Trinity	2,540	2,375	2,210	2,023	1,837	1,650
Terrell	Trinity	2,410	2,395	2,380	2,370	2,360	2,350
Clark	Trinity	210	210	210	210	210	210
Bardwell	Trinity	9,410	9,010	8,610	8,287	7,963	7,640
Waxahachie	Trinity	2,980	2,910	2,840	2,773	2,707	2,640
Forest Grove	Trinity	650	328	5	3	2	-
Trinidad	Trinity	2,950	2,950	2,950	2,950	2,950	2,950
Navarro Mills	Trinity	17,000	15,975	14,950	13,817	12,683	11,550
Fairfield	Trinity	6,395	6,163	5,930	5,725	5,520	5,315
Bryson	Brazos	-	-	-	-	-	-
Mineral Wells	Brazos	2,495	2,483	2,470	2,458	2,445	2,433
Teague City	Brazos	189	189	189	189	189	189
Lavon[c]	Trinity	88,111	83,963	79,927	75,892	70,959	67,148
Bois d'Arc[c]	Red	89,456	86,878	84,187	81,497	78,918	76,228
Muenster	Trinity	250	250	250	250	250	250
Ralph Hall	Sulphur	40,580	40,525	40,470	40,393	40,317	40,240
Chapman (NTMWD)[b,c]	Sulphur	39,700	37,600	35,500	33,500	31,100	29,200
Subtotal of Reservoirs in Region C		**998,961**	**983,582**	**968,308**	**953,195**	**935,099**	**918,853**
Imports							
Chapman (Irving)	Sulphur	38,644	37,725	36,805	35,886	34,967	34,048
Chapman (Upper Trinity MWD)	Sulphur	11,522	11,248	10,974	10,700	10,425	10,151
Tawakoni (Dallas)	Sabine	104,200	40,356	40,356	40,356	40,356	40,356
Fork (Dallas)	Sabine	120,000	108,253	107,099	105,996	104,819	103,628
Upper Sabine (NTMWD)	Sabine	10,313	9,865	9,529	9,080	8,632	8,295
Palestine (Dallas)	Neches	96,204	95,086	93,967	92,874	91,778	90,673
Lake Athens (Athens)	Neches	588	1,151	1,804	2,144	2,431	2,549
Brazos River Authority	Brazos	3,224	3,271	3,332	3,386	3,410	3,411
Parker County (from Lake Palo Pinto)	Brazos	1,519	1,506	1,492	1,479	1,465	1,447

Source	Basin	Yields in Acre-Feet/Year					
		2030	2040	2050	2060	2070	2080
Subtotal of Imports		**386,214**	**308,461**	**305,358**	**301,901**	**298,283**	**294,558**
TOTAL		**1,657,632**	**1,563,110**	**1,543,343**	**1,522,980**	**1,499,472**	**1,477,708**

[a] Amounts reported are safe yields; [b] Although this Reservoir is physically located in another region, this source has been combined with other NTWMD supplies into a system in DB27 and is now included in the DB27 reports for Region C sources; [c] Amounts reported consider droughts worse than the drought of record.

1.2.2 Groundwater

Groundwater supplies in Region C are primarily obtained from the following major and minor aquifers;

- Two major aquifers (Carrizo-Wilcox and Trinity),
- Four minor aquifers (Woodbine, Nacatoch, Cross Timbers, Queen City), and
- Locally undifferentiated formations, referred to as "other aquifers."

Region C includes parts of Groundwater Management Areas (GMAs) 6, 8, 11, and 12. As required by regional planning rules, MAG estimates provided by the TWDB were used to determine groundwater availability. For Region C, TWDB provided estimates for the Carrizo-Wilcox, Trinity, Woodbine, and Queen City aquifers. The groundwater supplies available in Region C are shown in

Table 1-6. There is approximately 160,000 acre-feet per year of available groundwater supplies to Region C in 2030 which increases to nearly 164,000 acre-feet per year over the planning period.

GMA-8 and GMA-11 deemed the Nacatoch aquifer "non-relevant", and new water availability estimates for this aquifer were not included in the MAGs developed by TWDB. Therefore, availability for this aquifer was assumed to be the same as the amounts used in the *2021 Region C Water Plan.* The Cross Timbers aquifer was designated as a new minor aquifer in 2017. No desired future conditions have been established by the GMAs for this aquifer, therefore no MAG amounts are available. For this reason, the availability from this aquifer is assumed to be the same as the amounts used in the *2021 Region C Water Plan*. There are also several locally undifferentiated formations in Region C, referred to as "other aquifer." Other aquifer supplies are used in Fannin and Navarro counties in Region C. Available supplies from these undifferentiated formations are not included in the MAG numbers. Other aquifer available supply amounts are based on historical use and are assumed to be the same as the amounts used in the *2021 Region C Water Plan*.

Table 1-6: Groundwater Supplies Available in Region C

Aquifer	Managed Available Groundwater (Acre-Feet/Year)					
	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox Aquifer	10,534	11,595	12,658	13,721	14,679	14,679
Cross Timbers Aquifer	984	984	984	984	984	984
Nacatoch Aquifer	1,939	1,939	1,939	1,939	1,939	1,939
Other Aquifer	5,110	5,110	5,110	5,110	5,110	5,110
Queen City Aquifer	231	231	231	231	231	231
Trinity Aquifer	113,534	113,534	113,534	113,534	113,534	113,534
Woodbine Aquifer	27,193	27,193	27,193	27,193	27,193	27,193
Region C Total	**159,525**	**160,586**	**161,649**	**162,712**	**163,670**	**163,670**

1.2.3 Reuse

Water supplies from currently permitted reuse projects were updated for the 2026 Plan. **Table 1-7** is the summary of availability by County. Total currently permitted reuse supplies in Region C is approximately 433,000 acre-feet per year in 2030 and increases to 526,000 acre-feet per year in 2080. These values represent multiple projects, each of which is listed individually in the DB27 reports in **Appendix A**.

Table 1-7: Currently Permitted Reuse Supplies Available to Region C

County	Permitted Reuse (Acre-Feet/Year)					
	2030	2040	2050	2060	2070	2080
Collin	72,327	91,272	106,742	120,306	121,988	123,333
Cooke	4	4	4	4	4	4
Dallas	46,474	47,371	47,495	47,595	47,741	47,741
Denton	64,344	69,362	77,673	90,138	98,758	98,597
Ellis	7,593	8,825	8,825	8,825	8,825	8,825
Fannin	20,290	20,263	20,235	22,216	24,190	24,144
Freestone	0	0	0	0	0	0
Grayson	0	0	0	0	0	0
Henderson	32	32	32	32	32	32
Jack	26	26	25	24	24	24
Kaufman	111,213	111,317	111,338	111,338	111,338	111,338
Navarro	100,465	100,465	100,465	100,465	100,465	100,465
Parker	3,266	3,866	4,004	4,023	4,043	4,043
Rockwall	672	672	672	672	672	672
Tarrant	6,505	6,544	6,529	6,526	6,525	6,525
Wise	0	0	0	0	0	0
Total	**433,211**	**460,019**	**484,039**	**512,164**	**524,605**	**525,743**

1.3 EXISTING WATER SUPPLIES

Existing Water Supplies (sometimes referred to as "currently available supplies" or "connected supplies") are supplies that are limited by water rights, contracts, and facilities that are currently in place. The Existing Water Supplies are less than the overall supplies available to the region (Source Water Availability from Section 1.2) because the facilities needed to use some of the source waters have not yet been developed. Common constraints limiting supplies include permit limits, the hydrogeologic properties of the source aquifers, and the availability and capacity of transmission systems, treatment plants, and wells.

Appendix A contains one database report related to existing water supplies. The report is:

- **TWDB DB27 Report #4 – WUG Existing Water Supplies**

This report shows the supplies allocated to each water user group (WUG) by source. **Table 1-8** shows the Existing Water Supplies in Region C by different source types. **Table 1-9** shows the Existing Water Supplies for WUGs by county. There is approximately 1.74 million acre-feet per year of existing supplies available to Region C in 2030, considering limitations. These supplies decrease to nearly 1.68 million acre-feet per year by the end of the planning period.

Table 1-8: Existing Water Supplies Available to Region C by source (Considering Limitations)

Summary	Existing Water Supplies (Acre-Feet/Year)					
	2030	2040	2050	2060	2070	2080
Reservoirs & Reservoir Systems in Region C	1,074,880	1,055,436	1,042,516	1,030,018	1,009,919	994,036
Run-of River	7,170	7,170	7,170	7,170	7,170	7,170
Other Local Supply	19,640	19,640	19,640	19,640	19,640	19,640
Surface Water and Groundwater Imports	239,935	164,442	163,712	162,605	161,410	160,028
Groundwater	93,830	94,289	95,174	95,971	96,763	97,708
Reuse	301,808	336,834	360,340	388,625	402,106	405,515
Region C Total	**1,737,263**	**1,677,811**	**1,688,552**	**1,704,029**	**1,697,008**	**1,684,097**

Table 1-9: Existing Water Supplies Available to Region C by County (Considering Limitations)

County	Existing Water Supplies (Acre-Feet/Year)					
	2030	2040	2050	2060	2070	2080
Collin	283,323	294,191	302,433	306,805	297,192	289,186
Cooke	9,080	9,217	9,294	9,445	9,706	9,885
Dallas	541,023	473,134	463,604	464,481	463,020	457,338
Denton	213,794	205,024	201,881	200,131	199,999	199,614
Ellis	49,030	51,693	55,981	58,731	60,890	62,337
Fannin	13,430	13,883	14,850	15,160	15,021	14,881
Freestone	16,552	18,845	18,544	18,239	17,930	17,619
Grayson	42,988	43,920	44,716	45,175	45,884	46,673
Henderson	8,743	9,192	9,897	10,177	10,493	10,606
Jack	6,174	5,795	5,566	5,310	5,115	4,953
Kaufman	40,856	42,363	45,966	50,740	56,176	59,578
Navarro	15,053	15,514	15,472	15,439	15,414	15,397
Parker	32,148	33,179	34,961	36,012	37,247	38,443

County	Existing Water Supplies (Acre-Feet/Year)					
	2030	2040	2050	2060	2070	2080
Rockwall	26,796	31,388	36,072	39,719	40,657	41,080
Tarrant	420,354	412,867	410,792	409,414	402,145	395,271
Wise	17,866	17,555	18,486	19,029	20,111	21,228
Region C Subtotal	***1,737,210***	***1,677,760***	***1,688,515***	***1,704,007***	***1,697,000***	***1,684,089***
Water to Other Regions	23,116	24,386	25,977	26,321	26,843	27,605
Total	**1,760,326**	**1,702,146**	**1,714,492**	**1,730,328**	**1,723,843**	**1,711,694**

1.4 WUG IDENTIFIED WATER NEEDS/SURPLUSES

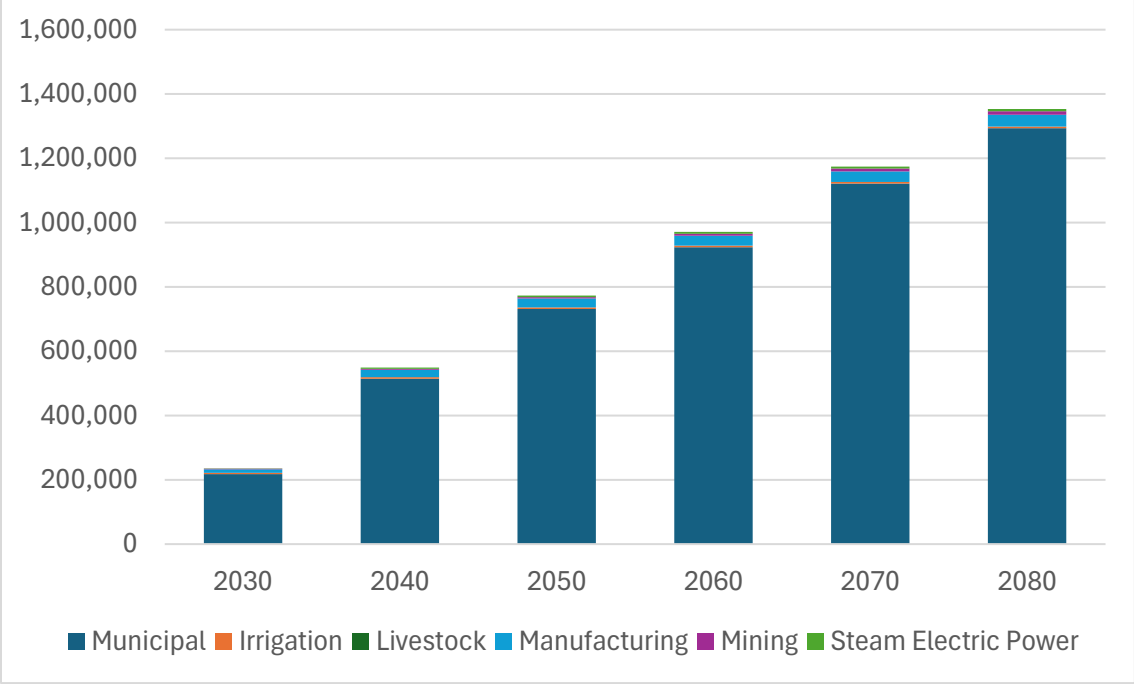
For each WUG, the Existing Water Supply was compared to the projected demand, resulting in either a need or a surplus for the WUG.

Appendix A contains one database report related to WUG identified water needs. The report is:

- **TWDB DB27 Report #5 – WUG Identified Water Needs/Surpluses**

This report is a compilation of all the water supply needs by individual WUG. The water supply needs (no surpluses) that are unmet by existing water supplies for the whole Region are outlined below in **Figure 1-1** by category of use.

Figure 1-1: Water Supply Needs by Use Type and Decade in Acre-Feet per Year



1.5 COMPARISON TO 2021 REGIONAL WATER PLAN

Using its online database (DB22 and DB27), TWDB has developed comparisons of information from this 2026 Regional Water Plan to information from the 2021 Regional Water Plan. Comparisons have been made for each WUG and for each supply source type by county.

Appendix A contains two database reports related to comparison the previous plan. The reports are:

- **TWDB DB27 Report #6 – WUG Data Comparison to 2021 RWP**
- **TWDB DB27 Report #7 – Source Data Comparison to 2021 RWP**

Projected municipal demands in Region C for the 2026 Plan are 2 to 4 percent higher in 2030 through 2060 than projected in the 2021 Plan. However, the municipal demands in 2070 are slightly lower than estimated for the 2021 Plan. This may be attributed to decreases in population growth rates in later decades due to lower birth rates and lower growth in some rural communities. Existing supplies to WUGs increased slightly in the 2026 Plan from the 2021 Plan, and corresponding overall water needs decreased by 23 percent in 2030 and 8 percent in 2070.

In Region C, total source availability (before allocations to users) decreased slightly from the 2021 Plan to the 2026 Plan due to several reasons. Surface water availability decreased by 2 percent in 2030 and 1 percent in 2070. Although two new reservoirs have come online since the 2021 Plan, Bois d'Arc Lake and Lake Ralph Hall, other reservoirs experienced a decrease in availability due to the new TCEQ WAMs and updated sedimentation. Additionally, the Texas Legislature authorized the regional water planning groups to consider droughts worse than the droughts of record in its planning efforts, which can reflect expected climate uncertainties and trends in water availability. Several water providers in Region C consider such conditions in their long-term water planning. Groundwater availability decreased by 3 percent in 2030 and stayed about the same in 2070. Reuse availability decreased by 2 percent in 2030 and increased by 6 percent in 2070.

2.0 WATER AVAILABILITY METHODOLOGY

2.1 SURFACE WATER

2.1.1 Reservoir Sedimentation Rates

For all major reservoirs in the Trinity, Red, and Sulphur Basins, anticipated sedimentation rates and revised area-capacity rating curves were developed to estimate reservoir storage in future decades. Annual

sedimentation rates, expressed in acre-feet per square mile (AF/SqMi), were estimated for each major reservoir based on sediment surveys, published sedimentation rates, or comparing changes in conservation pool capacity between two or more reservoir surveys. The total accumulated sediment for a specific year was calculated as:

[Sedimentation Rate] x [Drainage Area] x [Number of years from the Initial Survey]

This formula was used to estimate the reservoir capacity for decades 2030, 2050, and 2080. The total sediment quantity is applied to the initial area-capacity-elevation (ACE) curve using either a conical or trapezoidal shape method (depending upon the best fit for the reservoir). To develop the new ACE, reservoirs were sliced into incremental storage volumes based on elevation, then a uniform reduction was applied to the horizontal surface area of each slice. New storage volumes were calculated for each increment and added together to calculate the total storage at each elevation. A summary of the sedimentation analyses and projected conservation capacities for the reservoirs in Region C is shown in **Table 2-1.**

Table 2-1: Estimated Sedimentation Rates and Projected Capacities

Reservoir	Drainage Area (sqMi)	Annual Sediment Rate (AF/SqMi)	Date of Initial Capacity	Conservation Capacities (ac-ft)				Sediment Rate Source
				Initial	2030	2050	2080	
Red River Basin								
Bois d' Arc	271	0.94	2006	367,609	367,609	359,967	352,325	FNI, 2013
Bonham	29	0.90	2004	11,038	10,364	9,842	9,059	TWDB, 2005
Moss	69	0.70	1999	24,155	22,674	21,708	20,259	TWDB, 1999
Texoma	39,719	0.26	2002	2,516,232	2,233,825	2,028,471	1,720,455	TWDB, 2003
Sulphur River Basin								
Ralph Hall	101	0.62	2025	180,000	179,687	178,433	176,552	Harvey
Trinity River Basin								
Arlington	143	0.76	2007	40,188	37,785	35,609	32,346	TWDB, 2008
Bardwell	148	1.35	2020	43,917	42,014	38,009	32,001	TWDB, 2022
Benbrook	320	0.18	1998	85,648	83,808	82,658	80,934	TWDB, 2003
Bridgeport	1,085	0.30	2020	366,782	363,700	357,038	347,046	TWDB, 2022
Cedar Creek	934	0.90	2017	631,401	620,923	604,111	578,894	TWDB, 2018
Eagle Mountain	859	0.32	2018	185,083	181,981	176,497	168,270	TWDB, 2019
Fairfield	34	6.43	1999	44,169	37,463	33,090	26,531	TWDB, 1999
Forest Grove	59	0.48	1980	2,129	713	147	0	TBWE, 1959
Grapevine	695	0.60	2011	166,797	161,919	153,619	141,170	TWDB, 2012
Halbert	12	2.36	1999	6,033	5,158	4,592	3,742	TWDB, 2003
Joe Pool	232	1.06	2022	150,999	149,112	144,192	136,812	TWDB, 2023
Lavon	770	0.76	2021	412,498	407,522	395,818	378,262	TWDB, 2022
Lewisville	968	0.56	2007	598,902	586,841	576,041	559,842	TWDB, 2008
Lost Creek	26	0.70	1990	12,800	11,244	10,886	10,348	TBWE, 1959
Mountain Creek	63	1.06	1937	22,840	16,630	15,294	13,291	TBWE, 1959
Navarro Mills	320	0.81	2008	49,827	44,189	39,005	31,229	TWDB, 2009
New Terrell City	14	0.30	1997	8,594	8,457	8,373	8,247	TWDB, 2003
North[1]	3	0.85	1957	17,000	16,814	16,763	16,686	TBWE, 1959
Ray Hubbard	301	2.39	2015	439,559	429,130	414,750	393,181	TWDB, 2016

Reservoir	Drainage Area (sqMi)	Annual Sediment Rate (AF/SqMi)	Date of Initial Capacity	Conservation Capacities (ac-ft)				Sediment Rate Source
				Initial	2030	2050	2080	
Ray Roberts	692	0.57	2008	788,490	780,138	772,278	760,489	TWDB, 2010
Richland Chambers	1,447	1.32	2018	1,125,199	1,104,050	1,065,895	1,008,664	TWDB, 2019
Waxahachie	30	0.97	2020	11,643	11,368	10,784	9,910	TWDB, 2022
Weatherford	109	0.34	2008	17,812	17,020	16,280	15,170	TWDB, 2009
White Rock	100	1.06	2015	10,230	8,657	6,537	3,357	TWDB, 2016
Worth	94	1.18	2001	33,495	30,315	28,096	24,769	TWDB, 2002

[1]The yield for North was analyzed under 2030 sediment conditions and held constant across the planning period.

2.1.2 Hydrologic Models

The Texas Commission on Environmental Quality (TCEQ) developed and maintains Water Availability Models (WAMs) for river basins in Texas. In accordance with TWDB rules, Region C used the Full Authorization (Run 3) of the TCEQ-approved WAMs to determine surface water availability. For the 2026 Regional Plan, Region C consultants utilized TCEQ's Trinity, Red, and Sulphur WAMs. In addition, Region C used results from the Neches and Sabine River WAM model as modified by Region I Planning Group and from the Brazos River WAM model as modified by the Brazos G Planning Group.

As required by TWDB, Run 3 was utilized for each river basin. Run 3 version includes all water rights at full authorization, all applicable permit conditions are met, and no return flows. To reflect the current conditions and operations more accurately in the region, Region C requested hydrologic variances. This request is detailed and included in **Appendix B**.

2.1.3 Versions and Dates of Hydrologic Models

The following information is required for the hydrologic models used to determine Source Water Availability. More discussion on Source Water Availability is included in Section 1.2 of this memorandum. The required details for each hydrologic model used is included in

Table 2-2.

Table 2-2 : Hydrologic Models Used in Determining Surface Water Availability

Model/Reservoir Name	Date Used	Run Used	Model Input Files Used	Comments
Trinity River WAM				
Trinity WAM	November 2023	RUN 3	t3_2026Plan2030Sed.dat t3_2026Plan2050Sed.dat t3_2026Plan2080Sed.dat	Used to determine reservoir supplies.
			t3_2026Plan.dat	Used to determine run-of-river supplies
Red River WAM				
Red WAM	November 2023	RUN 3	red3_2026Plan2030Sed.dat red3_2026Plan2050Sed.dat red3_2026Plan2080Sed.dat	Used to determine reservoir supplies.
			red3.dat	Used to determine run-of-river supplies

Model/Reservoir Name	Date Used	Run Used	Model Input Files Used	Comments
Sulphur WAM				
Sulphur WAM	March 2024	RUN 3	sulphur3.dat	Used to determine run-of-river supplies.
			Raplh_Hall_FY2030.dat Raplh_Hall_FY2050.dat Raplh_Hall_FY2080.dat	Used to determine yield of Lake Ralph Hall.
Brazos River WAM				
Brazos WAM	March 2024	RUN 3	Parker Irrigation.dat	Used to determine run-of-river supplies.

Table 2-3 summarizes the firm yields as well as the alternative yields that these water providers have elected to use for planning purposes.

Table 2-3: Firm Yield and Alternative Yield for Supplies Using Alternative Yield as Source Availability

Source	2030	2040	2050	2060	2070	2080
Tarrant Regional Water District[1]						
West Fork (includes Bridgeport Local)						
Firm Yield	118,961	118,361	117,761	117,078	116,394	115,711
Safe Yield	96,161	95,561	94,961	94,428	93,894	93,361
Cedar Creek						
Firm Yield	207,600	206,355	205,110	203,890	202,670	201,450
Safe Yield	157,400	155,590	153,780	152,047	150,313	148,580
Richland-Chambers (TRWD)						
Firm Yield	224,650	223,205	221,760	220,357	218,953	217,550
Safe Yield	190,000	188,266	186,531	184,781	183,030	181,280
Benbrook						
Firm Yield	4,271	4,271	4,271	4,271	4,271	4,271
Safe Yield	3,371	3,371	3,371	3,371	3,371	3,371
Arlington						
Firm Yield	9,500	9,350	9,200	9,067	8,933	8,800
Safe Yield	7,500	7,385	7,270	7,157	7,043	6,930
Dallas Water Utilities[2]						
Elm Fork/Lewisville/Ray Roberts (Dallas)						
Firm Yield	207,399	206,409	205,419	204,036	202,652	201,269
Safe Yield	174,899	174,109	173,319	172,059	170,799	169,539
Ray Hubbard (Dallas)						
Firm Yield	55,730	54,790	53,850	52,953	52,057	51,160
Safe Yield	46,239	45,450	44,660	43,927	43,194	42,461
White Rock						
Firm Yield	3,400	3,200	3,000	2,800	2,600	2,400
Safe Yield	2,540	2,375	2,210	2,023	1,837	1,650

North Texas Municipal Water District[3]						
Bois d' Arc						
Firm Yield	90,600	89,900	89,200	88,733	88,267	87,800
Alternative Yield	89,456	86,878	84,187	81,497	78,918	76,228
Chapman (NTMWD)						
Firm Yield	40,940	39,966	38,992	38,018	37,044	36,070
Alternative Yield	39,700	37,600	35,500	33,500	31,100	29,200
Lavon						
Firm Yield	105,000	104,350	103,700	103,000	102,300	101,600
Alternative Yield	88,111	83,963	79,927	75,892	70,959	67,148
Texoma (NTMWD)						
Firm Yield	197,000	197,000	197,000	197,000	197,000	197,000
Alternative Yield	69,054	70,399	71,744	72,753	71,968	71,520

[1]Safe yield for TRWD is defined as retaining a minimum of 1-year supply in the reservoir during a repeat of the drought of record.
[2]Safe yield for DWU is defined as retaining a minimum of 9-month supply in the reservoir during a repeat of the drought of record.
[3]Alternative yield for NTMWD is based on a drought worse than the drought of record as evaluated in the NTMWD Long-Range Water Supply Plan (2024).

2.2 GROUNDWATER

2.2.1 Written Summary of MAGs

The geographic area of Region C overlaps with four of the state-designated Groundwater Management Areas: GMA-6, GMA-8, GMA-11, and GMA-12. All four of these GMAs have updated their Modeled Available Groundwater (MAG) reports during the sixth round of regional planning. As required by TWDB, Region C is using the updated aquifer availabilities set forth in these updated MAG reports for the 2026 Region C Water Plan. The MAGs for this planning cycle came from the GAM run documents summarized in **Table 2-4**. GMA-6 has no MAGs supplies in Region C and is discussed below in Section 2.2.2.

Table 2-4: GAM Models Used in Determining Groundwater Availability

GAM Version	Date Results Published	Model Used	GMA
GR 21-013	November 1, 2022	Northern Trinity and Woodbine GAM (NTWGAM), Edwards (Balcones Fault Zone) Aquifer GAM, Minor Aquifers in the Llano Uplift Region MAG	GMA-8
GR 21-016	February 17, 2022	Northern Carrizo-Wilcox, Queen City, and Sparta Aquifers GAM	GMA-11
GR 21-017	November 1, 2022	Central Queen City-Sparta/Carrizo-Wilcox Aquifers GAM, Yegua-Jackson GAM, Brazos River Alluvium Aquifer GAM	GMA-12

GR 21-013 summarizes MAGs for the Trinity, Woodbine, Edwards (Balcones Fault Zone), Marble Falls, Ellenburger-San Saba, and Hickory Aquifers in GMA-8. GR 21-016 summarizes MAGs for the Carrizo-Wilcox, Queen City, and Sparta aquifers in GMA-11. GR 21-017 summarizes MAGs for Sparta, Queen City, Yegua-Jackson, Carrizo-Wilcox, and Brazos River Alluvium in GMA-12.

Table 2-5 summarizes the MAG volumes from these GAM runs for each aquifer. The total MAG supplies for Region C range between 151,000 acre-feet per year in 2030 to 155,0000 acre-feet per year in 2080.

Table 2-5: Modeled Available Groundwater Supplies for Region C

Source	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox Aquifer	10,534	11,595	12,658	13,721	14,679	14,679
Queen City Aquifer	231	231	231	231	231	231
Trinity Aquifer	112,897	112,897	112,897	112,897	112,897	112,897
Woodbine Aquifer	27,193	27,193	27,193	27,193	27,193	27,193
Total	**150,855**	**151,916**	**152,979**	**154,042**	**155,000**	**155,000**

2.2.2 Documented Methodologies Utilized for Non-MAGs Availabilities

The MAG reports referenced in Section 2.2.1 did not include availabilities for Other Aquifer and portions of aquifers deemed “non-relevant” by the GMAs. “Other Aquifer” is a term that captures a multitude of local formations that produce limited groundwater. In Region C, most of the water produced from Other Aquifer is from alluvial deposits along streams and rivers. In Fannin County, it also includes the Blossom formation. Non-relevant aquifers include the Nacatosh Aquifer in Kaufman and Navarro counties and the Cross-Timbers Aquifer in Jack and Parker counties.

Other Aquifer availability is difficult to estimate since there are limited groundwater models and data for these formations. Therefore, Region C relied upon the historical use estimates reported by the TWDB, which is based on the water use survey. Many of these estimates are not reported by an entity but estimated by the TWDB as “non-surveyed estimate”. While this adds another level of uncertainty in the groundwater availability estimates for Region C, it is the best available data.

Historical water use from Other Aquifer is relatively small, ranging from less than 50 acre-feet per year to approximately 3,000 acre-feet per year on a county basis. Comparisons of the reported historical use from 2000 to 2021 to the availabilities reported in the 2021 Region C Water Plan found similar levels of water use. Therefore, Region C chose to use the availability values from the 2021 Region C Water Plan for the 2026 Plan. The only change is in Kaufman County where Other Aquifer was added as a new supply. This

county reported higher groundwater use attributed to Other Aquifer. The 2021 Region C Water Plan only included the Nacatosh Aquifer in Kaufman County. References to Other Aquifer for Jack and Parker counties in previous plans is now the "Cross Timbers Aquifer" in the 2026 Plan. A summary of the non-MAG groundwater availability is shown in **Table 2-6**.

Table 2-6: Non-MAG Groundwater Availabilities

County	Aquifer	Availability	Methodology[1]
Ellis	Nacatoch Aquifer	20	Historical Use
Fannin	Other Aquifer	2,919	Historical Use
Jack	Cross Timbers Aquifer	934	Historical Use
Kaufman	Nacatoch Aquifer	926	Historical Use
Kaufman	Other Aquifer	1,756	Historical Use
Navarro	Nacatoch Aquifer	980	Historical Use
Navarro	Other Aquifer	435	Historical Use
Parker	Cross Timbers Aquifer	50	Historical Use
Rockwall	Nacatoch Aquifer	13	Historical Use

[1]Historical use from 2000 - 2021, as estimated by the TWDB for its Water Use Survey reports, was used to verify the aquifer availabilities. For most counties, values approved by the TWDB for past regional water plans were used if the historical use estimates were similar.

3.0 POTENTIALLY FEASIBLE WATER MANAGEMENT STRATEGIES

3.1 PROCESS FOR IDENTIFYING POTENTIALLY FEASIBLE WMSS

The process for identifying potentially feasible water management strategies (WMS) was presented at the November 6, 2023, RCWPG meeting. There were no public comments and the RCWPG approved the methodology. A description of the methodology is presented in **Appendix C**.

3.2 LIST OF POTENTIALLY FEASIBLE WMS

A list of potentially feasible WMS is included in **Appendix D.** These strategies are based on preliminary discussions with wholesale water providers, water user survey responses, and recommendations from the 2026 Region C Regional Water Plan. During analysis and development of the regional water plan, other strategies may be identified and included in this list. The types of strategies considered include:

- Infrastructure and Water Treatment Improvements
- Reuse
- New Groundwater Development

- Voluntary Redistribution (includes increase in contracts)
- New Surface Water
- Aquifer Storage and Recovery
- Conjunctive Use
- Regional Projects
- Dredging Existing Surface Water Sources
- Desalination
- Conservation

4.0 INTERREGIONAL COORDINATION

Region C is in north central Texas and borders five regions: B, G, H, I and D. There are areas of mutual interest warranting interregional coordination with each of these regions. For example, there are shared water supplies, split WUGs, and the need for compatible approaches to surface water supplies. These topics are discussed and coordinated between the regions and their consultants through interregional coordination memoranda and meetings as needed. In addition, there are several similarities in the approaches and water concerns of these regions. To foster coordination with the adjoining regions, the RCWPG has assigned liaisons to the adjoining region. The liaisons attend the assigned region's planning group meetings and provide updates to the entire group. In turn, assigned liaisons from the adjoining regions to Region C have attended Region C meetings and provided updates to the region.

5.0 INFEASIBLE WATER MANAGEMENT STRATEGY ASSESMENT

Senate Bill 1511 of the 85th Texas Legislature established a new requirement for the RWP process to examine the WMS recommended in the prior RWP cycle to determine if any of these WMS are no longer feasible (the sponsor has not taken affirmative steps toward implementation); if infeasible strategies are identified, the prior RWP must be amended. Subsequent to the passage of this legislation, TWDB provided the RCWPG with additional guidance on addressing the new requirements, including a list of WMS and WMS Projects from the 2021 Region C RWP relevant to the analysis. The RCWPG performed a detailed assessment of the listed WMS and WMS Projects, including consideration of data from surveys of WUGs, directed correspondence to project sponsors, resolutions by project sponsors, application for funding support through TWDB financial assistance programs, project pilot studies, local institutional knowledge,

and other information as available. A description of the methodology and analysis is presented in **Appendix E**.

The legislative requirements and the results of the assessment were discussed at meetings of the RCWPG. At its meeting on November 6, 2023, the RCWPG took formal action establishing that no WMS or WMS project recommended in the 2021 Region C RWP were found to be infeasible.

6.0 PUBLIC COMMENT

Public comments were accepted 14 days prior to and at the public meeting on April 29, 2024, when this Technical Memorandum was presented.

APPENDIX A
TWDB DB27 Reports

TWDB DB27 Report #1 - WUG Population Projections

DRAFT Region C Water User Group (WUG) Population

	WUG Population					
	2030	2040	2050	2060	2070	2080
Collin County Total	**1,418,872**	**1,764,402**	**2,126,310**	**2,351,305**	**2,505,630**	**2,612,777**
Collin County / Sabine Basin Total	**18,370**	**38,224**	**56,054**	**66,545**	**79,804**	**85,451**
Caddo Basin SUD*	1,252	6,426	10,286	11,875	13,251	13,701
Josephine*	5,389	11,989	17,424	19,491	21,800	21,800
Nevada SUD	1,940	2,462	3,661	7,723	13,786	18,527
Royse City*	8,394	15,496	22,376	24,692	27,747	27,747
County-Other	1,395	1,851	2,307	2,764	3,220	3,676
Collin County / Trinity Basin Total	**1,400,502**	**1,726,178**	**2,070,256**	**2,284,760**	**2,425,826**	**2,527,326**
Allen	125,000	140,000	140,000	140,000	140,000	140,000
Anna	42,924	69,571	88,103	104,876	121,250	130,000
Bear Creek SUD	25,815	45,451	51,976	56,600	62,043	62,043
Blue Ridge	1,653	2,162	2,740	3,320	3,959	4,664
Caddo Basin SUD*	1,037	5,321	8,518	9,835	10,974	11,346
Celina	65,403	114,328	190,491	198,744	245,262	296,640
Copeville WSC	7,703	12,179	17,902	19,644	21,942	24,238
Culleoka WSC	12,542	14,383	17,346	19,661	22,127	24,442
Dallas	53,145	59,190	65,922	73,420	81,771	91,072
Desert WSC	365	401	440	480	524	572
East Fork SUD	17,422	20,787	24,665	28,063	30,999	34,243
Fairview	13,152	16,629	20,418	20,418	20,418	20,418
Farmersville	5,700	14,074	27,886	31,725	35,920	39,678
Frisco	183,058	221,642	222,104	222,104	222,104	222,104
Frognot WSC*	2,077	2,593	3,181	3,772	4,422	5,138
Hickory Creek SUD*	99	128	161	194	230	271
Lucas	11,475	13,122	13,442	13,442	13,442	13,442
McKinney	227,593	269,464	344,909	433,869	433,869	433,869
Melissa	43,840	65,280	87,678	108,878	119,072	119,072
Milligan WSC	3,352	3,525	4,137	4,824	5,593	6,231
Murphy	21,373	21,822	24,104	26,718	29,564	31,653
Mustang SUD	3,517	5,124	6,520	7,970	9,133	10,213
Nevada SUD	3,639	4,618	6,866	14,483	25,852	34,743
North Collin SUD	7,544	8,523	10,409	12,496	14,565	16,977
North Farmersville WSC	465	550	715	834	942	992
Parker	6,878	8,782	12,121	14,089	14,089	14,089
Plano	277,913	279,472	307,762	316,996	316,996	316,996
Princeton	48,722	103,793	140,731	157,121	171,027	171,027
Prosper	39,104	45,350	54,280	56,527	59,802	59,802

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DRAFT Region C Water User Group (WUG) Population

	WUG Population					
	2030	2040	2050	2060	2070	2080
Richardson	63,141	66,547	72,087	74,250	74,250	74,250
Sachse	9,745	10,386	11,796	12,331	12,692	12,692
Seis Lagos UD	2,348	2,270	2,383	2,479	2,535	2,541
South Grayson SUD	1,269	1,671	2,128	2,586	3,092	3,649
Verona SUD	3,345	4,217	5,210	6,206	7,303	8,512
West Leonard WSC*	337	422	518	614	720	837
Westminster SUD	2,138	2,674	3,283	3,894	4,567	5,309
Wylie	47,379	46,874	49,115	50,589	50,589	50,589
Wylie Northeast SUD	15,891	19,669	24,240	25,954	26,648	26,648
County-Other	2,399	3,184	3,969	4,754	5,539	6,324
Cooke County Total	**44,200**	**45,693**	**46,466**	**47,694**	**49,742**	**51,732**
Cooke County / Red Basin Total	**2,504**	**2,590**	**2,652**	**2,715**	**2,812**	**2,897**
Callisburg WSC	395	412	420	423	426	429
Gainesville	546	563	570	596	644	690
Lindsay	21	21	21	21	21	21
Two Way SUD	43	43	50	51	54	55
Woodbine WSC	520	539	548	550	553	555
County-Other	979	1,012	1,043	1,074	1,114	1,147
Cooke County / Trinity Basin Total	**41,696**	**43,103**	**43,814**	**44,979**	**46,930**	**48,835**
Bolivar WSC	1,869	2,045	2,112	2,154	2,196	2,244
Callisburg WSC	1,219	1,274	1,297	1,305	1,314	1,323
Gainesville	19,159	19,746	20,020	20,937	22,593	24,226
Lake Kiowa SUD	2,346	2,477	2,532	2,555	2,581	2,609
Lindsay	1,697	1,737	1,756	1,756	1,755	1,755
Mountain Springs WSC	1,933	1,942	1,952	1,940	1,927	1,913
Muenster	2,139	2,139	2,139	2,139	2,139	2,139
Woodbine WSC	6,337	6,577	6,682	6,710	6,739	6,773
County-Other	4,997	5,166	5,324	5,483	5,686	5,853
Dallas County Total	**2,744,243**	**2,899,298**	**3,045,184**	**3,162,467**	**3,277,308**	**3,372,187**
Dallas County / Trinity Basin Total	**2,744,243**	**2,899,298**	**3,045,184**	**3,162,467**	**3,277,308**	**3,372,187**
Addison	20,465	23,069	24,456	25,276	26,179	27,173
AMC Creekside	544	673	742	782	828	879
Balch Springs	28,412	30,394	33,234	36,214	40,018	42,000
Carrollton	55,007	58,186	61,664	65,328	69,216	69,480
Cedar Hill	53,645	58,553	63,911	69,070	74,646	80,672

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DRAFT Region C Water User Group (WUG) Population

	WUG Population					
	2030	2040	2050	2060	2070	2080
Cockrell Hill	3,610	3,380	3,255	3,176	3,089	2,993
Combine WSC	769	823	853	870	888	908
Coppell	42,352	42,256	42,339	42,405	42,500	42,500
Dallas	1,254,601	1,302,256	1,351,721	1,403,065	1,456,359	1,511,677
Desoto	59,901	63,934	66,069	67,304	68,664	70,162
Duncanville	43,672	45,939	47,157	47,307	47,307	47,307
East Fork SUD	4,577	5,461	6,479	7,372	8,143	8,995
Farmers Branch	36,454	39,795	41,570	42,609	43,754	45,014
Garland	259,490	280,255	292,596	301,612	303,416	303,416
Glenn Heights	13,834	15,160	15,864	16,278	16,732	17,233
Grand Prairie	146,304	166,714	188,910	194,371	201,657	201,657
Highland Park	9,311	9,311	9,311	9,311	9,311	9,311
Hutchins	8,346	9,300	9,808	10,107	10,436	10,799
Irving	285,073	302,931	303,163	303,400	303,641	303,641
Lancaster	44,667	47,419	48,875	49,713	50,637	51,653
Lancaster MUD 1	2,286	2,844	3,142	3,321	3,517	3,734
Lewisville	1,046	1,053	1,126	1,141	1,163	1,163
Mesquite	166,080	173,044	192,008	216,237	243,324	266,415
Ovilla	464	504	547	594	645	701
Richardson	54,374	56,289	58,980	60,750	60,750	60,750
Rockett SUD	755	836	912	938	966	976
Rowlett	65,945	69,670	80,411	84,929	88,280	88,280
Sachse	19,762	21,212	24,032	25,085	25,770	25,770
Seagoville	20,875	22,892	23,964	24,593	25,285	26,047
Sunnyvale	9,064	11,417	13,548	14,129	14,340	14,340
University Park	25,656	25,656	25,656	25,656	25,656	25,656
Wilmer	5,902	6,672	7,081	7,324	7,591	7,885
County-Other	1,000	1,400	1,800	2,200	2,600	3,000
Denton County Total	**1,229,659**	**1,498,214**	**1,772,935**	**1,998,120**	**2,244,614**	**2,456,768**
Denton County / Trinity Basin Total	**1,229,659**	**1,498,214**	**1,772,935**	**1,998,120**	**2,244,614**	**2,456,768**
AMC Creekside	2,140	2,686	3,261	3,846	4,490	5,199
Argyle WSC	13,736	17,803	23,593	29,159	33,250	36,250
Aubrey	8,276	14,448	24,810	33,745	40,586	40,586
Black Rock WSC	1,560	1,959	2,377	2,804	3,274	3,791
Bolivar WSC	9,399	11,786	14,299	16,855	20,524	25,205
Carrollton	86,261	91,375	96,677	102,308	108,261	108,673
Celina	1,265	2,170	3,739	3,970	5,005	6,054

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DRAFT Region C Water User Group (WUG) Population

	WUG Population					
	2030	2040	2050	2060	2070	2080
Coppell	1,425	1,376	1,418	1,452	1,500	1,500
Corinth	29,174	31,493	39,215	40,348	42,000	42,000
Cross Timbers WSC	9,808	12,310	14,944	17,622	20,802	25,403
Dallas	34,543	42,657	53,054	64,065	76,324	89,553
Denton	179,044	229,192	283,800	337,235	403,484	468,260
Denton County FWSD 10	6,246	6,246	6,246	6,246	6,246	6,246
Denton County FWSD 11-C	5,406	8,467	11,690	14,965	18,573	22,547
Denton County FWSD 1-A	23,532	31,738	33,928	34,388	35,057	35,057
Denton County FWSD 7	12,779	13,500	13,500	13,500	13,500	13,500
Flower Mound	94,783	118,816	144,099	144,099	144,099	144,099
Fort Worth*	26,302	39,396	48,326	60,243	73,369	87,826
Frisco	136,967	166,055	167,552	167,552	167,552	167,552
Hackberry	5,999	8,480	11,092	13,748	16,673	19,894
Highland Village	16,656	17,822	18,020	18,020	18,020	18,020
Justin	6,949	9,741	13,654	19,140	26,830	37,608
Krum	7,146	9,532	12,715	16,961	22,625	30,180
Lake Cities Municipal Utility Authority	17,721	21,502	22,513	22,753	22,897	22,897
Lewisville	114,210	114,924	122,855	124,518	126,942	126,942
Little Elm	44,322	42,372	44,739	46,710	48,000	48,000
Mountain Springs WSC	68	86	103	122	142	164
Mustang SUD	105,046	149,073	199,398	249,230	289,198	323,398
Northlake	26,264	29,172	36,205	42,530	48,940	53,700
Paloma Creek North	5,853	5,853	5,853	5,853	5,853	5,853
Paloma Creek South	9,088	9,088	9,088	9,088	9,088	9,088
Pilot Point	6,229	8,047	13,854	19,888	21,454	21,454
Plano	8,311	8,643	9,518	9,804	9,804	9,804
Ponder	4,798	6,403	8,093	9,811	11,703	13,786
Prosper	16,171	19,746	23,468	24,348	25,630	25,630
Providence Village WCID	7,235	7,235	7,235	7,235	7,235	7,235
Roanoke	13,999	13,658	13,952	14,185	14,524	14,524
Sanger	11,153	14,002	17,000	22,119	27,933	35,269
Southlake	699	648	582	513	440	367
Terra Southwest	3,143	3,996	4,895	5,808	6,814	7,922
The Colony	51,496	60,502	67,600	67,600	67,600	67,600
Trophy Club MUD 1	13,252	13,252	13,252	13,252	13,252	13,252
County-Other	51,205	80,964	110,723	140,482	185,121	214,880

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DRAFT Region C Water User Group (WUG) Population

	WUG Population					
	2030	2040	2050	2060	2070	2080
Ellis County Total	**241,747**	**290,486**	**346,554**	**397,716**	**455,844**	**513,797**
Ellis County / Trinity Basin Total	**241,747**	**290,486**	**346,554**	**397,716**	**455,844**	**513,797**
Avalon Water Supply & Sewer Service	992	1,109	1,236	1,360	1,498	1,650
Buena Vista-Bethel SUD	7,152	8,701	10,384	12,081	13,948	16,004
East Garrett WSC	1,806	2,295	2,825	3,363	3,954	4,605
Ennis	20,220	21,227	22,316	23,303	24,413	25,655
Ferris	2,455	2,602	2,761	2,907	3,072	3,256
Files Valley WSC*	848	1,024	1,214	1,406	1,617	1,850
Glenn Heights	8,344	10,749	13,364	16,019	18,936	22,144
Hilco United Services*	605	651	701	748	801	860
Italy	1,939	1,942	1,944	1,933	1,923	1,915
Mansfield*	581	698	824	951	1,091	1,245
Midlothian	33,669	38,530	45,987	52,996	60,311	66,058
Mountain Peak SUD*	21,088	28,150	35,829	43,651	52,242	61,684
Nash Forreston WSC	2,095	2,514	2,970	3,428	3,933	4,489
Ovilla	4,974	6,323	7,790	9,277	10,911	12,710
Palmer	2,543	3,053	3,606	4,162	4,775	5,449
Red Oak	12,039	15,009	18,237	21,502	25,093	29,044
Rice Water Supply and Sewer Service	5,565	6,678	7,888	9,106	10,446	11,922
Rockett SUD	37,615	44,938	53,859	62,009	74,775	85,142
Sardis Lone Elm WSC	20,865	25,783	31,135	32,524	32,524	32,524
South Ellis County WSC	1,458	1,750	2,067	2,386	2,737	3,124
Waxahachie	48,394	59,800	72,197	84,724	98,504	113,667
County-Other	6,500	6,960	7,420	7,880	8,340	8,800
Fannin County Total	**40,069**	**44,955**	**53,396**	**62,521**	**74,244**	**84,502**
Fannin County / Red Basin Total	**28,247**	**31,972**	**39,022**	**46,489**	**56,445**	**65,243**
Arledge Ridge WSC	1,003	1,083	1,125	1,160	1,197	1,238
Bois D Arc MUD*	3,012	3,160	3,249	3,304	3,365	3,432
Bonham	12,465	15,204	21,585	28,467	37,686	45,834
Desert WSC	16	19	20	21	22	23
Honey Grove	367	377	377	377	377	377
Leonard	18	19	23	26	32	38
Savoy	711	704	706	698	689	678
Southwest Fannin County SUD	5,560	6,147	6,439	6,699	6,985	7,298
Trenton	15	17	17	18	18	19
White Shed WSC	2,344	2,460	2,528	2,571	2,618	2,670
Whitewright	78	98	107	117	127	139

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DRAFT Region C Water User Group (WUG) Population

	WUG Population					
	2030	2040	2050	2060	2070	2080
County-Other	2,658	2,684	2,846	3,031	3,329	3,497
Fannin County / Sulphur Basin Total	**4,158**	**4,406**	**4,910**	**5,649**	**6,263**	**6,349**
Arledge Ridge WSC	361	391	406	418	432	446
Bois D Arc MUD*	19	20	20	21	21	21
Delta County MUD*	72	84	90	96	102	109
Hickory Creek SUD*	205	188	183	173	162	151
Honey Grove	1,415	1,451	1,451	1,451	1,451	1,451
Ladonia	774	953	1,373	2,026	2,500	2,500
Leonard	14	15	18	21	26	31
North Hunt SUD*	107	112	116	117	119	122
Wolfe City*	49	38	30	24	19	15
County-Other	1,142	1,154	1,223	1,302	1,431	1,503
Fannin County / Trinity Basin Total	**7,664**	**8,577**	**9,464**	**10,383**	**11,536**	**12,910**
Desert WSC	782	886	937	985	1,037	1,096
Frognot WSC*	30	42	48	53	60	67
Hickory Creek SUD*	69	64	62	59	55	51
Leonard	2,767	2,985	3,539	4,140	4,942	5,931
Southwest Fannin County SUD	1,319	1,459	1,528	1,590	1,658	1,732
Trenton	783	840	872	895	922	951
West Leonard WSC*	1,914	2,301	2,478	2,661	2,862	3,082
Freestone County Total	**19,057**	**18,648**	**18,067**	**17,514**	**16,905**	**16,234**
Freestone County / Brazos Basin Total	**2,934**	**2,801**	**2,620**	**2,551**	**2,477**	**2,394**
Point Enterprise WSC*	443	438	433	433	433	433
South Freestone County WSC	652	682	723	702	679	654
Teague	1,783	1,630	1,420	1,372	1,320	1,263
County-Other	56	51	44	44	45	44
Freestone County / Trinity Basin Total	**16,123**	**15,847**	**15,447**	**14,963**	**14,428**	**13,840**
Butler WSC	838	830	818	794	767	737
Fairfield	4,932	4,782	4,639	4,338	4,039	3,742
Flo Community WSC*	150	150	150	150	150	150
Pleasant Grove WSC	1,323	1,430	1,574	1,530	1,482	1,429
Point Enterprise WSC*	399	396	390	390	390	390
South Freestone County WSC	1,946	2,038	2,157	2,097	2,029	1,954
Southern Oaks Water Supply	675	856	1,099	1,073	1,043	1,009

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DRAFT Region C Water User Group (WUG) Population

	WUG Population					
	2030	2040	2050	2060	2070	2080
Teague	1,654	1,512	1,318	1,274	1,225	1,172
Wortham	925	841	724	700	673	644
County-Other	3,281	3,012	2,578	2,617	2,630	2,613
Grayson County Total	**169,780**	**200,021**	**231,274**	**257,654**	**292,518**	**317,713**
Grayson County / Red Basin Total	**135,905**	**154,532**	**172,476**	**189,629**	**211,345**	**225,932**
Bells	1,743	1,900	2,031	2,147	2,275	2,416
Denison	45,619	58,130	69,278	80,563	95,278	103,443
Dorchester	615	632	645	650	657	666
Howe	1,799	2,156	2,455	2,752	3,074	3,425
Kentuckytown WSC	1,425	1,562	1,676	1,779	1,892	2,016
Luella SUD	2,380	2,380	2,380	2,380	2,380	2,380
Northwest Grayson County WCID 1	2,032	2,265	2,459	2,640	2,838	3,054
Oak Ridge South Gale WSC	2,811	2,875	2,927	2,942	2,962	2,988
Pink Hill WSC	2,210	2,449	2,648	2,832	3,033	3,253
Pottsboro	3,613	3,938	4,210	4,450	4,715	5,007
Red River Authority of Texas*	1,052	1,265	1,443	1,621	1,814	2,024
Sherman	46,811	50,903	54,318	57,317	60,622	64,264
Southmayd	964	992	1,015	1,026	1,039	1,055
Southwest Fannin County SUD	1,534	1,673	1,788	1,891	2,003	2,127
Starr WSC	2,325	2,533	2,708	2,862	3,032	3,219
Tom Bean	205	205	205	205	205	205
Two Way SUD	3,552	3,761	4,478	4,895	5,435	5,772
Whitesboro	2,086	2,273	2,428	2,565	2,716	2,883
Whitewright	1,972	2,151	2,299	2,432	2,575	2,735
County-Other	11,157	10,489	11,085	11,680	12,800	13,000
Grayson County / Trinity Basin Total	**33,875**	**45,489**	**58,798**	**68,025**	**81,173**	**91,781**
Collinsville	2,641	2,907	3,129	3,331	3,552	3,794
Desert WSC	701	765	818	864	915	972
Dorchester	672	690	705	711	719	728
Gunter	1,940	2,258	2,523	2,782	3,064	3,371
Howe	2,986	3,579	4,076	4,568	5,104	5,686
Kentuckytown WSC	1,438	1,577	1,692	1,795	1,909	2,034
Luella SUD	337	337	337	337	337	337
Mustang SUD	2,344	3,424	4,396	5,368	6,088	6,808
Pilot Point	125	153	283	394	438	438
South Grayson SUD	4,034	4,496	4,882	5,240	5,631	6,061

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DRAFT Region C Water User Group (WUG) Population

	WUG Population					
	2030	2040	2050	2060	2070	2080
Tioga	1,773	2,106	2,386	2,662	2,961	3,288
Tom Bean	908	908	908	908	908	908
Two Way SUD	2,452	2,596	3,091	3,380	3,752	3,984
Van Alstyne	8,398	16,284	25,925	31,829	41,706	49,029
Westminster SUD	30	36	41	46	53	58
Whitesboro	2,761	3,007	3,214	3,395	3,595	3,816
Whitewright	248	270	289	305	324	344
Woodbine WSC	87	96	103	110	117	125
Henderson County Total	**65,669**	**71,460**	**78,514**	**84,827**	**92,129**	**97,538**
Henderson County / Trinity Basin Total	**65,669**	**71,460**	**78,514**	**84,827**	**92,129**	**97,538**
Athens*	12,998	15,700	20,673	24,945	30,100	33,252
B B S WSC*	17	17	17	17	17	17
Bethel Ash WSC*	3,053	3,205	3,238	3,316	3,403	3,499
Brushy Creek WSC*	681	702	719	733	750	768
Crescent Heights WSC	1,801	1,857	2,064	2,099	2,137	2,178
Dogwood Estates Water	1,179	1,154	1,226	1,239	1,253	1,267
East Cedar Creek FWSD	23,746	25,120	25,323	25,882	26,501	27,183
Eustace	3,105	3,399	3,333	3,441	3,562	3,696
Log Cabin	671	671	702	712	723	735
Mabank*	3,474	3,826	3,737	3,863	4,004	4,161
Malakoff	2,416	2,562	2,689	2,727	2,766	2,809
Trinidad	1,134	1,152	1,191	1,213	1,236	1,261
Virginia Hill WSC*	1,547	1,594	1,633	1,667	1,704	1,744
West Cedar Creek MUD	4,847	4,501	4,969	4,973	4,973	4,968
County-Other*	5,000	6,000	7,000	8,000	9,000	10,000
Jack County Total	**8,214**	**7,957**	**7,770**	**7,740**	**7,859**	**7,787**
Jack County / Brazos Basin Total	**1,681**	**1,606**	**1,494**	**1,420**	**1,345**	**1,270**
County-Other	1,681	1,606	1,494	1,420	1,345	1,270
Jack County / Trinity Basin Total	**6,533**	**6,351**	**6,276**	**6,320**	**6,514**	**6,517**
Jacksboro	3,714	3,657	3,770	3,940	4,259	4,387
County-Other	2,819	2,694	2,506	2,380	2,255	2,130
Kaufman County Total	**209,309**	**257,499**	**335,063**	**431,671**	**542,246**	**627,644**
Kaufman County / Sabine Basin Total	**5,195**	**5,655**	**7,111**	**8,847**	**11,275**	**12,550**
Ables Springs SUD*	4,078	4,242	4,952	5,578	6,317	6,633

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DRAFT Region C Water User Group (WUG) Population

	WUG Population					
	2030	2040	2050	2060	2070	2080
MacBee SUD*	186	226	278	336	399	469
Poetry WSC*	829	1,069	1,723	2,748	4,322	5,177
County-Other	102	118	158	185	237	271
Kaufman County / Trinity Basin Total	**204,114**	**251,844**	**327,952**	**422,824**	**530,971**	**615,094**
Ables Springs SUD*	1,866	1,941	2,266	2,553	2,891	3,036
Becker Jiba WSC	4,425	6,986	9,459	11,174	13,077	15,179
College Mound SUD	12,664	14,078	19,045	29,451	40,174	50,886
Combine WSC	2,835	3,271	3,825	4,439	5,121	5,876
Crandall	5,598	12,005	20,084	29,172	41,195	49,395
Elmo WSC	2,332	2,733	3,243	3,810	4,440	5,137
Forney	29,597	38,044	47,108	55,621	61,829	61,829
Forney Lake WSC	19,207	22,100	23,000	25,000	25,500	26,000
Gastonia Scurry SUD	12,512	14,583	19,563	32,939	48,748	59,846
Heath	193	271	379	388	388	388
High Point WSC	19,458	30,077	43,664	59,266	76,390	95,209
Kaufman	7,626	8,606	12,368	15,632	18,682	21,791
Kaufman County Development District 1	3,842	4,083	6,318	9,791	14,527	16,798
Kaufman County MUD 11	4,340	5,159	6,629	8,374	10,269	11,378
Kaufman County MUD 14	6,300	6,300	6,300	6,300	6,300	6,300
Kemp	1,611	1,671	1,745	1,813	1,894	1,987
Mabank*	6,335	6,398	6,461	6,467	6,498	6,549
MacBee SUD*	90	110	134	162	193	227
Markout WSC	2,958	3,514	4,903	7,062	9,422	12,571
North Kaufman WSC	3,448	4,535	5,920	7,495	9,231	11,141
Poetry WSC*	1,027	1,323	2,133	3,401	5,348	6,407
Rose Hill SUD	4,968	6,001	7,087	8,151	9,005	9,948
Talty SUD	12,151	13,567	20,000	28,710	39,600	46,568
Terrell	24,866	28,404	34,827	40,479	47,940	53,769
West Cedar Creek MUD	227	276	339	410	488	575
County-Other	13,638	15,808	21,152	24,764	31,821	36,304
Navarro County Total	**57,263**	**61,718**	**65,957**	**70,146**	**75,206**	**80,385**
Navarro County / Trinity Basin Total	**57,263**	**61,718**	**65,957**	**70,146**	**75,206**	**80,385**
B And B WSC	1,871	2,060	2,217	2,364	2,525	2,701
Blooming Grove	1,038	1,078	1,168	1,251	1,355	1,465
Brandon Irene WSC*	76	90	100	111	122	135
Chatfield WSC	3,318	3,572	3,782	3,967	4,172	4,396

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DRAFT Region C Water User Group (WUG) Population

	WUG Population					
	2030	2040	2050	2060	2070	2080
Corbet WSC	2,465	2,647	2,797	2,928	3,072	3,232
Corsicana	27,916	29,886	31,517	32,925	34,477	36,187
Dawson	825	834	842	839	837	835
Kerens	1,469	1,359	1,257	1,163	1,076	995
M E N WSC	3,732	4,307	4,782	5,255	5,771	6,334
Navarro Mills WSC*	2,814	3,021	3,193	3,343	3,507	3,689
Pleasant Grove WSC	122	130	137	144	151	159
Post Oak SUD*	505	472	445	408	367	325
Rice Water Supply and Sewer Service	3,953	4,697	5,581	6,632	7,881	9,365
South Ellis County WSC	68	83	94	106	118	132
Southern Oaks Water Supply	163	221	269	320	375	435
County-Other	6,928	7,261	7,776	8,390	9,400	10,000
Parker County Total	**190,921**	**254,388**	**340,869**	**442,691**	**566,315**	**675,719**
Parker County / Brazos Basin Total	**38,595**	**54,654**	**75,188**	**99,198**	**129,957**	**159,118**
Horseshoe Bend Water System	1,304	1,474	1,864	2,452	3,334	4,367
Mineral Wells*	1,801	1,900	1,999	2,099	2,099	2,099
North Rural WSC*	1,391	1,684	2,015	2,364	2,747	3,170
Parker County SUD	9,100	12,400	16,800	22,592	30,900	41,800
Santo SUD*	155	186	219	256	297	340
Sturdivant Progress WSC*	23	21	19	16	13	10
Weatherford	6,657	7,945	9,400	10,928	12,610	14,464
County-Other	18,164	29,044	42,872	58,491	77,957	92,868
Parker County / Trinity Basin Total	**152,326**	**199,734**	**265,681**	**343,493**	**436,358**	**516,601**
Aledo	7,847	8,462	10,380	11,847	13,500	14,500
Annetta	3,180	3,810	4,439	5,068	5,698	6,327
Azle	3,347	4,258	5,287	6,382	7,584	8,906
Community WSC	39	60	82	107	135	165
Fort Worth*	3,751	4,321	4,438	4,856	5,321	5,835
Hudson Oaks	5,500	5,693	5,851	6,044	6,300	6,500
Reno (Parker)	4,194	5,107	6,138	7,226	8,424	9,741
Springtown	5,436	7,245	10,032	12,229	14,192	15,677
Walnut Creek SUD	20,927	22,831	31,740	47,518	66,114	84,631
Weatherford	38,753	46,252	54,723	63,615	73,409	84,196
Willow Park	8,080	9,714	11,560	13,501	15,638	17,991
County-Other	51,272	81,981	121,011	165,100	220,043	262,132

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DRAFT Region C Water User Group (WUG) Population

	WUG Population					
	2030	2040	2050	2060	2070	2080
Rockwall County Total	**155,987**	**214,364**	**280,320**	**340,099**	**378,980**	**403,891**
Rockwall County / Sabine Basin Total	**55,949**	**92,302**	**121,462**	**141,354**	**166,766**	**182,866**
Bear Creek SUD	902	1,498	1,710	1,862	2,044	2,044
Blackland WSC	2,040	2,124	2,289	2,655	2,858	3,077
Cash SUD*	2,977	3,950	5,128	6,367	7,730	9,229
Fate	20,240	29,231	40,126	51,647	64,304	78,222
Nevada SUD	226	284	430	921	1,652	2,220
Royse City*	26,943	53,046	68,545	74,175	82,398	80,859
County-Other	2,621	2,169	3,234	3,727	5,780	7,215
Rockwall County / Trinity Basin Total	**100,038**	**122,062**	**158,858**	**198,745**	**212,214**	**221,025**
Bear Creek SUD	1,065	1,768	2,018	2,198	2,414	2,414
Blackland WSC	2,594	2,700	2,910	3,374	3,633	3,911
East Fork SUD	2,737	3,267	3,877	4,411	4,873	5,383
Fate	5,357	7,738	10,622	13,671	17,022	20,705
Heath	11,635	15,447	20,471	20,975	20,975	20,975
High Point WSC	1,853	2,687	3,698	4,768	5,943	7,235
Mount Zion WSC	2,079	2,148	2,226	2,294	2,373	2,462
R C H WSC	5,684	6,457	8,240	10,994	13,407	16,350
Rockwall	55,075	67,561	89,991	120,077	124,696	124,696
Rowlett	11,930	12,265	14,770	15,942	16,815	16,815
County-Other	29	24	35	41	63	79
Tarrant County Total	**2,446,041**	**2,749,019**	**2,878,997**	**3,093,389**	**3,272,494**	**3,438,106**
Tarrant County / Trinity Basin Total	**2,446,041**	**2,749,019**	**2,878,997**	**3,093,389**	**3,272,494**	**3,438,106**
Arlington	443,307	482,455	513,986	539,421	574,231	591,297
Azle	12,981	14,517	15,787	16,787	17,888	19,099
Bedford	52,345	56,345	57,255	60,166	60,166	60,166
Benbrook Water Authority	27,156	29,353	31,526	33,698	35,871	38,044
Bethesda WSC*	349	386	417	441	467	496
Blue Mound	2,690	2,976	3,213	3,398	3,602	3,826
Burleson*	9,765	10,956	11,941	12,718	13,573	14,513
Colleyville	28,000	28,000	28,000	28,000	28,000	28,000
Community WSC	4,084	4,570	4,972	5,289	5,638	6,021
Crowley*	22,194	26,367	29,831	32,630	35,703	39,078
Dalworthington Gardens	2,303	2,326	2,343	2,344	2,348	2,352
Edgecliff	3,761	3,761	3,761	3,761	3,761	3,761
Euless	60,820	60,820	60,820	60,820	60,820	60,820

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DRAFT Region C Water User Group (WUG) Population

	WUG Population					
	2030	2040	2050	2060	2070	2080
Everman	6,600	6,600	6,600	6,600	6,600	6,600
Flower Mound	907	1,060	1,321	1,382	1,456	1,456
Forest Hill	15,535	17,189	18,556	19,624	20,798	22,093
Fort Worth*	1,091,983	1,287,121	1,310,518	1,401,360	1,501,256	1,611,117
Grand Prairie	77,247	83,733	92,502	95,043	98,744	98,744
Grapevine	54,037	54,037	54,037	54,037	54,037	54,037
Haltom City	50,000	50,000	50,000	50,000	50,000	50,000
Haslet	6,540	8,959	11,803	12,845	14,000	14,000
Hurst	40,912	40,821	40,900	40,962	41,053	41,053
Johnson County SUD*	2,706	3,147	3,266	3,386	3,511	3,642
Keller	51,130	51,974	51,974	51,974	51,974	51,974
Kennedale	10,713	14,532	19,028	23,760	28,592	33,035
Lake Worth	5,861	6,414	6,809	7,145	7,474	7,767
Lakeside	2,144	2,144	2,144	2,144	2,144	2,144
Mansfield*	102,621	108,197	131,234	185,294	185,154	185,000
North Richland Hills	80,119	85,636	87,051	88,170	89,800	89,800
Pantego	2,653	2,653	2,653	2,653	2,653	2,653
Pelican Bay	2,958	3,967	5,320	7,134	9,567	12,830
Reno (Parker)	79	88	95	101	106	113
Richland Hills	9,616	10,622	11,452	12,911	14,217	15,655
River Oaks	8,077	8,053	8,106	8,149	8,210	8,210
Saginaw	29,916	32,879	33,167	33,395	33,727	33,727
Sansom Park	6,087	6,736	7,272	7,690	8,152	8,659
Southlake	35,117	39,471	42,199	44,631	47,071	49,365
Trophy Club MUD 1	995	1,282	1,521	1,717	1,933	2,169
Watauga	24,525	24,525	24,525	24,525	24,525	24,525
Westlake	3,052	4,001	4,791	5,441	6,152	6,933
Westover Hills	676	674	677	679	682	682
Westworth Village	3,129	3,203	3,406	3,582	3,755	3,912
White Settlement	20,351	22,469	24,218	25,582	27,083	28,738
County-Other	30,000	44,000	58,000	72,000	86,000	100,000
Wise County Total	**92,085**	**125,921**	**176,629**	**234,863**	**311,934**	**369,816**
Wise County / Trinity Basin Total	**92,085**	**125,921**	**176,629**	**234,863**	**311,934**	**369,816**
Alvord	3,020	3,736	4,375	4,888	5,453	6,073
Bolivar WSC	952	1,047	1,133	1,199	1,272	1,351
Boyd	1,477	1,879	2,574	3,202	3,800	4,200
Bridgeport	5,814	5,958	6,093	6,165	6,246	6,337

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DRAFT Region C Water User Group (WUG) Population

	WUG Population					
	2030	**2040**	**2050**	**2060**	**2070**	**2080**
Chico	2,054	2,054	2,054	2,054	2,054	2,054
Decatur	10,796	12,824	17,299	21,328	27,000	31,300
Fort Worth*	2,480	2,862	2,948	3,243	3,567	3,924
Newark	1,238	1,571	2,274	3,323	4,941	6,310
Rhome	2,290	2,958	4,367	6,339	9,332	12,443
Runaway Bay	1,878	2,304	2,826	3,467	4,253	5,217
Walnut Creek SUD	3,707	3,965	5,477	8,249	11,667	14,935
West Wise SUD	4,047	4,438	4,789	5,056	5,349	5,672
County-Other	52,332	80,325	120,420	166,350	227,000	270,000
Region C Population Total	**9,133,116**	**10,504,043**	**11,804,305**	**13,000,417**	**14,163,968**	**15,126,596**

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TWDB DB27 Report #2 - WUG Water Demand Projections

DRAFT Region C Water User Group (WUG) Demand

	WUG Demand (acre-feet per year)					
	2030	2040	2050	2060	2070	2080
Collin County Total	**315,084**	**376,604**	**445,569**	**487,945**	**513,708**	**532,582**
Collin County / Sabine Basin Total	**4,318**	**7,565**	**10,446**	**11,931**	**13,743**	**14,375**
Caddo Basin SUD*	157	801	1,282	1,480	1,652	1,708
Josephine*	1,136	2,523	3,667	4,101	4,587	4,587
Nevada SUD	187	236	350	739	1,319	1,773
Royse City*	1,257	2,311	3,337	3,683	4,138	4,138
County-Other	210	277	345	414	482	550
Manufacturing	1,245	1,291	1,339	1,388	1,439	1,493
Livestock	39	39	39	39	39	39
Irrigation	87	87	87	87	87	87
Collin County / Trinity Basin Total	**310,766**	**369,039**	**435,123**	**476,014**	**499,965**	**518,207**
Allen	25,556	28,533	28,533	28,533	28,533	28,533
Anna	6,639	10,722	13,577	16,162	18,686	20,034
Bear Creek SUD	2,980	5,223	5,973	6,504	7,130	7,130
Blue Ridge	278	362	459	556	663	781
Caddo Basin SUD*	130	663	1,062	1,226	1,368	1,414
Celina	13,445	23,452	39,076	40,769	50,311	60,850
Copeville WSC	931	1,466	2,155	2,365	2,641	2,918
Culleoka WSC	1,316	1,503	1,812	2,054	2,312	2,554
Dallas	11,730	13,022	14,503	16,153	17,990	20,037
Desert WSC	59	64	70	77	84	91
East Fork SUD	2,071	2,459	2,918	3,320	3,667	4,051
Fairview	4,646	5,863	7,199	7,199	7,199	7,199
Farmersville	659	1,618	3,206	3,648	4,130	4,562
Frisco	43,641	52,705	52,815	52,815	52,815	52,815
Frognot WSC*	208	259	318	377	441	513
Hickory Creek SUD*	16	21	26	31	37	44
Lucas	3,226	3,681	3,771	3,771	3,771	3,771
McKinney	48,864	57,687	73,839	92,883	92,883	92,883
Melissa	9,505	14,123	18,969	23,555	25,761	25,761
Milligan WSC	387	404	474	553	641	714
Murphy	4,832	4,914	5,428	6,017	6,658	7,128
Mustang SUD	518	753	959	1,172	1,343	1,502
Nevada SUD	350	442	657	1,386	2,474	3,325
North Collin SUD	1,080	1,216	1,485	1,783	2,078	2,422
North Farmersville WSC	99	117	152	177	200	211

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DRAFT Region C Water User Group (WUG) Demand

	WUG Demand (acre-feet per year)					
	2030	2040	2050	2060	2070	2080
Parker	2,913	3,714	5,126	5,958	5,958	5,958
Plano	70,410	70,627	77,776	80,110	80,110	80,110
Princeton	5,085	10,783	14,621	16,324	17,769	17,769
Prosper	10,137	11,731	14,041	14,623	15,470	15,470
Richardson	15,573	16,366	17,729	18,261	18,261	18,261
Sachse	1,734	1,840	2,090	2,185	2,249	2,249
Seis Lagos UD	656	633	665	691	707	709
South Grayson SUD	151	197	251	305	365	431
Verona SUD	442	555	685	816	961	1,120
West Leonard WSC*	44	55	67	79	93	108
Westminster SUD	404	504	618	733	860	1,000
Wylie	6,935	6,830	7,157	7,372	7,372	7,372
Wylie Northeast SUD	1,851	2,278	2,807	3,006	3,086	3,086
County-Other	361	477	594	711	829	947
Manufacturing	7,378	7,651	7,934	8,228	8,533	8,848
Steam Electric Power	40	40	40	40	40	40
Livestock	762	762	762	762	762	762
Irrigation	2,724	2,724	2,724	2,724	2,724	2,724
Cooke County Total	**9,144**	**9,345**	**9,464**	**9,643**	**9,935**	**10,218**
Cooke County / Red Basin Total	**1,043**	**1,053**	**1,059**	**1,068**	**1,080**	**1,092**
Callisburg WSC	34	36	36	37	37	37
Gainesville	76	78	79	83	89	96
Lindsay	3	3	3	3	3	3
Two Way SUD	6	6	6	7	7	7
Woodbine WSC	53	55	56	56	56	57
County-Other	125	129	133	136	142	146
Livestock	432	432	432	432	432	432
Irrigation	314	314	314	314	314	314
Cooke County / Trinity Basin Total	**8,101**	**8,292**	**8,405**	**8,575**	**8,855**	**9,126**
Bolivar WSC	255	278	287	293	299	305
Callisburg WSC	107	110	113	113	114	115
Gainesville	2,665	2,734	2,772	2,898	3,128	3,354
Lake Kiowa SUD	942	993	1,015	1,024	1,035	1,046
Lindsay	213	217	220	220	220	220
Mountain Springs WSC	317	317	319	317	315	312
Muenster	357	355	355	355	355	355

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DRAFT Region C Water User Group (WUG) Demand

	WUG Demand (acre-feet per year)					
	2030	2040	2050	2060	2070	2080
Woodbine WSC	650	670	681	684	687	690
County-Other	638	656	676	697	722	743
Manufacturing	139	144	149	155	161	167
Mining	12	12	12	13	13	13
Steam Electric Power	6	6	6	6	6	6
Livestock	1,076	1,076	1,076	1,076	1,076	1,076
Irrigation	724	724	724	724	724	724
Dallas County Total	**588,041**	**617,407**	**645,928**	**669,521**	**692,645**	**712,879**
Dallas County / Trinity Basin Total	**588,041**	**617,407**	**645,928**	**669,521**	**692,645**	**712,879**
Addison	8,324	9,360	9,922	10,255	10,622	11,025
AMC Creekside	37	45	50	53	56	59
Balch Springs	2,854	3,033	3,316	3,614	3,993	4,191
Carrollton	9,995	10,527	11,157	11,820	12,523	12,571
Cedar Hill	10,544	11,467	12,517	13,527	14,619	15,799
Cockrell Hill	525	489	471	460	447	433
Combine WSC	70	75	78	79	81	83
Coppell	11,021	10,958	10,980	10,997	11,021	11,021
Dallas	276,907	286,506	297,389	308,685	320,410	332,580
Desoto	10,093	10,729	11,088	11,295	11,523	11,775
Duncanville	6,037	6,319	6,487	6,507	6,507	6,507
East Fork SUD	544	646	766	872	963	1,064
Farmers Branch	10,602	11,536	12,050	12,352	12,683	13,049
Garland	40,812	43,884	45,816	47,228	47,510	47,510
Glenn Heights	1,486	1,620	1,695	1,740	1,788	1,842
Grand Prairie	23,012	26,086	29,559	30,414	31,554	31,554
Highland Park	4,144	4,139	4,139	4,139	4,139	4,139
Hutchins	1,841	2,037	2,148	2,214	2,286	2,365
Irving	60,093	63,617	63,666	63,715	63,766	63,766
Lancaster	7,427	7,847	8,088	8,226	8,379	8,547
Lancaster MUD 1	275	341	376	398	421	447
Lewisville	176	177	189	191	195	195
Mesquite	24,067	24,950	27,685	31,178	35,084	38,413
Ovilla	109	118	128	139	151	165
Richardson	13,410	13,844	14,505	14,941	14,941	14,941
Rockett SUD	86	95	103	106	110	111
Rowlett	9,781	10,287	11,872	12,539	13,034	13,034
Sachse	3,516	3,759	4,258	4,445	4,566	4,566

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DRAFT Region C Water User Group (WUG) Demand

	WUG Demand (acre-feet per year)					
	2030	2040	2050	2060	2070	2080
Seagoville	2,217	2,416	2,529	2,596	2,669	2,749
Sunnyvale	3,010	3,782	4,488	4,680	4,750	4,750
University Park	7,518	7,502	7,502	7,502	7,502	7,502
Wilmer	814	913	969	1,003	1,039	1,079
County-Other	2,037	2,851	3,665	4,479	5,294	6,108
Manufacturing	21,497	22,292	23,117	23,972	24,859	25,779
Mining	32	32	32	32	32	32
Steam Electric Power	2,412	2,412	2,412	2,412	2,412	2,412
Livestock	248	248	248	248	248	248
Irrigation	10,468	10,468	10,468	10,468	10,468	10,468
Denton County Total	**236,318**	**283,138**	**329,838**	**366,045**	**405,842**	**441,009**
Denton County / Trinity Basin Total	**236,318**	**283,138**	**329,838**	**366,045**	**405,842**	**441,009**
AMC Creekside	144	181	219	258	302	349
Argyle WSC	2,674	3,458	4,583	5,664	6,458	7,041
Aubrey	949	1,650	2,833	3,853	4,634	4,634
Black Rock WSC	374	469	569	671	783	907
Bolivar WSC	1,285	1,604	1,946	2,294	2,793	3,430
Carrollton	15,674	16,532	17,491	18,510	19,587	19,662
Celina	260	445	767	814	1,027	1,242
Coppell	371	357	368	377	389	389
Corinth	4,884	5,255	6,543	6,732	7,008	7,008
Cross Timbers WSC	2,103	2,634	3,198	3,771	4,451	5,436
Dallas	7,624	9,385	11,672	14,095	16,792	19,702
Denton	31,573	40,291	49,891	59,284	70,931	82,318
Denton County FWSD 10	1,158	1,155	1,155	1,155	1,155	1,155
Denton County FWSD 11-C	363	569	786	1,006	1,248	1,515
Denton County FWSD 1-A	3,979	5,348	5,717	5,794	5,907	5,907
Denton County FWSD 7	3,194	3,367	3,367	3,367	3,367	3,367
Flower Mound	23,525	29,430	35,693	35,693	35,693	35,693
Fort Worth*	5,081	7,584	9,304	11,598	14,125	16,908
Frisco	32,653	39,487	39,843	39,843	39,843	39,843
Hackberry	1,435	2,025	2,648	3,282	3,981	4,750
Highland Village	3,667	3,914	3,957	3,957	3,957	3,957
Justin	1,196	1,671	2,342	3,284	4,603	6,452
Krum	1,559	2,074	2,767	3,691	4,923	6,567
Lake Cities Municipal Utility Authority	2,411	2,913	3,050	3,082	3,102	3,102
Lewisville	19,229	19,269	20,598	20,877	21,283	21,283

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DRAFT Region C Water User Group (WUG) Demand

	WUG Demand (acre-feet per year)					
	2030	2040	2050	2060	2070	2080
Little Elm	5,915	5,620	5,934	6,195	6,366	6,366
Mountain Springs WSC	11	14	17	20	23	27
Mustang SUD	15,484	21,922	29,322	36,650	42,527	47,556
Northlake	5,222	5,783	7,177	8,431	9,701	10,645
Paloma Creek North	1,198	1,194	1,194	1,194	1,194	1,194
Paloma Creek South	1,841	1,835	1,835	1,835	1,835	1,835
Pilot Point	827	1,065	1,834	2,632	2,839	2,839
Plano	2,106	2,184	2,405	2,478	2,478	2,478
Ponder	692	921	1,164	1,411	1,683	1,982
Prosper	4,192	5,108	6,071	6,298	6,630	6,630
Providence Village WCID	909	904	904	904	904	904
Roanoke	3,915	3,810	3,892	3,957	4,052	4,052
Sanger	1,505	1,882	2,285	2,972	3,754	4,740
Southlake	286	265	238	210	180	150
Terra Southwest	235	297	364	432	507	589
The Colony	7,638	8,939	9,988	9,988	9,988	9,988
Trophy Club MUD 1	5,006	4,998	4,998	4,998	4,998	4,998
County-Other	6,119	9,640	13,184	16,727	22,043	25,586
Manufacturing	605	627	650	674	699	725
Mining	259	75	87	99	111	120
Steam Electric Power	1,175	1,175	1,175	1,175	1,175	1,175
Livestock	840	840	840	840	840	840
Irrigation	2,973	2,973	2,973	2,973	2,973	2,973
Ellis County Total	**57,400**	**67,132**	**78,443**	**88,594**	**99,681**	**110,919**
Ellis County / Trinity Basin Total	**57,400**	**67,132**	**78,443**	**88,594**	**99,681**	**110,919**
Avalon Water Supply & Sewer Service	122	136	151	166	183	202
Buena Vista-Bethel SUD	1,961	2,382	2,842	3,307	3,818	4,381
East Garrett WSC	291	369	454	540	635	740
Ennis	3,721	3,892	4,092	4,272	4,476	4,704
Ferris	474	501	531	559	591	626
Files Valley WSC*	166	200	237	275	316	362
Glenn Heights	896	1,149	1,428	1,712	2,024	2,367
Hilco United Services*	124	133	143	152	163	175
Italy	249	248	248	247	246	245
Mansfield*	157	188	221	256	293	335
Midlothian	7,672	8,752	10,446	12,038	13,700	15,005
Mountain Peak SUD*	6,543	8,720	11,099	13,522	16,183	19,108

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DRAFT Region C Water User Group (WUG) Demand

	WUG Demand (acre-feet per year)					
	2030	2040	2050	2060	2070	2080
Nash Forreston WSC	230	274	324	374	429	489
Ovilla	1,169	1,484	1,828	2,177	2,561	2,983
Palmer	276	329	389	449	515	588
Red Oak	1,753	2,177	2,645	3,119	3,640	4,213
Rice Water Supply and Sewer Service	647	773	913	1,054	1,209	1,379
Rockett SUD	4,285	5,094	6,105	7,029	8,476	9,652
Sardis Lone Elm WSC	5,534	6,825	8,242	8,610	8,610	8,610
South Ellis County WSC	542	649	767	885	1,016	1,159
Waxahachie	8,654	10,663	12,873	15,107	17,564	20,267
County-Other	772	823	877	931	986	1,040
Manufacturing	5,660	5,869	6,086	6,311	6,545	6,787
Steam Electric Power	1,854	1,854	1,854	1,854	1,854	1,854
Livestock	923	923	923	923	923	923
Irrigation	2,725	2,725	2,725	2,725	2,725	2,725
Fannin County Total	**19,627**	**20,619**	**22,364**	**24,540**	**27,177**	**29,580**
Fannin County / Red Basin Total	**16,399**	**17,239**	**18,791**	**20,737**	**23,131**	**25,338**
Arledge Ridge WSC	169	182	189	195	201	208
Bois D Arc MUD*	339	354	364	370	377	385
Bonham	1,944	2,362	3,353	4,422	5,855	7,120
Desert WSC	3	3	3	3	3	4
Honey Grove	57	59	59	59	59	59
Leonard	2	3	3	4	4	5
Savoy	94	93	93	92	91	89
Southwest Fannin County SUD	541	594	622	647	675	705
Trenton	3	3	3	3	3	3
White Shed WSC	245	256	263	267	272	277
Whitewright	14	18	19	21	23	25
County-Other	283	284	301	320	352	370
Manufacturing	5	5	5	5	5	5
Mining	1,747	2,070	2,561	3,376	4,258	5,130
Livestock	963	963	963	963	963	963
Irrigation	9,990	9,990	9,990	9,990	9,990	9,990
Fannin County / Sulphur Basin Total	**1,423**	**1,458**	**1,530**	**1,638**	**1,724**	**1,736**
Arledge Ridge WSC	61	66	68	70	73	75
Bois D Arc MUD*	2	2	2	2	2	2
Delta County MUD*	7	8	9	10	10	11

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DRAFT Region C Water User Group (WUG) Demand

	WUG Demand (acre-feet per year)					
	2030	2040	2050	2060	2070	2080
Hickory Creek SUD*	33	31	30	28	26	25
Honey Grove	221	225	225	225	225	225
Ladonia	117	144	207	305	377	377
Leonard	2	2	2	3	3	4
North Hunt SUD*	16	16	17	17	17	18
Wolfe City*	5	4	3	2	2	2
County-Other	121	122	129	138	151	159
Livestock	331	331	331	331	331	331
Irrigation	507	507	507	507	507	507
Fannin County / Trinity Basin Total	**1,805**	**1,922**	**2,043**	**2,165**	**2,322**	**2,506**
Desert WSC	125	142	150	158	166	175
Frognot WSC*	3	4	5	5	6	7
Hickory Creek SUD*	11	10	10	9	9	8
Leonard	379	407	483	564	675	810
Southwest Fannin County SUD	128	141	148	154	160	167
Trenton	141	151	157	161	166	171
West Leonard WSC*	248	297	320	344	370	398
Livestock	81	81	81	81	81	81
Irrigation	689	689	689	689	689	689
Freestone County Total	**9,928**	**19,291**	**19,205**	**19,108**	**19,005**	**18,898**
Freestone County / Brazos Basin Total	**832**	**809**	**778**	**770**	**761**	**751**
Point Enterprise WSC*	61	60	59	59	59	59
South Freestone County WSC	63	65	69	67	65	62
Teague	298	272	237	229	220	211
County-Other	5	5	4	4	4	4
Manufacturing	55	57	59	61	63	65
Livestock	245	245	245	245	245	245
Irrigation	105	105	105	105	105	105
Freestone County / Trinity Basin Total	**9,096**	**18,482**	**18,427**	**18,338**	**18,244**	**18,147**
Butler WSC	180	177	175	170	164	158
Fairfield	1,007	973	944	883	822	762
Flo Community WSC*	18	18	18	18	18	18
Pleasant Grove WSC	126	136	149	145	141	136
Point Enterprise WSC*	55	55	54	54	54	54
South Freestone County WSC	187	195	206	200	193	187

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DRAFT Region C Water User Group (WUG) Demand

	WUG Demand (acre-feet per year)					
	2030	2040	2050	2060	2070	2080
Southern Oaks Water Supply	121	154	197	192	187	181
Teague	277	252	220	212	204	195
Wortham	128	116	100	96	92	89
County-Other	321	292	250	254	255	253
Mining	200	200	200	200	200	200
Steam Electric Power	4,831	14,269	14,269	14,269	14,269	14,269
Livestock	1,185	1,185	1,185	1,185	1,185	1,185
Irrigation	460	460	460	460	460	460
Grayson County Total	**54,245**	**67,933**	**73,732**	**78,945**	**85,660**	**90,355**
Grayson County / Red Basin Total	**42,491**	**51,013**	**55,212**	**59,281**	**64,421**	**67,829**
Bells	179	194	207	219	232	246
Denison	11,860	15,077	17,969	20,896	24,712	26,830
Dorchester	106	109	111	112	113	115
Howe	165	196	224	251	280	312
Kentuckytown WSC	172	187	201	213	227	241
Luella SUD	241	240	240	240	240	240
Northwest Grayson County WCID 1	199	221	240	257	277	298
Oak Ridge South Gale WSC	236	239	244	245	247	249
Pink Hill WSC	246	272	294	314	336	361
Pottsboro	596	647	692	732	775	823
Red River Authority of Texas*	254	304	347	390	436	486
Sherman	11,274	12,225	13,046	13,766	14,560	15,434
Southmayd	103	106	108	109	111	112
Southwest Fannin County SUD	149	162	173	183	194	205
Starr WSC	230	249	266	281	298	316
Tom Bean	38	38	38	38	38	38
Two Way SUD	463	488	582	635	706	750
Whitesboro	246	266	284	301	318	338
Whitewright	354	385	411	435	461	490
County-Other	1,372	1,282	1,355	1,428	1,565	1,589
Manufacturing	5,778	9,896	9,950	10,006	10,065	10,126
Mining	295	295	295	295	295	295
Steam Electric Power	4,573	4,573	4,573	4,573	4,573	4,573
Livestock	671	671	671	671	671	671
Irrigation	2,691	2,691	2,691	2,691	2,691	2,691

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DRAFT Region C Water User Group (WUG) Demand

	WUG Demand (acre-feet per year)					
	2030	2040	2050	2060	2070	2080
Grayson County / Trinity Basin Total	**11,754**	**16,920**	**18,520**	**19,664**	**21,239**	**22,526**
Collinsville	280	306	329	351	374	399
Desert WSC	113	122	131	138	146	155
Dorchester	116	119	121	122	124	125
Gunter	305	354	395	436	480	528
Howe	273	326	371	416	465	518
Kentuckytown WSC	173	189	203	215	229	244
Luella SUD	34	34	34	34	34	34
Mustang SUD	346	504	646	789	895	1,001
Pilot Point	17	20	37	52	58	58
South Grayson SUD	479	531	577	619	665	716
Tioga	236	279	316	353	392	435
Tom Bean	167	166	166	166	166	166
Two Way SUD	320	337	401	439	487	517
Van Alstyne	946	1,825	2,905	3,567	4,674	5,494
Westminster SUD	6	7	8	9	10	11
Whitesboro	325	353	377	398	422	447
Whitewright	45	48	52	55	58	61
Woodbine WSC	9	10	10	11	12	13
Manufacturing	5,370	9,196	9,247	9,300	9,354	9,410
Livestock	435	435	435	435	435	435
Irrigation	1,759	1,759	1,759	1,759	1,759	1,759
Henderson County Total	**12,965**	**15,951**	**17,245**	**18,385**	**19,713**	**20,664**
Henderson County / Trinity Basin Total	**12,965**	**15,951**	**17,245**	**18,385**	**19,713**	**20,664**
Athens*	2,591	3,119	4,108	4,956	5,981	6,607
B B S WSC*	2	2	2	2	2	2
Bethel Ash WSC*	299	312	315	323	331	340
Brushy Creek WSC*	104	107	109	112	114	117
Crescent Heights WSC	150	154	171	174	177	180
Dogwood Estates Water	175	170	181	183	185	187
East Cedar Creek FWSD	3,591	3,799	3,829	3,914	4,007	4,111
Eustace	322	351	344	356	368	382
Log Cabin	114	114	119	121	123	125
Mabank*	677	743	725	750	777	808
Malakoff	270	285	299	303	308	312
Trinidad	159	161	167	170	173	177

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DRAFT Region C Water User Group (WUG) Demand

	WUG Demand (acre-feet per year)					
	2030	2040	2050	2060	2070	2080
Virginia Hill WSC*	184	189	194	198	202	207
West Cedar Creek MUD	1,037	963	1,063	1,064	1,064	1,063
County-Other*	437	521	608	695	782	869
Manufacturing	1,269	1,316	1,365	1,416	1,468	1,522
Mining*	15	16	17	19	22	26
Steam Electric Power*	132	2,192	2,192	2,192	2,192	2,192
Livestock*	694	694	694	694	694	694
Irrigation*	743	743	743	743	743	743
Jack County Total	**5,852**	**5,813**	**5,805**	**5,820**	**5,865**	**5,872**
Jack County / Brazos Basin Total	**419**	**409**	**397**	**389**	**381**	**373**
County-Other	182	172	160	152	144	136
Mining	16	16	16	16	16	16
Livestock	198	198	198	198	198	198
Irrigation	23	23	23	23	23	23
Jack County / Trinity Basin Total	**5,433**	**5,404**	**5,408**	**5,431**	**5,484**	**5,499**
Jacksboro	790	776	800	836	903	931
County-Other	304	289	269	256	242	229
Mining	19	19	19	19	19	19
Steam Electric Power	3,772	3,772	3,772	3,772	3,772	3,772
Livestock	487	487	487	487	487	487
Irrigation	61	61	61	61	61	61
Kaufman County Total	**43,359**	**49,805**	**60,450**	**73,713**	**88,988**	**100,484**
Kaufman County / Sabine Basin Total	**1,354**	**1,566**	**1,918**	**2,433**	**3,082**	**3,678**
Ables Springs SUD*	274	285	333	375	425	446
MacBee SUD*	22	26	32	39	46	55
Poetry WSC*	97	125	201	320	504	604
County-Other	11	12	17	20	25	29
Mining	864	1,032	1,249	1,593	1,996	2,458
Livestock	84	84	84	84	84	84
Irrigation	2	2	2	2	2	2
Kaufman County / Trinity Basin Total	**42,005**	**48,239**	**58,532**	**71,280**	**85,906**	**96,806**
Ables Springs SUD*	125	131	152	171	194	204
Becker Jiba WSC	390	611	828	978	1,145	1,329
College Mound SUD	1,291	1,435	1,941	3,002	4,095	5,187

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DRAFT Region C Water User Group (WUG) Demand

	WUG Demand (acre-feet per year)					
	2030	2040	2050	2060	2070	2080
Combine WSC	260	298	348	404	467	535
Crandall	992	2,121	3,548	5,153	7,277	8,725
Elmo WSC	190	221	263	309	360	416
Forney	4,304	5,511	6,823	8,056	8,956	8,956
Forney Lake WSC	3,061	3,512	3,655	3,972	4,052	4,131
Gastonia Scurry SUD	1,430	1,666	2,235	3,763	5,570	6,838
Heath	62	87	122	125	125	125
High Point WSC	1,707	2,627	3,814	5,177	6,673	8,316
Kaufman	1,252	1,408	2,024	2,558	3,057	3,565
Kaufman County Development District 1	905	959	1,484	2,300	3,412	3,945
Kaufman County MUD 11	720	853	1,096	1,385	1,698	1,882
Kaufman County MUD 14	1,714	1,712	1,712	1,712	1,712	1,712
Kemp	281	290	303	315	329	345
Mabank*	1,234	1,242	1,254	1,255	1,261	1,271
MacBee SUD*	10	13	16	19	23	26
Markout WSC	504	597	833	1,200	1,602	2,137
North Kaufman WSC	232	305	398	504	620	749
Poetry WSC*	120	154	249	397	624	747
Rose Hill SUD	410	492	581	668	738	815
Talty SUD	1,946	2,166	3,192	4,583	6,321	7,433
Terrell	4,128	4,698	5,760	6,695	7,929	8,893
West Cedar Creek MUD	49	59	73	88	104	123
County-Other	1,449	1,673	2,237	2,619	3,366	3,840
Manufacturing	1,177	1,221	1,266	1,313	1,362	1,412
Mining	589	704	852	1,086	1,361	1,676
Steam Electric Power	9,793	9,793	9,793	9,793	9,793	9,793
Livestock	1,329	1,329	1,329	1,329	1,329	1,329
Irrigation	351	351	351	351	351	351
Navarro County Total	**15,156**	**16,093**	**17,046**	**17,985**	**19,187**	**20,628**
Navarro County / Trinity Basin Total	**15,156**	**16,093**	**17,046**	**17,985**	**19,187**	**20,628**
B And B WSC	307	337	363	387	413	442
Blooming Grove	170	176	191	204	221	239
Brandon Irene WSC*	21	25	27	30	33	37
Chatfield WSC	344	368	389	408	429	452
Corbet WSC	211	225	238	249	261	275
Corsicana	6,265	6,688	7,053	7,368	7,716	8,098
Dawson	134	135	137	136	136	135

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DRAFT Region C Water User Group (WUG) Demand

	WUG Demand (acre-feet per year)					
	2030	2040	2050	2060	2070	2080
Kerens	169	155	143	133	123	114
M E N WSC	512	589	654	718	789	866
Navarro Mills WSC*	288	308	325	341	357	376
Pleasant Grove WSC	12	12	13	14	14	15
Post Oak SUD*	113	106	100	91	82	73
Rice Water Supply and Sewer Service	459	543	646	767	912	1,084
South Ellis County WSC	25	31	35	39	44	49
Southern Oaks Water Supply	29	40	48	57	67	78
County-Other	756	787	843	910	1,019	1,084
Manufacturing	1,634	1,694	1,757	1,822	1,889	1,959
Mining	1,748	1,915	2,125	2,352	2,723	3,293
Livestock	1,512	1,512	1,512	1,512	1,512	1,512
Irrigation	447	447	447	447	447	447
Parker County Total	**33,291**	**41,987**	**54,233**	**68,619**	**85,846**	**101,206**
Parker County / Brazos Basin Total	**7,754**	**9,812**	**12,632**	**15,931**	**20,044**	**23,911**
Horseshoe Bend Water System	179	201	255	335	456	597
Mineral Wells*	353	372	391	410	410	410
North Rural WSC*	149	179	214	252	292	337
Parker County SUD	937	1,271	1,722	2,316	3,167	4,285
Santo SUD*	21	25	29	34	40	46
Sturdivant Progress WSC*	2	2	2	2	1	1
Weatherford	1,203	1,431	1,693	1,968	2,271	2,605
County-Other	2,294	3,651	5,389	7,353	9,800	11,675
Manufacturing	13	13	14	14	15	15
Mining	1,052	1,116	1,372	1,696	2,041	2,389
Livestock	660	660	660	660	660	660
Irrigation	891	891	891	891	891	891
Parker County / Trinity Basin Total	**25,537**	**32,175**	**41,601**	**52,688**	**65,802**	**77,295**
Aledo	1,410	1,515	1,858	2,121	2,417	2,596
Annetta	445	531	619	707	795	883
Azle	512	649	805	972	1,155	1,357
Community WSC	6	9	12	16	20	24
Fort Worth*	725	832	854	935	1,024	1,123
Hudson Oaks	1,872	1,934	1,987	2,053	2,140	2,208
Reno (Parker)	282	343	413	486	566	655
Springtown	1,182	1,572	2,177	2,653	3,079	3,401

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DRAFT Region C Water User Group (WUG) Demand

	WUG Demand (acre-feet per year)					
	2030	2040	2050	2060	2070	2080
Walnut Creek SUD	3,228	3,511	4,880	7,306	10,166	13,013
Weatherford	7,002	8,329	9,855	11,456	13,220	15,162
Willow Park	1,228	1,471	1,750	2,044	2,368	2,724
County-Other	6,475	10,306	15,213	20,755	27,663	32,953
Manufacturing	72	75	77	80	82	86
Mining	10	10	13	16	19	22
Livestock	843	843	843	843	843	843
Irrigation	245	245	245	245	245	245
Rockwall County Total	**28,848**	**38,732**	**50,519**	**60,940**	**67,289**	**71,482**
Rockwall County / Sabine Basin Total	**9,326**	**14,896**	**19,487**	**22,703**	**26,752**	**29,452**
Bear Creek SUD	104	172	196	214	235	235
Blackland WSC	403	418	451	523	563	606
Cash SUD*	376	496	644	800	971	1,159
Fate	3,500	5,042	6,920	8,907	11,090	13,490
Nevada SUD	22	27	41	88	158	212
Royse City*	4,035	7,912	10,223	11,063	12,289	12,060
County-Other	411	338	504	582	902	1,127
Manufacturing	445	461	478	496	514	533
Livestock	30	30	30	30	30	30
Rockwall County / Trinity Basin Total	**19,522**	**23,836**	**31,032**	**38,237**	**40,537**	**42,030**
Bear Creek SUD	123	203	232	253	277	277
Blackland WSC	513	532	573	665	716	770
East Fork SUD	325	386	459	522	576	637
Fate	926	1,334	1,832	2,358	2,935	3,571
Heath	3,751	4,971	6,587	6,749	6,749	6,749
High Point WSC	163	235	323	416	519	632
Mount Zion WSC	403	415	430	443	458	476
R C H WSC	1,179	1,336	1,705	2,275	2,775	3,384
Rockwall	10,089	12,332	16,427	21,919	22,762	22,762
Rowlett	1,769	1,811	2,181	2,354	2,483	2,483
County-Other	4	4	6	6	10	12
Livestock	76	76	76	76	76	76
Irrigation	201	201	201	201	201	201

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DRAFT Region C Water User Group (WUG) Demand

	WUG Demand (acre-feet per year)					
	2030	2040	2050	2060	2070	2080
Tarrant County Total	**496,189**	**556,887**	**584,574**	**630,705**	**665,633**	**698,257**
Tarrant County / Trinity Basin Total	**496,189**	**556,887**	**584,574**	**630,705**	**665,633**	**698,257**
Arlington	74,649	80,933	86,223	90,489	96,329	99,192
Azle	1,985	2,211	2,405	2,557	2,725	2,909
Bedford	9,733	10,445	10,614	11,153	11,153	11,153
Benbrook Water Authority	6,152	6,633	7,124	7,615	8,106	8,597
Bethesda WSC*	72	79	86	90	96	102
Blue Mound	195	214	231	244	258	275
Burleson*	1,516	1,695	1,847	1,967	2,099	2,245
Colleyville	10,775	10,758	10,758	10,758	10,758	10,758
Community WSC	602	671	730	776	828	884
Crowley*	3,202	3,788	4,286	4,688	5,130	5,615
Dalworthington Gardens	901	908	915	915	917	919
Edgecliff	636	634	634	634	634	634
Euless	9,840	9,801	9,801	9,801	9,801	9,801
Everman	544	540	540	540	540	540
Flower Mound	225	263	327	342	361	361
Forest Hill	1,595	1,755	1,895	2,004	2,124	2,256
Fort Worth*	210,962	247,795	252,300	269,789	289,020	310,171
Grand Prairie	12,150	13,102	14,474	14,872	15,451	15,451
Grapevine	18,743	18,691	18,691	18,691	18,691	18,691
Haltom City	5,335	5,303	5,303	5,303	5,303	5,303
Haslet	2,574	3,513	4,629	5,037	5,490	5,490
Hurst	6,792	6,748	6,761	6,771	6,787	6,787
Johnson County SUD*	360	417	433	449	465	482
Keller	12,863	13,043	13,043	13,043	13,043	13,043
Kennedale	1,852	2,503	3,277	4,093	4,925	5,690
Lake Worth	1,259	1,372	1,457	1,529	1,599	1,662
Lakeside	583	582	582	582	582	582
Mansfield*	27,654	29,081	35,273	49,803	49,765	49,724
North Richland Hills	13,934	14,841	15,086	15,280	15,562	15,562
Pantego	673	671	671	671	671	671
Pelican Bay	199	267	358	479	643	862
Reno (Parker)	5	6	6	7	7	8
Richland Hills	1,273	1,400	1,509	1,701	1,873	2,063
River Oaks	882	874	880	885	891	891
Saginaw	3,974	4,344	4,382	4,412	4,456	4,456

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DRAFT Region C Water User Group (WUG) Demand

	WUG Demand (acre-feet per year)					
	2030	2040	2050	2060	2070	2080
Sansom Park	646	711	767	811	860	914
Southlake	14,382	16,137	17,253	18,247	19,245	20,182
Trophy Club MUD 1	376	484	574	648	729	818
Watauga	2,730	2,716	2,716	2,716	2,716	2,716
Westlake	3,519	4,611	5,521	6,271	7,090	7,990
Westover Hills	919	916	920	922	927	927
Westworth Village	442	451	479	504	528	550
White Settlement	2,400	2,636	2,841	3,001	3,177	3,371
County-Other	6,760	9,888	13,034	16,180	19,326	22,472
Manufacturing	12,339	12,796	13,269	13,760	14,269	14,797
Mining	525	106	115	121	129	136
Steam Electric Power	1,157	4,249	4,249	4,249	4,249	4,249
Livestock	341	341	341	341	341	341
Irrigation	4,964	4,964	4,964	4,964	4,964	4,964
Wise County Total	**22,940**	**27,319**	**34,750**	**43,114**	**54,362**	**63,752**
Wise County / Trinity Basin Total	**22,940**	**27,319**	**34,750**	**43,114**	**54,362**	**63,752**
Alvord	412	509	596	666	742	827
Bolivar WSC	130	142	154	163	173	184
Boyd	240	305	417	519	616	681
Bridgeport	986	1,006	1,029	1,041	1,055	1,070
Chico	396	395	395	395	395	395
Decatur	2,890	3,426	4,621	5,697	7,212	8,361
Fort Worth*	479	551	568	624	687	755
Newark	131	166	240	351	522	666
Rhome	385	495	731	1,061	1,562	2,083
Runaway Bay	676	829	1,016	1,247	1,529	1,876
Walnut Creek SUD	572	610	842	1,268	1,794	2,296
West Wise SUD	481	525	566	598	632	670
County-Other	6,075	9,274	13,903	19,206	26,208	31,172
Manufacturing	254	263	273	283	293	304
Mining	3,084	3,074	3,650	4,246	5,193	6,663
Steam Electric Power	2,894	2,894	2,894	2,894	2,894	2,894
Livestock	1,415	1,415	1,415	1,415	1,415	1,415
Irrigation	1,440	1,440	1,440	1,440	1,440	1,440
Region C Demand Total	**1,948,387**	**2,214,056**	**2,449,165**	**2,663,622**	**2,860,536**	**3,028,785**

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DRAFT Region C Water User Group (WUG) Demand

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TWDB DB27 Report #3 – Source Water Availability

DRAFT Region C Source Total Availability

				Source Availability (acre-feet per year)					
Source Name	**County**	**Basin**	**Salinity***	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Groundwater Source Availability Total				**157,769**	**158,830**	**159,893**	**160,956**	**161,914**	**161,914**
Carrizo-Wilcox Aquifer	Freestone	Brazos	Fresh	1,257	1,432	1,609	1,784	1,941	1,941
Carrizo-Wilcox Aquifer	Freestone	Trinity	Fresh	5,946	6,823	7,698	8,575	9,363	9,363
Carrizo-Wilcox Aquifer	Henderson	Trinity	Fresh	3,226	3,226	3,226	3,226	3,226	3,226
Carrizo-Wilcox Aquifer	Navarro	Trinity	Fresh	105	114	125	136	149	149
Cross Timbers Aquifer	Jack	Brazos	Fresh	284	284	284	284	284	284
Cross Timbers Aquifer	Jack	Trinity	Fresh	650	650	650	650	650	650
Cross Timbers Aquifer	Parker	Brazos	Fresh	50	50	50	50	50	50
Cross Timbers Aquifer	Wise	Trinity	Fresh	0	0	0	0	0	0
Nacatoch Aquifer	Ellis	Trinity	Fresh	20	20	20	20	20	20
Nacatoch Aquifer	Kaufman	Sabine	Fresh	49	49	49	49	49	49
Nacatoch Aquifer	Kaufman	Trinity	Fresh	877	877	877	877	877	877
Nacatoch Aquifer	Navarro	Trinity	Fresh	980	980	980	980	980	980
Nacatoch Aquifer	Rockwall	Sabine	Fresh	0	0	0	0	0	0
Nacatoch Aquifer	Rockwall	Trinity	Fresh	13	13	13	13	13	13
Other Aquifer	Fannin	Red	Fresh	2,919	2,919	2,919	2,919	2,919	2,919
Other Aquifer	Navarro	Trinity	Fresh	435	435	435	435	435	435
Queen City Aquifer	Freestone	Trinity	Fresh	77	77	77	77	77	77
Queen City Aquifer	Henderson	Trinity	Fresh	154	154	154	154	154	154
Trinity Aquifer	Collin	Sabine	Fresh	0	0	0	0	0	0
Trinity Aquifer	Collin	Trinity	Fresh	5,795	5,795	5,795	5,795	5,795	5,795
Trinity Aquifer	Cooke	Red	Fresh	2,186	2,186	2,186	2,186	2,186	2,186

* Salinity field indicates whether the source availability is considered ‘fresh’ (less than 1,000 mg/L), ‘brackish’ (1,000 to 10,000 mg/L), ‘saline’ (10,001 mg/L to 34,999 mg/L), or ‘seawater’ (35,000 mg/L or greater). Sources can also be labeled as ‘fresh/brackish’ or ‘brackish/saline’, if a combination of the salinity types is appropriate.

** Since reservoir sources can exist across multiple counties, the county field value, ‘reservoir’ is applied to all reservoir sources.

DRAFT Region C Source Total Availability

				Source Availability (acre-feet per year)					
Source Name	**County**	**Basin**	**Salinity***	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Trinity Aquifer	Cooke	Trinity	Fresh	8,335	8,335	8,335	8,335	8,335	8,335
Trinity Aquifer	Dallas	Trinity	Fresh	3,691	3,691	3,691	3,691	3,691	3,691
Trinity Aquifer	Denton	Trinity	Fresh	30,091	30,091	30,091	30,091	30,091	30,091
Trinity Aquifer	Ellis	Trinity	Fresh	6,168	6,168	6,168	6,168	6,168	6,168
Trinity Aquifer	Fannin	Red	Fresh	0	0	0	0	0	0
Trinity Aquifer	Fannin	Sulphur	Fresh	2,088	2,088	2,088	2,088	2,088	2,088
Trinity Aquifer	Fannin	Trinity	Fresh	0	0	0	0	0	0
Trinity Aquifer	Grayson	Red	Fresh	6,665	6,665	6,665	6,665	6,665	6,665
Trinity Aquifer	Grayson	Trinity	Fresh	4,051	4,051	4,051	4,051	4,051	4,051
Trinity Aquifer	Jack	Brazos	Fresh	188	188	188	188	188	188
Trinity Aquifer	Jack	Trinity	Fresh	449	449	449	449	449	449
Trinity Aquifer	Kaufman	Sabine	Fresh	0	0	0	0	0	0
Trinity Aquifer	Kaufman	Trinity	Fresh	0	0	0	0	0	0
Trinity Aquifer	Navarro	Trinity	Fresh	0	0	0	0	0	0
Trinity Aquifer	Parker	Brazos	Fresh	2,656	2,656	2,656	2,656	2,656	2,656
Trinity Aquifer	Parker	Trinity	Fresh	11,793	11,793	11,793	11,793	11,793	11,793
Trinity Aquifer	Rockwall	Sabine	Fresh	0	0	0	0	0	0
Trinity Aquifer	Rockwall	Trinity	Fresh	0	0	0	0	0	0
Trinity Aquifer	Tarrant	Trinity	Fresh	17,926	17,926	17,926	17,926	17,926	17,926
Trinity Aquifer	Wise	Trinity	Fresh	11,452	11,452	11,452	11,452	11,452	11,452
Woodbine Aquifer	Collin	Sabine	Fresh	0	0	0	0	0	0
Woodbine Aquifer	Collin	Trinity	Fresh	4,254	4,254	4,254	4,254	4,254	4,254

* Salinity field indicates whether the source availability is considered ‘fresh’ (less than 1,000 mg/L), ‘brackish’ (1,000 to 10,000 mg/L), ‘saline’ (10,001 mg/L to 34,999 mg/L), or ‘seawater’ (35,000 mg/L or greater). Sources can also be labeled as ‘fresh/brackish’ or ‘brackish/saline’, if a combination of the salinity types is appropriate.

** Since reservoir sources can exist across multiple counties, the county field value, ‘reservoir’ is applied to all reservoir sources.

DRAFT Region C Source Total Availability

				Source Availability (acre-feet per year)					
Source Name	**County**	**Basin**	**Salinity***	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Woodbine Aquifer	Cooke	Red	Fresh	262	262	262	262	262	262
Woodbine Aquifer	Cooke	Trinity	Fresh	539	539	539	539	539	539
Woodbine Aquifer	Dallas	Trinity	Fresh	2,798	2,798	2,798	2,798	2,798	2,798
Woodbine Aquifer	Denton	Trinity	Fresh	3,609	3,609	3,609	3,609	3,609	3,609
Woodbine Aquifer	Ellis	Trinity	Fresh	2,074	2,074	2,074	2,074	2,074	2,074
Woodbine Aquifer	Fannin	Red	Fresh	3,547	3,547	3,547	3,547	3,547	3,547
Woodbine Aquifer	Fannin	Sulphur	Fresh	550	550	550	550	550	550
Woodbine Aquifer	Fannin	Trinity	Fresh	827	827	827	827	827	827
Woodbine Aquifer	Grayson	Red	Fresh	5,603	5,603	5,603	5,603	5,603	5,603
Woodbine Aquifer	Grayson	Trinity	Fresh	1,923	1,923	1,923	1,923	1,923	1,923
Woodbine Aquifer	Kaufman	Sabine	Fresh	0	0	0	0	0	0
Woodbine Aquifer	Kaufman	Trinity	Fresh	0	0	0	0	0	0
Woodbine Aquifer	Navarro	Trinity	Fresh	68	68	68	68	68	68
Woodbine Aquifer	Rockwall	Sabine	Fresh	0	0	0	0	0	0
Woodbine Aquifer	Rockwall	Trinity	Fresh	0	0	0	0	0	0
Woodbine Aquifer	Tarrant	Trinity	Fresh	1,139	1,139	1,139	1,139	1,139	1,139
Reuse Source Availability Total				**433,211**	**460,019**	**484,039**	**512,164**	**524,605**	**525,743**
Direct Reuse	Collin	Trinity	Fresh	3,498	3,498	3,498	3,498	3,498	3,498
Direct Reuse	Cooke	Trinity	Fresh	4	4	4	4	4	4
Direct Reuse	Dallas	Trinity	Fresh	1,246	1,246	1,246	1,246	1,246	1,246
Direct Reuse	Denton	Trinity	Fresh	3,137	3,137	3,137	3,137	3,137	3,137
Direct Reuse	Ellis	Trinity	Fresh	919	919	919	919	919	919

* Salinity field indicates whether the source availability is considered ‘fresh’ (less than 1,000 mg/L), ‘brackish’ (1,000 to 10,000 mg/L), ‘saline’ (10,001 mg/L to 34,999 mg/L), or ‘seawater’ (35,000 mg/L or greater). Sources can also be labeled as ‘fresh/brackish’ or ‘brackish/saline’, if a combination of the salinity types is appropriate.

** Since reservoir sources can exist across multiple counties, the county field value, ‘reservoir’ is applied to all reservoir sources.

DRAFT Region C Source Total Availability

				Source Availability (acre-feet per year)					
Source Name	**County**	**Basin**	**Salinity***	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Direct Reuse	Henderson	Trinity	Fresh	32	32	32	32	32	32
Direct Reuse	Jack	Trinity	Fresh	26	26	25	24	24	24
Direct Reuse	Kaufman	Trinity	Fresh	9,213	9,317	9,338	9,338	9,338	9,338
Direct Reuse	Parker	Trinity	Fresh	463	503	641	660	680	680
Direct Reuse	Rockwall	Trinity	Fresh	672	672	672	672	672	672
Direct Reuse	Tarrant	Trinity	Fresh	2,846	2,846	2,846	2,846	2,846	2,846
Indirect Reuse	Collin	Trinity	Fresh	68,829	87,774	103,244	116,808	118,490	119,835
Indirect Reuse	Dallas	Trinity	Fresh	45,228	46,125	46,249	46,349	46,495	46,495
Indirect Reuse	Denton	Trinity	Fresh	61,207	66,225	74,536	87,001	95,621	95,460
Indirect Reuse	Ellis	Trinity	Fresh	6,674	7,906	7,906	7,906	7,906	7,906
Indirect Reuse	Fannin	Sulphur	Fresh	20,290	20,263	20,235	22,216	24,190	24,144
Indirect Reuse	Kaufman	Trinity	Fresh	102,000	102,000	102,000	102,000	102,000	102,000
Indirect Reuse	Navarro	Trinity	Fresh	100,465	100,465	100,465	100,465	100,465	100,465
Indirect Reuse	Parker	Trinity	Fresh	2,803	3,363	3,363	3,363	3,363	3,363
Indirect Reuse	Tarrant	Trinity	Fresh	3,659	3,698	3,683	3,680	3,679	3,679
Surface Water Source Availability Total				**1,300,599**	**1,283,830**	**1,267,166**	**1,250,260**	**1,230,370**	**1,212,331**
Bardwell Lake/Reservoir	Reservoir**	Trinity	Fresh	9,410	9,010	8,610	8,287	7,963	7,640
Bonham Lake/Reservoir	Reservoir**	Red	Fresh	4,148	3,924	3,811	3,699	3,587	3,475
Brazos Livestock Local Supply	Freestone	Brazos	Fresh	83	83	83	83	83	83
Brazos Livestock Local Supply	Jack	Brazos	Fresh	232	232	232	232	232	232
Brazos Livestock Local Supply	Parker	Brazos	Fresh	903	903	903	903	903	903

* Salinity field indicates whether the source availability is considered ‘fresh’ (less than 1,000 mg/L), ‘brackish’ (1,000 to 10,000 mg/L), ‘saline’ (10,001 mg/L to 34,999 mg/L), or ‘seawater’ (35,000 mg/L or greater). Sources can also be labeled as ‘fresh/brackish’ or ‘brackish/saline’, if a combination of the salinity types is appropriate.

** Since reservoir sources can exist across multiple counties, the county field value, ‘reservoir’ is applied to all reservoir sources.

DRAFT Region C Source Total Availability

				Source Availability (acre-feet per year)					
Source Name	**County**	**Basin**	**Salinity***	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Brazos Other Local Supply	Parker	Brazos	Fresh	1,242	1,242	1,242	1,242	1,242	1,242
Brazos Run-of-River	Parker	Brazos	Fresh	66	66	66	66	66	66
Bryson Lake/Reservoir	Reservoir**	Brazos	Fresh	0	0	0	0	0	0
Clark Lake/Reservoir	Reservoir**	Trinity	Fresh	210	210	210	210	210	210
Fairfield Lake/Reservoir	Reservoir**	Trinity	Fresh	6,395	6,163	5,930	5,725	5,520	5,315
Forest Grove Lake/Reservoir	Reservoir**	Trinity	Fresh	650	328	5	3	2	0
Grapevine Lake/Reservoir Non-System Portion	Reservoir**	Trinity	Fresh	19,350	19,150	18,950	18,710	18,470	18,230
Halbert Lake/Reservoir	Reservoir**	Trinity	Fresh	0	0	0	0	0	0
Hubert H Moss Lake/Reservoir	Reservoir**	Red	Fresh	4,900	4,800	4,700	4,633	4,567	4,500
Joe Pool Lake/Reservoir	Reservoir**	Trinity	Fresh	14,050	13,725	13,400	13,133	12,867	12,600
Lewisville Lake/Reservoir Non-System Portion	Reservoir**	Trinity	Fresh	5,200	5,075	4,950	4,800	4,650	4,500
Lost Creek-Jacksboro Lake/Reservoir System	Reservoir**	Trinity	Fresh	1,397	1,397	1,397	1,397	1,397	1,397
Mineral Wells Lake/Reservoir	Reservoir**	Brazos	Fresh	2,495	2,483	2,470	2,458	2,445	2,433
Mountain Creek Lake/Reservoir	Reservoir**	Trinity	Fresh	6,400	6,400	6,400	6,400	6,400	6,400
Muenster Lake/Reservoir	Reservoir**	Red	Fresh	250	250	250	250	250	250
Navarro Mills Lake/Reservoir	Reservoir**	Trinity	Fresh	17,000	15,975	14,950	13,817	12,683	11,550
North Lake/Reservoir	Reservoir**	Trinity	Fresh	70	70	70	70	70	70
North Texas MWD Lake/Reservoir System	Reservoir**	Trinity	Fresh	286,321	278,840	271,358	263,642	252,945	244,096
Ralph Hall Lake/Reservoir	Reservoir**	Sulphur	Fresh	40,580	40,525	40,470	40,393	40,317	40,240
Randell Lake/Reservoir	Reservoir**	Red	Fresh	1,600	1,600	1,600	1,600	1,600	1,600

* Salinity field indicates whether the source availability is considered 'fresh' (less than 1,000 mg/L), 'brackish' (1,000 to 10,000 mg/L), 'saline' (10,001 mg/L to 34,999 mg/L), or 'seawater' (35,000 mg/L or greater). Sources can also be labeled as 'fresh/brackish' or 'brackish/saline', if a combination of the salinity types is appropriate.

** Since reservoir sources can exist across multiple counties, the county field value, 'reservoir' is applied to all reservoir sources.

DRAFT Region C Source Total Availability

				Source Availability (acre-feet per year)					
Source Name	**County**	**Basin**	**Salinity***	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Ray Hubbard Lake/Reservoir	Reservoir**	Trinity	Fresh	46,239	45,450	44,660	43,927	43,194	42,461
Ray Roberts Lake/Reservoir Non-System Portion	Reservoir**	Trinity	Fresh	18,600	18,480	18,360	18,207	18,053	17,900
Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	Reservoir**	Trinity	Fresh	174,899	174,109	173,319	172,059	170,799	169,539
Red Livestock Local Supply	Cooke	Red	Fresh	380	380	380	380	380	380
Red Livestock Local Supply	Fannin	Red	Fresh	915	915	915	915	915	915
Red Livestock Local Supply	Grayson	Red	Fresh	652	652	652	652	652	652
Red Run-of-River	Fannin	Red	Fresh	2,370	2,370	2,370	2,370	2,370	2,370
Red Run-of-River	Grayson	Red	Fresh	771	771	771	771	771	771
Richland Chambers Lake/Reservoir Non-System Portion	Reservoir**	Trinity	Fresh	13,843	13,833	13,823	13,803	13,783	13,763
Sabine Livestock Local Supply	Collin	Sabine	Fresh	31	31	31	31	31	31
Sabine Livestock Local Supply	Kaufman	Sabine	Fresh	98	98	98	98	98	98
Sabine Livestock Local Supply	Rockwall	Sabine	Fresh	50	50	50	50	50	50
Sulphur Livestock Local Supply	Fannin	Sulphur	Fresh	314	314	314	314	314	314
Sulphur Run-of-River	Fannin	Sulphur	Fresh	45	45	45	45	45	45
Teague City Lake/Reservoir	Reservoir**	Brazos	Fresh	189	189	189	189	189	189
Terrell Lake/Reservoir	Reservoir**	Trinity	Fresh	2,410	2,395	2,380	2,370	2,360	2,350
Texoma Lake/Reservoir Non-System Portion	Reservoir**	Red	Brackish	126,250	126,250	126,250	126,250	126,250	126,250
Trinidad City Lake/Reservoir	Reservoir**	Trinity	Fresh	0	0	0	0	0	0
Trinidad Lake/Reservoir	Reservoir**	Trinity	Fresh	2,950	2,950	2,950	2,950	2,950	2,950

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** Since reservoir sources can exist across multiple counties, the county field value, ‘reservoir’ is applied to all reservoir sources.

DRAFT Region C Source Total Availability

				Source Availability (acre-feet per year)					
Source Name	**County**	**Basin**	**Salinity***	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Trinity Livestock Local Supply	Collin	Trinity	Fresh	971	971	971	971	971	971
Trinity Livestock Local Supply	Cooke	Trinity	Fresh	807	807	807	807	807	807
Trinity Livestock Local Supply	Dallas	Trinity	Fresh	198	198	198	198	198	198
Trinity Livestock Local Supply	Denton	Trinity	Fresh	622	622	622	622	622	622
Trinity Livestock Local Supply	Ellis	Trinity	Fresh	1,112	1,112	1,112	1,112	1,112	1,112
Trinity Livestock Local Supply	Fannin	Trinity	Fresh	77	77	77	77	77	77
Trinity Livestock Local Supply	Freestone	Trinity	Fresh	960	960	960	960	960	960
Trinity Livestock Local Supply	Grayson	Trinity	Fresh	423	423	423	423	423	423
Trinity Livestock Local Supply	Henderson	Trinity	Fresh	345	345	345	345	345	345
Trinity Livestock Local Supply	Jack	Trinity	Fresh	570	570	570	570	570	570
Trinity Livestock Local Supply	Kaufman	Trinity	Fresh	1,524	1,524	1,524	1,524	1,524	1,524
Trinity Livestock Local Supply	Navarro	Trinity	Fresh	1,603	1,603	1,603	1,603	1,603	1,603
Trinity Livestock Local Supply	Parker	Trinity	Fresh	1,019	1,019	1,019	1,019	1,019	1,019
Trinity Livestock Local Supply	Rockwall	Trinity	Fresh	56	56	56	56	56	56
Trinity Livestock Local Supply	Tarrant	Trinity	Fresh	442	442	442	442	442	442
Trinity Livestock Local Supply	Wise	Trinity	Fresh	1,117	1,117	1,117	1,117	1,117	1,117
Trinity Other Local Supply	Denton	Trinity	Fresh	764	764	764	764	764	764
Trinity Other Local Supply	Freestone	Trinity	Fresh	32	32	32	32	32	32
Trinity Other Local Supply	Kaufman	Trinity	Fresh	1,162	1,162	1,162	1,162	1,162	1,162
Trinity Other Local Supply	Tarrant	Trinity	Fresh	1,280	1,280	1,280	1,280	1,280	1,280

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** Since reservoir sources can exist across multiple counties, the county field value, ‘reservoir’ is applied to all reservoir sources.

DRAFT Region C Source Total Availability

				Source Availability (acre-feet per year)					
Source Name	**County**	**Basin**	**Salinity***	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Trinity Run-of-River	Collin	Trinity	Fresh	265	265	265	265	265	265
Trinity Run-of-River	Dallas	Trinity	Fresh	1,732	1,732	1,732	1,732	1,732	1,732
Trinity Run-of-River	Ellis	Trinity	Fresh	1	1	1	1	1	1
Trinity Run-of-River	Freestone	Trinity	Fresh	132	132	132	132	132	132
Trinity Run-of-River	Henderson	Trinity	Fresh	1,246	1,246	1,246	1,246	1,246	1,246
Trinity Run-of-River	Jack	Trinity	Fresh	0	0	0	0	0	0
Trinity Run-of-River	Kaufman	Trinity	Fresh	83	83	83	83	83	83
Trinity Run-of-River	Navarro	Trinity	Fresh	787	787	787	787	787	787
Trinity Run-of-River	Parker	Trinity	Fresh	68	68	68	68	68	68
Trinity Run-of-River	Tarrant	Trinity	Fresh	1,592	1,592	1,592	1,592	1,592	1,592
Trinity Run-of-River	Wise	Trinity	Fresh	39	39	39	39	39	39
TRWD Lake/Reservoir System	Reservoir**	Trinity	Fresh	454,432	450,173	445,913	441,784	437,651	433,522
Valley Lake/Reservoir	Reservoir**	Red	Fresh	2,800	2,800	2,800	2,800	2,800	2,800
Waxahachie Lake/Reservoir	Reservoir**	Trinity	Fresh	2,980	2,910	2,840	2,773	2,707	2,640
Weatherford Lake/Reservoir	Reservoir**	Trinity	Fresh	2,860	2,810	2,760	2,717	2,673	2,630
White Rock Lake/Reservoir	Reservoir**	Trinity	Fresh	2,540	2,375	2,210	2,023	1,837	1,650
			Region C Source Availability Total	**1,891,579**	**1,902,679**	**1,911,098**	**1,923,380**	**1,916,889**	**1,899,988**

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** Since reservoir sources can exist across multiple counties, the county field value, 'reservoir' is applied to all reservoir sources.

TWDB DB27 Report #4 – WUG Existing Water Supplies

DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Collin County WUG Total			**283,328**	**293,351**	**301,171**	**305,511**	**295,899**	**287,920**
Collin County / Sabine Basin WUG Total			**4,006**	**5,643**	**6,743**	**7,047**	**7,568**	**7,538**
Caddo Basin SUD*	D	Fork Lake/Reservoir	0	0	0	0	0	0
Caddo Basin SUD*	C	North Texas MWD Lake/Reservoir System	87	104	124	143	163	163
Caddo Basin SUD*	D	Tawakoni Lake/Reservoir	4	6	7	7	8	8
Caddo Basin SUD*	C	Trinity Indirect Reuse	67	87	103	120	137	137
Josephine*	C	North Texas MWD Lake/Reservoir System	632	1,171	1,443	1,418	1,441	1,347
Josephine*	D	Tawakoni Lake/Reservoir	22	41	50	48	49	45
Josephine*	C	Trinity Indirect Reuse	377	797	1,091	1,177	1,254	1,224
Nevada SUD	C	North Texas MWD Lake/Reservoir System	104	110	138	256	414	521
Nevada SUD	D	Tawakoni Lake/Reservoir	4	4	4	9	14	18
Nevada SUD	C	Trinity Indirect Reuse	63	74	105	213	361	472
Royse City*	C	North Texas MWD Lake/Reservoir System	699	1,074	1,312	1,274	1,300	1,215
Royse City*	D	Tawakoni Lake/Reservoir	25	38	47	44	44	41
Royse City*	C	Trinity Indirect Reuse	417	730	993	1,056	1,133	1,104
County-Other	C	North Texas MWD Lake/Reservoir System	10	8	7	6	6	6
County-Other	C	Trinity Aquifer | Collin County	110	110	110	110	110	110
County-Other	C	Trinity Indirect Reuse	7	6	6	6	5	5
County-Other	C	Woodbine Aquifer | Collin County	110	110	110	110	110	110
Manufacturing	C	North Texas MWD Lake/Reservoir System	664	576	505	461	433	420
Manufacturing	D	Tawakoni Lake/Reservoir	23	20	17	15	14	14
Manufacturing	C	Trinity Indirect Reuse	396	390	382	383	379	383
Manufacturing	C	Woodbine Aquifer | Collin County	50	52	54	56	58	60
Livestock	C	Local Surface Water Supply	49	49	49	49	49	49
Irrigation	C	Direct Reuse	65	65	65	65	65	65
Irrigation	C	Ray Hubbard Lake/Reservoir	1	1	1	1	1	1
Irrigation	C	Trinity Aquifer | Collin County	9	9	9	9	9	9

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Irrigation	C	Trinity Run-of-River	8	8	8	8	8	8
Irrigation	C	Woodbine Aquifer | Collin County	3	3	3	3	3	3
Collin County / Trinity Basin WUG Total			**279,322**	**287,708**	**294,428**	**298,464**	**288,331**	**280,382**
Allen	C	North Texas MWD Lake/Reservoir System	14,208	13,249	11,221	9,865	8,959	8,375
Allen	D	Tawakoni Lake/Reservoir	512	469	394	340	306	285
Allen	C	Trinity Indirect Reuse	8,478	9,018	8,487	8,186	7,808	7,612
Anna	C	North Texas MWD Lake/Reservoir System	3,419	4,751	5,146	5,418	5,713	5,737
Anna	D	Tawakoni Lake/Reservoir	123	168	181	187	195	195
Anna	C	Trinity Aquifer | Collin County	445	445	445	445	445	445
Anna	C	Trinity Indirect Reuse	2,040	3,234	3,893	4,496	4,980	5,213
Anna	C	Woodbine Aquifer | Collin County	45	45	45	45	45	45
Bear Creek SUD	C	North Texas MWD Lake/Reservoir System	1,657	2,426	2,350	2,249	2,238	2,094
Bear Creek SUD	D	Tawakoni Lake/Reservoir	60	86	82	77	76	71
Bear Creek SUD	C	Trinity Indirect Reuse	989	1,651	1,777	1,866	1,951	1,901
Blue Ridge	C	Woodbine Aquifer | Collin County	400	400	400	400	400	400
Caddo Basin SUD*	D	Fork Lake/Reservoir	0	0	0	0	0	0
Caddo Basin SUD*	C	North Texas MWD Lake/Reservoir System	58	69	82	95	108	108
Caddo Basin SUD*	D	Tawakoni Lake/Reservoir	3	3	4	5	6	6
Caddo Basin SUD*	C	Trinity Indirect Reuse	45	56	69	80	91	91
Celina	D	Chapman/Cooper Lake/Reservoir Non-System Portion	709	1,049	1,176	1,245	1,234	1,212
Celina	C	Ralph Hall Lake/Reservoir	2,548	3,856	4,424	4,795	4,868	4,908
Celina	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	2,834	4,087	5,177	5,642	5,686	5,552
Celina	C	Sulphur Indirect Reuse	1,274	1,927	2,212	2,637	2,920	2,945
Celina	C	Trinity Indirect Reuse	298	439	489	578	632	618
Copeville WSC	C	North Texas MWD Lake/Reservoir System	516	681	847	817	831	857
Copeville WSC	D	Tawakoni Lake/Reservoir	19	24	29	28	28	29

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Copeville WSC	C	Trinity Indirect Reuse	310	463	641	678	722	778
Culleoka WSC	C	North Texas MWD Lake/Reservoir System	732	698	712	710	726	751
Culleoka WSC	D	Tawakoni Lake/Reservoir	26	25	25	24	25	25
Culleoka WSC	C	Trinity Indirect Reuse	437	475	539	590	633	681
Dallas	D	Fork Lake/Reservoir	3,078	2,929	3,062	3,232	3,405	3,605
Dallas	C	Ray Hubbard Lake/Reservoir	1,152	1,201	1,248	1,309	1,372	1,445
Dallas	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	2,775	3,081	3,107	3,274	3,468	3,747
Dallas	D	Tawakoni Lake/Reservoir	2,674	1,092	1,154	1,231	1,311	1,404
Dallas	C	Trinity Indirect Reuse	1,261	1,421	1,645	2,114	2,524	2,703
Desert WSC	C	Woodbine Aquifer | Fannin County	39	38	39	40	41	42
Desert WSC	C	Woodbine Aquifer | Grayson County	20	26	31	37	43	49
East Fork SUD	C	North Texas MWD Lake/Reservoir System	1,151	1,143	1,148	1,148	1,151	1,190
East Fork SUD	D	Tawakoni Lake/Reservoir	41	40	40	40	40	40
East Fork SUD	C	Trinity Indirect Reuse	687	777	867	952	1,003	1,081
Fairview	C	North Texas MWD Lake/Reservoir System	2,584	2,723	2,831	2,488	2,260	2,113
Fairview	D	Tawakoni Lake/Reservoir	93	96	99	86	77	72
Fairview	C	Trinity Indirect Reuse	1,541	1,853	2,141	2,066	1,971	1,920
Farmersville	C	North Texas MWD Lake/Reservoir System	367	751	1,260	1,262	1,297	1,338
Farmersville	D	Tawakoni Lake/Reservoir	13	27	44	43	44	46
Farmersville	C	Trinity Indirect Reuse	218	511	954	1,047	1,130	1,218
Frisco	C	Direct Reuse	801	801	799	799	799	799
Frisco	C	North Texas MWD Lake/Reservoir System	24,075	24,317	20,638	18,142	16,476	15,404
Frisco	D	Tawakoni Lake/Reservoir	867	860	724	625	562	523
Frisco	C	Trinity Aquifer | Collin County	37	37	37	37	37	37
Frisco	C	Trinity Indirect Reuse	14,365	16,549	15,609	15,057	14,362	13,998
Frisco	C	Woodbine Aquifer | Collin County	43	43	43	43	43	43
Frognot WSC*	C	Woodbine Aquifer | Collin County	208	259	318	377	441	513

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Hickory Creek SUD*	D	Woodbine Aquifer | Hunt County	6	7	7	7	7	7
Lucas	C	North Texas MWD Lake/Reservoir System	1,793	1,710	1,484	1,304	1,184	1,107
Lucas	D	Tawakoni Lake/Reservoir	65	60	52	45	40	38
Lucas	C	Trinity Indirect Reuse	1,070	1,163	1,121	1,082	1,032	1,005
McKinney	C	North Texas MWD Lake/Reservoir System	27,167	26,788	29,038	32,111	29,163	27,263
McKinney	D	Tawakoni Lake/Reservoir	979	948	1,020	1,106	995	927
McKinney	C	Trinity Indirect Reuse	16,209	18,231	21,963	26,651	25,421	24,778
Melissa	C	North Texas MWD Lake/Reservoir System	5,187	6,478	7,391	8,083	8,033	7,509
Melissa	D	Tawakoni Lake/Reservoir	187	229	260	279	274	256
Melissa	C	Trinity Indirect Reuse	3,095	4,408	5,590	6,708	7,003	6,826
Melissa	C	Woodbine Aquifer | Collin County	175	175	175	175	175	175
Milligan WSC	C	North Texas MWD Lake/Reservoir System	214	187	186	191	201	210
Milligan WSC	D	Tawakoni Lake/Reservoir	8	7	7	7	7	7
Milligan WSC	C	Trinity Indirect Reuse	129	128	141	159	175	191
Murphy	C	North Texas MWD Lake/Reservoir System	2,686	2,281	2,135	2,079	2,091	2,093
Murphy	D	Tawakoni Lake/Reservoir	97	81	75	72	71	71
Murphy	C	Trinity Indirect Reuse	1,603	1,553	1,614	1,727	1,822	1,901
Mustang SUD	D	Chapman/Cooper Lake/Reservoir Non-System Portion	38	43	39	39	38	39
Mustang SUD	C	Ralph Hall Lake/Reservoir	138	158	147	150	151	158
Mustang SUD	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	153	167	172	177	177	178
Mustang SUD	C	Sulphur Indirect Reuse	69	79	74	83	91	95
Mustang SUD	C	Texoma Lake/Reservoir Non-System Portion	4	3	3	3	2	2
Mustang SUD	C	Trinity Aquifer | Denton County	51	52	50	49	48	48
Mustang SUD	C	Trinity Indirect Reuse	16	18	16	18	20	20
Mustang SUD	C	Woodbine Aquifer | Denton County	2	2	2	2	2	2

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Nevada SUD	C	North Texas MWD Lake/Reservoir System	194	204	259	480	778	976
Nevada SUD	D	Tawakoni Lake/Reservoir	7	8	9	16	26	33
Nevada SUD	C	Trinity Indirect Reuse	116	140	195	397	677	887
North Collin SUD	C	North Texas MWD Lake/Reservoir System	601	564	584	617	652	711
North Collin SUD	D	Tawakoni Lake/Reservoir	22	20	21	21	22	24
North Collin SUD	C	Trinity Indirect Reuse	358	385	441	511	569	646
North Farmersville WSC	C	North Texas MWD Lake/Reservoir System	55	54	60	61	63	62
North Farmersville WSC	D	Tawakoni Lake/Reservoir	2	2	2	2	2	2
North Farmersville WSC	C	Trinity Indirect Reuse	33	37	45	51	54	56
Parker	C	North Texas MWD Lake/Reservoir System	1,621	1,725	2,016	2,059	1,871	1,749
Parker	D	Tawakoni Lake/Reservoir	58	61	71	71	64	59
Parker	C	Trinity Indirect Reuse	966	1,174	1,525	1,710	1,630	1,590
Plano	C	North Texas MWD Lake/Reservoir System	39,148	32,798	30,587	27,696	25,152	23,515
Plano	D	Tawakoni Lake/Reservoir	1,410	1,160	1,074	954	858	799
Plano	C	Trinity Indirect Reuse	23,357	22,321	23,134	22,985	21,926	21,370
Princeton	C	North Texas MWD Lake/Reservoir System	2,827	5,007	5,750	5,644	5,579	5,216
Princeton	D	Tawakoni Lake/Reservoir	102	177	202	194	190	177
Princeton	C	Trinity Indirect Reuse	1,687	3,408	4,349	4,683	4,864	4,740
Prosper	C	North Texas MWD Lake/Reservoir System	5,636	5,447	5,522	5,056	4,857	4,541
Prosper	D	Tawakoni Lake/Reservoir	203	193	194	174	166	154
Prosper	C	Trinity Indirect Reuse	3,363	3,708	4,177	4,196	4,234	4,127
Richardson	C	North Texas MWD Lake/Reservoir System	8,658	7,600	6,972	6,313	5,733	5,360
Richardson	D	Tawakoni Lake/Reservoir	312	269	245	217	196	182
Richardson	C	Trinity Indirect Reuse	5,167	5,172	5,274	5,240	4,998	4,872
Sachse	C	North Texas MWD Lake/Reservoir System	964	854	822	755	706	660
Sachse	D	Tawakoni Lake/Reservoir	35	30	29	26	24	22
Sachse	C	Trinity Indirect Reuse	575	582	622	627	616	600

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Seis Lagos UD	C	North Texas MWD Lake/Reservoir System	364	295	262	239	221	209
Seis Lagos UD	D	Tawakoni Lake/Reservoir	13	10	9	8	8	7
Seis Lagos UD	C	Trinity Indirect Reuse	218	199	197	199	194	189
South Grayson SUD	C	Trinity Aquifer | Grayson County	96	108	121	132	142	150
South Grayson SUD	C	Woodbine Aquifer | Grayson County	25	29	32	35	38	40
Verona SUD	C	Woodbine Aquifer | Collin County	442	555	685	816	961	1,120
West Leonard WSC*	C	Woodbine Aquifer | Fannin County	44	55	67	79	93	108
Westminster SUD	C	Woodbine Aquifer | Collin County	404	504	618	733	860	1,000
Wylie	C	North Texas MWD Lake/Reservoir System	3,855	3,172	2,814	2,549	2,315	2,164
Wylie	D	Tawakoni Lake/Reservoir	139	112	99	88	79	74
Wylie	C	Trinity Indirect Reuse	2,301	2,158	2,129	2,115	2,017	1,966
Wylie Northeast SUD	C	North Texas MWD Lake/Reservoir System	1,029	1,058	1,104	1,039	968	905
Wylie Northeast SUD	D	Tawakoni Lake/Reservoir	37	37	39	36	33	31
Wylie Northeast SUD	C	Trinity Indirect Reuse	614	720	835	863	845	824
County-Other	C	North Texas MWD Lake/Reservoir System	17	15	13	10	10	9
County-Other	D	Tawakoni Lake/Reservoir	1	1	1	1	1	0
County-Other	C	Trinity Aquifer | Collin County	190	190	190	190	190	190
County-Other	C	Trinity Indirect Reuse	10	10	8	9	8	8
County-Other	C	Woodbine Aquifer | Collin County	190	190	190	190	190	190
Manufacturing	C	North Texas MWD Lake/Reservoir System	3,937	3,412	2,995	2,731	2,572	2,493
Manufacturing	D	Tawakoni Lake/Reservoir	143	121	106	94	89	85
Manufacturing	C	Trinity Indirect Reuse	2,350	2,321	2,266	2,266	2,241	2,266
Manufacturing	C	Woodbine Aquifer | Collin County	295	306	317	329	341	354
Steam Electric Power	C	North Texas MWD Lake/Reservoir System	40	40	40	40	40	40

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Livestock	C	Local Surface Water Supply	953	953	953	953	953	953
Irrigation	C	Direct Reuse	2,032	2,032	2,032	2,032	2,032	2,032
Irrigation	C	Ray Hubbard Lake/Reservoir	46	36	34	34	33	31
Irrigation	C	Trinity Aquifer | Collin County	293	293	293	293	293	293
Irrigation	C	Trinity Run-of-River	257	257	257	257	257	257
Irrigation	C	Woodbine Aquifer | Collin County	94	94	94	94	94	94
Cooke County WUG Total			**9,080**	**9,217**	**9,294**	**9,445**	**9,706**	**9,885**
Cooke County / Red Basin WUG Total			**1,042**	**1,050**	**1,055**	**1,064**	**1,074**	**1,076**
Callisburg WSC	C	Trinity Aquifer | Cooke County	34	36	36	37	37	37
Gainesville	C	Hubert H Moss Lake/Reservoir	18	20	21	24	31	36
Gainesville	C	Trinity Aquifer | Cooke County	58	58	58	59	58	59
Lindsay	C	Trinity Aquifer | Cooke County	3	3	3	3	3	3
Two Way SUD	C	Trinity Aquifer | Grayson County	5	5	4	5	4	4
Woodbine WSC	C	Trinity Aquifer | Cooke County	53	53	54	54	53	53
County-Other	C	Trinity Aquifer | Cooke County	105	109	113	116	122	126
County-Other	C	Woodbine Aquifer | Cooke County	20	20	20	20	20	20
Livestock	C	Local Surface Water Supply	340	340	340	340	340	340
Livestock	C	Trinity Aquifer | Cooke County	75	75	75	75	75	75
Livestock	C	Woodbine Aquifer | Cooke County	17	17	17	17	17	17
Irrigation	C	Direct Reuse	1	1	1	1	1	1
Irrigation	C	Hubert H Moss Lake/Reservoir	245	245	245	245	245	237
Irrigation	C	Trinity Aquifer | Cooke County	53	53	53	53	53	53

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Irrigation	C	Woodbine Aquifer | Cooke County	15	15	15	15	15	15
Cooke County / Trinity Basin WUG Total			**8,038**	**8,167**	**8,239**	**8,381**	**8,632**	**8,809**
Bolivar WSC	C	Trinity Aquifer | Cooke County	30	28	24	21	18	16
Bolivar WSC	C	Trinity Aquifer | Denton County	145	130	115	102	87	74
Bolivar WSC	C	Trinity Aquifer | Wise County	17	16	14	12	10	9
Callisburg WSC	C	Trinity Aquifer | Cooke County	107	110	113	113	114	115
Gainesville	C	Hubert H Moss Lake/Reservoir	619	688	726	853	1,082	1,265
Gainesville	C	Trinity Aquifer | Cooke County	2,046	2,046	2,046	2,045	2,046	2,045
Lake Kiowa SUD	C	Trinity Aquifer | Cooke County	942	993	1,015	1,024	1,035	1,046
Lindsay	C	Trinity Aquifer | Cooke County	213	217	220	220	220	220
Mountain Springs WSC	C	Trinity Aquifer | Cooke County	317	317	319	317	315	312
Muenster	C	Trinity Aquifer | Cooke County	357	355	355	355	355	355
Woodbine WSC	C	Trinity Aquifer | Cooke County	650	649	649	648	648	647
County-Other	C	Trinity Aquifer | Cooke County	538	556	576	597	622	643
County-Other	C	Woodbine Aquifer | Cooke County	100	100	100	100	100	100
Manufacturing	C	Hubert H Moss Lake/Reservoir	135	140	145	151	157	158
Manufacturing	C	Trinity Aquifer | Cooke County	4	4	4	4	4	4
Mining	C	Trinity Aquifer | Cooke County	12	12	12	13	13	13
Steam Electric Power	C	Trinity Aquifer | Cooke County	6	6	6	6	6	6
Livestock	C	Local Surface Water Supply	847	847	847	847	847	847

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Livestock	C	Trinity Aquifer | Cooke County	186	186	186	186	186	186
Livestock	C	Woodbine Aquifer | Cooke County	43	43	43	43	43	43
Irrigation	C	Direct Reuse	3	3	3	3	3	3
Irrigation	C	Hubert H Moss Lake/Reservoir	565	565	565	565	565	546
Irrigation	C	Trinity Aquifer | Cooke County	122	122	122	122	122	122
Irrigation	C	Woodbine Aquifer | Cooke County	34	34	34	34	34	34
Dallas County WUG Total			**541,023**	**473,134**	**463,604**	**464,481**	**463,020**	**457,338**
Dallas County / Trinity Basin WUG Total			**541,023**	**473,134**	**463,604**	**464,481**	**463,020**	**457,338**
Addison	D	Fork Lake/Reservoir	2,184	2,105	2,094	2,052	2,010	1,984
Addison	C	Ray Hubbard Lake/Reservoir	818	863	854	831	810	795
Addison	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	1,969	2,215	2,126	2,079	2,048	2,061
Addison	D	Tawakoni Lake/Reservoir	1,897	785	789	781	774	773
Addison	C	Trinity Indirect Reuse	895	1,022	1,125	1,342	1,490	1,488
AMC Creekside	C	Trinity Aquifer | Denton County	37	45	50	53	56	59
Balch Springs	D	Fork Lake/Reservoir	749	682	700	723	756	754
Balch Springs	C	Ray Hubbard Lake/Reservoir	280	280	285	293	305	302
Balch Springs	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	676	718	711	733	769	784
Balch Springs	D	Tawakoni Lake/Reservoir	650	254	264	275	291	294
Balch Springs	C	Trinity Indirect Reuse	307	331	376	473	560	565
Carrollton	D	Fork Lake/Reservoir	2,623	2,368	2,355	2,365	2,370	2,262
Carrollton	C	Ray Hubbard Lake/Reservoir	982	971	960	958	955	907
Carrollton	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	2,364	2,491	2,390	2,396	2,413	2,351
Carrollton	D	Tawakoni Lake/Reservoir	2,278	883	888	901	913	881
Carrollton	C	Trinity Aquifer | Dallas County	10	10	10	10	10	10

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Carrollton	C	Trinity Indirect Reuse	1,075	1,149	1,265	1,547	1,757	1,696
Cedar Hill	D	Fork Lake/Reservoir	2,720	2,539	2,604	2,671	2,733	2,810
Cedar Hill	C	Ray Hubbard Lake/Reservoir	1,018	1,041	1,062	1,082	1,101	1,127
Cedar Hill	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	2,452	2,671	2,643	2,705	2,783	2,921
Cedar Hill	D	Tawakoni Lake/Reservoir	2,362	946	981	1,017	1,052	1,094
Cedar Hill	C	Trinity Aquifer | Dallas County	180	180	180	180	180	180
Cedar Hill	C	Trinity Indirect Reuse	1,114	1,232	1,399	1,747	2,026	2,107
Cockrell Hill	D	Fork Lake/Reservoir	138	110	100	92	85	78
Cockrell Hill	C	Ray Hubbard Lake/Reservoir	52	45	41	37	34	31
Cockrell Hill	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	124	116	101	94	85	82
Cockrell Hill	D	Tawakoni Lake/Reservoir	120	41	37	35	33	30
Cockrell Hill	C	Trinity Indirect Reuse	56	53	53	60	63	58
Combine WSC	D	Fork Lake/Reservoir	18	17	16	16	15	15
Combine WSC	C	Ray Hubbard Lake/Reservoir	7	7	7	6	6	6
Combine WSC	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	17	18	17	16	16	16
Combine WSC	D	Tawakoni Lake/Reservoir	16	6	6	6	6	6
Combine WSC	C	Trinity Indirect Reuse	8	8	9	10	11	11
Coppell	D	Fork Lake/Reservoir	2,893	2,465	2,318	2,201	2,086	1,983
Coppell	C	Ray Hubbard Lake/Reservoir	1,083	1,011	945	891	840	795
Coppell	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	2,607	2,593	2,351	2,230	2,124	2,061
Coppell	D	Tawakoni Lake/Reservoir	2,511	919	874	838	803	773
Coppell	C	Trinity Indirect Reuse	1,185	1,196	1,245	1,439	1,546	1,487
Dallas	D	Fork Lake/Reservoir	72,675	64,447	62,779	61,771	60,643	59,838
Dallas	C	Ray Hubbard Lake/Reservoir	27,197	26,424	25,589	25,026	24,438	23,989

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Dallas	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	65,502	67,789	63,702	62,567	61,752	62,200
Dallas	D	Tawakoni Lake/Reservoir	63,105	24,025	23,657	23,518	23,348	23,301
Dallas	C	Trinity Indirect Reuse	29,777	31,282	33,731	40,392	44,959	44,870
Desoto	D	Fork Lake/Reservoir	2,649	2,413	2,341	2,260	2,181	2,119
Desoto	C	Ray Hubbard Lake/Reservoir	991	990	954	916	879	849
Desoto	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	2,388	2,538	2,375	2,289	2,220	2,202
Desoto	D	Tawakoni Lake/Reservoir	2,300	900	882	861	840	825
Desoto	C	Trinity Indirect Reuse	1,085	1,172	1,257	1,478	1,617	1,589
Duncanville	D	Fork Lake/Reservoir	1,584	1,421	1,369	1,302	1,232	1,171
Duncanville	C	Ray Hubbard Lake/Reservoir	593	583	558	528	496	469
Duncanville	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	1,428	1,495	1,390	1,318	1,254	1,217
Duncanville	D	Tawakoni Lake/Reservoir	1,376	530	516	496	474	456
Duncanville	C	Trinity Indirect Reuse	649	690	736	852	913	878
East Fork SUD	C	North Texas MWD Lake/Reservoir System	303	300	301	302	302	312
East Fork SUD	D	Tawakoni Lake/Reservoir	11	11	11	10	10	11
East Fork SUD	C	Trinity Indirect Reuse	181	204	228	251	264	284
Farmers Branch	D	Fork Lake/Reservoir	2,782	2,595	2,544	2,472	2,401	2,348
Farmers Branch	C	Ray Hubbard Lake/Reservoir	1,041	1,064	1,037	1,001	967	941
Farmers Branch	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	2,509	2,729	2,581	2,504	2,444	2,441
Farmers Branch	D	Tawakoni Lake/Reservoir	2,416	967	958	941	924	914
Farmers Branch	C	Trinity Indirect Reuse	1,140	1,260	1,367	1,616	1,780	1,760
Garland	C	North Texas MWD Lake/Reservoir System	22,691	20,378	18,017	16,328	14,917	13,945
Garland	D	Tawakoni Lake/Reservoir	817	721	633	562	509	474
Garland	C	Trinity Indirect Reuse	13,538	13,869	13,628	13,551	13,003	12,675
Glenn Heights	D	Fork Lake/Reservoir	371	350	345	337	328	323
Glenn Heights	C	Ray Hubbard Lake/Reservoir	139	143	141	137	132	129

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Glenn Heights	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	335	367	351	341	334	335
Glenn Heights	D	Tawakoni Lake/Reservoir	323	130	130	128	127	126
Glenn Heights	C	Trinity Aquifer | Dallas County	42	40	37	34	32	30
Glenn Heights	C	Trinity Indirect Reuse	152	170	185	220	243	242
Glenn Heights	C	Woodbine Aquifer | Dallas County	28	26	24	23	21	20
Grand Prairie	D	Fork Lake/Reservoir	3,645	3,507	3,837	3,766	3,726	3,542
Grand Prairie	C	Ray Hubbard Lake/Reservoir	1,364	1,438	1,564	1,526	1,501	1,420
Grand Prairie	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	3,286	3,689	3,894	3,815	3,794	3,681
Grand Prairie	D	Tawakoni Lake/Reservoir	3,165	1,307	1,446	1,434	1,435	1,380
Grand Prairie	C	Trinity Indirect Reuse	1,493	1,702	2,062	2,463	2,762	2,656
Grand Prairie	C	TRWD Lake/Reservoir System	7,908	8,114	8,205	7,636	7,274	6,828
Highland Park	C	Grapevine Lake/Reservoir Non-System Portion	4,144	4,139	4,139	4,139	4,139	4,139
Hutchins	D	Fork Lake/Reservoir	483	458	453	443	433	425
Hutchins	C	Ray Hubbard Lake/Reservoir	181	188	185	180	174	171
Hutchins	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	435	482	460	448	440	442
Hutchins	D	Tawakoni Lake/Reservoir	420	171	171	169	167	166
Hutchins	C	Trinity Indirect Reuse	198	222	244	290	321	319
Irving	D	Chapman/Cooper Lake/Reservoir Non-System Portion	35,634	34,604	33,569	32,530	31,487	30,439
Irving	D	Fork Lake/Reservoir	1,312	1,125	1,056	1,001	946	900
Irving	C	Ray Hubbard Lake/Reservoir	491	461	430	405	381	361
Irving	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	1,183	1,183	1,071	1,014	964	934
Irving	D	Tawakoni Lake/Reservoir	1,139	419	398	381	364	350
Irving	C	Trinity Indirect Reuse	1,024	1,032	1,053	1,140	1,188	1,161
Lancaster	D	Fork Lake/Reservoir	1,949	1,765	1,708	1,646	1,586	1,538

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WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Lancaster	C	Ray Hubbard Lake/Reservoir	729	724	696	667	639	617
Lancaster	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	1,757	1,856	1,733	1,667	1,614	1,598
Lancaster	D	Tawakoni Lake/Reservoir	1,693	658	643	627	611	599
Lancaster	C	Trinity Indirect Reuse	799	857	917	1,077	1,176	1,153
Lancaster MUD 1	D	Fork Lake/Reservoir	72	77	79	80	80	80
Lancaster MUD 1	C	Ray Hubbard Lake/Reservoir	27	31	32	32	32	32
Lancaster MUD 1	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	64	81	81	81	81	85
Lancaster MUD 1	D	Tawakoni Lake/Reservoir	63	29	30	30	31	31
Lancaster MUD 1	C	Trinity Indirect Reuse	30	37	43	52	59	60
Lewisville	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	164	132	133	132	131	126
Mesquite	C	North Texas MWD Lake/Reservoir System	13,381	11,587	10,888	10,779	11,015	11,275
Mesquite	D	Tawakoni Lake/Reservoir	482	410	382	371	376	383
Mesquite	C	Trinity Indirect Reuse	7,984	7,885	8,235	8,946	9,602	10,248
Ovilla	D	Fork Lake/Reservoir	29	27	27	28	29	30
Ovilla	C	Ray Hubbard Lake/Reservoir	11	11	11	11	12	12
Ovilla	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	26	28	27	28	29	31
Ovilla	D	Tawakoni Lake/Reservoir	25	10	10	11	11	12
Ovilla	C	Trinity Indirect Reuse	12	13	15	18	21	22
Richardson	C	North Texas MWD Lake/Reservoir System	7,456	6,428	5,705	5,165	4,691	4,386
Richardson	D	Tawakoni Lake/Reservoir	268	227	200	178	160	149
Richardson	C	Trinity Indirect Reuse	4,448	4,376	4,314	4,287	4,089	3,985
Rockett SUD	C	Joe Pool Lake/Reservoir	30	29	27	25	22	20
Rockett SUD	C	TRWD Lake/Reservoir System	51	52	55	53	53	51
Rowlett	C	North Texas MWD Lake/Reservoir System	5,438	4,777	4,669	4,335	4,092	3,826
Rowlett	D	Tawakoni Lake/Reservoir	196	169	164	149	139	130

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Rowlett	C	Trinity Indirect Reuse	3,246	3,250	3,532	3,597	3,568	3,476
Sachse	C	North Texas MWD Lake/Reservoir System	1,955	1,746	1,674	1,537	1,433	1,340
Sachse	D	Tawakoni Lake/Reservoir	70	62	59	53	49	46
Sachse	C	Trinity Indirect Reuse	1,167	1,188	1,267	1,275	1,249	1,218
Seagoville	D	Fork Lake/Reservoir	582	543	534	520	505	494
Seagoville	C	Ray Hubbard Lake/Reservoir	218	223	218	211	204	198
Seagoville	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	525	571	541	525	515	514
Seagoville	D	Tawakoni Lake/Reservoir	505	203	201	198	194	193
Seagoville	C	Trinity Indirect Reuse	238	264	287	340	374	371
Sunnyvale	C	North Texas MWD Lake/Reservoir System	1,675	1,756	1,765	1,618	1,491	1,395
Sunnyvale	D	Tawakoni Lake/Reservoir	60	62	62	56	51	47
Sunnyvale	C	Trinity Indirect Reuse	998	1,196	1,335	1,343	1,300	1,266
University Park	C	Grapevine Lake/Reservoir Non-System Portion	7,518	7,502	7,502	7,502	7,502	7,502
Wilmer	D	Fork Lake/Reservoir	214	205	204	201	197	194
Wilmer	C	Ray Hubbard Lake/Reservoir	80	84	83	81	79	78
Wilmer	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	192	216	208	204	200	201
Wilmer	D	Tawakoni Lake/Reservoir	185	77	77	76	76	76
Wilmer	C	Trinity Indirect Reuse	88	100	110	131	146	146
County-Other	D	Fork Lake/Reservoir	377	323	303	287	272	258
County-Other	C	Navarro Mills Lake/Reservoir	42	41	38	36	34	32
County-Other	C	Ray Hubbard Lake/Reservoir	141	132	124	116	109	104
County-Other	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	340	340	307	292	277	268
County-Other	C	Richland Chambers Lake/Reservoir Non-System Portion	8	8	8	7	7	6
County-Other	D	Tawakoni Lake/Reservoir	327	120	114	109	105	101

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
County-Other	C	Trinity Aquifer | Dallas County	50	50	50	50	50	50
County-Other	C	Trinity Indirect Reuse	154	157	163	188	201	194
County-Other	C	TRWD Lake/Reservoir System	579	516	481	440	409	384
County-Other	C	Woodbine Aquifer | Dallas County	300	300	300	300	300	300
Manufacturing	D	Chapman/Cooper Lake/Reservoir Non-System Portion	3,010	3,121	3,236	3,356	3,480	3,609
Manufacturing	D	Fork Lake/Reservoir	4,062	3,610	3,513	3,454	3,388	3,340
Manufacturing	C	North Texas MWD Lake/Reservoir System	1,673	1,448	1,273	1,160	1,092	1,060
Manufacturing	C	Ray Hubbard Lake/Reservoir	1,520	1,480	1,432	1,399	1,365	1,339
Manufacturing	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	3,662	3,798	3,566	3,499	3,450	3,470
Manufacturing	D	Tawakoni Lake/Reservoir	3,587	1,397	1,369	1,354	1,342	1,336
Manufacturing	C	Trinity Aquifer | Dallas County	100	100	100	100	100	100
Manufacturing	C	Trinity Indirect Reuse	2,662	2,739	2,850	3,222	3,464	3,467
Mining	C	Trinity Aquifer | Dallas County	15	15	15	15	15	15
Mining	C	Woodbine Aquifer | Dallas County	17	17	17	17	17	17
Steam Electric Power	C	Mountain Creek Lake/Reservoir	6,400	6,400	6,400	6,400	6,400	6,400
Steam Electric Power	C	Ray Hubbard Lake/Reservoir	933	747	704	691	671	644
Steam Electric Power	C	Trinity Run-of-River	1,423	1,423	1,423	1,423	1,423	1,423
Livestock	C	Local Surface Water Supply	198	198	198	198	198	198
Livestock	C	Woodbine Aquifer | Dallas County	50	50	50	50	50	50
Irrigation	C	Direct Reuse	1,246	1,246	1,246	1,246	1,246	1,246
Irrigation	C	Joe Pool Lake/Reservoir	300	300	300	300	300	300
Irrigation	C	Trinity Aquifer | Dallas County	100	100	100	100	100	100
Irrigation	C	Trinity Indirect Reuse	8,000	8,000	8,000	8,000	8,000	8,000

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Irrigation	C	Trinity Run-of-River	309	309	309	309	309	309
Irrigation	C	White Rock Lake/Reservoir	2,540	2,375	2,210	2,023	1,837	1,650
Irrigation	C	Woodbine Aquifer | Dallas County	100	100	100	100	100	100
Denton County WUG Total			**213,800**	**205,028**	**201,884**	**200,134**	**200,002**	**199,617**
Denton County / Trinity Basin WUG Total			**213,800**	**205,028**	**201,884**	**200,134**	**200,002**	**199,617**
AMC Creekside	C	Trinity Aquifer | Denton County	144	181	219	258	302	349
Argyle WSC	D	Chapman/Cooper Lake/Reservoir Non-System Portion	191	192	193	200	200	201
Argyle WSC	C	Ralph Hall Lake/Reservoir	685	708	729	776	792	814
Argyle WSC	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	761	751	853	913	925	921
Argyle WSC	C	Sulphur Indirect Reuse	342	354	364	427	475	489
Argyle WSC	C	Trinity Aquifer | Denton County	683	683	683	683	683	683
Argyle WSC	C	Trinity Indirect Reuse	80	81	81	94	103	103
Aubrey	D	Chapman/Cooper Lake/Reservoir Non-System Portion	18	43	79	118	122	111
Aubrey	C	Ralph Hall Lake/Reservoir	63	159	300	455	482	450
Aubrey	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	70	169	351	535	563	509
Aubrey	C	Sulphur Indirect Reuse	32	80	150	250	289	270
Aubrey	C	Trinity Aquifer | Denton County	559	559	559	559	559	559
Aubrey	C	Trinity Indirect Reuse	7	18	33	55	63	57
Black Rock WSC	C	Trinity Aquifer | Denton County	468	468	468	468	468	468
Bolivar WSC	C	Trinity Aquifer | Cooke County	154	158	163	167	171	175
Bolivar WSC	C	Trinity Aquifer | Denton County	731	753	774	792	813	831
Bolivar WSC	C	Trinity Aquifer | Wise County	88	90	93	95	98	100
Carrollton	D	Fork Lake/Reservoir	4,114	3,719	3,692	3,704	3,708	3,538

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Carrollton	C	Ray Hubbard Lake/Reservoir	1,539	1,525	1,505	1,501	1,494	1,418
Carrollton	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	3,708	3,911	3,747	3,752	3,775	3,676
Carrollton	D	Tawakoni Lake/Reservoir	3,572	1,386	1,391	1,410	1,427	1,378
Carrollton	C	Trinity Aquifer | Dallas County	15	15	15	15	15	15
Carrollton	C	Trinity Indirect Reuse	1,685	1,805	1,984	2,422	2,748	2,653
Celina	D	Chapman/Cooper Lake/Reservoir Non-System Portion	14	20	23	25	25	25
Celina	C	Ralph Hall Lake/Reservoir	49	73	87	96	99	100
Celina	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	55	78	102	113	116	113
Celina	C	Sulphur Indirect Reuse	25	37	43	53	60	60
Celina	C	Trinity Indirect Reuse	6	8	10	12	13	13
Coppell	D	Fork Lake/Reservoir	97	80	78	75	74	70
Coppell	C	Ray Hubbard Lake/Reservoir	36	33	32	31	30	28
Coppell	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	88	84	79	76	75	73
Coppell	D	Tawakoni Lake/Reservoir	85	30	29	29	28	27
Coppell	C	Trinity Indirect Reuse	40	39	42	49	55	52
Corinth	D	Chapman/Cooper Lake/Reservoir Non-System Portion	452	352	314	263	235	214
Corinth	C	Ralph Hall Lake/Reservoir	1,624	1,294	1,181	1,014	928	865
Corinth	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	1,806	1,371	1,382	1,193	1,084	978
Corinth	C	Sulphur Indirect Reuse	812	647	591	558	557	519
Corinth	C	Trinity Indirect Reuse	190	147	131	122	120	109
Cross Timbers WSC	D	Chapman/Cooper Lake/Reservoir Non-System Portion	116	114	107	111	119	132
Cross Timbers WSC	C	Ralph Hall Lake/Reservoir	420	422	404	426	472	537

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Cross Timbers WSC	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	467	447	473	501	551	607
Cross Timbers WSC	C	Sulphur Indirect Reuse	210	211	202	234	283	322
Cross Timbers WSC	C	Trinity Aquifer | Denton County	649	649	649	649	649	649
Cross Timbers WSC	C	Trinity Indirect Reuse	49	48	45	51	61	68
Dallas	D	Fork Lake/Reservoir	2,001	2,111	2,464	2,821	3,178	3,545
Dallas	C	Ray Hubbard Lake/Reservoir	749	866	1,004	1,143	1,281	1,421
Dallas	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	1,803	2,221	2,500	2,857	3,236	3,685
Dallas	D	Tawakoni Lake/Reservoir	1,737	787	928	1,074	1,224	1,380
Dallas	C	Trinity Indirect Reuse	820	1,025	1,324	1,844	2,356	2,658
Denton	C	Lewisville Lake/Reservoir Non-System Portion	4,427	4,131	3,676	3,570	3,506	3,425
Denton	C	Ray Roberts Lake/Reservoir Non-System Portion	15,833	15,041	13,636	13,542	13,611	13,625
Denton	C	Trinity Indirect Reuse	6,206	7,376	9,296	9,534	9,563	9,654
Denton County FWSD 10	D	Chapman/Cooper Lake/Reservoir Non-System Portion	107	78	57	45	38	35
Denton County FWSD 10	C	Ralph Hall Lake/Reservoir	385	284	208	174	153	143
Denton County FWSD 10	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	428	301	244	204	179	161
Denton County FWSD 10	C	Sulphur Indirect Reuse	193	142	104	96	92	86
Denton County FWSD 10	C	Trinity Indirect Reuse	45	32	23	21	20	18
Denton County FWSD 11-C	D	Chapman/Cooper Lake/Reservoir Non-System Portion	34	38	37	40	43	46
Denton County FWSD 11-C	C	Ralph Hall Lake/Reservoir	121	140	142	152	165	187
Denton County FWSD 11-C	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	134	149	166	178	193	212

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WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Denton County FWSD 11-C	C	Sulphur Indirect Reuse	60	70	71	83	99	112
Denton County FWSD 11-C	C	Trinity Indirect Reuse	14	16	16	18	21	24
Denton County FWSD 1-A	D	Chapman/Cooper Lake/Reservoir Non-System Portion	368	359	274	226	198	180
Denton County FWSD 1-A	C	Ralph Hall Lake/Reservoir	1,323	1,316	1,032	873	782	729
Denton County FWSD 1-A	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	1,472	1,395	1,208	1,027	914	825
Denton County FWSD 1-A	C	Sulphur Indirect Reuse	661	658	516	480	469	437
Denton County FWSD 1-A	C	Trinity Indirect Reuse	155	150	114	105	102	92
Denton County FWSD 7	D	Chapman/Cooper Lake/Reservoir Non-System Portion	296	226	162	132	112	103
Denton County FWSD 7	C	Ralph Hall Lake/Reservoir	1,062	829	608	507	446	416
Denton County FWSD 7	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	1,181	879	711	596	521	470
Denton County FWSD 7	C	Sulphur Indirect Reuse	531	414	304	279	268	249
Denton County FWSD 7	C	Trinity Indirect Reuse	124	94	67	61	58	52
Flower Mound	D	Chapman/Cooper Lake/Reservoir Non-System Portion	1,414	1,379	1,284	1,046	899	818
Flower Mound	D	Fork Lake/Reservoir	1,603	1,375	1,290	1,222	1,155	1,098
Flower Mound	C	Ralph Hall Lake/Reservoir	5,084	5,072	4,833	4,031	3,544	3,304
Flower Mound	C	Ray Hubbard Lake/Reservoir	600	564	526	495	465	441
Flower Mound	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	7,100	6,822	6,964	5,981	5,317	4,878
Flower Mound	C	Sulphur Indirect Reuse	2,543	2,535	2,416	2,217	2,126	1,982
Flower Mound	D	Tawakoni Lake/Reservoir	1,392	512	486	466	445	428
Flower Mound	C	Trinity Indirect Reuse	1,252	1,245	1,228	1,285	1,316	1,241
Fort Worth*	C	Trinity Indirect Reuse	705	1,220	1,517	1,827	2,145	2,469

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WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Fort Worth*	C	TRWD Lake/Reservoir System	3,511	4,190	4,938	5,695	6,394	7,120
Frisco	C	Direct Reuse	600	600	602	602	602	602
Frisco	C	North Texas MWD Lake/Reservoir System	18,013	18,219	15,569	13,686	12,430	11,620
Frisco	D	Tawakoni Lake/Reservoir	649	645	547	471	424	395
Frisco	C	Trinity Aquifer | Collin County	28	28	28	28	28	28
Frisco	C	Trinity Indirect Reuse	10,747	12,399	11,775	11,359	10,835	10,561
Frisco	C	Woodbine Aquifer | Collin County	32	32	32	32	32	32
Hackberry	C	North Texas MWD Lake/Reservoir System	798	941	1,041	1,134	1,250	1,395
Hackberry	D	Tawakoni Lake/Reservoir	29	33	37	39	43	47
Hackberry	C	Trinity Indirect Reuse	476	640	788	942	1,089	1,266
Highland Village	D	Chapman/Cooper Lake/Reservoir Non-System Portion	209	177	136	116	105	96
Highland Village	C	Ralph Hall Lake/Reservoir	750	651	510	448	412	384
Highland Village	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	834	690	597	527	481	434
Highland Village	C	Sulphur Indirect Reuse	375	325	255	246	247	230
Highland Village	C	Trinity Aquifer | Denton County	1,411	1,411	1,411	1,411	1,411	1,411
Highland Village	C	Trinity Indirect Reuse	88	74	57	54	53	48
Justin	D	Chapman/Cooper Lake/Reservoir Non-System Portion	110	112	112	128	154	197
Justin	C	Ralph Hall Lake/Reservoir	398	411	423	494	610	796
Justin	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	442	436	495	582	712	901
Justin	C	Sulphur Indirect Reuse	199	206	211	272	366	478
Justin	C	Trinity Aquifer | Denton County	242	242	242	242	242	242
Justin	C	Trinity Indirect Reuse	47	47	47	60	79	100
Krum	D	Chapman/Cooper Lake/Reservoir Non-System Portion	85	95	102	119	144	181
Krum	C	Ralph Hall Lake/Reservoir	302	351	382	458	566	730

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Krum	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	336	372	447	539	661	826
Krum	C	Sulphur Indirect Reuse	151	175	191	252	339	438
Krum	C	Trinity Aquifer | Denton County	650	650	650	650	650	650
Krum	C	Trinity Indirect Reuse	35	40	42	55	73	92
Lake Cities Municipal Utility Authority	D	Chapman/Cooper Lake/Reservoir Non-System Portion	222	195	147	121	104	95
Lake Cities Municipal Utility Authority	C	Ralph Hall Lake/Reservoir	802	717	550	464	411	383
Lake Cities Municipal Utility Authority	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	892	760	644	546	480	433
Lake Cities Municipal Utility Authority	C	Sulphur Indirect Reuse	401	358	275	255	246	230
Lake Cities Municipal Utility Authority	C	Trinity Indirect Reuse	94	82	61	56	53	48
Lewisville	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	17,934	14,391	14,508	14,424	14,290	13,707
Little Elm	C	North Texas MWD Lake/Reservoir System	3,288	2,610	2,333	2,141	2,000	1,869
Little Elm	D	Tawakoni Lake/Reservoir	118	92	82	74	68	63
Little Elm	C	Trinity Indirect Reuse	1,963	1,776	1,765	1,778	1,742	1,698
Mountain Springs WSC	C	Trinity Aquifer | Cooke County	11	14	17	20	23	27
Mustang SUD	D	Chapman/Cooper Lake/Reservoir Non-System Portion	1,146	1,248	1,196	1,219	1,212	1,233
Mustang SUD	C	Ralph Hall Lake/Reservoir	4,118	4,587	4,499	4,691	4,786	4,989
Mustang SUD	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	4,582	4,862	5,266	5,519	5,590	5,644
Mustang SUD	C	Sulphur Indirect Reuse	2,059	2,293	2,249	2,579	2,872	2,993
Mustang SUD	C	Texoma Lake/Reservoir Non-System Portion	129	84	81	78	76	74

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WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Mustang SUD	C	Trinity Aquifer | Denton County	1,519	1,517	1,520	1,522	1,524	1,524
Mustang SUD	C	Trinity Indirect Reuse	482	522	498	566	621	629
Mustang SUD	C	Woodbine Aquifer | Denton County	67	67	68	68	68	68
Northlake	D	Chapman/Cooper Lake/Reservoir Non-System Portion	317	254	227	217	215	215
Northlake	C	Ralph Hall Lake/Reservoir	1,136	933	852	837	848	868
Northlake	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	1,264	990	998	985	990	982
Northlake	C	Sulphur Indirect Reuse	568	467	426	460	509	521
Northlake	C	Trinity Indirect Reuse	133	106	94	101	110	109
Northlake	C	TRWD Lake/Reservoir System	1,481	1,465	1,702	1,830	1,963	2,023
Northlake	C	Woodbine Aquifer | Denton County	95	95	95	95	95	95
Paloma Creek North	D	Chapman/Cooper Lake/Reservoir Non-System Portion	111	80	57	46	39	35
Paloma Creek North	C	Ralph Hall Lake/Reservoir	398	294	216	180	158	148
Paloma Creek North	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	443	312	252	212	185	167
Paloma Creek North	C	Sulphur Indirect Reuse	199	147	108	99	95	89
Paloma Creek North	C	Trinity Indirect Reuse	47	33	24	22	21	19
Paloma Creek South	D	Chapman/Cooper Lake/Reservoir Non-System Portion	170	123	87	73	61	56
Paloma Creek South	C	Ralph Hall Lake/Reservoir	612	452	331	276	243	226
Paloma Creek South	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	681	479	388	325	284	256
Paloma Creek South	C	Sulphur Indirect Reuse	306	226	166	152	146	136
Paloma Creek South	C	Trinity Indirect Reuse	72	51	37	33	32	29
Pilot Point	D	Chapman/Cooper Lake/Reservoir Non-System Portion	8	28	51	72	70	69
Pilot Point	C	Ralph Hall Lake/Reservoir	27	103	194	272	277	276

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WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Pilot Point	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	30	109	227	320	323	312
Pilot Point	C	Sulphur Indirect Reuse	14	51	97	150	167	166
Pilot Point	C	Trinity Aquifer | Denton County	559	560	560	560	560	560
Pilot Point	C	Trinity Indirect Reuse	3	12	22	32	36	34
Plano	C	North Texas MWD Lake/Reservoir System	1,171	1,014	946	857	778	727
Plano	D	Tawakoni Lake/Reservoir	42	36	33	29	27	25
Plano	C	Trinity Indirect Reuse	698	690	716	711	678	661
Ponder	D	Chapman/Cooper Lake/Reservoir Non-System Portion	15	25	32	35	39	45
Ponder	C	Ralph Hall Lake/Reservoir	58	89	123	136	153	181
Ponder	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	64	94	144	159	179	204
Ponder	C	Sulphur Indirect Reuse	29	44	62	75	92	108
Ponder	C	Trinity Aquifer | Denton County	385	385	385	385	385	385
Ponder	C	Trinity Indirect Reuse	7	10	14	16	20	23
Prosper	C	North Texas MWD Lake/Reservoir System	2,331	2,372	2,387	2,177	2,082	1,946
Prosper	D	Tawakoni Lake/Reservoir	84	84	84	75	71	66
Prosper	C	Trinity Indirect Reuse	1,390	1,615	1,805	1,807	1,814	1,769
Providence Village WCID	D	Chapman/Cooper Lake/Reservoir Non-System Portion	85	61	43	36	29	28
Providence Village WCID	C	Ralph Hall Lake/Reservoir	302	223	163	136	120	111
Providence Village WCID	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	336	236	191	160	140	126
Providence Village WCID	C	Sulphur Indirect Reuse	151	111	82	75	72	67
Providence Village WCID	C	Trinity Indirect Reuse	35	25	18	16	16	14
Roanoke	C	TRWD Lake/Reservoir System	3,394	2,945	2,806	2,606	2,483	2,331

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WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Sanger	D	Chapman/Cooper Lake/Reservoir Non-System Portion	64	71	70	84	98	119
Sanger	C	Ralph Hall Lake/Reservoir	226	260	264	323	388	483
Sanger	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	251	276	308	381	453	547
Sanger	C	Sulphur Indirect Reuse	113	130	132	178	233	290
Sanger	C	Trinity Aquifer | Denton County	825	825	825	825	825	825
Sanger	C	Trinity Indirect Reuse	26	30	29	39	50	61
Southlake	C	TRWD Lake/Reservoir System	248	205	172	138	110	86
Terra Southwest	C	North Texas MWD Lake/Reservoir System	19	45	65	80	97	114
Terra Southwest	D	Tawakoni Lake/Reservoir	1	2	2	3	3	4
Terra Southwest	C	Trinity Aquifer | Denton County	100	100	100	100	100	100
Terra Southwest	C	Trinity Indirect Reuse	12	30	48	66	84	104
Terra Southwest	C	Woodbine Aquifer | Denton County	100	100	100	100	100	100
The Colony	D	Fork Lake/Reservoir	1,423	1,332	1,430	1,355	1,282	1,219
The Colony	C	North Texas MWD Lake/Reservoir System	668	929	866	761	690	646
The Colony	C	Ray Hubbard Lake/Reservoir	533	546	583	549	517	489
The Colony	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	1,283	1,402	1,450	1,374	1,305	1,265
The Colony	D	Tawakoni Lake/Reservoir	1,260	530	569	542	518	497
The Colony	C	Trinity Aquifer | Denton County	1,015	1,015	1,015	1,015	1,015	1,015
The Colony	C	Trinity Indirect Reuse	981	1,279	1,422	1,517	1,553	1,501
Trophy Club MUD 1	C	Trinity Aquifer | Denton County	516	506	498	491	484	477
Trophy Club MUD 1	C	TRWD Lake/Reservoir System	4,339	3,864	3,603	3,291	3,063	2,875
County-Other	D	Chapman/Cooper Lake/Reservoir Non-System Portion	3	3	2	1	0	0

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WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
County-Other	C	Lewisville Lake/Reservoir Non-System Portion	7	5	4	3	2	2
County-Other	C	Ralph Hall Lake/Reservoir	12	8	6	5	5	4
County-Other	C	Ray Roberts Lake/Reservoir Non-System Portion	25	19	14	11	10	8
County-Other	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	13	9	7	6	6	5
County-Other	C	Sulphur Indirect Reuse	6	4	3	3	3	3
County-Other	C	Trinity Aquifer | Denton County	1,079	1,079	1,079	1,079	1,079	1,079
County-Other	C	Trinity Indirect Reuse	11	10	10	9	8	7
County-Other	C	Woodbine Aquifer | Denton County	610	610	610	610	610	610
Manufacturing	D	Chapman/Cooper Lake/Reservoir Non-System Portion	3	2	1	1	0	0
Manufacturing	D	Fork Lake/Reservoir	17	16	15	15	15	15
Manufacturing	C	Lewisville Lake/Reservoir Non-System Portion	66	50	37	32	27	24
Manufacturing	C	North Texas MWD Lake/Reservoir System	16	14	13	12	12	11
Manufacturing	C	Ralph Hall Lake/Reservoir	10	7	6	5	5	5
Manufacturing	C	Ray Hubbard Lake/Reservoir	7	6	6	6	6	6
Manufacturing	C	Ray Roberts Lake/Reservoir Non-System Portion	237	183	138	120	105	94
Manufacturing	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	27	24	23	20	20	19
Manufacturing	C	Sulphur Indirect Reuse	5	4	3	3	3	3
Manufacturing	D	Tawakoni Lake/Reservoir	16	7	6	6	6	6
Manufacturing	C	Trinity Indirect Reuse	111	109	113	105	94	87
Manufacturing	C	TRWD Lake/Reservoir System	5	4	5	4	4	4
Mining	C	Local Surface Water Supply	764	764	764	764	764	764
Mining	C	Trinity Aquifer | Denton County	50	50	50	50	50	50

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Steam Electric Power	C	Direct Reuse	1,175	1,175	1,175	1,175	1,175	1,175
Livestock	C	Local Surface Water Supply	622	622	622	622	622	622
Livestock	C	Trinity Aquifer | Denton County	100	100	100	100	100	100
Livestock	C	Woodbine Aquifer | Denton County	118	118	118	118	118	118
Irrigation	C	Direct Reuse	1,962	1,962	1,962	1,962	1,962	1,962
Irrigation	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	933	747	704	691	671	644
Irrigation	C	Trinity Aquifer | Denton County	100	100	100	100	100	100
Irrigation	C	Woodbine Aquifer | Denton County	100	100	100	100	100	100
Ellis County WUG Total			**49,774**	**52,424**	**56,702**	**59,444**	**61,596**	**63,037**
Ellis County / Trinity Basin WUG Total			**49,774**	**52,424**	**56,702**	**59,444**	**61,596**	**63,037**
Avalon Water Supply & Sewer Service	C	Trinity Aquifer | Ellis County	149	149	149	149	149	149
Buena Vista-Bethel SUD	C	Bardwell Lake/Reservoir	614	604	580	567	553	537
Buena Vista-Bethel SUD	C	Trinity Aquifer | Ellis County	50	50	100	100	100	100
Buena Vista-Bethel SUD	C	Trinity Indirect Reuse	416	465	505	546	586	626
Buena Vista-Bethel SUD	C	TRWD Lake/Reservoir System	106	109	109	111	113	114
Buena Vista-Bethel SUD	C	Waxahachie Lake/Reservoir	432	433	425	422	418	412
East Garrett WSC	C	Bardwell Lake/Reservoir	248	284	313	339	360	378
East Garrett WSC	C	Trinity Indirect Reuse	43	85	141	201	268	296
East Garrett WSC	C	TRWD Lake/Reservoir System	0	0	0	0	4	38
Ennis	C	Bardwell Lake/Reservoir	3,178	2,997	2,823	2,679	2,538	2,400
Ennis	C	Trinity Indirect Reuse	543	895	1,269	1,593	1,893	1,879
Ennis	C	TRWD Lake/Reservoir System	0	0	0	0	29	244
Ferris	C	Joe Pool Lake/Reservoir	165	153	141	132	120	114

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Ferris	C	TRWD Lake/Reservoir System	279	274	281	278	282	285
Files Valley WSC*	G	Brazos River Authority Aquilla Lake/Reservoir System	338	385	445	498	522	522
Glenn Heights	D	Fork Lake/Reservoir	224	248	290	331	372	414
Glenn Heights	C	Ray Hubbard Lake/Reservoir	84	102	118	134	150	166
Glenn Heights	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	202	261	295	336	379	431
Glenn Heights	D	Tawakoni Lake/Reservoir	194	93	109	126	143	161
Glenn Heights	C	Trinity Aquifer | Dallas County	26	28	31	34	36	38
Glenn Heights	C	Trinity Indirect Reuse	92	120	156	217	276	311
Glenn Heights	C	Woodbine Aquifer | Dallas County	17	19	21	22	24	25
Hilco United Services*	G	Brazos River Authority Aquilla Lake/Reservoir System	4	4	4	4	4	4
Hilco United Services*	G	Trinity Aquifer | Hill County	1	1	1	1	1	1
Hilco United Services*	C	Woodbine Aquifer | Ellis County	26	31	26	31	26	26
Italy	C	Trinity Aquifer | Ellis County	79	78	78	77	76	75
Italy	C	Woodbine Aquifer | Ellis County	170	170	170	170	170	170
Mansfield*	C	TRWD Lake/Reservoir System	136	146	159	168	180	192
Midlothian	C	Joe Pool Lake/Reservoir	1,297	1,149	999	873	745	616
Midlothian	C	Trinity Indirect Reuse	3,206	3,206	3,206	3,206	3,206	3,206
Midlothian	C	TRWD Lake/Reservoir System	2,747	3,399	4,499	5,242	5,974	6,433
Mountain Peak SUD*	C	Joe Pool Lake/Reservoir	1,121	1,121	1,121	1,121	1,121	1,121
Mountain Peak SUD*	C	Trinity Aquifer | Ellis County	1,200	1,200	1,200	1,200	1,200	1,200
Nash Forreston WSC	C	Bardwell Lake/Reservoir	74	71	68	66	64	61
Nash Forreston WSC	C	Trinity Aquifer | Ellis County	100	100	100	100	100	100

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Nash Forreston WSC	C	Trinity Indirect Reuse	50	55	60	64	68	72
Nash Forreston WSC	C	TRWD Lake/Reservoir System	13	13	13	13	13	13
Nash Forreston WSC	C	Waxahachie Lake/Reservoir	52	51	50	49	48	47
Ovilla	D	Fork Lake/Reservoir	306	333	386	435	484	536
Ovilla	C	Ray Hubbard Lake/Reservoir	115	137	157	177	195	215
Ovilla	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	277	351	392	442	493	557
Ovilla	D	Tawakoni Lake/Reservoir	266	124	146	165	187	209
Ovilla	C	Trinity Indirect Reuse	125	162	207	285	360	403
Palmer	C	Joe Pool Lake/Reservoir	96	100	103	106	105	107
Palmer	C	TRWD Lake/Reservoir System	162	180	206	223	246	268
Red Oak	D	Fork Lake/Reservoir	460	490	558	624	689	758
Red Oak	C	Ray Hubbard Lake/Reservoir	172	201	228	253	278	304
Red Oak	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	414	514	567	632	701	788
Red Oak	D	Tawakoni Lake/Reservoir	400	183	210	238	265	295
Red Oak	C	Trinity Indirect Reuse	189	238	300	408	511	568
Rice Water Supply and Sewer Service	C	Bardwell Lake/Reservoir	25	22	20	18	16	15
Rice Water Supply and Sewer Service	C	Navarro Mills Lake/Reservoir	515	605	675	740	802	864
Rice Water Supply and Sewer Service	C	Richland Chambers Lake/Reservoir Non-System Portion	103	121	135	148	161	173
Rice Water Supply and Sewer Service	C	Trinity Indirect Reuse	4	7	9	11	12	11
Rice Water Supply and Sewer Service	C	TRWD Lake/Reservoir System	0	0	0	0	0	2
Rockett SUD	C	Joe Pool Lake/Reservoir	1,491	1,557	1,621	1,666	1,726	1,761
Rockett SUD	C	TRWD Lake/Reservoir System	2,520	2,783	3,233	3,490	4,048	4,399
Sardis Lone Elm WSC	C	Joe Pool Lake/Reservoir	390	342	297	266	228	204

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Sardis Lone Elm WSC	C	Trinity Aquifer | Ellis County	956	450	450	450	450	450
Sardis Lone Elm WSC	C	TRWD Lake/Reservoir System	3,438	3,092	2,905	2,669	2,501	2,356
Sardis Lone Elm WSC	C	Woodbine Aquifer | Ellis County	898	898	898	898	898	898
South Ellis County WSC	C	Trinity Aquifer | Ellis County	430	429	430	431	431	432
Waxahachie	C	Bardwell Lake/Reservoir	2,779	2,760	2,721	2,672	2,611	2,540
Waxahachie	C	Trinity Indirect Reuse	1,886	2,127	2,368	2,569	2,768	2,963
Waxahachie	C	TRWD Lake/Reservoir System	479	2,523	4,458	5,398	5,406	5,414
Waxahachie	C	Waxahachie Lake/Reservoir	1,955	1,981	1,995	1,987	1,972	1,951
County-Other	C	Bardwell Lake/Reservoir	133	116	101	90	79	70
County-Other	G	Brazos River Authority Aquilla Lake/Reservoir System	84	84	84	84	84	84
County-Other	D	Fork Lake/Reservoir	26	23	21	20	19	18
County-Other	C	Joe Pool Lake/Reservoir	70	61	53	47	41	36
County-Other	C	Ray Hubbard Lake/Reservoir	10	9	9	8	8	7
County-Other	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	23	24	21	20	19	19
County-Other	D	Tawakoni Lake/Reservoir	23	8	8	8	7	7
County-Other	C	Trinity Aquifer | Ellis County	530	530	530	530	530	530
County-Other	C	Trinity Indirect Reuse	59	64	70	76	80	75
County-Other	C	TRWD Lake/Reservoir System	126	116	112	104	102	100
County-Other	C	Waxahachie Lake/Reservoir	34	28	23	20	17	14
Manufacturing	C	Bardwell Lake/Reservoir	1,686	1,485	1,314	1,188	1,075	973
Manufacturing	C	Joe Pool Lake/Reservoir	566	587	609	631	655	679
Manufacturing	C	Trinity Aquifer | Ellis County	600	800	800	800	800	800
Manufacturing	C	Trinity Indirect Reuse	655	717	790	853	906	870
Manufacturing	C	TRWD Lake/Reservoir System	124	105	89	78	76	130

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Manufacturing	C	Waxahachie Lake/Reservoir	507	417	347	295	252	216
Manufacturing	C	Woodbine Aquifer | Ellis County	270	270	270	270	270	270
Steam Electric Power	C	Bardwell Lake/Reservoir	655	655	655	655	655	655
Steam Electric Power	C	Direct Reuse	919	919	919	919	919	919
Steam Electric Power	C	Joe Pool Lake/Reservoir	280	280	280	280	280	280
Livestock	C	Local Surface Water Supply	1,112	1,112	1,112	1,112	1,112	1,112
Livestock	C	Woodbine Aquifer | Ellis County	30	30	30	30	30	30
Irrigation	C	Trinity Aquifer | Ellis County	2,054	2,054	2,054	2,054	2,054	2,054
Irrigation	C	Trinity Run-of-River	1	1	1	1	1	1
Irrigation	C	Woodbine Aquifer | Ellis County	670	670	670	670	670	670
Fannin County WUG Total			**13,429**	**13,882**	**14,849**	**15,159**	**15,020**	**14,880**
Fannin County / Red Basin WUG Total			**10,667**	**11,060**	**12,016**	**12,313**	**12,161**	**12,008**
Arledge Ridge WSC	C	Woodbine Aquifer | Fannin County	169	182	189	195	201	208
Bois D Arc MUD*	C	Woodbine Aquifer | Fannin County	267	267	269	269	269	269
Bonham	C	Bonham Lake/Reservoir	1,944	2,362	3,353	3,694	3,582	3,470
Desert WSC	C	Woodbine Aquifer | Fannin County	1	2	1	2	1	2
Desert WSC	C	Woodbine Aquifer | Grayson County	2	1	2	1	2	2
Honey Grove	C	Woodbine Aquifer | Fannin County	57	59	59	59	59	59
Leonard	C	Woodbine Aquifer | Fannin County	3	3	3	3	3	3
Savoy	C	Woodbine Aquifer | Fannin County	94	93	93	92	91	89
Southwest Fannin County SUD	C	Woodbine Aquifer | Fannin County	383	382	381	380	379	378
Southwest Fannin County SUD	C	Woodbine Aquifer | Grayson County	158	159	158	157	158	157

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Trenton	C	Woodbine Aquifer | Fannin County	3	3	3	3	3	3
White Shed WSC	C	Woodbine Aquifer | Fannin County	245	256	263	267	272	277
Whitewright	C	Woodbine Aquifer | Grayson County	14	16	17	17	17	17
County-Other	C	Sulphur Run-of-River	32	31	31	31	31	31
County-Other	C	Trinity Aquifer | Fannin County	129	116	103	90	77	64
County-Other	C	Woodbine Aquifer | Fannin County	408	370	333	295	258	221
Manufacturing	C	Bonham Lake/Reservoir	5	5	5	5	5	5
Mining	C	Red Run-of-River	75	75	75	75	75	75
Livestock	C	Local Surface Water Supply	914	914	914	914	914	914
Livestock	C	Other Aquifer | Fannin County	8	8	8	8	8	8
Livestock	C	Trinity Aquifer | Fannin County	19	19	19	19	19	19
Livestock	C	Woodbine Aquifer | Fannin County	22	22	22	22	22	22
Irrigation	C	Other Aquifer | Fannin County	2,598	2,598	2,598	2,598	2,598	2,598
Irrigation	C	Red Run-of-River	2,050	2,050	2,050	2,050	2,050	2,050
Irrigation	C	Trinity Aquifer | Fannin County	893	893	893	893	893	893
Irrigation	C	Woodbine Aquifer | Fannin County	174	174	174	174	174	174
Fannin County / Sulphur Basin WUG Total			**1,325**	**1,309**	**1,283**	**1,261**	**1,237**	**1,208**
Arledge Ridge WSC	C	Woodbine Aquifer | Fannin County	61	66	68	70	73	75
Bois D Arc MUD*	C	Woodbine Aquifer | Fannin County	2	2	1	1	1	1
Delta County MUD*	D	Big Creek Lake/Reservoir	7	8	9	10	9	0
Delta County MUD*	D	Chapman/Cooper Lake/Reservoir Non-System Portion	0	0	0	0	0	0
Hickory Creek SUD*	D	Woodbine Aquifer | Hunt County	16	13	11	9	8	7

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Honey Grove	C	Woodbine Aquifer | Fannin County	221	225	225	225	225	225
Ladonia	C	Trinity Aquifer | Fannin County	120	120	120	120	120	120
Leonard	C	Woodbine Aquifer | Fannin County	1	1	1	1	1	1
North Hunt SUD*	D	Tawakoni Lake/Reservoir	16	13	11	9	7	7
North Hunt SUD*	D	Woodbine Aquifer | Hunt County	6	5	4	4	3	3
Wolfe City*	D	Turkey Creek Lake/Reservoir	10	10	10	10	10	10
Wolfe City*	C	Woodbine Aquifer | Fannin County	2	2	1	1	1	1
County-Other	C	Sulphur Run-of-River	13	14	14	14	14	14
County-Other	C	Trinity Aquifer | Fannin County	55	50	44	39	33	28
County-Other	C	Woodbine Aquifer | Fannin County	174	159	143	127	111	95
Livestock	C	Local Surface Water Supply	315	315	315	315	315	315
Livestock	C	Other Aquifer | Fannin County	2	2	2	2	2	2
Livestock	C	Trinity Aquifer | Fannin County	6	6	6	6	6	6
Livestock	C	Woodbine Aquifer | Fannin County	8	8	8	8	8	8
Irrigation	C	Other Aquifer | Fannin County	132	132	132	132	132	132
Irrigation	C	Red Run-of-River	104	104	104	104	104	104
Irrigation	C	Trinity Aquifer | Fannin County	45	45	45	45	45	45
Irrigation	C	Woodbine Aquifer | Fannin County	9	9	9	9	9	9
Fannin County / Trinity Basin WUG Total			**1,437**	**1,513**	**1,550**	**1,585**	**1,622**	**1,664**
Desert WSC	C	Woodbine Aquifer | Fannin County	82	84	83	82	82	81
Desert WSC	C	Woodbine Aquifer | Grayson County	43	58	67	76	84	94
Frognot WSC*		No water supply associated with WUG	0	0	0	0	0	0

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Hickory Creek SUD*	D	Woodbine Aquifer | Hunt County	4	3	3	3	2	2
Leonard	C	Woodbine Aquifer | Fannin County	316	316	316	316	316	316
Southwest Fannin County SUD	C	Woodbine Aquifer | Fannin County	90	91	91	90	90	90
Southwest Fannin County SUD	C	Woodbine Aquifer | Grayson County	38	38	38	38	37	37
Trenton	C	Woodbine Aquifer | Fannin County	141	151	157	161	166	171
West Leonard WSC*	C	Woodbine Aquifer | Fannin County	248	297	320	344	370	398
Livestock	C	Local Surface Water Supply	77	77	77	77	77	77
Livestock	C	Trinity Aquifer | Fannin County	2	2	2	2	2	2
Livestock	C	Woodbine Aquifer | Fannin County	2	2	2	2	2	2
Irrigation	C	Other Aquifer | Fannin County	179	179	179	179	179	179
Irrigation	C	Red Run-of-River	141	141	141	141	141	141
Irrigation	C	Trinity Aquifer | Fannin County	62	62	62	62	62	62
Irrigation	C	Woodbine Aquifer | Fannin County	12	12	12	12	12	12
Freestone County WUG Total			**16,552**	**18,845**	**18,544**	**18,239**	**17,930**	**17,619**
Freestone County / Brazos Basin WUG Total			**860**	**838**	**807**	**799**	**790**	**780**
Point Enterprise WSC*	C	Carrizo-Wilcox Aquifer | Freestone County	61	60	59	59	59	59
South Freestone County WSC	C	Carrizo-Wilcox Aquifer | Freestone County	63	65	69	67	65	62
Teague	C	Carrizo-Wilcox Aquifer | Freestone County	298	272	237	229	220	211
County-Other	C	Carrizo-Wilcox Aquifer | Freestone County	15	16	15	15	15	15
County-Other	C	Trinity Run-of-River	1	1	1	1	1	1
Manufacturing	C	Carrizo-Wilcox Aquifer | Freestone County	55	57	59	61	63	65
Livestock	C	Carrizo-Wilcox Aquifer | Freestone County	66	66	66	66	66	66

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Livestock	C	Local Surface Water Supply	179	179	179	179	179	179
Irrigation	C	Carrizo-Wilcox Aquifer | Freestone County	105	105	105	105	105	105
Irrigation	C	Trinity Run-of-River	17	17	17	17	17	17
Freestone County / Trinity Basin WUG Total			**15,692**	**18,007**	**17,737**	**17,440**	**17,140**	**16,839**
Butler WSC	C	Carrizo-Wilcox Aquifer | Freestone County	180	177	175	170	164	158
Fairfield	C	Carrizo-Wilcox Aquifer | Freestone County	1,007	973	944	883	822	762
Flo Community WSC*	H	Carrizo-Wilcox Aquifer | Leon County	18	18	18	18	18	18
Pleasant Grove WSC	C	Carrizo-Wilcox Aquifer | Freestone County	126	136	149	145	141	136
Point Enterprise WSC*	C	Carrizo-Wilcox Aquifer | Freestone County	55	55	54	54	54	54
South Freestone County WSC	C	Carrizo-Wilcox Aquifer | Freestone County	187	195	206	200	193	187
Southern Oaks Water Supply	C	Carrizo-Wilcox Aquifer | Freestone County	209	206	208	200	191	181
Teague	C	Carrizo-Wilcox Aquifer | Freestone County	277	252	220	212	204	195
Wortham	G	Carrizo-Wilcox Aquifer | Limestone County	157	157	157	157	157	157
County-Other	C	Carrizo-Wilcox Aquifer | Freestone County	925	924	925	925	925	925
County-Other	C	Trinity Run-of-River	40	40	40	40	40	40
Mining	C	Carrizo-Wilcox Aquifer | Freestone County	168	168	168	168	168	168
Mining	C	Local Surface Water Supply	32	32	32	32	32	32
Steam Electric Power	C	Carrizo-Wilcox Aquifer | Freestone County	70	70	70	70	70	70
Steam Electric Power	C	Fairfield Lake/Reservoir	6,395	6,163	5,930	5,725	5,520	5,315
Steam Electric Power	C	TRWD Lake/Reservoir System	4,127	6,722	6,722	6,722	6,722	6,722
Livestock	C	Carrizo-Wilcox Aquifer | Freestone County	321	321	321	321	321	321

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Livestock	C	Local Surface Water Supply	864	864	864	864	864	864
Irrigation	C	Carrizo-Wilcox Aquifer | Freestone County	460	460	460	460	460	460
Irrigation	C	Trinity Run-of-River	74	74	74	74	74	74
Grayson County WUG Total			**42,087**	**43,232**	**44,083**	**44,588**	**45,344**	**46,173**
Grayson County / Red Basin WUG Total			**32,698**	**32,482**	**32,786**	**33,056**	**33,350**	**33,775**
Bells	C	Woodbine Aquifer | Grayson County	107	107	107	107	107	107
Denison	C	Randell Lake/Reservoir	962	984	999	1,008	1,019	1,023
Denison	C	Texoma Lake/Reservoir Non-System Portion	5,653	5,740	5,792	5,834	5,875	5,888
Denison	C	Woodbine Aquifer | Grayson County	84	84	84	84	84	84
Dorchester	C	Trinity Aquifer | Grayson County	30	33	34	35	37	38
Dorchester	C	Woodbine Aquifer | Grayson County	76	76	77	77	76	77
Howe	C	North Texas MWD Lake/Reservoir System	33	42	46	50	54	61
Howe	D	Tawakoni Lake/Reservoir	1	2	2	2	2	2
Howe	C	Trinity Indirect Reuse	20	28	35	41	48	55
Howe	C	Woodbine Aquifer | Grayson County	106	106	106	106	106	106
Kentuckytown WSC	C	Woodbine Aquifer | Grayson County	172	187	201	213	227	241
Luella SUD	C	Woodbine Aquifer | Grayson County	241	240	240	240	240	240
Northwest Grayson County WCID 1	C	Trinity Aquifer | Grayson County	163	163	163	163	163	163
Oak Ridge South Gale WSC	C	Randell Lake/Reservoir	29	24	20	18	15	14
Oak Ridge South Gale WSC	C	Texoma Lake/Reservoir Non-System Portion	112	91	79	68	59	55
Pink Hill WSC	C	Trinity Aquifer | Grayson County	128	128	128	128	128	128
Pink Hill WSC	C	Woodbine Aquifer | Grayson County	118	144	166	186	208	233
Pottsboro	C	Randell Lake/Reservoir	60	53	48	45	41	40

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Pottsboro	C	Texoma Lake/Reservoir Non-System Portion	231	204	187	173	158	156
Pottsboro	C	Woodbine Aquifer | Grayson County	112	112	112	112	112	112
Red River Authority of Texas*	B	Red Indirect Reuse	0	0	0	0	0	0
Red River Authority of Texas*	B	Seymour Aquifer | Hardeman County	0	0	0	0	0	0
Red River Authority of Texas*	C	Texoma Lake/Reservoir Non-System Portion	254	304	347	390	436	486
Red River Authority of Texas*	B	Trinity Aquifer | Montague County	0	0	0	0	0	0
Sherman	C	Texoma Lake/Reservoir Non-System Portion	3,774	2,886	3,130	3,330	3,529	3,777
Sherman	C	Trinity Aquifer | Grayson County	4,738	4,738	4,738	4,738	4,738	4,738
Sherman	C	Woodbine Aquifer | Grayson County	996	996	996	996	996	996
Southmayd	C	Woodbine Aquifer | Grayson County	103	106	108	109	111	112
Southwest Fannin County SUD	C	Woodbine Aquifer | Fannin County	105	105	106	108	109	110
Southwest Fannin County SUD	C	Woodbine Aquifer | Grayson County	44	43	44	45	45	46
Starr WSC	C	Trinity Aquifer | Grayson County	230	249	266	281	298	316
Tom Bean	C	Woodbine Aquifer | Grayson County	38	38	38	38	38	38
Two Way SUD	C	Trinity Aquifer | Grayson County	404	404	405	404	405	405
Whitesboro	C	Trinity Aquifer | Grayson County	236	235	235	236	235	236
Whitewright	C	Woodbine Aquifer | Grayson County	354	353	352	352	352	352
County-Other	C	Randell Lake/Reservoir	49	39	33	29	25	23
County-Other	C	Texoma Lake/Reservoir Non-System Portion	866	668	694	725	782	809
County-Other	C	Trinity Aquifer | Grayson County	200	200	200	200	200	200
County-Other	C	Woodbine Aquifer | Grayson County	100	100	100	100	100	100

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Manufacturing	C	North Texas MWD Lake/Reservoir System	14	12	10	8	8	16
Manufacturing	C	Randell Lake/Reservoir	259	259	259	259	259	259
Manufacturing	C	Red Run-of-River	2	2	2	2	2	2
Manufacturing	D	Tawakoni Lake/Reservoir	1	1	1	1	1	1
Manufacturing	C	Texoma Lake/Reservoir Non-System Portion	2,995	3,698	3,599	3,518	3,426	3,328
Manufacturing	C	Trinity Indirect Reuse	9	9	8	8	7	13
Manufacturing	C	Woodbine Aquifer | Grayson County	259	259	259	259	259	359
Mining	C	Trinity Aquifer | Grayson County	295	295	295	295	295	295
Steam Electric Power	C	Texoma Lake/Reservoir Non-System Portion	4,573	4,573	4,573	4,573	4,573	4,573
Livestock	C	Local Surface Water Supply	652	652	652	652	652	652
Livestock	C	Woodbine Aquifer | Grayson County	19	19	19	19	19	19
Irrigation	C	Red Run-of-River	465	465	465	465	465	465
Irrigation	C	Trinity Aquifer | Grayson County	1,023	1,023	1,023	1,023	1,023	1,023
Irrigation	C	Woodbine Aquifer | Grayson County	1,203	1,203	1,203	1,203	1,203	1,203
Grayson County / Trinity Basin WUG Total			**9,389**	**10,750**	**11,297**	**11,532**	**11,994**	**12,398**
Collinsville	C	Trinity Aquifer | Grayson County	242	242	242	242	242	242
Desert WSC	C	Woodbine Aquifer | Fannin County	74	72	73	72	72	71
Desert WSC	C	Woodbine Aquifer | Grayson County	39	50	58	66	74	84
Dorchester	C	Trinity Aquifer | Grayson County	32	35	38	39	40	42
Dorchester	C	Woodbine Aquifer | Grayson County	84	84	83	83	84	83
Gunter	C	Trinity Aquifer | Grayson County	175	175	175	175	175	175
Howe	C	North Texas MWD Lake/Reservoir System	54	69	77	83	91	100
Howe	D	Tawakoni Lake/Reservoir	2	2	2	3	3	3
Howe	C	Trinity Indirect Reuse	32	48	58	69	79	91

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Howe	C	Woodbine Aquifer | Grayson County	176	176	176	176	176	176
Kentuckytown WSC	C	Woodbine Aquifer | Grayson County	173	189	203	215	229	244
Luella SUD	C	Woodbine Aquifer | Grayson County	34	34	34	34	34	34
Mustang SUD	D	Chapman/Cooper Lake/Reservoir Non-System Portion	26	29	26	26	26	26
Mustang SUD	C	Ralph Hall Lake/Reservoir	92	105	99	101	101	105
Mustang SUD	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	102	112	116	119	118	119
Mustang SUD	C	Sulphur Indirect Reuse	46	53	50	56	60	63
Mustang SUD	C	Texoma Lake/Reservoir Non-System Portion	3	2	2	2	2	2
Mustang SUD	C	Trinity Aquifer | Denton County	34	35	34	33	32	32
Mustang SUD	C	Trinity Indirect Reuse	11	12	11	12	13	13
Mustang SUD	C	Woodbine Aquifer | Denton County	2	2	1	1	1	1
Pilot Point	D	Chapman/Cooper Lake/Reservoir Non-System Portion	0	1	1	1	1	1
Pilot Point	C	Ralph Hall Lake/Reservoir	1	2	4	5	6	6
Pilot Point	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	1	2	5	6	7	6
Pilot Point	C	Sulphur Indirect Reuse	0	1	2	3	3	3
Pilot Point	C	Trinity Aquifer | Denton County	12	11	11	11	11	11
Pilot Point	C	Trinity Indirect Reuse	0	0	0	1	1	1
South Grayson SUD	C	Trinity Aquifer | Grayson County	304	292	279	268	258	250
South Grayson SUD	C	Woodbine Aquifer | Grayson County	81	77	74	71	68	66
Tioga	C	Trinity Aquifer | Grayson County	165	165	165	165	165	165
Tom Bean	C	Woodbine Aquifer | Grayson County	167	166	166	166	166	166

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Two Way SUD	C	Trinity Aquifer | Grayson County	279	279	279	279	279	279
Van Alstyne	C	North Texas MWD Lake/Reservoir System	359	708	1,024	1,130	1,373	1,525
Van Alstyne	D	Tawakoni Lake/Reservoir	13	25	36	39	47	52
Van Alstyne	C	Trinity Aquifer | Grayson County	300	300	300	300	300	300
Van Alstyne	C	Trinity Indirect Reuse	214	482	775	937	1,197	1,385
Van Alstyne	C	Woodbine Aquifer | Grayson County	208	208	208	208	208	208
Westminster SUD	C	Woodbine Aquifer | Collin County	6	7	8	9	10	11
Whitesboro	C	Trinity Aquifer | Grayson County	311	312	312	311	312	311
Whitewright	C	Woodbine Aquifer | Grayson County	45	44	44	44	44	44
Woodbine WSC	C	Trinity Aquifer | Cooke County	9	10	9	10	11	12
Manufacturing	C	North Texas MWD Lake/Reservoir System	13	11	10	8	8	14
Manufacturing	C	Randell Lake/Reservoir	241	241	241	241	241	241
Manufacturing	C	Red Run-of-River	1	1	1	1	1	1
Manufacturing	C	Texoma Lake/Reservoir Non-System Portion	2,783	3,437	3,344	3,269	3,184	3,092
Manufacturing	C	Trinity Indirect Reuse	8	7	6	7	6	13
Manufacturing	C	Woodbine Aquifer | Grayson County	241	241	241	241	241	335
Livestock	C	Local Surface Water Supply	423	423	423	423	423	423
Livestock	C	Woodbine Aquifer | Grayson County	12	12	12	12	12	12
Irrigation	C	Red Run-of-River	303	303	303	303	303	303
Irrigation	C	Trinity Aquifer | Grayson County	669	669	669	669	669	669
Irrigation	C	Woodbine Aquifer | Grayson County	787	787	787	787	787	787
Henderson County WUG Total			**12,705**	**13,159**	**13,848**	**14,110**	**14,350**	**14,434**
Henderson County / Trinity Basin WUG Total			**12,705**	**13,159**	**13,848**	**14,110**	**14,350**	**14,434**
Athens*	I	Athens Lake/Reservoir	568	1,134	1,790	2,132	2,420	2,539

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Athens*	C	Carrizo-Wilcox Aquifer | Henderson County	1,170	1,126	1,091	1,056	1,019	978
Athens*	I	Carrizo-Wilcox Aquifer | Henderson County	872	874	877	879	880	880
B B S WSC*	I	Carrizo-Wilcox Aquifer | Anderson County	2	2	2	2	2	2
Bethel Ash WSC*	C	Carrizo-Wilcox Aquifer | Henderson County	299	312	315	323	331	340
Brushy Creek WSC*		No water supply associated with WUG	0	0	0	0	0	0
Crescent Heights WSC	C	Carrizo-Wilcox Aquifer | Henderson County	150	154	171	174	177	180
Dogwood Estates Water	C	Carrizo-Wilcox Aquifer | Henderson County	175	170	181	183	185	187
East Cedar Creek FWSD	C	TRWD Lake/Reservoir System	1,155	1,155	1,155	1,155	1,155	1,155
Eustace	C	Carrizo-Wilcox Aquifer | Henderson County	322	351	344	356	368	382
Log Cabin	C	Carrizo-Wilcox Aquifer | Henderson County	114	114	119	121	123	125
Mabank*	C	TRWD Lake/Reservoir System	587	574	522	494	476	465
Malakoff	C	Carrizo-Wilcox Aquifer | Henderson County	100	100	100	100	100	100
Malakoff	C	TRWD Lake/Reservoir System	234	221	215	199	189	179
Trinidad	C	TRWD Lake/Reservoir System	128	113	110	102	97	93
Virginia Hill WSC*	C	Carrizo-Wilcox Aquifer | Henderson County	184	189	194	198	202	207
West Cedar Creek MUD	C	TRWD Lake/Reservoir System	899	744	766	701	652	612
County-Other*	C	Carrizo-Wilcox Aquifer | Henderson County	135	135	135	135	135	135
County-Other*	C	TRWD Lake/Reservoir System	154	236	308	347	384	417
Manufacturing	I	Athens Lake/Reservoir	20	17	14	12	11	10
Manufacturing	C	Carrizo-Wilcox Aquifer | Henderson County	400	400	400	400	400	400
Mining*	C	Carrizo-Wilcox Aquifer | Henderson County	15	16	17	19	22	26

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Steam Electric Power*	C	Trinidad Lake/Reservoir	3,050	3,050	3,050	3,050	3,050	3,050
Livestock*	C	Carrizo-Wilcox Aquifer | Henderson County	111	111	111	111	111	111
Livestock*	C	Local Surface Water Supply	345	345	345	345	345	345
Livestock*	I	Local Surface Water Supply	138	138	138	138	138	138
Livestock*	C	Queen City Aquifer | Henderson County	100	100	100	100	100	100
Irrigation*	C	Direct Reuse	32	32	32	32	32	32
Irrigation*	C	Trinity Run-of-River	1,246	1,246	1,246	1,246	1,246	1,246
Jack County WUG Total			**6,174**	**5,795**	**5,566**	**5,310**	**5,115**	**4,953**
Jack County / Brazos Basin WUG Total			**482**	**472**	**460**	**452**	**444**	**436**
County-Other	C	Cross Timbers Aquifer | Jack County	165	156	146	139	132	124
County-Other	G	Graham/Eddleman Lake/Reservoir	17	16	14	13	12	12
Mining	C	Cross Timbers Aquifer | Jack County	16	16	16	16	16	16
Livestock	C	Cross Timbers Aquifer | Jack County	29	29	29	29	29	29
Livestock	C	Local Surface Water Supply	232	232	232	232	232	232
Irrigation	C	Cross Timbers Aquifer | Jack County	16	16	16	16	16	16
Irrigation	C	Direct Reuse	7	7	7	7	7	7
Jack County / Trinity Basin WUG Total			**5,692**	**5,323**	**5,106**	**4,858**	**4,671**	**4,517**
Jacksboro	C	Lost Creek-Jacksboro Lake/Reservoir System	1,397	1,397	1,397	1,397	1,397	1,397
County-Other	C	Cross Timbers Aquifer | Jack County	275	263	245	235	223	210
County-Other	G	Graham/Eddleman Lake/Reservoir	29	26	24	21	19	19
Mining	C	Cross Timbers Aquifer | Jack County	19	19	19	19	19	19
Steam Electric Power	C	TRWD Lake/Reservoir System	3,270	2,916	2,719	2,484	2,311	2,170

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WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Livestock	C	Cross Timbers Aquifer | Jack County	71	71	71	71	71	71
Livestock	C	Local Surface Water Supply	570	570	570	570	570	570
Irrigation	C	Cross Timbers Aquifer | Jack County	42	42	43	44	44	44
Irrigation	C	Direct Reuse	19	19	18	17	17	17
Kaufman County WUG Total			**40,763**	**42,255**	**45,785**	**50,445**	**55,705**	**59,011**
Kaufman County / Sabine Basin WUG Total			**1,472**	**1,462**	**1,489**	**1,520**	**1,556**	**1,558**
Ables Springs SUD*	C	North Texas MWD Lake/Reservoir System	153	131	131	130	134	131
Ables Springs SUD*	D	Tawakoni Lake/Reservoir	5	5	4	4	4	4
Ables Springs SUD*	C	Trinity Indirect Reuse	91	91	100	108	117	120
MacBee SUD*	D	Tawakoni Lake/Reservoir	19	24	30	36	43	43
Poetry WSC*	D	Fork Lake/Reservoir	0	0	0	0	0	0
Poetry WSC*	C	North Texas MWD Lake/Reservoir System	28	31	36	44	54	54
Poetry WSC*	D	Tawakoni Lake/Reservoir	1	1	2	3	2	2
Poetry WSC*	C	Trinity Indirect Reuse	22	25	30	38	46	46
County-Other	C	North Texas MWD Lake/Reservoir System	5	5	7	7	7	8
County-Other	C	Trinity Indirect Reuse	4	4	4	6	6	7
County-Other	C	TRWD Lake/Reservoir System	1	1	1	1	0	0
Mining	C	Local Surface Water Supply	691	691	691	691	691	691
Mining	C	Nacatoch Aquifer | Kaufman County	351	351	351	351	351	351
Livestock	C	Local Surface Water Supply	97	97	97	97	97	97
Irrigation	C	Direct Reuse	3	4	4	4	4	4
Irrigation	C	TRWD Lake/Reservoir System	1	1	1	0	0	0
Kaufman County / Trinity Basin WUG Total			**39,291**	**40,793**	**44,296**	**48,925**	**54,149**	**57,453**
Ables Springs SUD*	C	North Texas MWD Lake/Reservoir System	69	61	60	59	61	60
Ables Springs SUD*	D	Tawakoni Lake/Reservoir	3	2	2	2	2	2
Ables Springs SUD*	C	Trinity Indirect Reuse	42	41	45	49	52	54

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WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Becker Jiba WSC	C	North Texas MWD Lake/Reservoir System	217	284	326	337	360	390
Becker Jiba WSC	D	Tawakoni Lake/Reservoir	8	10	11	12	12	13
Becker Jiba WSC	C	Trinity Indirect Reuse	129	193	247	281	313	355
College Mound SUD	C	North Texas MWD Lake/Reservoir System	494	462	493	596	691	783
College Mound SUD	D	Tawakoni Lake/Reservoir	17	16	18	20	24	27
College Mound SUD	C	Trinity Indirect Reuse	293	315	372	495	602	711
Combine WSC	D	Fork Lake/Reservoir	69	67	74	81	89	96
Combine WSC	C	Ray Hubbard Lake/Reservoir	25	27	30	33	36	39
Combine WSC	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	61	71	74	82	89	100
Combine WSC	D	Tawakoni Lake/Reservoir	59	25	28	31	34	37
Combine WSC	C	Trinity Indirect Reuse	28	33	39	53	66	72
Crandall	C	North Texas MWD Lake/Reservoir System	551	985	1,395	1,782	2,285	2,561
Crandall	D	Tawakoni Lake/Reservoir	20	35	49	61	78	87
Crandall	C	Trinity Indirect Reuse	330	670	1,056	1,478	1,991	2,327
Elmo WSC	C	North Texas MWD Lake/Reservoir System	105	102	103	107	113	122
Elmo WSC	D	Tawakoni Lake/Reservoir	4	4	4	4	4	4
Elmo WSC	C	Trinity Indirect Reuse	63	70	78	88	99	111
Forney	C	North Texas MWD Lake/Reservoir System	2,393	2,559	2,683	2,785	2,812	2,629
Forney	D	Tawakoni Lake/Reservoir	86	91	94	96	96	89
Forney	C	Trinity Indirect Reuse	1,427	1,742	2,030	2,312	2,451	2,390
Forney Lake WSC	C	North Texas MWD Lake/Reservoir System	1,703	1,631	1,438	1,374	1,273	1,213
Forney Lake WSC	D	Tawakoni Lake/Reservoir	61	58	50	47	43	41
Forney Lake WSC	C	Trinity Indirect Reuse	1,015	1,110	1,087	1,139	1,109	1,102
Gastonia Scurry SUD	C	North Texas MWD Lake/Reservoir System	795	774	880	1,301	1,749	2,007
Gastonia Scurry SUD	D	Tawakoni Lake/Reservoir	29	27	31	45	60	68
Gastonia Scurry SUD	C	Trinity Indirect Reuse	474	527	664	1,080	1,524	1,824
Heath	C	North Texas MWD Lake/Reservoir System	34	40	48	43	39	37
Heath	D	Tawakoni Lake/Reservoir	1	1	2	1	1	1

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WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Heath	C	Trinity Indirect Reuse	20	28	36	36	34	33
High Point WSC	C	North Texas MWD Lake/Reservoir System	950	1,220	1,500	1,790	2,096	2,440
High Point WSC	D	Tawakoni Lake/Reservoir	34	44	54	62	72	84
High Point WSC	C	Trinity Indirect Reuse	566	830	1,134	1,484	1,826	2,218
Kaufman	C	North Texas MWD Lake/Reservoir System	697	654	796	885	959	1,046
Kaufman	D	Tawakoni Lake/Reservoir	25	23	28	30	33	36
Kaufman	C	Trinity Indirect Reuse	415	445	602	734	837	951
Kaufman County Development District 1	C	North Texas MWD Lake/Reservoir System	504	445	584	796	1,071	1,158
Kaufman County Development District 1	D	Tawakoni Lake/Reservoir	18	16	20	27	37	39
Kaufman County Development District 1	C	Trinity Indirect Reuse	300	303	441	660	934	1,053
Kaufman County MUD 11	C	North Texas MWD Lake/Reservoir System	401	395	431	480	533	552
Kaufman County MUD 11	D	Tawakoni Lake/Reservoir	14	14	15	16	18	19
Kaufman County MUD 11	C	Trinity Indirect Reuse	238	270	326	397	465	502
Kaufman County MUD 14	C	North Texas MWD Lake/Reservoir System	953	795	673	592	538	503
Kaufman County MUD 14	D	Tawakoni Lake/Reservoir	34	28	24	20	18	17
Kaufman County MUD 14	C	Trinity Indirect Reuse	569	541	509	491	469	457
Kemp	C	TRWD Lake/Reservoir System	243	224	219	207	201	198
Mabank*	C	TRWD Lake/Reservoir System	1,070	960	904	827	773	731
MacBee SUD*	D	Tawakoni Lake/Reservoir	3	3	4	5	6	6
Markout WSC	C	North Texas MWD Lake/Reservoir System	188	180	172	165	161	159
Markout WSC	D	Tawakoni Lake/Reservoir	7	6	6	6	6	5
Markout WSC	C	Trinity Indirect Reuse	112	121	129	137	141	144
North Kaufman WSC	C	North Texas MWD Lake/Reservoir System	129	141	155	174	193	220

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WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
North Kaufman WSC	D	Tawakoni Lake/Reservoir	5	5	6	6	7	7
North Kaufman WSC	C	Trinity Indirect Reuse	77	97	119	145	170	200
Poetry WSC*	D	Fork Lake/Reservoir	0	0	0	0	0	0
Poetry WSC*	C	North Texas MWD Lake/Reservoir System	28	30	36	44	54	54
Poetry WSC*	D	Tawakoni Lake/Reservoir	2	2	2	2	3	3
Poetry WSC*	C	Trinity Indirect Reuse	22	25	30	36	45	45
Rose Hill SUD	C	North Texas MWD Lake/Reservoir System	228	228	228	232	232	239
Rose Hill SUD	D	Tawakoni Lake/Reservoir	8	8	8	8	8	8
Rose Hill SUD	C	Trinity Indirect Reuse	136	156	173	191	201	218
Talty SUD	C	North Texas MWD Lake/Reservoir System	1,082	1,005	1,255	1,584	1,985	2,181
Talty SUD	D	Tawakoni Lake/Reservoir	39	36	44	55	68	74
Talty SUD	C	Trinity Indirect Reuse	645	685	949	1,315	1,730	1,983
Terrell	C	North Texas MWD Lake/Reservoir System	2,294	2,181	2,265	2,315	2,489	2,610
Terrell	D	Tawakoni Lake/Reservoir	83	77	80	80	85	89
Terrell	C	Trinity Indirect Reuse	1,370	1,485	1,713	1,920	2,170	2,373
West Cedar Creek MUD	C	TRWD Lake/Reservoir System	43	46	53	58	64	71
County-Other	C	North Texas MWD Lake/Reservoir System	765	737	834	859	1,003	1,070
County-Other	D	Tawakoni Lake/Reservoir	28	27	30	30	35	37
County-Other	C	Trinity Indirect Reuse	456	502	633	714	876	974
County-Other	C	TRWD Lake/Reservoir System	86	76	72	65	61	58
Manufacturing	C	North Texas MWD Lake/Reservoir System	654	567	497	453	427	415
Manufacturing	D	Tawakoni Lake/Reservoir	24	20	17	16	15	14
Manufacturing	C	Trinity Indirect Reuse	391	387	378	377	373	376
Mining	C	Local Surface Water Supply	471	471	471	471	471	471
Mining	C	Nacatoch Aquifer | Kaufman County	239	239	239	239	239	239
Steam Electric Power	C	Direct Reuse	8,672	8,672	8,672	8,672	8,672	8,672

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Steam Electric Power	C	North Texas MWD Lake/Reservoir System	624	521	441	387	352	330
Steam Electric Power	D	Tawakoni Lake/Reservoir	22	18	15	13	12	11
Steam Electric Power	C	Trinity Indirect Reuse	372	355	334	322	307	298
Livestock	C	Local Surface Water Supply	1,525	1,525	1,525	1,525	1,525	1,525
Irrigation	C	Direct Reuse	538	641	662	662	662	662
Irrigation	C	Nacatoch Aquifer | Kaufman County	50	50	50	50	50	50
Irrigation	C	Ray Hubbard Lake/Reservoir	26	21	20	19	19	18
Irrigation	C	Trinity Run-of-River	83	83	83	83	83	83
Irrigation	C	TRWD Lake/Reservoir System	108	96	89	82	77	72
Navarro County WUG Total			**15,106**	**15,565**	**15,509**	**15,461**	**15,422**	**15,405**
Navarro County / Trinity Basin WUG Total			**15,106**	**15,565**	**15,509**	**15,461**	**15,422**	**15,405**
B And B WSC	C	Navarro Mills Lake/Reservoir	256	274	277	279	281	282
B And B WSC	C	Richland Chambers Lake/Reservoir Non-System Portion	51	55	56	56	56	57
Blooming Grove	C	Navarro Mills Lake/Reservoir	142	143	146	147	150	152
Blooming Grove	C	Richland Chambers Lake/Reservoir Non-System Portion	28	29	29	30	30	31
Brandon Irene WSC*	G	Brazos River Authority Aquilla Lake/Reservoir System	10	11	12	13	13	14
Brandon Irene WSC*	G	Trinity Aquifer | Hill County	23	24	25	26	27	27
Chatfield WSC	C	Navarro Mills Lake/Reservoir	287	299	297	295	292	289
Chatfield WSC	C	Richland Chambers Lake/Reservoir Non-System Portion	57	60	60	59	58	58
Corbet WSC	C	Navarro Mills Lake/Reservoir	176	183	182	180	177	176

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Corbet WSC	C	Richland Chambers Lake/Reservoir Non-System Portion	35	37	36	36	36	35
Corsicana	C	Navarro Mills Lake/Reservoir	5,220	5,443	5,394	5,322	5,247	5,181
Corsicana	C	Richland Chambers Lake/Reservoir Non-System Portion	1,045	1,086	1,075	1,064	1,044	1,034
Dawson	C	Navarro Mills Lake/Reservoir	112	110	105	98	92	87
Dawson	C	Richland Chambers Lake/Reservoir Non-System Portion	22	22	21	20	19	17
Kerens	C	Navarro Mills Lake/Reservoir	141	126	109	96	83	73
Kerens	C	Richland Chambers Lake/Reservoir Non-System Portion	28	25	22	19	17	15
M E N WSC	C	Navarro Mills Lake/Reservoir	427	479	500	518	536	554
M E N WSC	C	Richland Chambers Lake/Reservoir Non-System Portion	85	96	100	104	107	111
Navarro Mills WSC*	C	Navarro Mills Lake/Reservoir	238	249	246	246	241	240
Navarro Mills WSC*	C	Richland Chambers Lake/Reservoir Non-System Portion	48	50	50	49	49	48
Navarro Mills WSC*	C	Woodbine Aquifer | Navarro County	20	20	20	20	20	20
Pleasant Grove WSC	C	Carrizo-Wilcox Aquifer | Freestone County	12	12	13	14	14	15
Post Oak SUD*	C	Navarro Mills Lake/Reservoir	45	44	31	19	7	7
Post Oak SUD*	C	Richland Chambers Lake/Reservoir Non-System Portion	8	7	6	3	1	1
Rice Water Supply and Sewer Service	C	Bardwell Lake/Reservoir	18	16	15	13	12	11
Rice Water Supply and Sewer Service	C	Navarro Mills Lake/Reservoir	365	425	478	539	605	679

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Rice Water Supply and Sewer Service	C	Richland Chambers Lake/Reservoir Non-System Portion	73	85	96	108	121	136
Rice Water Supply and Sewer Service	C	Trinity Indirect Reuse	3	5	6	8	9	9
Rice Water Supply and Sewer Service	C	TRWD Lake/Reservoir System	0	0	0	0	0	1
South Ellis County WSC	C	Trinity Aquifer | Ellis County	20	21	20	19	19	18
Southern Oaks Water Supply	C	Carrizo-Wilcox Aquifer | Freestone County	50	53	51	59	68	78
County-Other	C	Navarro Mills Lake/Reservoir	536	544	548	559	588	589
County-Other	C	Other Aquifer | Navarro County	200	200	200	200	200	200
County-Other	C	Richland Chambers Lake/Reservoir Non-System Portion	107	109	110	112	118	118
County-Other	C	Trinity Run-of-River	252	252	252	252	252	252
County-Other	C	TRWD Lake/Reservoir System	130	116	108	99	92	86
Manufacturing	C	Navarro Mills Lake/Reservoir	1,357	1,373	1,337	1,310	1,277	1,247
Manufacturing	C	Richland Chambers Lake/Reservoir Non-System Portion	272	275	268	262	256	249
Manufacturing	C	TRWD Lake/Reservoir System	4	4	5	5	5	5
Mining	C	Carrizo-Wilcox Aquifer | Navarro County	6	6	6	6	6	6
Mining	C	Nacatoch Aquifer | Navarro County	970	970	970	970	970	970
Livestock	C	Carrizo-Wilcox Aquifer | Navarro County	10	10	10	10	10	10
Livestock	C	Local Surface Water Supply	1,603	1,603	1,603	1,603	1,603	1,603
Livestock	C	Nacatoch Aquifer | Navarro County	10	10	10	10	10	10
Livestock	C	Other Aquifer | Navarro County	69	69	69	69	69	69
Irrigation	C	Trinity Run-of-River	535	535	535	535	535	535

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Parker County WUG Total			**32,148**	**33,179**	**34,961**	**36,012**	**37,247**	**38,443**
Parker County / Brazos Basin WUG Total			**9,596**	**9,738**	**10,020**	**10,198**	**10,435**	**10,676**
Horseshoe Bend Water System	C	Trinity Aquifer | Parker County	179	201	255	335	456	597
Mineral Wells*	G	Palo Pinto Lake/Reservoir	265	252	239	225	212	194
North Rural WSC*	G	Palo Pinto Lake/Reservoir	104	104	104	104	103	103
Parker County SUD	G	Brazos River Authority Main Stem Lake/Reservoir System	1,100	1,100	1,100	1,100	1,100	1,100
Parker County SUD	G	Palo Pinto Lake/Reservoir	448	448	448	448	448	448
Parker County SUD	C	Trinity Aquifer | Parker County	36	36	36	36	36	36
Santo SUD*	G	Palo Pinto Lake/Reservoir	14	14	13	14	14	14
Sturdivant Progress WSC*		No water supply associated with WUG	0	0	0	0	0	0
Weatherford	C	TRWD Lake/Reservoir System	679	788	929	1,034	1,152	1,277
Weatherford	C	Weatherford Lake/Reservoir	419	412	405	398	392	386
County-Other	C	Cross Timbers Aquifer | Parker County	13	13	13	13	13	13
County-Other	G	Palo Pinto Lake/Reservoir	173	173	173	173	173	173
County-Other	C	Trinity Aquifer | Parker County	1,565	1,565	1,565	1,565	1,565	1,565
Manufacturing	G	Palo Pinto Lake/Reservoir	4	4	4	4	4	4
Manufacturing	C	Trinity Aquifer | Parker County	5	4	5	4	5	4
Manufacturing	C	TRWD Lake/Reservoir System	4	3	3	3	3	3
Mining	G	Brazos River Authority Main Stem Lake/Reservoir System	991	991	991	991	991	991
Mining	C	Local Surface Water Supply	1,230	1,231	1,230	1,230	1,231	1,231
Mining	C	Trinity Aquifer | Parker County	495	496	495	495	495	495
Livestock	C	Local Surface Water Supply	844	844	844	844	844	844
Livestock	C	Trinity Aquifer | Parker County	22	22	22	22	22	22

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Irrigation	G	Brazos River Authority Main Stem Lake/Reservoir System	392	392	392	392	392	392
Irrigation	C	Brazos Run-of-River	52	52	52	52	52	52
Irrigation	C	Direct Reuse	364	395	504	518	534	534
Irrigation	C	Trinity Aquifer | Parker County	145	145	145	145	145	145
Irrigation	C	Trinity Run-of-River	53	53	53	53	53	53
Parker County / Trinity Basin WUG Total			**22,552**	**23,441**	**24,941**	**25,814**	**26,812**	**27,767**
Aledo	C	Trinity Aquifer | Parker County	423	455	557	636	725	779
Aledo	C	TRWD Lake/Reservoir System	856	820	938	978	1,037	1,045
Annetta	C	Trinity Aquifer | Parker County	787	787	787	787	787	787
Azle	C	TRWD Lake/Reservoir System	344	381	421	463	500	534
Community WSC	C	TRWD Lake/Reservoir System	5	7	9	11	12	14
Fort Worth*	C	Trinity Indirect Reuse	101	134	139	147	155	164
Fort Worth*	C	TRWD Lake/Reservoir System	501	460	453	459	464	473
Hudson Oaks	C	Trinity Aquifer | Parker County	400	400	400	400	400	400
Hudson Oaks	C	TRWD Lake/Reservoir System	1,275	1,186	1,144	1,089	1,066	1,040
Reno (Parker)	C	Trinity Aquifer | Parker County	130	130	130	130	130	130
Reno (Parker)	C	Trinity Aquifer | Tarrant County	10	10	10	10	10	10
Reno (Parker)	C	TRWD Lake/Reservoir System	114	114	114	114	115	115
Springtown	C	Trinity Aquifer | Parker County	118	157	218	265	308	340
Springtown	C	TRWD Lake/Reservoir System	922	1,094	1,344	1,344	1,344	1,344
Walnut Creek SUD	C	TRWD Lake/Reservoir System	2,594	2,602	2,605	2,602	2,596	2,596
Weatherford	C	TRWD Lake/Reservoir System	3,955	4,585	5,406	6,018	6,703	7,431

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WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Weatherford	C	Weatherford Lake/Reservoir	2,441	2,398	2,355	2,319	2,281	2,244
Willow Park	C	Trinity Aquifer | Parker County	690	690	690	690	690	690
Willow Park	C	TRWD Lake/Reservoir System	466	604	765	892	1,028	1,171
County-Other	C	Cross Timbers Aquifer | Parker County	37	37	37	37	37	37
County-Other	G	Palo Pinto Lake/Reservoir	490	490	490	490	490	490
County-Other	C	Trinity Aquifer | Parker County	4,418	4,418	4,418	4,418	4,418	4,418
Manufacturing	G	Palo Pinto Lake/Reservoir	21	21	21	21	21	21
Manufacturing	C	Trinity Aquifer | Parker County	25	26	25	26	25	26
Manufacturing	C	TRWD Lake/Reservoir System	21	20	19	17	16	14
Mining	G	Brazos River Authority Main Stem Lake/Reservoir System	9	9	9	9	9	9
Mining	C	Local Surface Water Supply	12	11	12	12	11	11
Mining	C	Trinity Aquifer | Parker County	5	4	5	5	5	5
Livestock	C	Local Surface Water Supply	1,078	1,078	1,078	1,078	1,078	1,078
Livestock	C	Trinity Aquifer | Parker County	28	28	28	28	28	28
Irrigation	G	Brazos River Authority Main Stem Lake/Reservoir System	108	108	108	108	108	108
Irrigation	C	Brazos Run-of-River	14	14	14	14	14	14
Irrigation	C	Direct Reuse	99	108	137	142	146	146
Irrigation	C	Trinity Aquifer | Parker County	40	40	40	40	40	40
Irrigation	C	Trinity Run-of-River	15	15	15	15	15	15
Rockwall County WUG Total			**26,996**	**31,630**	**36,414**	**40,218**	**41,335**	**41,829**
Rockwall County / Sabine Basin WUG Total			**8,454**	**11,849**	**13,757**	**14,761**	**16,262**	**17,045**
Bear Creek SUD	C	North Texas MWD Lake/Reservoir System	58	80	77	74	74	69
Bear Creek SUD	D	Tawakoni Lake/Reservoir	2	3	3	3	3	2

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Bear Creek SUD	C	Trinity Indirect Reuse	35	54	58	62	65	63
Blackland WSC	C	North Texas MWD Lake/Reservoir System	224	194	178	180	177	178
Blackland WSC	D	Tawakoni Lake/Reservoir	8	7	6	6	6	6
Blackland WSC	C	Trinity Indirect Reuse	134	132	134	150	154	161
Cash SUD*	D	Fork Lake/Reservoir	0	0	0	0	496	546
Cash SUD*	C	North Texas MWD Lake/Reservoir System	97	120	141	141	149	163
Cash SUD*	D	Tawakoni Lake/Reservoir	150	145	205	363	38	38
Cash SUD*	C	Trinity Indirect Reuse	82	106	127	129	137	151
Fate	C	North Texas MWD Lake/Reservoir System	1,945	2,341	2,721	3,079	3,482	3,960
Fate	D	Tawakoni Lake/Reservoir	70	83	96	106	119	134
Fate	C	Trinity Indirect Reuse	1,162	1,593	2,059	2,557	3,035	3,599
Nevada SUD	C	North Texas MWD Lake/Reservoir System	12	12	16	30	50	62
Nevada SUD	D	Tawakoni Lake/Reservoir	0	0	1	1	2	2
Nevada SUD	C	Trinity Indirect Reuse	7	9	12	25	43	57
Royse City*	C	North Texas MWD Lake/Reservoir System	2,243	3,675	4,020	3,825	3,858	3,540
Royse City*	D	Tawakoni Lake/Reservoir	81	130	141	131	132	120
Royse City*	C	Trinity Indirect Reuse	1,338	2,500	3,041	3,174	3,363	3,217
County-Other	C	North Texas MWD Lake/Reservoir System	229	156	199	201	283	331
County-Other	D	Tawakoni Lake/Reservoir	8	6	7	7	10	11
County-Other	C	Trinity Indirect Reuse	135	106	149	167	248	301
Manufacturing	C	North Texas MWD Lake/Reservoir System	248	214	188	172	161	157
Manufacturing	D	Tawakoni Lake/Reservoir	9	8	7	6	6	5
Manufacturing	C	Trinity Indirect Reuse	147	145	141	142	141	142
Livestock	C	Local Surface Water Supply	30	30	30	30	30	30
Rockwall County / Trinity Basin WUG Total			**18,542**	**19,781**	**22,657**	**25,457**	**25,073**	**24,784**
Bear Creek SUD	C	North Texas MWD Lake/Reservoir System	68	94	91	87	87	81
Bear Creek SUD	D	Tawakoni Lake/Reservoir	2	3	3	3	3	3
Bear Creek SUD	C	Trinity Indirect Reuse	40	64	69	73	76	74

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Blackland WSC	C	North Texas MWD Lake/Reservoir System	285	247	226	230	224	226
Blackland WSC	D	Tawakoni Lake/Reservoir	10	9	8	8	8	8
Blackland WSC	C	Trinity Indirect Reuse	171	168	170	191	196	206
East Fork SUD	C	North Texas MWD Lake/Reservoir System	181	179	181	180	181	187
East Fork SUD	D	Tawakoni Lake/Reservoir	7	6	6	6	6	6
East Fork SUD	C	Trinity Indirect Reuse	107	122	137	150	158	170
Fate	C	North Texas MWD Lake/Reservoir System	515	619	720	815	922	1,048
Fate	D	Tawakoni Lake/Reservoir	19	22	25	28	31	36
Fate	C	Trinity Indirect Reuse	307	422	545	676	804	953
Heath	C	North Texas MWD Lake/Reservoir System	2,086	2,310	2,590	2,333	2,120	1,980
Heath	D	Tawakoni Lake/Reservoir	75	82	91	81	73	68
Heath	C	Trinity Indirect Reuse	1,245	1,570	1,960	1,937	1,847	1,801
High Point WSC	C	North Texas MWD Lake/Reservoir System	90	110	126	144	162	186
High Point WSC	D	Tawakoni Lake/Reservoir	4	4	4	4	6	6
High Point WSC	C	Trinity Indirect Reuse	54	74	96	120	142	170
Mount Zion WSC	C	North Texas MWD Lake/Reservoir System	224	192	169	154	144	140
Mount Zion WSC	D	Tawakoni Lake/Reservoir	8	7	6	5	5	5
Mount Zion WSC	C	Trinity Indirect Reuse	134	131	128	127	125	126
R C H WSC	C	North Texas MWD Lake/Reservoir System	655	621	670	787	872	993
R C H WSC	D	Tawakoni Lake/Reservoir	24	22	24	27	30	34
R C H WSC	C	Trinity Indirect Reuse	392	422	507	653	759	902
Rockwall	C	North Texas MWD Lake/Reservoir System	5,610	5,725	6,460	7,578	7,146	6,681
Rockwall	D	Tawakoni Lake/Reservoir	202	203	227	261	244	227
Rockwall	C	Trinity Indirect Reuse	3,346	3,898	4,886	6,289	6,230	6,072
Rowlett	C	North Texas MWD Lake/Reservoir System	984	841	858	814	780	729
Rowlett	D	Tawakoni Lake/Reservoir	35	30	30	28	27	25
Rowlett	C	Trinity Indirect Reuse	586	573	648	676	679	663
County-Other	C	North Texas MWD Lake/Reservoir System	2	2	2	2	3	4
County-Other	C	Trinity Indirect Reuse	2	2	2	2	2	3

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Livestock	C	Local Surface Water Supply	76	76	76	76	76	76
Irrigation	C	Direct Reuse	672	672	672	672	672	672
Irrigation	C	Ray Hubbard Lake/Reservoir	324	259	244	240	233	223
Tarrant County WUG Total			**420,476**	**413,214**	**411,253**	**410,041**	**402,926**	**396,208**
Tarrant County / Trinity Basin WUG Total			**420,476**	**413,214**	**411,253**	**410,041**	**402,926**	**396,208**
Arlington	C	TRWD Lake/Reservoir System	61,004	58,937	58,467	55,966	55,385	53,370
Azle	C	TRWD Lake/Reservoir System	1,336	1,299	1,259	1,217	1,180	1,146
Bedford	C	Trinity Aquifer | Tarrant County	445	445	445	445	445	445
Bedford	C	TRWD Lake/Reservoir System	8,051	7,730	7,331	7,052	6,563	6,161
Benbrook Water Authority	C	Trinity Aquifer | Tarrant County	615	663	712	762	811	860
Benbrook Water Authority	C	TRWD Lake/Reservoir System	4,799	4,615	4,622	4,514	4,471	4,451
Bethesda WSC*	G	Trinity Aquifer | Johnson County	4	4	4	4	3	3
Bethesda WSC*	C	Trinity Aquifer | Tarrant County	17	16	16	15	14	14
Bethesda WSC*	C	TRWD Lake/Reservoir System	27	37	37	37	37	35
Blue Mound	C	Trinity Aquifer | Tarrant County	195	214	231	244	258	275
Burleson*	C	TRWD Lake/Reservoir System	1,516	1,695	1,847	1,967	2,099	2,245
Colleyville	C	TRWD Lake/Reservoir System	9,340	8,316	7,755	7,085	6,593	6,189
Community WSC	C	TRWD Lake/Reservoir System	522	518	526	510	507	508
Crowley*	C	TRWD Lake/Reservoir System	2,775	2,928	3,090	3,087	3,143	3,230
Dalworthington Gardens	C	TRWD Lake/Reservoir System	763	686	643	587	548	515
Edgecliff	C	TRWD Lake/Reservoir System	551	490	457	417	388	364
Euless	C	Direct Reuse	368	368	368	368	368	368

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Euless	C	Trinity Aquifer | Tarrant County	2,106	2,106	2,106	2,106	2,106	2,106
Euless	C	TRWD Lake/Reservoir System	6,385	5,664	5,282	4,826	4,491	4,215
Everman	C	Trinity Aquifer | Tarrant County	544	540	540	540	540	540
Flower Mound	D	Chapman/Cooper Lake/Reservoir Non-System Portion	14	12	12	10	9	8
Flower Mound	D	Fork Lake/Reservoir	15	12	12	12	12	11
Flower Mound	C	Ralph Hall Lake/Reservoir	49	45	44	39	36	33
Flower Mound	C	Ray Hubbard Lake/Reservoir	6	5	5	5	5	4
Flower Mound	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	68	61	64	57	54	50
Flower Mound	C	Sulphur Indirect Reuse	24	23	22	21	22	20
Flower Mound	D	Tawakoni Lake/Reservoir	13	5	4	4	4	4
Flower Mound	C	Trinity Indirect Reuse	12	11	11	13	14	12
Forest Hill	C	TRWD Lake/Reservoir System	1,383	1,356	1,367	1,320	1,301	1,298
Fort Worth*	C	Trinity Indirect Reuse	29,276	39,878	41,148	42,491	43,864	45,289
Fort Worth*	C	TRWD Lake/Reservoir System	145,794	136,901	133,885	132,448	130,851	130,621
Grand Prairie	D	Fork Lake/Reservoir	1,925	1,761	1,879	1,842	1,824	1,734
Grand Prairie	C	Ray Hubbard Lake/Reservoir	720	722	766	746	735	695
Grand Prairie	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	1,735	1,853	1,907	1,866	1,858	1,802
Grand Prairie	D	Tawakoni Lake/Reservoir	1,671	657	708	701	702	675
Grand Prairie	C	Trinity Indirect Reuse	789	855	1,009	1,204	1,352	1,300
Grand Prairie	C	TRWD Lake/Reservoir System	4,175	4,075	4,017	3,734	3,562	3,344
Grapevine	C	Grapevine Lake/Reservoir Non-System Portion	1,919	1,886	1,852	1,818	1,784	1,750
Grapevine	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	2,566	2,011	1,931	1,920	1,889	1,834
Grapevine	C	Trinity Indirect Reuse	2,538	2,577	2,562	2,559	2,558	2,558

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Grapevine	C	TRWD Lake/Reservoir System	9,999	8,917	8,316	7,597	7,069	6,635
Haltom City	C	TRWD Lake/Reservoir System	4,625	4,100	3,823	3,493	3,250	3,050
Haslet	C	TRWD Lake/Reservoir System	2,231	2,716	3,337	3,318	3,364	3,159
Hurst	C	Trinity Aquifer | Tarrant County	378	378	378	378	378	378
Hurst	C	TRWD Lake/Reservoir System	5,888	5,216	4,874	4,460	4,159	3,905
Johnson County SUD*	G	Brazos River Authority Main Stem Lake/Reservoir System	188	187	187	187	187	187
Johnson County SUD*	C	TRWD Lake/Reservoir System	169	205	161	142	135	135
Keller	C	TRWD Lake/Reservoir System	11,150	10,083	9,403	8,590	7,993	7,503
Kennedale	C	Trinity Aquifer | Tarrant County	838	838	838	838	838	838
Kennedale	C	TRWD Lake/Reservoir System	864	1,273	1,746	2,132	2,494	2,780
Lake Worth	C	Trinity Aquifer | Tarrant County	170	170	170	170	170	170
Lake Worth	C	TRWD Lake/Reservoir System	944	929	928	895	876	859
Lakeside	C	Trinity Aquifer | Tarrant County	583	582	582	582	582	582
Mansfield*	C	TRWD Lake/Reservoir System	23,971	22,480	25,428	32,802	30,496	28,606
North Richland Hills	C	TRWD Lake/Reservoir System	12,079	11,472	10,876	10,063	9,537	8,953
Pantego	C	Trinity Aquifer | Tarrant County	673	671	671	671	671	671
Pelican Bay	C	Trinity Aquifer | Tarrant County	199	267	358	479	500	500
Reno (Parker)	C	Trinity Aquifer | Parker County	2	2	2	2	2	2
Reno (Parker)	C	TRWD Lake/Reservoir System	2	2	2	2	1	1
Richland Hills	C	Trinity Aquifer | Tarrant County	242	242	242	242	242	242

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Richland Hills	C	TRWD Lake/Reservoir System	893	895	913	961	999	1,048
River Oaks	C	TRWD Lake/Reservoir System	764	675	635	583	546	513
Saginaw	C	TRWD Lake/Reservoir System	3,444	3,358	3,159	2,906	2,730	2,563
Sansom Park	C	Trinity Aquifer | Tarrant County	646	711	767	811	860	914
Southlake	C	TRWD Lake/Reservoir System	12,467	12,475	12,438	12,018	11,794	11,611
Trophy Club MUD 1	C	Trinity Aquifer | Denton County	39	49	57	64	71	78
Trophy Club MUD 1	C	TRWD Lake/Reservoir System	326	374	414	427	447	471
Watauga	C	TRWD Lake/Reservoir System	2,367	2,100	1,958	1,789	1,664	1,562
Westlake	C	TRWD Lake/Reservoir System	3,050	3,564	3,980	4,130	4,345	4,596
Westover Hills	C	TRWD Lake/Reservoir System	796	708	663	607	569	533
Westworth Village	C	TRWD Lake/Reservoir System	383	349	345	332	324	316
White Settlement	C	Trinity Aquifer | Tarrant County	610	610	610	610	610	610
White Settlement	C	TRWD Lake/Reservoir System	1,552	1,566	1,608	1,575	1,573	1,589
County-Other	D	Fork Lake/Reservoir	350	300	282	267	253	240
County-Other	C	Ray Hubbard Lake/Reservoir	131	123	115	108	102	96
County-Other	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	316	316	286	270	257	250
County-Other	D	Tawakoni Lake/Reservoir	304	112	106	102	97	94
County-Other	C	Trinity Aquifer | Tarrant County	768	768	768	768	768	768
County-Other	C	Trinity Indirect Reuse	144	146	151	175	187	180
County-Other	C	TRWD Lake/Reservoir System	578	515	481	439	409	384
Manufacturing	D	Fork Lake/Reservoir	4	3	3	3	3	3
Manufacturing	C	Ray Hubbard Lake/Reservoir	1	1	1	1	1	1

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Manufacturing	C	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	4	4	3	3	2	3
Manufacturing	D	Tawakoni Lake/Reservoir	3	1	1	1	1	1
Manufacturing	C	Trinity Aquifer | Tarrant County	256	256	256	256	256	256
Manufacturing	C	Trinity Indirect Reuse	1	1	2	2	2	2
Manufacturing	C	TRWD Lake/Reservoir System	10,358	9,586	9,274	8,791	8,487	8,263
Mining	C	Local Surface Water Supply	1,280	1,280	1,280	1,280	1,280	1,280
Mining	C	Trinity Aquifer | Tarrant County	100	100	100	100	100	50
Mining	C	TRWD Lake/Reservoir System	86	76	71	65	60	56
Steam Electric Power	C	Trinity Run-of-River	1,079	1,079	1,079	1,079	1,079	1,079
Steam Electric Power	C	TRWD Lake/Reservoir System	68	2,451	2,285	2,088	1,943	1,824
Livestock	C	Local Surface Water Supply	442	442	442	442	442	442
Livestock	C	Trinity Aquifer | Tarrant County	50	50	50	50	50	50
Irrigation	C	Direct Reuse	2,478	2,478	2,478	2,478	2,478	2,478
Irrigation	C	Trinity Aquifer | Tarrant County	250	250	250	250	250	250
Irrigation	C	Trinity Indirect Reuse	1,121	1,121	1,121	1,121	1,121	1,121
Irrigation	C	Trinity Run-of-River	513	513	513	513	513	513
Irrigation	C	TRWD Lake/Reservoir System	954	851	793	724	673	632
Irrigation	C	Woodbine Aquifer | Tarrant County	250	250	250	250	250	250
Wise County WUG Total			**17,946**	**17,632**	**18,559**	**19,095**	**20,172**	**21,286**
Wise County / Trinity Basin WUG Total			**17,946**	**17,632**	**18,559**	**19,095**	**20,172**	**21,286**
Alvord	C	Trinity Aquifer | Wise County	228	228	228	228	228	228
Bolivar WSC	C	Trinity Aquifer | Cooke County	16	14	13	12	11	9
Bolivar WSC	C	Trinity Aquifer | Denton County	74	67	61	56	50	45

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Bolivar WSC	C	Trinity Aquifer | Wise County	9	8	7	7	6	5
Boyd	C	Trinity Aquifer | Wise County	153	153	153	153	153	153
Boyd	C	TRWD Lake/Reservoir System	70	70	70	70	70	70
Bridgeport	C	TRWD Lake/Reservoir System	855	778	741	686	646	616
Chico	C	Trinity Aquifer | Wise County	194	194	194	194	194	194
Chico	C	TRWD Lake/Reservoir System	175	156	145	133	124	116
Decatur	C	TRWD Lake/Reservoir System	2,505	2,648	3,332	3,752	4,419	4,809
Fort Worth*	C	Trinity Indirect Reuse	66	89	93	98	104	110
Fort Worth*	C	TRWD Lake/Reservoir System	331	304	301	306	311	318
Newark	C	Trinity Aquifer | Wise County	125	125	125	125	125	125
Rhome	C	Trinity Aquifer | Wise County	169	169	169	169	169	169
Rhome	C	TRWD Lake/Reservoir System	173	173	173	173	173	173
Runaway Bay	C	TRWD Lake/Reservoir System	586	641	733	821	937	1,079
Walnut Creek SUD	C	TRWD Lake/Reservoir System	460	452	449	452	458	458
West Wise SUD	C	TRWD Lake/Reservoir System	415	405	407	394	386	384
County-Other	C	Trinity Aquifer | Wise County	2,584	2,584	2,584	2,584	2,584	2,584
County-Other	C	TRWD Lake/Reservoir System	203	193	182	165	153	144
Manufacturing	C	Trinity Aquifer | Wise County	204	213	223	233	243	254
Manufacturing	C	TRWD Lake/Reservoir System	43	39	36	33	31	28
Mining	C	Trinity Aquifer | Wise County	2,155	2,155	2,155	2,155	2,155	2,155
Mining	C	Trinity Run-of-River	39	39	39	39	39	39

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DRAFT Region C Water User Group (WUG) Existing Water Supply

WUG Name	Source Region	Source Description	Existing Supply (acre-feet per year)					
			2030	2040	2050	2060	2070	2080
Mining	C	TRWD Lake/Reservoir System	772	680	1,050	1,352	1,838	2,571
Steam Electric Power	C	TRWD Lake/Reservoir System	2,509	2,237	2,086	1,906	1,773	1,665
Livestock	C	Local Surface Water Supply	1,117	1,117	1,117	1,117	1,117	1,117
Livestock	C	Trinity Aquifer | Wise County	298	298	298	298	298	298
Irrigation	C	Trinity Aquifer | Wise County	1,276	1,276	1,276	1,276	1,276	1,276
Irrigation	C	TRWD Lake/Reservoir System	142	127	119	108	101	94
Region C WUG Existing Water Supply Total			**1,741,387**	**1,681,542**	**1,692,026**	**1,707,693**	**1,700,789**	**1,688,038**

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TWDB DB27 Report #5 – WUG Identified Water Needs/Surpluses

DRAFT Region C Water User Group (WUG) Needs or Surplus

WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Needs/Surplus report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Surplus volumes are shown as positive values, and needs are shown as negative values in parentheses.

			Water Supply Needs or Surplus (acre-feet per year)					
WUG Name	**County**	**Basin**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Caddo Basin SUD*	Collin	Sabine	1	(604)	(1,048)	(1,210)	(1,344)	(1,400)
Josephine*	Collin	Sabine	(105)	(514)	(1,083)	(1,458)	(1,843)	(1,971)
Nevada SUD	Collin	Sabine	(16)	(48)	(103)	(261)	(530)	(762)
Royse City*	Collin	Sabine	(116)	(469)	(985)	(1,309)	(1,661)	(1,778)
County-Other	Collin	Sabine	27	(43)	(112)	(182)	(251)	(319)
Manufacturing	Collin	Sabine	(112)	(253)	(381)	(473)	(555)	(616)
Livestock	Collin	Sabine	10	10	10	10	10	10
Irrigation	Collin	Sabine	(1)	(1)	(1)	(1)	(1)	(1)
Allen	Collin	Trinity	(2,358)	(5,797)	(8,431)	(10,142)	(11,460)	(12,261)
Anna	Collin	Trinity	(567)	(2,079)	(3,867)	(5,571)	(7,308)	(8,399)
Bear Creek SUD	Collin	Trinity	(274)	(1,060)	(1,764)	(2,312)	(2,865)	(3,064)
Blue Ridge	Collin	Trinity	122	38	(59)	(156)	(263)	(381)
Caddo Basin SUD*	Collin	Trinity	(24)	(535)	(907)	(1,046)	(1,163)	(1,209)
Celina	Collin	Trinity	(5,782)	(12,094)	(25,598)	(25,872)	(34,971)	(45,615)
Copeville WSC	Collin	Trinity	(86)	(298)	(638)	(842)	(1,060)	(1,254)
Culleoka WSC	Collin	Trinity	(121)	(305)	(536)	(730)	(928)	(1,097)
Dallas	Collin	Trinity	(790)	(3,298)	(4,287)	(4,993)	(5,910)	(7,133)
Desert WSC	Collin	Trinity	0	0	0	0	0	0
East Fork SUD	Collin	Trinity	(192)	(499)	(863)	(1,180)	(1,473)	(1,740)
Fairview	Collin	Trinity	(428)	(1,191)	(2,128)	(2,559)	(2,891)	(3,094)
Farmersville	Collin	Trinity	(61)	(329)	(948)	(1,296)	(1,659)	(1,960)
Frisco	Collin	Trinity	(3,453)	(10,098)	(14,965)	(18,112)	(20,536)	(22,011)
Frognot WSC*	Collin	Trinity	0	0	0	0	0	0
Hickory Creek SUD*	Collin	Trinity	(10)	(14)	(19)	(24)	(30)	(37)
Lucas	Collin	Trinity	(298)	(748)	(1,114)	(1,340)	(1,515)	(1,621)
McKinney	Collin	Trinity	(4,509)	(11,720)	(21,818)	(33,015)	(37,304)	(39,915)
Melissa	Collin	Trinity	(861)	(2,833)	(5,553)	(8,310)	(10,276)	(10,995)
Milligan WSC	Collin	Trinity	(36)	(82)	(140)	(196)	(258)	(306)
Murphy	Collin	Trinity	(446)	(999)	(1,604)	(2,139)	(2,674)	(3,063)
Mustang SUD	Collin	Trinity	(47)	(231)	(456)	(651)	(814)	(960)
Nevada SUD	Collin	Trinity	(33)	(90)	(194)	(493)	(993)	(1,429)
North Collin SUD	Collin	Trinity	(99)	(247)	(439)	(634)	(835)	(1,041)
North Farmersville WSC	Collin	Trinity	(9)	(24)	(45)	(63)	(81)	(91)

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DRAFT Region C Water User Group (WUG) Needs or Surplus

			Water Supply Needs or Surplus (acre-feet per year)					
WUG Name	**County**	**Basin**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Parker	Collin	Trinity	(268)	(754)	(1,514)	(2,118)	(2,393)	(2,560)
Plano	Collin	Trinity	(6,495)	(14,348)	(22,981)	(28,475)	(32,174)	(34,426)
Princeton	Collin	Trinity	(469)	(2,191)	(4,320)	(5,803)	(7,136)	(7,636)
Prosper	Collin	Trinity	(935)	(2,383)	(4,148)	(5,197)	(6,213)	(6,648)
Richardson	Collin	Trinity	(1,436)	(3,325)	(5,238)	(6,491)	(7,334)	(7,847)
Sachse	Collin	Trinity	(160)	(374)	(617)	(777)	(903)	(967)
Seis Lagos UD	Collin	Trinity	(61)	(129)	(197)	(245)	(284)	(304)
South Grayson SUD	Collin	Trinity	(30)	(60)	(98)	(138)	(185)	(241)
Verona SUD	Collin	Trinity	0	0	0	0	0	0
West Leonard WSC*	Collin	Trinity	0	0	0	0	0	0
Westminster SUD	Collin	Trinity	0	0	0	0	0	0
Wylie	Collin	Trinity	(640)	(1,388)	(2,115)	(2,620)	(2,961)	(3,168)
Wylie Northeast SUD	Collin	Trinity	(171)	(463)	(829)	(1,068)	(1,240)	(1,326)
County-Other	Collin	Trinity	47	(71)	(192)	(311)	(430)	(550)
Manufacturing	Collin	Trinity	(653)	(1,491)	(2,250)	(2,808)	(3,290)	(3,650)
Steam Electric Power	Collin	Trinity	0	0	0	0	0	0
Livestock	Collin	Trinity	191	191	191	191	191	191
Irrigation	Collin	Trinity	(2)	(12)	(14)	(14)	(15)	(17)
Callisburg WSC	Cooke	Red	0	0	0	0	0	0
Gainesville	Cooke	Red	0	0	0	0	0	(1)
Lindsay	Cooke	Red	0	0	0	0	0	0
Two Way SUD	Cooke	Red	(1)	(1)	(2)	(2)	(3)	(3)
Woodbine WSC	Cooke	Red	0	(2)	(2)	(2)	(3)	(4)
County-Other	Cooke	Red	0	0	0	0	0	0
Livestock	Cooke	Red	0	0	0	0	0	0
Irrigation	Cooke	Red	0	0	0	0	0	(8)
Bolivar WSC	Cooke	Trinity	(63)	(104)	(134)	(158)	(184)	(206)
Callisburg WSC	Cooke	Trinity	0	0	0	0	0	0
Gainesville	Cooke	Trinity	0	0	0	0	0	(44)
Lake Kiowa SUD	Cooke	Trinity	0	0	0	0	0	0
Lindsay	Cooke	Trinity	0	0	0	0	0	0
Mountain Springs WSC	Cooke	Trinity	0	0	0	0	0	0
Muenster	Cooke	Trinity	0	0	0	0	0	0
Woodbine WSC	Cooke	Trinity	0	(21)	(32)	(36)	(39)	(43)
County-Other	Cooke	Trinity	0	0	0	0	0	0

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DRAFT Region C Water User Group (WUG) Needs or Surplus

			Water Supply Needs or Surplus (acre-feet per year)					
WUG Name	County	Basin	2030	2040	2050	2060	2070	2080
Manufacturing	Cooke	Trinity	0	0	0	0	0	(5)
Mining	Cooke	Trinity	0	0	0	0	0	0
Steam Electric Power	Cooke	Trinity	0	0	0	0	0	0
Livestock	Cooke	Trinity	0	0	0	0	0	0
Irrigation	Cooke	Trinity	0	0	0	0	0	(19)
Addison	Dallas	Trinity	(561)	(2,370)	(2,934)	(3,170)	(3,490)	(3,924)
AMC Creekside	Dallas	Trinity	0	0	0	0	0	0
Balch Springs	Dallas	Trinity	(192)	(768)	(980)	(1,117)	(1,312)	(1,492)
Carrollton	Dallas	Trinity	(663)	(2,655)	(3,289)	(3,643)	(4,105)	(4,464)
Cedar Hill	Dallas	Trinity	(698)	(2,858)	(3,648)	(4,125)	(4,744)	(5,560)
Cockrell Hill	Dallas	Trinity	(35)	(124)	(139)	(142)	(147)	(154)
Combine WSC	Dallas	Trinity	(4)	(19)	(23)	(25)	(27)	(29)
Coppell	Dallas	Trinity	(742)	(2,774)	(3,247)	(3,398)	(3,622)	(3,922)
Dallas	Dallas	Trinity	(18,651)	(72,539)	(87,931)	(95,411)	(105,270)	(118,382)
Desoto	Dallas	Trinity	(680)	(2,716)	(3,279)	(3,491)	(3,786)	(4,191)
Duncanville	Dallas	Trinity	(407)	(1,600)	(1,918)	(2,011)	(2,138)	(2,316)
East Fork SUD	Dallas	Trinity	(49)	(131)	(226)	(309)	(387)	(457)
Farmers Branch	Dallas	Trinity	(714)	(2,921)	(3,563)	(3,818)	(4,167)	(4,645)
Garland	Dallas	Trinity	(3,766)	(8,916)	(13,538)	(16,787)	(19,081)	(20,416)
Glenn Heights	Dallas	Trinity	(96)	(394)	(482)	(520)	(571)	(637)
Grand Prairie	Dallas	Trinity	(2,151)	(6,329)	(8,551)	(9,774)	(11,062)	(12,047)
Highland Park	Dallas	Trinity	0	0	0	0	0	0
Hutchins	Dallas	Trinity	(124)	(516)	(635)	(684)	(751)	(842)
Irving	Dallas	Trinity	(19,310)	(24,793)	(26,089)	(27,244)	(28,436)	(29,621)
Lancaster	Dallas	Trinity	(500)	(1,987)	(2,391)	(2,542)	(2,753)	(3,042)
Lancaster MUD 1	Dallas	Trinity	(19)	(86)	(111)	(123)	(138)	(159)
Lewisville	Dallas	Trinity	(12)	(45)	(56)	(59)	(64)	(69)
Mesquite	Dallas	Trinity	(2,220)	(5,068)	(8,180)	(11,082)	(14,091)	(16,507)
Ovilla	Dallas	Trinity	(6)	(29)	(38)	(43)	(49)	(58)
Richardson	Dallas	Trinity	(1,238)	(2,813)	(4,286)	(5,311)	(6,001)	(6,421)
Rockett SUD	Dallas	Trinity	(5)	(14)	(21)	(28)	(35)	(40)
Rowlett	Dallas	Trinity	(901)	(2,091)	(3,507)	(4,458)	(5,235)	(5,602)
Sachse	Dallas	Trinity	(324)	(763)	(1,258)	(1,580)	(1,835)	(1,962)
Seagoville	Dallas	Trinity	(149)	(612)	(748)	(802)	(877)	(979)
Sunnyvale	Dallas	Trinity	(277)	(768)	(1,326)	(1,663)	(1,908)	(2,042)
University Park	Dallas	Trinity	0	0	0	0	0	0
Wilmer	Dallas	Trinity	(55)	(231)	(287)	(310)	(341)	(384)

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DRAFT Region C Water User Group (WUG) Needs or Surplus

			Water Supply Needs or Surplus (acre-feet per year)					
WUG Name	**County**	**Basin**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
County-Other	Dallas	Trinity	281	(864)	(1,777)	(2,654)	(3,530)	(4,411)
Manufacturing	Dallas	Trinity	(1,221)	(4,599)	(5,778)	(6,428)	(7,178)	(8,058)
Mining	Dallas	Trinity	0	0	0	0	0	0
Steam Electric Power	Dallas	Trinity	6,344	6,158	6,115	6,102	6,082	6,055
Livestock	Dallas	Trinity	0	0	0	0	0	0
Irrigation	Dallas	Trinity	2,127	1,962	1,797	1,610	1,424	1,237
AMC Creekside	Denton	Trinity	0	0	0	0	0	0
Argyle WSC	Denton	Trinity	68	(689)	(1,680)	(2,571)	(3,280)	(3,830)
Aubrey	Denton	Trinity	(200)	(622)	(1,361)	(1,881)	(2,556)	(2,678)
Black Rock WSC	Denton	Trinity	94	(1)	(101)	(203)	(315)	(439)
Bolivar WSC	Denton	Trinity	(312)	(603)	(916)	(1,240)	(1,711)	(2,324)
Carrollton	Denton	Trinity	(1,041)	(4,171)	(5,157)	(5,706)	(6,420)	(6,984)
Celina	Denton	Trinity	(111)	(229)	(502)	(515)	(714)	(931)
Coppell	Denton	Trinity	(25)	(91)	(108)	(117)	(127)	(139)
Corinth	Denton	Trinity	0	(1,444)	(2,944)	(3,582)	(4,084)	(4,323)
Cross Timbers WSC	Denton	Trinity	(192)	(743)	(1,318)	(1,799)	(2,316)	(3,121)
Dallas	Denton	Trinity	(514)	(2,375)	(3,452)	(4,356)	(5,517)	(7,013)
Denton	Denton	Trinity	(5,107)	(13,743)	(23,283)	(32,638)	(44,251)	(55,614)
Denton County FWSD 10	Denton	Trinity	0	(318)	(519)	(615)	(673)	(712)
Denton County FWSD 11-C	Denton	Trinity	0	(156)	(354)	(535)	(727)	(934)
Denton County FWSD 1-A	Denton	Trinity	0	(1,470)	(2,573)	(3,083)	(3,442)	(3,644)
Denton County FWSD 7	Denton	Trinity	0	(925)	(1,515)	(1,792)	(1,962)	(2,077)
Flower Mound	Denton	Trinity	(2,537)	(9,926)	(16,666)	(18,950)	(20,426)	(21,503)
Fort Worth*	Denton	Trinity	(865)	(2,174)	(2,849)	(4,076)	(5,586)	(7,319)
Frisco	Denton	Trinity	(2,584)	(7,564)	(11,290)	(13,665)	(15,492)	(16,605)
Hackberry	Denton	Trinity	(132)	(411)	(782)	(1,167)	(1,599)	(2,042)
Highland Village	Denton	Trinity	0	(586)	(991)	(1,155)	(1,248)	(1,354)
Justin	Denton	Trinity	242	(217)	(812)	(1,506)	(2,440)	(3,738)
Krum	Denton	Trinity	0	(391)	(953)	(1,618)	(2,490)	(3,650)
Lake Cities Municipal Utility Authority	Denton	Trinity	0	(801)	(1,373)	(1,640)	(1,808)	(1,913)
Lewisville	Denton	Trinity	(1,295)	(4,878)	(6,090)	(6,453)	(6,993)	(7,576)
Little Elm	Denton	Trinity	(546)	(1,142)	(1,754)	(2,202)	(2,556)	(2,736)

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DRAFT Region C Water User Group (WUG) Needs or Surplus

			Water Supply Needs or Surplus (acre-feet per year)					
WUG Name	**County**	**Basin**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Mountain Springs WSC	Denton	Trinity	0	0	0	0	0	0
Mustang SUD	Denton	Trinity	(1,382)	(6,742)	(13,945)	(20,408)	(25,778)	(30,402)
Northlake	Denton	Trinity	(228)	(1,473)	(2,783)	(3,906)	(4,971)	(5,832)
Paloma Creek North	Denton	Trinity	0	(328)	(537)	(635)	(696)	(736)
Paloma Creek South	Denton	Trinity	0	(504)	(826)	(976)	(1,069)	(1,132)
Pilot Point	Denton	Trinity	(186)	(202)	(683)	(1,226)	(1,406)	(1,422)
Plano	Denton	Trinity	(195)	(444)	(710)	(881)	(995)	(1,065)
Ponder	Denton	Trinity	(134)	(274)	(404)	(605)	(815)	(1,036)
Prosper	Denton	Trinity	(387)	(1,037)	(1,795)	(2,239)	(2,663)	(2,849)
Providence Village WCID	Denton	Trinity	0	(248)	(407)	(481)	(527)	(558)
Roanoke	Denton	Trinity	(521)	(865)	(1,086)	(1,351)	(1,569)	(1,721)
Sanger	Denton	Trinity	0	(290)	(657)	(1,142)	(1,707)	(2,415)
Southlake	Denton	Trinity	(38)	(60)	(66)	(72)	(70)	(64)
Terra Southwest	Denton	Trinity	(3)	(20)	(49)	(83)	(123)	(167)
The Colony	Denton	Trinity	(475)	(1,906)	(2,653)	(2,875)	(3,108)	(3,356)
Trophy Club MUD 1	Denton	Trinity	(151)	(628)	(897)	(1,216)	(1,451)	(1,646)
County-Other	Denton	Trinity	(4,353)	(7,893)	(11,449)	(15,000)	(20,320)	(23,868)
Manufacturing	Denton	Trinity	(85)	(201)	(284)	(345)	(402)	(451)
Mining	Denton	Trinity	555	739	727	715	703	694
Steam Electric Power	Denton	Trinity	0	0	0	0	0	0
Livestock	Denton	Trinity	0	0	0	0	0	0
Irrigation	Denton	Trinity	122	(64)	(107)	(120)	(140)	(167)
Avalon Water Supply & Sewer Service	Ellis	Trinity	27	13	(2)	(17)	(34)	(53)
Buena Vista-Bethel SUD	Ellis	Trinity	(343)	(721)	(1,123)	(1,561)	(2,048)	(2,592)
East Garrett WSC	Ellis	Trinity	0	0	0	0	(3)	(28)
Ennis	Ellis	Trinity	0	0	0	0	(16)	(181)
Ferris	Ellis	Trinity	(30)	(74)	(109)	(149)	(189)	(227)
Files Valley WSC*	Ellis	Trinity	172	185	208	223	206	160
Glenn Heights	Ellis	Trinity	(57)	(278)	(408)	(512)	(644)	(821)
Hilco United Services*	Ellis	Trinity	(93)	(97)	(112)	(116)	(132)	(144)
Italy	Ellis	Trinity	0	0	0	0	0	0
Mansfield*	Ellis	Trinity	(21)	(42)	(62)	(88)	(113)	(143)

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DRAFT Region C Water User Group (WUG) Needs or Surplus

			Water Supply Needs or Surplus (acre-feet per year)					
WUG Name	**County**	**Basin**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Midlothian	Ellis	Trinity	(422)	(998)	(1,742)	(2,717)	(3,775)	(4,750)
Mountain Peak SUD*	Ellis	Trinity	(4,222)	(6,399)	(8,778)	(11,201)	(13,862)	(16,787)
Nash Forreston WSC	Ellis	Trinity	59	16	(33)	(82)	(136)	(196)
Ovilla	Ellis	Trinity	(80)	(377)	(540)	(673)	(842)	(1,063)
Palmer	Ellis	Trinity	(18)	(49)	(80)	(120)	(164)	(213)
Red Oak	Ellis	Trinity	(118)	(551)	(782)	(964)	(1,196)	(1,500)
Rice Water Supply and Sewer Service	Ellis	Trinity	0	(18)	(74)	(137)	(218)	(314)
Rockett SUD	Ellis	Trinity	(274)	(754)	(1,251)	(1,873)	(2,702)	(3,492)
Sardis Lone Elm WSC	Ellis	Trinity	148	(2,043)	(3,692)	(4,327)	(4,533)	(4,702)
South Ellis County WSC	Ellis	Trinity	(112)	(220)	(337)	(454)	(585)	(727)
Waxahachie	Ellis	Trinity	(1,555)	(1,272)	(1,331)	(2,481)	(4,807)	(7,399)
County-Other	Ellis	Trinity	346	240	155	76	0	(80)
Manufacturing	Ellis	Trinity	(1,252)	(1,488)	(1,867)	(2,196)	(2,511)	(2,849)
Steam Electric Power	Ellis	Trinity	0	0	0	0	0	0
Livestock	Ellis	Trinity	219	219	219	219	219	219
Irrigation	Ellis	Trinity	0	0	0	0	0	0
Arledge Ridge WSC	Fannin	Red	0	0	0	0	0	0
Bois D Arc MUD*	Fannin	Red	(72)	(87)	(95)	(101)	(108)	(116)
Bonham	Fannin	Red	0	0	0	(728)	(2,273)	(3,650)
Desert WSC	Fannin	Red	0	0	0	0	0	0
Honey Grove	Fannin	Red	0	0	0	0	0	0
Leonard	Fannin	Red	1	0	0	(1)	(1)	(2)
Savoy	Fannin	Red	0	0	0	0	0	0
Southwest Fannin County SUD	Fannin	Red	0	(53)	(83)	(110)	(138)	(170)
Trenton	Fannin	Red	0	0	0	0	0	0
White Shed WSC	Fannin	Red	0	0	0	0	0	0
Whitewright	Fannin	Red	0	(2)	(2)	(4)	(6)	(8)
County-Other	Fannin	Red	286	233	166	96	14	(54)
Manufacturing	Fannin	Red	0	0	0	0	0	0
Mining	Fannin	Red	(1,672)	(1,995)	(2,486)	(3,301)	(4,183)	(5,055)
Livestock	Fannin	Red	0	0	0	0	0	0
Irrigation	Fannin	Red	(4,275)	(4,275)	(4,275)	(4,275)	(4,275)	(4,275)

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DRAFT Region C Water User Group (WUG) Needs or Surplus

			Water Supply Needs or Surplus (acre-feet per year)					
WUG Name	**County**	**Basin**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Arledge Ridge WSC	Fannin	Sulphur	0	0	0	0	0	0
Bois D Arc MUD*	Fannin	Sulphur	0	0	(1)	(1)	(1)	(1)
Delta County MUD*	Fannin	Sulphur	0	0	0	0	(1)	(11)
Hickory Creek SUD*	Fannin	Sulphur	(17)	(18)	(19)	(19)	(18)	(18)
Honey Grove	Fannin	Sulphur	0	0	0	0	0	0
Ladonia	Fannin	Sulphur	3	(24)	(87)	(185)	(257)	(257)
Leonard	Fannin	Sulphur	(1)	(1)	(1)	(2)	(2)	(3)
North Hunt SUD*	Fannin	Sulphur	6	2	(2)	(4)	(7)	(8)
Wolfe City*	Fannin	Sulphur	7	8	8	9	9	9
County-Other	Fannin	Sulphur	121	101	72	42	7	(22)
Livestock	Fannin	Sulphur	0	0	0	0	0	0
Irrigation	Fannin	Sulphur	(217)	(217)	(217)	(217)	(217)	(217)
Desert WSC	Fannin	Trinity	0	0	0	0	0	0
Frognot WSC*	Fannin	Trinity	(3)	(4)	(5)	(5)	(6)	(7)
Hickory Creek SUD*	Fannin	Trinity	(7)	(7)	(7)	(6)	(7)	(6)
Leonard	Fannin	Trinity	(63)	(91)	(167)	(248)	(359)	(494)
Southwest Fannin County SUD	Fannin	Trinity	0	(12)	(19)	(26)	(33)	(40)
Trenton	Fannin	Trinity	0	0	0	0	0	0
West Leonard WSC*	Fannin	Trinity	0	0	0	0	0	0
Livestock	Fannin	Trinity	0	0	0	0	0	0
Irrigation	Fannin	Trinity	(295)	(295)	(295)	(295)	(295)	(295)
Point Enterprise WSC*	Freestone	Brazos	0	0	0	0	0	0
South Freestone County WSC	Freestone	Brazos	0	0	0	0	0	0
Teague	Freestone	Brazos	0	0	0	0	0	0
County-Other	Freestone	Brazos	11	12	12	12	12	12
Manufacturing	Freestone	Brazos	0	0	0	0	0	0
Livestock	Freestone	Brazos	0	0	0	0	0	0
Irrigation	Freestone	Brazos	17	17	17	17	17	17
Butler WSC	Freestone	Trinity	0	0	0	0	0	0
Fairfield	Freestone	Trinity	0	0	0	0	0	0
Flo Community WSC*	Freestone	Trinity	0	0	0	0	0	0
Pleasant Grove WSC	Freestone	Trinity	0	0	0	0	0	0

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DRAFT Region C Water User Group (WUG) Needs or Surplus

			Water Supply Needs or Surplus (acre-feet per year)					
WUG Name	County	Basin	2030	2040	2050	2060	2070	2080
Point Enterprise WSC*	Freestone	Trinity	0	0	0	0	0	0
South Freestone County WSC	Freestone	Trinity	0	0	0	0	0	0
Southern Oaks Water Supply	Freestone	Trinity	88	52	11	8	4	0
Teague	Freestone	Trinity	0	0	0	0	0	0
Wortham	Freestone	Trinity	29	41	57	61	65	68
County-Other	Freestone	Trinity	644	672	715	711	710	712
Mining	Freestone	Trinity	0	0	0	0	0	0
Steam Electric Power	Freestone	Trinity	5,761	(1,314)	(1,547)	(1,752)	(1,957)	(2,162)
Livestock	Freestone	Trinity	0	0	0	0	0	0
Irrigation	Freestone	Trinity	74	74	74	74	74	74
Bells	Grayson	Red	(72)	(87)	(100)	(112)	(125)	(139)
Denison	Grayson	Red	(5,161)	(8,269)	(11,094)	(13,970)	(17,734)	(19,835)
Dorchester	Grayson	Red	0	0	0	0	0	0
Howe	Grayson	Red	(5)	(18)	(35)	(52)	(70)	(88)
Kentuckytown WSC	Grayson	Red	0	0	0	0	0	0
Luella SUD	Grayson	Red	0	0	0	0	0	0
Northwest Grayson County WCID 1	Grayson	Red	(36)	(58)	(77)	(94)	(114)	(135)
Oak Ridge South Gale WSC	Grayson	Red	(95)	(124)	(145)	(159)	(173)	(180)
Pink Hill WSC	Grayson	Red	0	0	0	0	0	0
Pottsboro	Grayson	Red	(193)	(278)	(345)	(402)	(464)	(515)
Red River Authority of Texas*	Grayson	Red	0	0	0	0	0	0
Sherman	Grayson	Red	(1,766)	(3,605)	(4,182)	(4,702)	(5,297)	(5,923)
Southmayd	Grayson	Red	0	0	0	0	0	0
Southwest Fannin County SUD	Grayson	Red	0	(14)	(23)	(30)	(40)	(49)
Starr WSC	Grayson	Red	0	0	0	0	0	0
Tom Bean	Grayson	Red	0	0	0	0	0	0
Two Way SUD	Grayson	Red	(59)	(84)	(177)	(231)	(301)	(345)
Whitesboro	Grayson	Red	(10)	(31)	(49)	(65)	(83)	(102)
Whitewright	Grayson	Red	0	(32)	(59)	(83)	(109)	(138)
County-Other	Grayson	Red	(157)	(275)	(328)	(374)	(458)	(457)
Manufacturing	Grayson	Red	(2,239)	(5,656)	(5,812)	(5,951)	(6,103)	(6,148)
Mining	Grayson	Red	0	0	0	0	0	0

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DRAFT Region C Water User Group (WUG) Needs or Surplus

			Water Supply Needs or Surplus (acre-feet per year)					
WUG Name	County	Basin	2030	2040	2050	2060	2070	2080
Steam Electric Power	Grayson	Red	0	0	0	0	0	0
Livestock	Grayson	Red	0	0	0	0	0	0
Irrigation	Grayson	Red	0	0	0	0	0	0
Collinsville	Grayson	Trinity	(38)	(64)	(87)	(109)	(132)	(157)
Desert WSC	Grayson	Trinity	0	0	0	0	0	0
Dorchester	Grayson	Trinity	0	0	0	0	0	0
Gunter	Grayson	Trinity	(130)	(179)	(220)	(261)	(305)	(353)
Howe	Grayson	Trinity	(9)	(31)	(58)	(85)	(116)	(148)
Kentuckytown WSC	Grayson	Trinity	0	0	0	0	0	0
Luella SUD	Grayson	Trinity	0	0	0	0	0	0
Mustang SUD	Grayson	Trinity	(30)	(154)	(307)	(439)	(542)	(640)
Pilot Point	Grayson	Trinity	(3)	(3)	(14)	(25)	(29)	(30)
South Grayson SUD	Grayson	Trinity	(94)	(162)	(224)	(280)	(339)	(400)
Tioga	Grayson	Trinity	(71)	(114)	(151)	(188)	(227)	(270)
Tom Bean	Grayson	Trinity	0	0	0	0	0	0
Two Way SUD	Grayson	Trinity	(41)	(58)	(122)	(160)	(208)	(238)
Van Alstyne	Grayson	Trinity	148	(102)	(562)	(953)	(1,549)	(2,024)
Westminster SUD	Grayson	Trinity	0	0	0	0	0	0
Whitesboro	Grayson	Trinity	(14)	(41)	(65)	(87)	(110)	(136)
Whitewright	Grayson	Trinity	0	(4)	(8)	(11)	(14)	(17)
Woodbine WSC	Grayson	Trinity	0	0	(1)	(1)	(1)	(1)
Manufacturing	Grayson	Trinity	(2,083)	(5,258)	(5,404)	(5,533)	(5,673)	(5,714)
Livestock	Grayson	Trinity	0	0	0	0	0	0
Irrigation	Grayson	Trinity	0	0	0	0	0	0
Athens*	Henderson	Trinity	19	15	(350)	(889)	(1,662)	(2,210)
B B S WSC*	Henderson	Trinity	0	0	0	0	0	0
Bethel Ash WSC*	Henderson	Trinity	0	0	0	0	0	0
Brushy Creek WSC*	Henderson	Trinity	(104)	(107)	(109)	(112)	(114)	(117)
Crescent Heights WSC	Henderson	Trinity	0	0	0	0	0	0
Dogwood Estates Water	Henderson	Trinity	0	0	0	0	0	0
East Cedar Creek FWSD	Henderson	Trinity	(2,436)	(2,644)	(2,674)	(2,759)	(2,852)	(2,956)
Eustace	Henderson	Trinity	0	0	0	0	0	0
Log Cabin	Henderson	Trinity	0	0	0	0	0	0
Mabank*	Henderson	Trinity	(90)	(169)	(203)	(256)	(301)	(343)
Malakoff	Henderson	Trinity	64	36	16	(4)	(19)	(33)

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DRAFT Region C Water User Group (WUG) Needs or Surplus

			Water Supply Needs or Surplus (acre-feet per year)					
WUG Name	**County**	**Basin**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Trinidad	Henderson	Trinity	(31)	(48)	(57)	(68)	(76)	(84)
Virginia Hill WSC*	Henderson	Trinity	0	0	0	0	0	0
West Cedar Creek MUD	Henderson	Trinity	(138)	(219)	(297)	(363)	(412)	(451)
County-Other*	Henderson	Trinity	(148)	(150)	(165)	(213)	(263)	(317)
Manufacturing	Henderson	Trinity	(849)	(899)	(951)	(1,004)	(1,057)	(1,112)
Mining*	Henderson	Trinity	0	0	0	0	0	0
Steam Electric Power*	Henderson	Trinity	2,918	858	858	858	858	858
Livestock*	Henderson	Trinity	0	0	0	0	0	0
Irrigation*	Henderson	Trinity	535	535	535	535	535	535
County-Other	Jack	Brazos	0	0	0	0	0	0
Mining	Jack	Brazos	0	0	0	0	0	0
Livestock	Jack	Brazos	63	63	63	63	63	63
Irrigation	Jack	Brazos	0	0	0	0	0	0
Jacksboro	Jack	Trinity	607	621	597	561	494	466
County-Other	Jack	Trinity	0	0	0	0	0	0
Mining	Jack	Trinity	0	0	0	0	0	0
Steam Electric Power	Jack	Trinity	(502)	(856)	(1,053)	(1,288)	(1,461)	(1,602)
Livestock	Jack	Trinity	154	154	154	154	154	154
Irrigation	Jack	Trinity	0	0	0	0	0	0
Ables Springs SUD*	Kaufman	Sabine	(25)	(58)	(98)	(133)	(170)	(191)
MacBee SUD*	Kaufman	Sabine	(3)	(2)	(2)	(3)	(3)	(12)
Poetry WSC*	Kaufman	Sabine	(46)	(68)	(133)	(235)	(402)	(502)
County-Other	Kaufman	Sabine	(1)	(2)	(5)	(6)	(12)	(14)
Mining	Kaufman	Sabine	178	10	(207)	(551)	(954)	(1,416)
Livestock	Kaufman	Sabine	13	13	13	13	13	13
Irrigation	Kaufman	Sabine	2	3	3	2	2	2
Ables Springs SUD*	Kaufman	Trinity	(11)	(27)	(45)	(61)	(79)	(88)
Becker Jiba WSC	Kaufman	Trinity	(36)	(124)	(244)	(348)	(460)	(571)
College Mound SUD	Kaufman	Trinity	(487)	(642)	(1,058)	(1,891)	(2,778)	(3,666)
Combine WSC	Kaufman	Trinity	(18)	(75)	(103)	(124)	(153)	(191)
Crandall	Kaufman	Trinity	(91)	(431)	(1,048)	(1,832)	(2,923)	(3,750)
Elmo WSC	Kaufman	Trinity	(18)	(45)	(78)	(110)	(144)	(179)
Forney	Kaufman	Trinity	(398)	(1,119)	(2,016)	(2,863)	(3,597)	(3,848)
Forney Lake WSC	Kaufman	Trinity	(282)	(713)	(1,080)	(1,412)	(1,627)	(1,775)
Gastonia Scurry SUD	Kaufman	Trinity	(132)	(338)	(660)	(1,337)	(2,237)	(2,939)

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DRAFT Region C Water User Group (WUG) Needs or Surplus

			Water Supply Needs or Surplus (acre-feet per year)					
WUG Name	**County**	**Basin**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Heath	Kaufman	Trinity	(7)	(18)	(36)	(45)	(51)	(54)
High Point WSC	Kaufman	Trinity	(157)	(533)	(1,126)	(1,841)	(2,679)	(3,574)
Kaufman	Kaufman	Trinity	(115)	(286)	(598)	(909)	(1,228)	(1,532)
Kaufman County Development District 1	Kaufman	Trinity	(83)	(195)	(439)	(817)	(1,370)	(1,695)
Kaufman County MUD 11	Kaufman	Trinity	(67)	(174)	(324)	(492)	(682)	(809)
Kaufman County MUD 14	Kaufman	Trinity	(158)	(348)	(506)	(609)	(687)	(735)
Kemp	Kaufman	Trinity	(38)	(66)	(84)	(108)	(128)	(147)
Mabank*	Kaufman	Trinity	(164)	(282)	(350)	(428)	(488)	(540)
MacBee SUD*	Kaufman	Trinity	(7)	(10)	(12)	(14)	(17)	(20)
Markout WSC	Kaufman	Trinity	(197)	(290)	(526)	(892)	(1,294)	(1,829)
North Kaufman WSC	Kaufman	Trinity	(21)	(62)	(118)	(179)	(250)	(322)
Poetry WSC*	Kaufman	Trinity	(68)	(97)	(181)	(315)	(522)	(645)
Rose Hill SUD	Kaufman	Trinity	(38)	(100)	(172)	(237)	(297)	(350)
Talty SUD	Kaufman	Trinity	(180)	(440)	(944)	(1,629)	(2,538)	(3,195)
Terrell	Kaufman	Trinity	(381)	(955)	(1,702)	(2,380)	(3,185)	(3,821)
West Cedar Creek MUD	Kaufman	Trinity	(6)	(13)	(20)	(30)	(40)	(52)
County-Other	Kaufman	Trinity	(114)	(331)	(668)	(951)	(1,391)	(1,701)
Manufacturing	Kaufman	Trinity	(108)	(247)	(374)	(467)	(547)	(607)
Mining	Kaufman	Trinity	121	6	(142)	(376)	(651)	(966)
Steam Electric Power	Kaufman	Trinity	(103)	(227)	(331)	(399)	(450)	(482)
Livestock	Kaufman	Trinity	196	196	196	196	196	196
Irrigation	Kaufman	Trinity	454	540	553	545	540	534
B And B WSC	Navarro	Trinity	0	(8)	(30)	(52)	(76)	(103)
Blooming Grove	Navarro	Trinity	0	(4)	(16)	(27)	(41)	(56)
Brandon Irene WSC*	Navarro	Trinity	12	10	10	9	7	4
Chatfield WSC	Navarro	Trinity	0	(9)	(32)	(54)	(79)	(105)
Corbet WSC	Navarro	Trinity	0	(5)	(20)	(33)	(48)	(64)
Corsicana	Navarro	Trinity	0	(159)	(584)	(982)	(1,425)	(1,883)
Dawson	Navarro	Trinity	0	(3)	(11)	(18)	(25)	(31)
Kerens	Navarro	Trinity	0	(4)	(12)	(18)	(23)	(26)
M E N WSC	Navarro	Trinity	0	(14)	(54)	(96)	(146)	(201)
Navarro Mills WSC*	Navarro	Trinity	18	11	(9)	(26)	(47)	(68)

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DRAFT Region C Water User Group (WUG) Needs or Surplus

			Water Supply Needs or Surplus (acre-feet per year)					
WUG Name	**County**	**Basin**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Pleasant Grove WSC	Navarro	Trinity	0	0	0	0	0	0
Post Oak SUD*	Navarro	Trinity	(60)	(55)	(63)	(69)	(74)	(65)
Rice Water Supply and Sewer Service	Navarro	Trinity	0	(12)	(51)	(99)	(165)	(248)
South Ellis County WSC	Navarro	Trinity	(5)	(10)	(15)	(20)	(25)	(31)
Southern Oaks Water Supply	Navarro	Trinity	21	13	3	2	1	0
County-Other	Navarro	Trinity	469	434	375	312	231	161
Manufacturing	Navarro	Trinity	(1)	(42)	(147)	(245)	(351)	(458)
Mining	Navarro	Trinity	(772)	(939)	(1,149)	(1,376)	(1,747)	(2,317)
Livestock	Navarro	Trinity	180	180	180	180	180	180
Irrigation	Navarro	Trinity	88	88	88	88	88	88
Horseshoe Bend Water System	Parker	Brazos	0	0	0	0	0	0
Mineral Wells*	Parker	Brazos	(88)	(120)	(152)	(185)	(198)	(216)
North Rural WSC*	Parker	Brazos	(45)	(75)	(110)	(148)	(189)	(234)
Parker County SUD	Parker	Brazos	647	313	(138)	(732)	(1,583)	(2,701)
Santo SUD*	Parker	Brazos	(7)	(11)	(16)	(20)	(26)	(32)
Sturdivant Progress WSC*	Parker	Brazos	(2)	(2)	(2)	(2)	(1)	(1)
Weatherford	Parker	Brazos	(105)	(231)	(359)	(536)	(727)	(942)
County-Other	Parker	Brazos	(543)	(1,900)	(3,638)	(5,602)	(8,049)	(9,924)
Manufacturing	Parker	Brazos	0	(2)	(2)	(3)	(3)	(4)
Mining	Parker	Brazos	1,664	1,602	1,344	1,020	676	328
Livestock	Parker	Brazos	206	206	206	206	206	206
Irrigation	Parker	Brazos	115	146	255	269	285	285
Aledo	Parker	Trinity	(131)	(240)	(363)	(507)	(655)	(772)
Annetta	Parker	Trinity	342	256	168	80	(8)	(96)
Azle	Parker	Trinity	(168)	(268)	(384)	(509)	(655)	(823)
Community WSC	Parker	Trinity	(1)	(2)	(3)	(5)	(8)	(10)
Fort Worth*	Parker	Trinity	(123)	(238)	(262)	(329)	(405)	(486)
Hudson Oaks	Parker	Trinity	(197)	(348)	(443)	(564)	(674)	(768)
Reno (Parker)	Parker	Trinity	(28)	(89)	(159)	(232)	(311)	(400)
Springtown	Parker	Trinity	(142)	(321)	(615)	(1,044)	(1,427)	(1,717)
Walnut Creek SUD	Parker	Trinity	(634)	(909)	(2,275)	(4,704)	(7,570)	(10,417)
Weatherford	Parker	Trinity	(606)	(1,346)	(2,094)	(3,119)	(4,236)	(5,487)
Willow Park	Parker	Trinity	(72)	(177)	(295)	(462)	(650)	(863)

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DRAFT Region C Water User Group (WUG) Needs or Surplus

			Water Supply Needs or Surplus (acre-feet per year)					
WUG Name	**County**	**Basin**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
County-Other	Parker	Trinity	(1,530)	(5,361)	(10,268)	(15,810)	(22,718)	(28,008)
Manufacturing	Parker	Trinity	(5)	(8)	(12)	(16)	(20)	(25)
Mining	Parker	Trinity	16	14	13	10	6	3
Livestock	Parker	Trinity	263	263	263	263	263	263
Irrigation	Parker	Trinity	31	40	69	74	78	78
Bear Creek SUD	Rockwall	Sabine	(9)	(35)	(58)	(75)	(93)	(101)
Blackland WSC	Rockwall	Sabine	(37)	(85)	(133)	(187)	(226)	(261)
Cash SUD*	Rockwall	Sabine	(47)	(125)	(171)	(167)	(151)	(261)
Fate	Rockwall	Sabine	(323)	(1,025)	(2,044)	(3,165)	(4,454)	(5,797)
Nevada SUD	Rockwall	Sabine	(3)	(6)	(12)	(32)	(63)	(91)
Royse City*	Rockwall	Sabine	(373)	(1,607)	(3,021)	(3,933)	(4,936)	(5,183)
County-Other	Rockwall	Sabine	(39)	(70)	(149)	(207)	(361)	(484)
Manufacturing	Rockwall	Sabine	(41)	(94)	(142)	(176)	(206)	(229)
Livestock	Rockwall	Sabine	0	0	0	0	0	0
Bear Creek SUD	Rockwall	Trinity	(13)	(42)	(69)	(90)	(111)	(119)
Blackland WSC	Rockwall	Trinity	(47)	(108)	(169)	(236)	(288)	(330)
East Fork SUD	Rockwall	Trinity	(30)	(79)	(135)	(186)	(231)	(274)
Fate	Rockwall	Trinity	(85)	(271)	(542)	(839)	(1,178)	(1,534)
Heath	Rockwall	Trinity	(345)	(1,009)	(1,946)	(2,398)	(2,709)	(2,900)
High Point WSC	Rockwall	Trinity	(15)	(47)	(97)	(148)	(209)	(270)
Mount Zion WSC	Rockwall	Trinity	(37)	(85)	(127)	(157)	(184)	(205)
R C H WSC	Rockwall	Trinity	(108)	(271)	(504)	(808)	(1,114)	(1,455)
Rockwall	Rockwall	Trinity	(931)	(2,506)	(4,854)	(7,791)	(9,142)	(9,782)
Rowlett	Rockwall	Trinity	(164)	(367)	(645)	(836)	(997)	(1,066)
County-Other	Rockwall	Trinity	0	0	(2)	(2)	(5)	(5)
Livestock	Rockwall	Trinity	0	0	0	0	0	0
Irrigation	Rockwall	Trinity	795	730	715	711	704	694
Arlington	Tarrant	Trinity	(13,645)	(21,996)	(27,756)	(34,523)	(40,944)	(45,822)
Azle	Tarrant	Trinity	(649)	(912)	(1,146)	(1,340)	(1,545)	(1,763)
Bedford	Tarrant	Trinity	(1,237)	(2,270)	(2,838)	(3,656)	(4,145)	(4,547)
Benbrook Water Authority	Tarrant	Trinity	(738)	(1,355)	(1,790)	(2,339)	(2,824)	(3,286)
Bethesda WSC*	Tarrant	Trinity	(24)	(22)	(29)	(34)	(42)	(50)
Blue Mound	Tarrant	Trinity	0	0	0	0	0	0
Burleson*	Tarrant	Trinity	0	0	0	0	0	0
Colleyville	Tarrant	Trinity	(1,435)	(2,442)	(3,003)	(3,673)	(4,165)	(4,569)
Community WSC	Tarrant	Trinity	(80)	(153)	(204)	(266)	(321)	(376)
Crowley*	Tarrant	Trinity	(427)	(860)	(1,196)	(1,601)	(1,987)	(2,385)

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DRAFT Region C Water User Group (WUG) Needs or Surplus

			Water Supply Needs or Surplus (acre-feet per year)					
WUG Name	**County**	**Basin**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Dalworthington Gardens	Tarrant	Trinity	(138)	(222)	(272)	(328)	(369)	(404)
Edgecliff	Tarrant	Trinity	(85)	(144)	(177)	(217)	(246)	(270)
Euless	Tarrant	Trinity	(981)	(1,663)	(2,045)	(2,501)	(2,836)	(3,112)
Everman	Tarrant	Trinity	0	0	0	0	0	0
Flower Mound	Tarrant	Trinity	(24)	(89)	(153)	(181)	(205)	(219)
Forest Hill	Tarrant	Trinity	(212)	(399)	(528)	(684)	(823)	(958)
Fort Worth*	Tarrant	Trinity	(35,892)	(71,016)	(77,267)	(94,850)	(114,305)	(134,261)
Grand Prairie	Tarrant	Trinity	(1,135)	(3,179)	(4,188)	(4,779)	(5,418)	(5,901)
Grapevine	Tarrant	Trinity	(1,721)	(3,300)	(4,030)	(4,797)	(5,391)	(5,914)
Haltom City	Tarrant	Trinity	(710)	(1,203)	(1,480)	(1,810)	(2,053)	(2,253)
Haslet	Tarrant	Trinity	(343)	(797)	(1,292)	(1,719)	(2,126)	(2,331)
Hurst	Tarrant	Trinity	(526)	(1,154)	(1,509)	(1,933)	(2,250)	(2,504)
Johnson County SUD*	Tarrant	Trinity	(3)	(25)	(85)	(120)	(143)	(160)
Keller	Tarrant	Trinity	(1,713)	(2,960)	(3,640)	(4,453)	(5,050)	(5,540)
Kennedale	Tarrant	Trinity	(150)	(392)	(693)	(1,123)	(1,593)	(2,072)
Lake Worth	Tarrant	Trinity	(145)	(273)	(359)	(464)	(553)	(633)
Lakeside	Tarrant	Trinity	0	0	0	0	0	0
Mansfield*	Tarrant	Trinity	(3,683)	(6,601)	(9,845)	(17,001)	(19,269)	(21,118)
North Richland Hills	Tarrant	Trinity	(1,855)	(3,369)	(4,210)	(5,217)	(6,025)	(6,609)
Pantego	Tarrant	Trinity	0	0	0	0	0	0
Pelican Bay	Tarrant	Trinity	0	0	0	0	(143)	(362)
Reno (Parker)	Tarrant	Trinity	(1)	(2)	(2)	(3)	(4)	(5)
Richland Hills	Tarrant	Trinity	(138)	(263)	(354)	(498)	(632)	(773)
River Oaks	Tarrant	Trinity	(118)	(199)	(245)	(302)	(345)	(378)
Saginaw	Tarrant	Trinity	(530)	(986)	(1,223)	(1,506)	(1,726)	(1,893)
Sansom Park	Tarrant	Trinity	0	0	0	0	0	0
Southlake	Tarrant	Trinity	(1,915)	(3,662)	(4,815)	(6,229)	(7,451)	(8,571)
Trophy Club MUD 1	Tarrant	Trinity	(11)	(61)	(103)	(157)	(211)	(269)
Watauga	Tarrant	Trinity	(363)	(616)	(758)	(927)	(1,052)	(1,154)
Westlake	Tarrant	Trinity	(469)	(1,047)	(1,541)	(2,141)	(2,745)	(3,394)
Westover Hills	Tarrant	Trinity	(123)	(208)	(257)	(315)	(358)	(394)
Westworth Village	Tarrant	Trinity	(59)	(102)	(134)	(172)	(204)	(234)
White Settlement	Tarrant	Trinity	(238)	(460)	(623)	(816)	(994)	(1,172)
County-Other	Tarrant	Trinity	(4,169)	(7,608)	(10,845)	(14,051)	(17,253)	(20,460)
Manufacturing	Tarrant	Trinity	(1,712)	(2,944)	(3,729)	(4,703)	(5,517)	(6,268)
Mining	Tarrant	Trinity	941	1,350	1,336	1,324	1,311	1,250

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DRAFT Region C Water User Group (WUG) Needs or Surplus

			Water Supply Needs or Surplus (acre-feet per year)					
WUG Name	**County**	**Basin**	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**
Steam Electric Power	Tarrant	Trinity	(10)	(719)	(885)	(1,082)	(1,227)	(1,346)
Livestock	Tarrant	Trinity	151	151	151	151	151	151
Irrigation	Tarrant	Trinity	602	499	441	372	321	280
Alvord	Wise	Trinity	(184)	(281)	(368)	(438)	(514)	(599)
Bolivar WSC	Wise	Trinity	(31)	(53)	(73)	(88)	(106)	(125)
Boyd	Wise	Trinity	(17)	(82)	(194)	(296)	(393)	(458)
Bridgeport	Wise	Trinity	(131)	(228)	(288)	(355)	(409)	(454)
Chico	Wise	Trinity	(27)	(45)	(56)	(68)	(77)	(85)
Decatur	Wise	Trinity	(385)	(778)	(1,289)	(1,945)	(2,793)	(3,552)
Fort Worth*	Wise	Trinity	(82)	(158)	(174)	(220)	(272)	(327)
Newark	Wise	Trinity	(6)	(41)	(115)	(226)	(397)	(541)
Rhome	Wise	Trinity	(43)	(153)	(389)	(719)	(1,220)	(1,741)
Runaway Bay	Wise	Trinity	(90)	(188)	(283)	(426)	(592)	(797)
Walnut Creek SUD	Wise	Trinity	(112)	(158)	(393)	(816)	(1,336)	(1,838)
West Wise SUD	Wise	Trinity	(66)	(120)	(159)	(204)	(246)	(286)
County-Other	Wise	Trinity	(3,288)	(6,497)	(11,137)	(16,457)	(23,471)	(28,444)
Manufacturing	Wise	Trinity	(7)	(11)	(14)	(17)	(19)	(22)
Mining	Wise	Trinity	(118)	(200)	(406)	(700)	(1,161)	(1,898)
Steam Electric Power	Wise	Trinity	(385)	(657)	(808)	(988)	(1,121)	(1,229)
Livestock	Wise	Trinity	0	0	0	0	0	0
Irrigation	Wise	Trinity	(22)	(37)	(45)	(56)	(63)	(70)

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TWDB DB27 Report #6 – WUG Data Comparison to 2021 RWP

DRAFT Region C 2026 Regional Water Plan (RWP)
Water User Group (WUG) Data Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Collin County| Municipal WUG Type						
Existing WUG supply total	217,591	271,620	24.8%	225,095	285,935	27.0%
Projected demand total	266,884	302,809	13.5%	461,816	500,084	8.3%
Water supply needs total**	49,798	31,386	-37.0%	236,723	214,149	-9.5%
Collin County| Manufacturing WUG Type						
Existing WUG supply total	2,217	7,858	254.4%	1,576	6,127	288.8%
Projected demand total	2,602	8,623	231.4%	2,602	9,972	283.2%
Water supply needs total**	385	765	98.7%	1,026	3,845	274.8%
Collin County| Steam Electric Power WUG Type						
Existing WUG supply total	40	40	0.0%	40	40	0.0%
Projected demand total	40	40	0.0%	40	40	0.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Collin County| Livestock WUG Type						
Existing WUG supply total	1,002	1,002	0.0%	1,002	1,002	0.0%
Projected demand total	912	801	-12.2%	912	801	-12.2%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Collin County| Irrigation WUG Type						
Existing WUG supply total	5,604	2,808	-49.9%	4,994	2,795	-44.0%
Projected demand total	3,340	2,811	-15.8%	3,340	2,811	-15.8%
Water supply needs total**	0	3	100.0%	0	16	100.0%
Cooke County| Municipal WUG Type						
Existing WUG supply total	6,474	6,377	-1.5%	7,575	6,980	-7.9%
Projected demand total	6,334	6,441	1.7%	12,688	7,209	-43.2%
Water supply needs total**	70	64	-8.6%	5,128	229	-95.5%
Cooke County| Manufacturing WUG Type						
Existing WUG supply total	128	139	8.6%	46	161	250.0%

*The 2030 and 2070 planning decades are used in this comparison because they represent the earliest and latest planning decades in both the 2021 and 2026 RWPs

**WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.

DRAFT Region C 2026 Regional Water Plan (RWP)
Water User Group (WUG) Data Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Projected demand total	128	139	8.6%	128	161	25.8%
Water supply needs total**	0	0	0.0%	82	0	-100.0%
Cooke County| Mining WUG Type						
Existing WUG supply total	750	12	-98.4%	450	13	-97.1%
Projected demand total	900	12	-98.7%	586	13	-97.8%
Water supply needs total**	150	0	-100.0%	136	0	-100.0%
Cooke County| Steam Electric Power WUG Type						
Existing WUG supply total	5	6	20.0%	5	6	20.0%
Projected demand total	5	6	20.0%	5	6	20.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Cooke County| Livestock WUG Type						
Existing WUG supply total	1,427	1,508	5.7%	1,427	1,508	5.7%
Projected demand total	1,330	1,508	13.4%	1,330	1,508	13.4%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Cooke County| Irrigation WUG Type						
Existing WUG supply total	1,100	1,038	-5.6%	524	1,038	98.1%
Projected demand total	1,100	1,038	-5.6%	1,100	1,038	-5.6%
Water supply needs total**	0	0	0.0%	576	0	-100.0%
Dallas County| Municipal WUG Type						
Existing WUG supply total	496,930	499,116	0.4%	489,928	424,673	-13.3%
Projected demand total	569,262	553,384	-2.8%	724,228	654,626	-9.6%
Water supply needs total**	72,332	54,549	-24.6%	234,300	229,953	-1.9%
Dallas County| Manufacturing WUG Type						
Existing WUG supply total	21,423	20,276	-5.4%	16,860	17,681	4.9%
Projected demand total	23,073	21,497	-6.8%	23,073	24,859	7.7%
Water supply needs total**	1,650	1,221	-26.0%	6,213	7,178	15.5%

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DRAFT Region C 2026 Regional Water Plan (RWP)
Water User Group (WUG) Data Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Dallas County| Mining WUG Type						
Existing WUG supply total	3,578	32	-99.1%	3,578	32	-99.1%
Projected demand total	2,656	32	-98.8%	1,916	32	-98.3%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Dallas County| Steam Electric Power WUG Type						
Existing WUG supply total	7,682	8,756	14.0%	7,467	8,494	13.8%
Projected demand total	1,065	2,412	126.5%	1,065	2,412	126.5%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Dallas County| Livestock WUG Type						
Existing WUG supply total	856	248	-71.0%	856	248	-71.0%
Projected demand total	758	248	-67.3%	758	248	-67.3%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Dallas County| Irrigation WUG Type						
Existing WUG supply total	14,311	12,595	-12.0%	14,311	11,892	-16.9%
Projected demand total	10,122	10,468	3.4%	10,122	10,468	3.4%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Denton County| Municipal WUG Type						
Existing WUG supply total	176,192	207,356	17.7%	174,639	194,043	11.1%
Projected demand total	214,919	230,466	7.2%	383,290	400,044	4.4%
Water supply needs total**	39,634	23,514	-40.7%	208,651	206,001	-1.3%
Denton County| Manufacturing WUG Type						
Existing WUG supply total	357	520	45.7%	151	297	96.7%
Projected demand total	440	605	37.5%	440	699	58.9%
Water supply needs total**	83	85	2.4%	289	402	39.1%
Denton County| Mining WUG Type						
Existing WUG supply total	3,099	814	-73.7%	4,778	814	-83.0%

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DRAFT Region C 2026 Regional Water Plan (RWP)
Water User Group (WUG) Data Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Projected demand total	2,729	259	-90.5%	6,291	111	-98.2%
Water supply needs total**	0	0	0.0%	1,513	0	-100.0%
Denton County| Steam Electric Power WUG Type						
Existing WUG supply total	173	1,175	579.2%	173	1,175	579.2%
Projected demand total	173	1,175	579.2%	173	1,175	579.2%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Denton County| Livestock WUG Type						
Existing WUG supply total	1,352	840	-37.9%	1,352	840	-37.9%
Projected demand total	769	840	9.2%	769	840	9.2%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Denton County| Irrigation WUG Type						
Existing WUG supply total	4,805	3,095	-35.6%	4,465	2,833	-36.6%
Projected demand total	3,003	2,973	-1.0%	3,003	2,973	-1.0%
Water supply needs total**	0	0	0.0%	0	140	100.0%
Ellis County| Municipal WUG Type						
Existing WUG supply total	36,519	39,645	8.6%	48,878	51,841	6.1%
Projected demand total	44,355	46,238	4.2%	109,461	87,634	-19.9%
Water supply needs total**	8,429	7,345	-12.9%	60,811	35,999	-40.8%
Ellis County| Manufacturing WUG Type						
Existing WUG supply total	5,244	4,408	-15.9%	3,539	4,034	14.0%
Projected demand total	6,549	5,660	-13.6%	6,549	6,545	-0.1%
Water supply needs total**	1,305	1,252	-4.1%	3,010	2,511	-16.6%
Ellis County| Mining WUG Type						
Existing WUG supply total	547	0	-100.0%	55	0	-100.0%
Projected demand total	547	0	-100.0%	55	0	-100.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%

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DRAFT Region C 2026 Regional Water Plan (RWP)
Water User Group (WUG) Data Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Ellis County| Steam Electric Power WUG Type						
Existing WUG supply total	762	1,854	143.3%	731	1,854	153.6%
Projected demand total	901	1,854	105.8%	901	1,854	105.8%
Water supply needs total**	139	0	-100.0%	170	0	-100.0%
Ellis County| Livestock WUG Type						
Existing WUG supply total	1,140	1,142	0.2%	1,140	1,142	0.2%
Projected demand total	1,140	923	-19.0%	1,140	923	-19.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Ellis County| Irrigation WUG Type						
Existing WUG supply total	619	2,725	340.2%	619	2,725	340.2%
Projected demand total	1,367	2,725	99.3%	1,367	2,725	99.3%
Water supply needs total**	748	0	-100.0%	748	0	-100.0%
Fannin County| Municipal WUG Type						
Existing WUG supply total	5,896	5,575	-5.4%	6,502	7,166	10.2%
Projected demand total	5,718	5,314	-7.1%	17,383	10,353	-40.4%
Water supply needs total**	503	163	-67.6%	11,214	3,217	-71.3%
Fannin County| Manufacturing WUG Type						
Existing WUG supply total	12	5	-58.3%	6	5	-16.7%
Projected demand total	12	5	-58.3%	12	5	-58.3%
Water supply needs total**	0	0	0.0%	6	0	-100.0%
Fannin County| Mining WUG Type						
Existing WUG supply total	72	75	4.2%	72	75	4.2%
Projected demand total	351	1,747	397.7%	128	4,258	3226.6%
Water supply needs total**	279	1,672	499.3%	56	4,183	7369.6%
Fannin County| Livestock WUG Type						
Existing WUG supply total	1,411	1,375	-2.6%	1,411	1,375	-2.6%

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DRAFT Region C 2026 Regional Water Plan (RWP)
Water User Group (WUG) Data Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Projected demand total	1,411	1,375	-2.6%	1,411	1,375	-2.6%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Fannin County| Irrigation WUG Type						
Existing WUG supply total	7,717	6,399	-17.1%	7,717	6,399	-17.1%
Projected demand total	11,553	11,186	-3.2%	11,553	11,186	-3.2%
Water supply needs total**	3,836	4,787	24.8%	3,836	4,787	24.8%
Freestone County| Municipal WUG Type						
Existing WUG supply total	3,780	3,619	-4.3%	3,942	3,269	-17.1%
Projected demand total	2,980	2,847	-4.5%	9,139	2,478	-72.9%
Water supply needs total**	122	0	-100.0%	5,204	0	-100.0%
Freestone County| Manufacturing WUG Type						
Existing WUG supply total	19	55	189.5%	19	63	231.6%
Projected demand total	19	55	189.5%	19	63	231.6%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Freestone County| Mining WUG Type						
Existing WUG supply total	1,012	200	-80.2%	1,012	200	-80.2%
Projected demand total	5,115	200	-96.1%	5,582	200	-96.4%
Water supply needs total**	4,103	0	-100.0%	4,570	0	-100.0%
Freestone County| Steam Electric Power WUG Type						
Existing WUG supply total	26,867	10,592	-60.6%	24,980	12,312	-50.7%
Projected demand total	34,432	4,831	-86.0%	34,432	14,269	-58.6%
Water supply needs total**	7,565	0	-100.0%	9,452	1,957	-79.3%
Freestone County| Livestock WUG Type						
Existing WUG supply total	1,207	1,430	18.5%	1,207	1,430	18.5%
Projected demand total	1,207	1,430	18.5%	1,207	1,430	18.5%
Water supply needs total**	0	0	0.0%	0	0	0.0%

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DRAFT Region C 2026 Regional Water Plan (RWP)
Water User Group (WUG) Data Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Freestone County| Irrigation WUG Type						
Existing WUG supply total	700	656	-6.3%	700	656	-6.3%
Projected demand total	569	565	-0.7%	569	565	-0.7%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Grayson County| Municipal WUG Type						
Existing WUG supply total	26,961	24,837	-7.9%	32,119	27,277	-15.1%
Projected demand total	27,783	32,673	17.6%	59,079	55,817	-5.5%
Water supply needs total**	2,442	7,984	226.9%	27,018	28,540	5.6%
Grayson County| Manufacturing WUG Type						
Existing WUG supply total	3,458	6,826	97.4%	2,305	7,643	231.6%
Projected demand total	3,009	11,148	270.5%	3,009	19,419	545.4%
Water supply needs total**	0	4,322	100.0%	704	11,776	1572.7%
Grayson County| Mining WUG Type						
Existing WUG supply total	212	295	39.2%	212	295	39.2%
Projected demand total	210	295	40.5%	163	295	81.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Grayson County| Steam Electric Power WUG Type						
Existing WUG supply total	4,387	4,573	4.2%	4,387	4,573	4.2%
Projected demand total	4,387	4,573	4.2%	4,387	4,573	4.2%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Grayson County| Livestock WUG Type						
Existing WUG supply total	1,290	1,106	-14.3%	1,290	1,106	-14.3%
Projected demand total	1,143	1,106	-3.2%	1,143	1,106	-3.2%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Grayson County| Irrigation WUG Type						
Existing WUG supply total	4,477	4,450	-0.6%	4,477	4,450	-0.6%

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DRAFT Region C 2026 Regional Water Plan (RWP)
Water User Group (WUG) Data Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Projected demand total	4,477	4,450	-0.6%	4,477	4,450	-0.6%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Henderson County| Municipal WUG Type						
Existing WUG supply total	7,931	7,248	-8.6%	10,345	8,895	-14.0%
Projected demand total	8,015	10,112	26.2%	17,841	14,594	-18.2%
Water supply needs total**	812	2,947	262.9%	7,818	5,699	-27.1%
Henderson County| Manufacturing WUG Type						
Existing WUG supply total	997	420	-57.9%	997	411	-58.8%
Projected demand total	985	1,269	28.8%	985	1,468	49.0%
Water supply needs total**	0	849	100.0%	0	1,057	100.0%
Henderson County| Mining WUG Type						
Existing WUG supply total	489	15	-96.9%	439	22	-95.0%
Projected demand total	506	15	-97.0%	469	22	-95.3%
Water supply needs total**	17	0	-100.0%	30	0	-100.0%
Henderson County| Steam Electric Power WUG Type						
Existing WUG supply total	3,631	3,050	-16.0%	3,446	3,050	-11.5%
Projected demand total	3,709	132	-96.4%	3,709	2,192	-40.9%
Water supply needs total**	78	0	-100.0%	263	0	-100.0%
Henderson County| Livestock WUG Type						
Existing WUG supply total	858	694	-19.1%	858	694	-19.1%
Projected demand total	1,261	694	-45.0%	1,261	694	-45.0%
Water supply needs total**	403	0	-100.0%	403	0	-100.0%
Henderson County| Irrigation WUG Type						
Existing WUG supply total	582	1,278	119.6%	582	1,278	119.6%
Projected demand total	582	743	27.7%	582	743	27.7%
Water supply needs total**	0	0	0.0%	0	0	0.0%

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DRAFT Region C 2026 Regional Water Plan (RWP)
Water User Group (WUG) Data Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Jack County| Municipal WUG Type						
Existing WUG supply total	1,222	1,883	54.1%	1,248	1,783	42.9%
Projected demand total	1,267	1,276	0.7%	1,321	1,289	-2.4%
Water supply needs total**	45	0	-100.0%	73	0	-100.0%
Jack County| Manufacturing WUG Type						
Existing WUG supply total	1	0	-100.0%	1	0	-100.0%
Projected demand total	1	0	-100.0%	1	0	-100.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Jack County| Mining WUG Type						
Existing WUG supply total	1,546	35	-97.7%	1,251	35	-97.2%
Projected demand total	1,821	35	-98.1%	1,862	35	-98.1%
Water supply needs total**	275	0	-100.0%	611	0	-100.0%
Jack County| Steam Electric Power WUG Type						
Existing WUG supply total	3,324	3,270	-1.6%	2,266	2,311	2.0%
Projected demand total	3,772	3,772	0.0%	3,772	3,772	0.0%
Water supply needs total**	448	502	12.1%	1,506	1,461	-3.0%
Jack County| Livestock WUG Type						
Existing WUG supply total	932	902	-3.2%	932	902	-3.2%
Projected demand total	785	685	-12.7%	785	685	-12.7%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Jack County| Irrigation WUG Type						
Existing WUG supply total	191	84	-56.0%	189	84	-55.6%
Projected demand total	98	84	-14.3%	98	84	-14.3%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Kaufman County| Municipal WUG Type						
Existing WUG supply total	20,636	25,821	25.1%	33,886	41,278	21.8%

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Water User Group (WUG) Data Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Projected demand total	25,960	29,170	12.4%	72,158	72,710	0.8%
Water supply needs total**	5,324	3,349	-37.1%	38,272	31,432	-17.9%
Kaufman County| Manufacturing WUG Type						
Existing WUG supply total	1,035	1,069	3.3%	747	815	9.1%
Projected demand total	1,109	1,177	6.1%	1,109	1,362	22.8%
Water supply needs total**	74	108	45.9%	362	547	51.1%
Kaufman County| Mining WUG Type						
Existing WUG supply total	675	1,752	159.6%	676	1,752	159.2%
Projected demand total	386	1,453	276.4%	951	3,357	253.0%
Water supply needs total**	0	0	0.0%	275	1,605	483.6%
Kaufman County| Steam Electric Power WUG Type						
Existing WUG supply total	9,619	9,690	0.7%	9,327	9,343	0.2%
Projected demand total	9,793	9,793	0.0%	9,793	9,793	0.0%
Water supply needs total**	174	103	-40.8%	466	450	-3.4%
Kaufman County| Livestock WUG Type						
Existing WUG supply total	1,722	1,622	-5.8%	1,722	1,622	-5.8%
Projected demand total	1,570	1,413	-10.0%	1,570	1,413	-10.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Kaufman County| Irrigation WUG Type						
Existing WUG supply total	831	809	-2.6%	913	895	-2.0%
Projected demand total	285	353	23.9%	285	353	23.9%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Navarro County| Municipal WUG Type						
Existing WUG supply total	10,291	10,270	-0.2%	11,226	10,681	-4.9%
Projected demand total	10,037	9,815	-2.2%	15,470	12,616	-18.4%
Water supply needs total**	0	65	100.0%	4,261	2,174	-49.0%

*The 2030 and 2070 planning decades are used in this comparison because they represent the earliest and latest planning decades in both the 2021 and 2026 RWPs

**WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.

DRAFT Region C 2026 Regional Water Plan (RWP)
Water User Group (WUG) Data Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Navarro County| Manufacturing WUG Type						
Existing WUG supply total	1,062	1,633	53.8%	759	1,538	102.6%
Projected demand total	1,062	1,634	53.9%	1,062	1,889	77.9%
Water supply needs total**	0	1	100.0%	303	351	15.8%
Navarro County| Mining WUG Type						
Existing WUG supply total	976	976	0.0%	976	976	0.0%
Projected demand total	1,238	1,748	41.2%	2,076	2,723	31.2%
Water supply needs total**	262	772	194.7%	1,100	1,747	58.8%
Navarro County| Livestock WUG Type						
Existing WUG supply total	1,691	1,692	0.1%	1,691	1,692	0.1%
Projected demand total	1,691	1,512	-10.6%	1,691	1,512	-10.6%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Navarro County| Irrigation WUG Type						
Existing WUG supply total	226	535	136.7%	226	535	136.7%
Projected demand total	75	447	496.0%	75	447	496.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Parker County| Municipal WUG Type						
Existing WUG supply total	33,552	26,072	-22.3%	31,721	30,960	-2.4%
Projected demand total	41,707	29,505	-29.3%	87,042	81,050	-6.9%
Water supply needs total**	8,738	4,422	-49.4%	55,341	50,090	-9.5%
Parker County| Manufacturing WUG Type						
Existing WUG supply total	95	80	-15.8%	83	74	-10.8%
Projected demand total	103	85	-17.5%	103	97	-5.8%
Water supply needs total**	8	5	-37.5%	20	23	15.0%
Parker County| Mining WUG Type						
Existing WUG supply total	3,740	2,742	-26.7%	3,740	2,742	-26.7%

*The 2030 and 2070 planning decades are used in this comparison because they represent the earliest and latest planning decades in both the 2021 and 2026 RWPs

**WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.

DRAFT Region C 2026 Regional Water Plan (RWP)
Water User Group (WUG) Data Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Projected demand total	4,029	1,062	-73.6%	4,364	2,060	-52.8%
Water supply needs total**	289	0	-100.0%	624	0	-100.0%
Parker County| Steam Electric Power WUG Type						
Existing WUG supply total	604	0	-100.0%	604	0	-100.0%
Projected demand total	604	0	-100.0%	604	0	-100.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Parker County| Livestock WUG Type						
Existing WUG supply total	2,151	1,972	-8.3%	2,151	1,972	-8.3%
Projected demand total	1,634	1,503	-8.0%	1,634	1,503	-8.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Parker County| Irrigation WUG Type						
Existing WUG supply total	887	1,282	44.5%	1,104	1,499	35.8%
Projected demand total	773	1,136	47.0%	773	1,136	47.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Rockwall County| Municipal WUG Type						
Existing WUG supply total	25,599	25,490	-0.4%	32,984	40,016	21.3%
Projected demand total	30,411	28,096	-7.6%	57,225	66,468	16.2%
Water supply needs total**	4,815	2,606	-45.9%	24,241	26,452	9.1%
Rockwall County| Manufacturing WUG Type						
Existing WUG supply total	31	404	1203.2%	21	308	1366.7%
Projected demand total	36	445	1136.1%	36	514	1327.8%
Water supply needs total**	5	41	720.0%	15	206	1273.3%
Rockwall County| Livestock WUG Type						
Existing WUG supply total	117	106	-9.4%	117	106	-9.4%
Projected demand total	111	106	-4.5%	111	106	-4.5%
Water supply needs total**	0	0	0.0%	0	0	0.0%

*The 2030 and 2070 planning decades are used in this comparison because they represent the earliest and latest planning decades in both the 2021 and 2026 RWPs

**WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.

DRAFT Region C 2026 Regional Water Plan (RWP)
Water User Group (WUG) Data Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Rockwall County| Irrigation WUG Type						
Existing WUG supply total	989	996	0.7%	914	905	-1.0%
Projected demand total	234	201	-14.1%	234	201	-14.1%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Tarrant County| Municipal WUG Type						
Existing WUG supply total	369,165	401,178	8.7%	334,255	383,935	14.9%
Projected demand total	446,443	476,863	6.8%	612,383	641,681	4.8%
Water supply needs total**	77,374	75,685	-2.2%	278,233	257,746	-7.4%
Tarrant County| Manufacturing WUG Type						
Existing WUG supply total	11,668	10,627	-8.9%	8,020	8,752	9.1%
Projected demand total	13,301	12,339	-7.2%	13,301	14,269	7.3%
Water supply needs total**	1,633	1,712	4.8%	5,281	5,517	4.5%
Tarrant County| Mining WUG Type						
Existing WUG supply total	8,914	1,466	-83.6%	7,850	1,440	-81.7%
Projected demand total	6,562	525	-92.0%	1,464	129	-91.2%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Tarrant County| Steam Electric Power WUG Type						
Existing WUG supply total	3,127	1,147	-63.3%	1,938	3,022	55.9%
Projected demand total	4,948	1,157	-76.6%	4,948	4,249	-14.1%
Water supply needs total**	1,821	10	-99.5%	3,010	1,227	-59.2%
Tarrant County| Livestock WUG Type						
Existing WUG supply total	552	492	-10.9%	552	492	-10.9%
Projected demand total	627	341	-45.6%	627	341	-45.6%
Water supply needs total**	75	0	-100.0%	75	0	-100.0%
Tarrant County| Irrigation WUG Type						
Existing WUG supply total	6,926	5,566	-19.6%	6,482	5,285	-18.5%

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**WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.

DRAFT Region C 2026 Regional Water Plan (RWP)
Water User Group (WUG) Data Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Projected demand total	4,926	4,964	0.8%	4,926	4,964	0.8%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Wise County| Municipal WUG Type						
Existing WUG supply total	11,415	9,391	-17.7%	13,020	11,301	-13.2%
Projected demand total	15,211	13,853	-8.9%	33,305	43,127	29.5%
Water supply needs total**	3,799	4,462	17.5%	20,285	31,826	56.9%
Wise County| Manufacturing WUG Type						
Existing WUG supply total	294	247	-16.0%	280	274	-2.1%
Projected demand total	501	254	-49.3%	501	293	-41.5%
Water supply needs total**	207	7	-96.6%	221	19	-91.4%
Wise County| Mining WUG Type						
Existing WUG supply total	5,184	2,966	-42.8%	5,184	4,032	-22.2%
Projected demand total	11,159	3,084	-72.4%	17,694	5,193	-70.7%
Water supply needs total**	5,975	118	-98.0%	12,510	1,161	-90.7%
Wise County| Steam Electric Power WUG Type						
Existing WUG supply total	2,550	2,509	-1.6%	1,738	1,773	2.0%
Projected demand total	2,894	2,894	0.0%	2,894	2,894	0.0%
Water supply needs total**	344	385	11.9%	1,156	1,121	-3.0%
Wise County| Livestock WUG Type						
Existing WUG supply total	1,575	1,415	-10.2%	1,575	1,415	-10.2%
Projected demand total	1,198	1,415	18.1%	1,198	1,415	18.1%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Wise County| Irrigation WUG Type						
Existing WUG supply total	1,336	1,418	6.1%	1,171	1,377	17.6%
Projected demand total	1,406	1,440	2.4%	1,406	1,440	2.4%
Water supply needs total**	70	22	-68.6%	235	63	-73.2%

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**WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.

DRAFT Region C 2026 Regional Water Plan (RWP)
Water User Group (WUG) Data Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

Region C Total						
Existing WUG supply total	1,662,344	1,741,387	4.8%	1,648,819	1,700,789	3.2%
Projected demand total	1,936,605	1,948,387	0.6%	2,898,540	2,860,536	-1.3%
Water supply needs total**	306,638	237,283	-22.6%	1,278,426	1,176,857	-7.9%

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**WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.

TWDB DB27 Report #7 – Source Data Comparison to 2021 RWP

DRAFT Region C 2026 Regional Water Plan (RWP)
Source Availability Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Collin County						
Groundwater availability total	10,043	10,049	0.1%	10,043	10,049	0.1%
Reuse availability total	62,124	72,327	16.4%	76,512	121,988	59.4%
Surface Water availability total	1,410	1,267	-10.1%	1,410	1,267	-10.1%
Cooke County						
Groundwater availability total	11,313	11,322	0.1%	11,313	11,322	0.1%
Reuse availability total	4	4	0.0%	4	4	0.0%
Surface Water availability total	1,187	1,187	0.0%	1,187	1,187	0.0%
Dallas County						
Groundwater availability total	6,484	6,489	0.1%	6,484	6,489	0.1%
Reuse availability total	65,296	46,474	-28.8%	65,296	47,741	-26.9%
Surface Water availability total	2,882	1,930	-33.0%	2,882	1,930	-33.0%
Denton County						
Groundwater availability total	33,675	33,700	0.1%	33,675	33,700	0.1%
Reuse availability total	62,771	64,344	2.5%	97,054	98,758	1.8%
Surface Water availability total	1,988	1,386	-30.3%	1,988	1,386	-30.3%
Ellis County						
Groundwater availability total	7,617	8,262	8.5%	7,617	8,262	8.5%
Reuse availability total	4,801	7,593	58.2%	6,048	8,825	45.9%
Surface Water availability total	1,115	1,113	-0.2%	1,115	1,113	-0.2%
Fannin County						
Groundwater availability total	9,927	9,931	0.0%	9,927	9,931	0.0%
Surface Water availability total	6,040	3,721	-38.4%	6,040	3,721	-38.4%
Freestone County						
Groundwater availability total	9,267	7,280	-21.4%	9,898	11,381	15.0%
Surface Water availability total	1,291	1,207	-6.5%	1,291	1,207	-6.5%
Grayson County						
Groundwater availability total	18,229	18,242	0.1%	18,229	18,242	0.1%
Surface Water availability total	2,197	1,846	-16.0%	2,197	1,846	-16.0%
Henderson County						

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**Since reservoir sources can exist across multiple counties, the county field value, 'reservoir' is applied to all reservoir sources.

DRAFT Region C 2026 Regional Water Plan (RWP)
Source Availability Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Groundwater availability total	11,174	3,380	-69.8%	10,893	3,380	-69.0%
Reuse availability total	32	32	0.0%	32	32	0.0%
Surface Water availability total	760	1,591	109.3%	760	1,591	109.3%
Jack County						
Groundwater availability total	934	1,571	68.2%	934	1,571	68.2%
Reuse availability total	26	26	0.0%	24	24	0.0%
Surface Water availability total	1,282	802	-37.4%	1,282	802	-37.4%
Kaufman County						
Groundwater availability total	926	926	0.0%	926	926	0.0%
Reuse availability total	111,737	111,213	-0.5%	111,862	111,338	-0.5%
Surface Water availability total	1,772	2,867	61.8%	1,772	2,867	61.8%
Navarro County						
Groundwater availability total	1,498	1,588	6.0%	1,498	1,632	8.9%
Reuse availability total	100,465	100,465	0.0%	100,465	100,465	0.0%
Surface Water availability total	2,081	2,390	14.8%	2,081	2,390	14.8%
Parker County						
Groundwater availability total	11,913	14,499	21.7%	11,913	14,499	21.7%
Reuse availability total	3,266	3,266	0.0%	4,043	4,043	0.0%
Surface Water availability total	2,181	3,298	51.2%	2,181	3,298	51.2%
Reservoir County**						
Surface Water availability total	1,291,834	1,271,418	-1.6%	1,210,332	1,201,189	-0.8%
Rockwall County						
Groundwater availability total	13	13	0.0%	13	13	0.0%
Reuse availability total	672	672	0.0%	672	672	0.0%
Surface Water availability total	117	106	-9.4%	117	106	-9.4%
Tarrant County						
Groundwater availability total	19,053	19,065	0.1%	19,053	19,065	0.1%
Reuse availability total	8,382	6,505	-22.4%	8,402	6,525	-22.3%
Surface Water availability total	2,292	3,314	44.6%	2,292	3,314	44.6%
Wise County						
Groundwater availability total	9,734	11,452	17.6%	9,734	11,452	17.6%

*The 2030 and 2070 planning decades are used in this comparison because they represent the earliest and latest planning decades in both the 2021 and 2026 RWPs.

**Since reservoir sources can exist across multiple counties, the county field value, 'reservoir' is applied to all reservoir sources.

DRAFT Region C 2026 Regional Water Plan (RWP)
Source Availability Comparison to 2021 RWP

Water Volumes Shown in Acre-Feet per year

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Surface Water availability total	7,650	1,156	-84.9%	7,465	1,156	-84.5%
Region C Total						
Groundwater availability total	161,800	157,769	-2.5%	162,150	161,914	-0.1%
Reuse availability total	419,576	412,921	-1.6%	470,414	500,415	6.4%
Surface Water availability total	1,328,079	1,300,599	-2.1%	1,246,392	1,230,370	-1.3%

*The 2030 and 2070 planning decades are used in this comparison because they represent the earliest and latest planning decades in both the 2021 and 2026 RWPs.

**Since reservoir sources can exist across multiple counties, the county field value, 'reservoir' is applied to all reservoir sources.

APPENDIX B
Hydrologic Variance Request and Approval for Surface Water

REGION C WATER PLANNING GROUP

Senate Bill One Sixth Round of Regional Water Planning - Texas Water Development Board

August 2023

Jeff Walker
Texas Water Development Board
1700 North Congress
Austin, Texas 78711-3231

RE: Region C Request for Modifications to TCEQ Water Availability Models for Planning Purposes

Dear Mr. Walker:

Region C is located primarily within the Trinity and Red River Basins. Small areas of the region are in the Sabine, Sulphur and Brazos River Basins. Reservoirs in each of these river basins and the Neches River Basin supply water to Region C. As part of the 2026 planning efforts, the Full Authorization Water Availability Models (WAM[1]), also known as Run 3, for each of these basins will be updated to determine surface water availability in the region. To reflect the current conditions and operations of the region, the following hydrologic variances are summarized below. Completed hydrologic variance request forms for each river basin are included in Attachment A.

Safe Yield

Based on requests from Tarrant Regional Water District (TRWD) and Dallas Water Utilities (DWU), Region C requests the use of safe yield for the allocation and distribution of surface water supplies from reservoirs owned and operated by these two wholesale water providers. In accordance with the TWDB planning rules, firm yields will also be determined and reported in the plan. Firm yield will be used for other surface water reservoirs.

Drought Worse than the Drought of Record

The Texas Legislature authorized the regional water planning groups to consider droughts worse than the drought of record in its planning efforts, which can reflect expected climate uncertainties and trends in water availability. Several water providers in Region C consider such conditions in their long-term water planning. NTMWD has recently completed a Long-Range Water Supply Plan that did a detailed evaluation on the potential impacts of a drought worse than the drought of record on its water supplies. Region C requests the use of the results of this analysis for the allocation and distribution of surface water supplies from reservoirs owned and operated by NTMWD. DWU is also considering the potential impacts of climatic uncertainties in the update of its Long-Range Water Supply Plan, but this update is not available at this time. Therefore, Region C has requested the use of safe yield as discussed above.

[1] The term WAM refers throughout this document to TCEQ's Full Authorization Scenario, also known as Run 3, with modifications as proposed in this letter.

If the DWU update becomes available prior to the completion of the 2026 Region C Water Plan, Region C respectfully requests the option to use these results for the allocation and distribution of surface water supplies from reservoirs owned and operated by DWU.

Trinity River WAM

Multiple changes are requested for the Trinity WAM to account for current operating conditions, including:

- Subordination agreements,
- System operations, where appropriate, and
- Other corrections noted during review of the models.

Red River WAM

Water supplies from the Red River Basin include supplies from Lake Texoma, several small lakes, and run of the river supplies. Hydrologic variance requests for the Red River WAM include changes to Lake Texoma and associated water rights to avoid potential double counting of supply and more accurately define the firm yields of the Region C reservoirs.

Sulphur WAM

The only reservoir in the Sulphur Basin currently used by Region C is Lake Chapman. This reservoir is used by multiple providers and is modeled in the WAM as individual water rights. Region C requests modeling Lake Chapman as a single pool to assess the firm yield, and then assign supplies proportionally based on each provider's water right.

Other WAMs

For the 2026 Region C Water Plan, we request to use the Neches and Sabine River WAM models as modified by the Region I Planning Group with the approval of the Texas Water Development Board. For supplies in the Brazos River Basin, we request to use the Brazos G WAM as modified by the Brazos G Planning Group with the approval of the Texas Water Development Board.

As intended by Senate Bill 1, the assessment of surface water availability in Region C will be conducted to accurately reflect water supplies that are available for use.

Please call me if you have any questions regarding our request.

Sincerely,

Kevin Ward
Chair, Region C Water Planning Group

Attachment A

Hydrologic Variance Request Forms

Surface Water Hydrologic Variance Request Checklist

Texas Water Development Board (TWDB) rules[1] require that regional water planning groups (RWPG) use most current Water Availability Models (WAM) from the Texas Commission on Environmental Quality (TCEQ) and assume full utilization of existing water rights and no return flows for surface water supply analysis. Additionally, evaluation of existing stored surface water available during Drought of Record conditions must be based on Firm Yield using anticipated sedimentation rates. However, the TWDB rules also allow, and **we encourage**, RWPGs to use more representative, water availability modeling assumptions; better site-specific information; or justified operational procedures other than Firm Yield with written approval (via a Hydrologic Variance) from the Executive Administrator in order to better represent and therefore prepare for expected drought conditions.

RWPGs must use this checklist, which is intended to save time and reduce effort, to request a Hydrologic Variance for estimating the availability of surface water sources. For Questions 4 – 10, please indicate whether the requested variance is for determining Existing Supply, Strategy Supply, or both. Please complete a separate checklist for each river basin in which variances are being requested.

Water Planning Region: C

1. Which major river basin does the request apply to? Please specify if the request only applies part of the basin or only to certain reservoirs.

   Trinity River Basin

2. Please give a brief, bulleted, description of the requested hydrologic variances including how the alternative availability assumptions vary from rule requirements, how the modifications will affect the associated annual availability volume(s) in the regional water plan, and why the variance is necessary or provides a better basis for planning. You must provide more-detailed descriptions in the subsequent checklist questions. Attach any available documentation supporting the request.

   Region C requests to use the posted TCEQ Trinity WAM for use in the 2021 Region C Plan with the following variances for all water supply analyses:
   - Inclusion of any new water rights that are not currently included in the posted TCEQ WAM.
   - Modeling of Lake Jacksboro and Lost Creek Reservoir as a system. System modeling includes subordination of Lake Bridgeport.
   - Use of the full storage for Forest Grove Reservoir with an annual depletion limit (inflow for storage, diversion, and evaporation) of 16,348 acre-feet per year. The TCEQ WAM incorrectly uses the 16,348 acre-feet as the storage of the reservoir rather than the authorized storage of 20,038 acre-feet.

[1] 31 Texas Administrative Code (TAC) §§ 357.10(14) and 357.32(c)

- Modeling of Corsicana's rights from Richland-Chambers Reservoir as a system with Lake Halbert, reflecting how these rights are actually used.

The following variances are required only for modeling the yields of these supplies. When calculating the firm yield of other sources, the modeling will be identical to Run 3.

- Modeling of Tarrant Regional Water District's West Fork reservoirs (Bridgeport, Eagle Mountain, and Worth) as a system.
- Modeling of Dallas' water rights in the Elm Fork of the Trinity River as a system with Lakes Grapevine, Lewisville and Ray Roberts.
- Modeling of Lake Benbrook as one pool instead of multiple pools to facilitate calculation of yields. The current modeling incorrectly assigns evaporation to the dead pool of the reservoir which does not refill because it is modeled as non-priority. In actual operation, TRWD cannot use water from the reservoir unless this dead storage is full. This modeling respects the USACE minimum elevation for water supply.

These adjustments to the WAMs are requested to reflect the water rights and agreements more accurately for water supply sources in Region C.

3. Was this request submitted in a previous planning cycle? If yes, please indicate which cycle and note how it is different, if at all, from the previous request?

   Yes

   The same hydrologic variance requests were implemented in the 2021 Region C Water Plan. This request only differs in the inclusion of any new water rights that are not currently in the WAM.

4. Are you requesting to extend the period of record beyond the current applicable WAM hydrologic period? If yes, please describe the proposed methodology. Indicate whether you believe there is a new drought of record in the basin.

   No

   Choose an item.

   Click or tap here to enter text.

5. Are you requesting to use a reservoir safe yield? If yes, please describe in detail how the safe yield would be calculated and defined, which reservoir(s) it would apply to, and why the modification is needed or preferrable for drought planning purposes.

   Yes

   Existing Supply

Based on requests from Tarrant Regional Water District (TRWD) and Dallas Water Utilities, Region C requests the use of safe yield for the allocation and distribution of surface water supplies from reservoirs owned and operated by these two wholesale water providers. The TRWD reservoirs include Lake Bridgeport, Eagle Mountain Lake, Lake Worth, Lake Benbrook, Lake Arlington, Richland-Chambers Reservoir and Cedar Creek Reservoir. Dallas reservoirs include Lake Ray Roberts, Lake Lewisville, Lake Grapevine, Lake Ray Hubbard, Lake Tawakoni, and Lake Fork. For some of these lakes, Dallas holds only a portion of the water rights. Supply for the other water right holders in these lakes will continue to be calculated using firm yield.

Safe yield is the amount of water that can be used during the critical drought while leaving a minimum supply in reserve. Safe yield is consistent with the current operations of these two surface water suppliers and previous regional water planning. In accordance with the TWDB planning rules, firm yields will also be determined and reported in the plan.

6. Are you requesting to use a reservoir yield other than firm yield or safe yield? If yes, please describe, in a bulleted list, each modification requested including how the alternative yield was calculated, which reservoir(s) it applies to, and why the modification is needed or preferrable for drought planning purposes. Examples of alternative reservoir yield analyses may include using an alternative reservoir level, conditional reliability, or other special reservoir operations.

   Yes

   Existing Supply

   The Texas Legislature authorized the regional water planning groups to consider droughts worse than the drought of record in its planning efforts, which can reflect expected climate uncertainties and trends in water availability. Several water providers in Region C consider such conditions in their long-term water planning. NTMWD has recently completed a Long-Range Water Supply Plan that did a detailed evaluation on the potential impacts of a drought worse than the drought of record on its water supplies. Region C requests the use of the results of this analysis for the allocation and distribution of surface water supplies from reservoirs owned and operated by NTMWD. DWU is also considering the potential impacts of climatic uncertainties in the update of its Long-Range Water Supply Plan, but this update is not available at this time. Therefore, Region C has requested the use of safe yield as discussed above.

   If the DWU update becomes available prior to the completion of the 2026 Region C Water Plan, Region C respectfully requests the option to use these results for the allocation and distribution of surface water supplies from reservoirs owned and operated by DWU.

7. Are you requesting to use a different model (such as a RiverWare or Excel-based models) than RUN 3 of the applicable TCEQ WAM? If yes, please describe the model being considered including how it incorporates water rights and prior appropriation and how it is more conservative than RUN 3 of the applicable TCEQ WAM.

   No

Choose an item.

Click or tap here to enter text.

8. Are you requesting to use a modified TCEQ WAM? If yes, please describe in a bulleted list all modifications in detail including all specific changes to the WAM and whether the modified WAM is more conservative than the TCEQ WAM RUN 3. Examples of WAM modifications may include adding subordination agreements, contracts, updated water rights, modified spring flows, updated lake evaporation, updated sedimentation[2], system or reservoir operations, or special operational procedures into the WAM.

   Yes

   Existing Supply

Multiple changes are requested for the Trinity WAM to account for current operating conditions, including:

- Subordination agreements,
- System operations, and
- Other corrections noted during review of the models.

These changes are detailed in Question 2.

9. Are you requesting to include return flows in the modeling? If yes, are you doing so to model an indirect reuse water management strategy (WMS)? Please provide complete details regarding the proposed methodology for determining reuse WMS availability.

   No

   Choose an item.

   Only return flows authorized in existing surface water rights and modeled in the existing WAM Run 3 will be included in the analysis.

10. Are any of the requested Hydrologic Variances also planned to be used by another region for the same basin? If yes, please indicate the other Region. Please indicate if unknown.

    Unknown

    Each of the river basins modeled by Region C are also used by other regions. It is unknown whether the other regions will adopt the modifications made by Region C in the analysis of

[2] Updating anticipated sedimentation rates does not require a hydrologic variance under 31 TAC § 357.10(14). The Technical Memorandum will require providing details regarding the sedimentation methodology utilized. Please consider providing that information with this request.

the supplies for each respective region. We do not expect our modifications to affect the supplies for these regions.

11. Please describe any other variance requests not captured on this checklist or add any other information regarding the variance requests on this checklist.

    Click or tap here to enter text.

Surface Water Hydrologic Variance Request Checklist

Texas Water Development Board (TWDB) rules[1] require that regional water planning groups (RWPG) use most current Water Availability Models (WAM) from the Texas Commission on Environmental Quality (TCEQ) and assume full utilization of existing water rights and no return flows for surface water supply analysis. Additionally, evaluation of existing stored surface water available during Drought of Record conditions must be based on Firm Yield using anticipated sedimentation rates. However, the TWDB rules also allow, and **we encourage**, RWPGs to use more representative, water availability modeling assumptions; better site-specific information; or justified operational procedures other than Firm Yield with written approval (via a Hydrologic Variance) from the Executive Administrator in order to better represent and therefore prepare for expected drought conditions.

RWPGs must use this checklist, which is intended to save time and reduce effort, to request a Hydrologic Variance for estimating the availability of surface water sources. For Questions 4 – 10, please indicate whether the requested variance is for determining Existing Supply, Strategy Supply, or both. Please complete a separate checklist for each river basin in which variances are being requested.

Water Planning Region: C

1. Which major river basin does the request apply to? Please specify if the request only applies part of the basin or only to certain reservoirs.

   Red River Basin

2. Please give a brief, bulleted, description of the requested hydrologic variances including how the alternative availability assumptions vary from rule requirements, how the modifications will affect the associated annual availability volume(s) in the regional water plan, and why the variance is necessary or provides a better basis for planning. You must provide more-detailed descriptions in the subsequent checklist questions. Attach any available documentation supporting the request.

   Region C requests to use the posted TCEQ Red River WAM for use in the 2021 Region C Plan with the following variances;
   - Modeling of Lake Randell and Valley Lake as stand-alone reservoirs without Lake Texoma backups for the firm yield calculation of these two reservoirs. Backup supply for these reservoirs from Lake Texoma is included in the supplies from Lake Texoma. This prevents double counting of the makeup water from Lake Texoma. For firm yield calculations for reservoirs other than Lake Randell, Valley Lake and Lake Texoma, the backups for Lake Randell and Valley Lake were retained.
   - Lake Texoma is located on the Texas-Oklahoma border, and in accordance with the Red River Compact, water in Lake Texoma is equally shared by Texas and Oklahoma. There are three distinct water storage pools in Lake Texoma: 1) water supply, 2) hydropower, and 3) sediment storage (dead pool). Use of water from Lake Texoma is authorized by

[1] 31 Texas Administrative Code (TAC) §§ 357.10(14) and 357.32(c)

multiple Texas water rights and Oklahoma water rights, as well as authorizations by the US Congress and contracts with the Corps. To assess the firm yield of the reservoir for Region C, the total firm yield for both the water supply and hydropower pools will be modeled. This total yield is equally split between Texas and Oklahoma. The reliable supplies from the lake are limited to the Texas water rights and associated storage contracts with the Corps.

- Removal of diversion backups of individual Texas water rights in Lake Texoma from the hydropower pool. All Texas water rights are 100% reliable in the WAM, so these backups are not invoked in the WAM. The code was removed because it made the modeling unnecessarily complicated.

These adjustments to the WAMs are requested to reflect the water rights and agreements more accurately for water supply sources in Region C.

3. Was this request submitted in a previous planning cycle? If yes, please indicate which cycle and note how it is different, if at all, from the previous request?

   Yes

   The same hydrologic variance requests were implemented in the 2021 Region C Water Plan.

4. Are you requesting to extend the period of record beyond the current applicable WAM hydrologic period? If yes, please describe the proposed methodology. Indicate whether you believe there is a new drought of record in the basin.

   No

   Choose an item.

   Click or tap here to enter text.

5. Are you requesting to use a reservoir safe yield? If yes, please describe in detail how the safe yield would be calculated and defined, which reservoir(s) it would apply to, and why the modification is needed or preferrable for drought planning purposes.

   No

   Choose an item.

   Click or tap here to enter text.

6. Are you requesting to use a reservoir yield other than firm yield or safe yield? If yes, please describe, in a bulleted list, each modification requested including how the alternative yield was calculated, which reservoir(s) it applies to, and why the modification is needed or preferrable for drought planning purposes. Examples of alternative reservoir yield analyses may include using an alternative reservoir level, conditional reliability, or other special reservoir operations.

No

Choose an item.

Click or tap here to enter text.

7. Are you requesting to use a different model (such as a RiverWare or Excel-based models) than RUN 3 of the applicable TCEQ WAM? If yes, please describe the model being considered including how it incorporates water rights and prior appropriation and how it is more conservative than RUN 3 of the applicable TCEQ WAM.

   No

   Choose an item.

   Click or tap here to enter text.

8. Are you requesting to use a modified TCEQ WAM? If yes, please describe in a bulleted list all modifications in detail including all specific changes to the WAM and whether the modified WAM is more conservative than the TCEQ WAM RUN 3. Examples of WAM modifications may include adding subordination agreements, contracts, updated water rights, modified spring flows, updated lake evaporation, updated sedimentation[2], system or reservoir operations, or special operational procedures into the WAM.

   Yes

   Existing Supply

Multiple changes are requested for the Red River WAM to account for current operating conditions, as detailed in the response to Question 2

9. Are you requesting to include return flows in the modeling? If yes, are you doing so to model an indirect reuse water management strategy (WMS)? Please provide complete details regarding the proposed methodology for determining reuse WMS availability.

   No

   Choose an item.

[2] Updating anticipated sedimentation rates does not require a hydrologic variance under 31 TAC § 357.10(14). The Technical Memorandum will require providing details regarding the sedimentation methodology utilized. Please consider providing that information with this request.

Only return flows authorized in existing surface water rights and modeled in the existing WAM Run 3 will be included in the analysis.

10. Are any of the requested Hydrologic Variances also planned to be used by another region for the same basin? If yes, please indicate the other Region. Please indicate if unknown.

    Unknown

    Click or tap here to enter text.

11. Please describe any other variance requests not captured on this checklist or add any other information regarding the variance requests on this checklist.

    Click or tap here to enter text.

Surface Water Hydrologic Variance Request Checklist

Texas Water Development Board (TWDB) rules[1] require that regional water planning groups (RWPG) use most current Water Availability Models (WAM) from the Texas Commission on Environmental Quality (TCEQ) and assume full utilization of existing water rights and no return flows for surface water supply analysis. Additionally, evaluation of existing stored surface water available during Drought of Record conditions must be based on Firm Yield using anticipated sedimentation rates. However, the TWDB rules also allow, and **we encourage**, RWPGs to use more representative, water availability modeling assumptions; better site-specific information; or justified operational procedures other than Firm Yield with written approval (via a Hydrologic Variance) from the Executive Administrator in order to better represent and therefore prepare for expected drought conditions.

RWPGs must use this checklist, which is intended to save time and reduce effort, to request a Hydrologic Variance for estimating the availability of surface water sources. For Questions 4 – 10, please indicate whether the requested variance is for determining Existing Supply, Strategy Supply, or both. Please complete a separate checklist for each river basin in which variances are being requested.

Water Planning Region: C

1. Which major river basin does the request apply to? Please specify if the request only applies part of the basin or only to certain reservoirs.

   Sulphur River Basin

2. Please give a brief, bulleted, description of the requested hydrologic variances including how the alternative availability assumptions vary from rule requirements, how the modifications will affect the associated annual availability volume(s) in the regional water plan, and why the variance is necessary or provides a better basis for planning. You must provide more-detailed descriptions in the subsequent checklist questions. Attach any available documentation supporting the request.

   Region C requests to use the approved TCEQ Sulphur WAM for use in the 2021 Region C Plan with the following variances for all water supply analyses:
   - Inclusion of any new water rights granted that are not currently included in the approved TCEQ WAM.

The following variance is requested for modeling existing supplies from Lake Chapman.

- Modeling of Lake Chapman as one pool instead of multiple pools to facilitate calculation of the firm yield. All authorizations have the same priority date, and a single pool correctly distributes inflows among the water right holders. This modeling respects the USACE minimum elevation for water supply.

[1] 31 Texas Administrative Code (TAC) §§ 357.10(14) and 357.32(c)

These adjustments to the WAMs are requested to reflect the water rights and agreements more accurately for water supply sources in Region C.

3. Was this request submitted in a previous planning cycle? If yes, please indicate which cycle and note how it is different, if at all, from the previous request?

   Yes

   The same hydrologic variance requests were implemented in the 2021 Region C Water Plan. This request only differs in the inclusion of any new water rights that are not currently in the WAM.

4. Are you requesting to extend the period of record beyond the current applicable WAM hydrologic period? If yes, please describe the proposed methodology. Indicate whether you believe there is a new drought of record in the basin.

   No

   Choose an item.

   Click or tap here to enter text.

5. Are you requesting to use a reservoir safe yield? If yes, please describe in detail how the safe yield would be calculated and defined, which reservoir(s) it would apply to, and why the modification is needed or preferrable for drought planning purposes.

   No

   Choose an item.

   Click or tap here to enter text.

6. Are you requesting to use a reservoir yield other than firm yield or safe yield? If yes, please describe, in a bulleted list, each modification requested including how the alternative yield was calculated, which reservoir(s) it applies to, and why the modification is needed or preferrable for drought planning purposes. Examples of alternative reservoir yield analyses may include using an alternative reservoir level, conditional reliability, or other special reservoir operations.

   No

   Choose an item.

7. Are you requesting to use a different model (such as a RiverWare or Excel-based models) than RUN 3 of the applicable TCEQ WAM? If yes, please describe the model being considered including how it incorporates water rights and prior appropriation and how it is more conservative than RUN 3 of the applicable TCEQ WAM.

   No

   Choose an item.

   Click or tap here to enter text.

8. Are you requesting to use a modified TCEQ WAM? If yes, please describe in a bulleted list all modifications in detail including all specific changes to the WAM and whether the modified WAM is more conservative than the TCEQ WAM RUN 3. Examples of WAM modifications may include adding subordination agreements, contracts, updated water rights, modified spring flows, updated lake evaporation, updated sedimentation[2], system or reservoir operations, or special operational procedures into the WAM.

   Yes

   Existing Supply

Changes are requested for the Sulphur WAM are in Question 2.

-

9. Are you requesting to include return flows in the modeling? If yes, are you doing so to model an indirect reuse water management strategy (WMS)? Please provide complete details regarding the proposed methodology for determining reuse WMS availability.

   No

   Choose an item.

   Only return flows authorized in existing surface water rights and modeled in the existing WAM Run 3 will be included in the analysis.

[2] Updating anticipated sedimentation rates does not require a hydrologic variance under 31 TAC § 357.10(14). The Technical Memorandum will require providing details regarding the sedimentation methodology utilized. Please consider providing that information with this request.

10. Are any of the requested Hydrologic Variances also planned to be used by another region for the same basin? If yes, please indicate the other Region. Please indicate if unknown.

    Unknown

    Click or tap here to enter text.

11. Please describe any other variance requests not captured on this checklist or add any other information regarding the variance requests on this checklist.

    Click or tap here to enter text.

Texas Water Development Board

P.O. Box 13231, 1700 N. Congress Ave.
Austin, TX 78711-3231, www.twdb.texas.gov
Phone (512) 463-7847, Fax (512) 475-2053

October 26, 2023

Mr. Kevin Ward
Chair
Region C Regional Water Planning Group
c/o Trinity River Authority
P.O. Box 60
Arlington, Texas 76044

Dear Chairman Ward:

I have reviewed your request dated August 22, 2023, for approval of alternative water supply assumptions to be used in determining existing surface water availability. This letter confirms that the TWDB approves the following assumptions:

1. Use of safe yield for the allocation and distribution of surface water supplies from reservoirs owned and operated by Dallas Water Utilities (nine-month safe yield) and Tarrant Regional Water District (one-year safe yield).

2. Use of the results of North Texas Municipal Water District's Long-Range Water Supply plan, which accounted for the potential impacts of a drought worse than the drought of record, for the allocation and distribution of surface water supplies from reservoirs owned and operated by North Texas Municipal Water District.

3. Multiple changes to the Trinity WAM to account for current operating conditions, including subordination agreements, systems operations, and other corrections noted during review of the models, as detailed in Attachment A of the hydrologic variance request.

4. Changes to Lake Texoma and associated water rights in the Red River WAM to avoid potential double counting of supply and to improve the accuracy of firm yield estimates from Region C reservoirs, as detailed in Attachment A of the hydrologic variance request.

5. Model Lake Chapman, in the Sulphur WAM, as a single pool to assess its firm yield and then assign supplies proportionally based on each provider's water right, with inclusion of any new water rights granted that are not currently in the approved TCEQ WAM.

6. Use of surface water availabilities, based upon the hydrologic variance approved for use by the Region I RWPG and the TWDB for the Neches and Sabine River Basins.

7. Use of surface water availabilities, based upon the hydrologic variance approved for use by the Brazos G RWPG and the TWDB for the Brazos River Basin.

Because we have not had the opportunity to review the related information, the TWDB is not pre-approving the use of potential impacts of climatic uncertainties from the Dallas Water Utilities Long-Range Water Supply plan at this time. Once the updated long-range plan information is made available including the information on the methodology that will be the basis for assessing climatic uncertainties as will be incorporated into the regional water plan, the TWDB requests that a separate hydrologic variance request be submitted to approve this one item so that staff can review the updated information.

Although the TWDB approves the use of a nine-month (Dallas Water Utilities) and one-year (Tarrant Regional Water District) safe yield for developing estimates of current water supplies, firm yield for each reservoir must still be reported to TWDB in the online planning database and plan documents. For the purpose of evaluating potentially feasible water management strategies, the TCEQ WAM Run 3 is to be used, unless a separate hydrologic variance for water management strategy availability is submitted and approved by the TWDB.

While the TWDB authorizes these modifications to evaluate existing water supplies for development of the 2026 Region C RWP, it is the responsibility of the RWPG to ensure that the resulting estimates of water availability are reasonable for drought planning purposes and will reflect conditions expected in the event of actual drought conditions; and in all other regards will be evaluated in accordance with the most recent version of regional water planning contract Exhibit C, *General Guidelines for Development of the 2026 Regional Water Plans.*

If you have any questions, please do not hesitate to contact Kevin Smith of our Regional Water Planning staff at 512-475-1561 or kevin.smith@twdb.texas.gov.

Sincerely,

Jeff Walker Digitally signed by Jeff Walker Date: 2023.11.30 07:44:34 -06'00'

Jeff Walker
Executive Administrator

c: Howard Slobodin, Trinity River Authority
Abigail Gardner, P.E., Freese and Nichols, Inc.
Tony Smith, P.E., Carollo Engineers (Region G)
Brigit Buff, P.E., Plummer Associates, Inc. (Region I)
Kevin Smith, Water Supply Planning

Nelun Fernando, Ph.D., Surface Water

APPENDIX C
Methodology for Identifying Potentially Feasible WMSs

MEMORANDUM

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TO: Region C Regional Water Planning Group

CC: File

FROM: Freese and Nichols, Inc.

SUBJECT: Methodology for Identifying Potentially Feasible Water Management Strategies

DATE: 10/30/2023

PROJECT: TRA21862

The Regional Water Planning rules requires each region to develop and document the process to identify potentially feasible water management strategies (PFWMS). This process is in addition to the process set forth by the TWDB to evaluate each PFWMS. The purpose of this memorandum is to summarize the methodology for identifying potentially feasible water management strategies (WMSs).

For Region C, the methodology for identifying PFWMS will follow the sequence below:

1. **Identify entities with needs**. Per TWDB rules, conservation is required to be considered as a WMS for all water user groups (WUGs) with a need. It is anticipated that we will include recommended conservation strategies for most if not all municipal WUGs, as was done in the previous plan.
2. **Review recommended strategies in previous Regional Water Plan (RWP).** For each WUG/WWP, we will consider all WMSs that were included in the previous plan unless that WMS has been determined to be infeasible or unsupported by the WUG/WWP.
3. **Contact WUG/WWPs for input.** We will contact all WUGs/WWPs to get their input on what WMSs they want included in the plan. Meetings will be held with the major and regional water providers at which time they will be asked about their WMSs. A survey of WUGs and remaining WWPs will be conducted that presents the WMSs from the 2021 RCWP and specifically asks if the water supplier agrees with the WMSs and if not, it will ask them to provide other WMSs that they are considering.
4. **Seek input from Region C Members.** As the planning cycle progresses, all Region C members will be given an opportunity to comment and/or provide input on the PFWMS. RWPG representatives will be contacted for input on county-wide WUGs. These comments will be verified with the related water provider.
5. **Accept input from the public.** As the planning cycle progresses, the public will be given an opportunity to comment and/or provide input on the PFWMS. These comments will be verified with the related water provider.

As required by statute and rules (TWC §16.053(e)(5), and 31 TAC §357.34(c)) the RWPGs must consider, but are not limited to considering, a specified list of strategy types. This list includes 24 WMS types that require screening as part of the process for identifying PFWMS.[1]

While the TWDB list is comprehensive, each strategy type is not appropriate for every need, and some strategy types may not be appropriate for Region C water users. To determine whether a strategy is potentially feasible, the first considerations are:

- A strategy must use proven technology and must be technically feasible.
- A strategy should have an identifiable sponsor.
- A strategy must consider end use. This includes water quality, economics, geographic constraints, etc.
- A strategy must meet existing regulations.

The second consideration is whether a strategy would provide sufficient water to meet a projected need or a sizeable portion of the need. Considerations include:

- Is there available existing supply that is not already allocated to another user?
- Can new water be developed? If yes, identify the potential sources.
- Does the water quality meet the end use requirements? If not, can it be treated?
- Are there any technical considerations that would preclude the feasibility of the strategy type? For example, are there suitable geologic formations for aquifer storage and recovery (ASR)?

Strategy types that will be reviewed for consideration as potentially feasible for Region C include:

1. **Water Conservation**. Water conservation must be considered as a strategy for every identified need. If water conservation is not adopted, the reason must be documented. Region C will also consider conservation for municipal Water User Groups that do not show an identified need.
2. **Reuse.** Reuse projects will be considered on a case-by-case basis. Both direct and indirect reuse will be considered as appropriate.
3. **Management of existing water supplies.** The management of existing water supplies (including voluntary redistribution of water resources as well as voluntary subordination of water rights) will be considered on a case-by-case basis.
4. **Conjunctive use.** The conjunctive use of groundwater and surface water supplies may be considered when groundwater supplies are available. Applicable groundwater conservation district rules will be considered for such conjunctive systems.
5. **Acquisition of available existing water supplies.** The acquisition and connection of available existing supplies will be considered on a case-by-case basis. In general, supplies should be owned by the water group with a need for additional supply or available to that group for purchase or permitting.
6. **Development of new water supplies.** New supply development is a critical component for Region C. Although most of the new supply development is likely to be new surface water, other strategy subtypes will also be considered as potentially feasible.
7. **Developing regional water supply facilities or providing regional management of water supply facilities.**
8. **Developing large-scale desalination facilities for seawater or brackish groundwater production zones identified and designated under TWC §16.060(b)(5).** The RCWPG will consider desalination on a case-by-case basis.

[1] Second Amended General Guidelines for the Development of the 2026 Regional Water Plans, September 2023. https://www.twdb.texas.gov/waterplanning/rwp/planningdocu/2026/projectdocs/2026RWP_ExhibitC.pdf

9. **Developing large-scale desalination facilities for marine seawater that serve local or regional entities.** The RCWPG will consider desalination on a case-by-case basis.
10. **Voluntary transfer of water within the region using, but not limited to, contracts, water marketing, regional water banks, sales, leases, options, subordination agreements, and financing agreements.**
11. **Emergency transfer of water under TWC §11.139.**
12. **Interbasin transfers of surface water.** The RCWPG will recommend interbasin transfers when necessary to transport water from the source to its destination. Interbasin transfers will be evaluated in accordance with current regulations.
13. **System optimization.** Strategies will be considered for WUGs/WWPs that operate multiple water supply sources. Only system optimization that results in increased yield will be considered as potentially feasible.
14. **Reallocation of reservoir storage to new uses.** The RCWPG will consider reallocation of reservoir storage if the owner is amenable to reallocation and, in a case where reallocation in federal reservoirs is being considered (such as from flood to conservation storage), an appropriate and willing local sponsor can be found to sponsor a federal study.
15. **Enhancements of yields.** The RCWPG will consider yield enhancement projects as appropriate for the water source and identified need.
16. **Improvements to water quality.** The RCWPG will consider water quality improvement projects for municipal supplies that bring the existing water supply into compliance with state and federal regulations. General water quality projects may be considered if they improve the usability of the water source to help meet demands.
17. **New surface water supply.** The RCWPG will consider new surface water resources that can be permitted, provide a reasonable amount of supply to meet the identified need, are located within a reasonable distance of the end users, and are expected to provide water supplies at a reasonable cost.
18. **New groundwater supply.** The RCWPG will consider groundwater supplies in areas where additional groundwater is available.
19. **Aquifer storage and recovery.** The RCWPG will consider aquifer storage and recovery where the structure of the aquifer is such that this method is applicable. An ASR study must have already been performed to consider an area feasible for an ASR project.

There are several strategy types that likely are not appropriate for Region C water users. However, they may be considered if a project sponsor requests as a specific strategy.

1. **Drought management.** The RCWPG recommends that drought management WMS be implemented in response to drought conditions. These will be used to respond to drought conditions and provide a safety factor for water users. Drought management measures will not be adopted as strategies to meet long-range needs.
2. **Cancellation of water rights.** The Texas Commission on Environmental Quality has the power to cancel water rights after ten years of non-use, but this involuntary cancellation authority has seldom been used. The Water Availability Models show that very little additional supply would be gained from water right cancellation in Region C. Therefore, water right cancellation is not recommended as a potentially feasible water management strategy for Region C.
3. **Brush control.** The RCWPG will consider brush control as a general regional strategy. Specific impacts and quantity of supply will not be evaluated unless there is available data from existing studies.

4. **Precipitation enhancement.** The RCWPG will consider precipitation enhancement as a general regional strategy. Specific impacts and quantity of supply will not be evaluated unless there is available data from existing studies.
5. **Rainwater harvesting.** The RCWPG will consider rainwater harvesting as a general regional strategy. Specific impacts and quantity of supply will not be evaluated unless there is available data from existing studies.

APPENDIX D
List of Potentially Feasible WMSs

Table D-1: Tabular List of Potentially Feasible Water Management Strategies

Potentially Feasible Water Management Strategies
Conservation:
Conservation Measures
Drought Management:
Implementation of Drought Contingency Plans/Measures as needed
Reuse:
Purchase Reuse Water from DCPCMUD (Lake Grapevine)
Additional Reuse (TBD)
Athens Indirect Reuse
Cedar Creek Reuse (Wetlands)
Direct Reuse
Direct Reuse From Local WWTPs
Direct Reuse From Sherman
Direct Reuse From UTRWD
Ennis Indirect Reuse
Indirect Reuse (Athens MWA) (Interbasin Transfer)
Indirect Reuse to Lake Weatherford/Sunshine
Indirect Reuse From Jacksboro
Irving Indirect Reuse
Joe Pool Reuse
Las Colinas Direct Reuse
Main Stem Balancing Reservoir
Main Stem Pump Station
Reuse for Steam Electric Power
Reuse from TRA Central Regional WWTP
TRA Reuse for SEP
Lake Ralph Hall Reuse - UTRWD
Existing Supplies:
Additional Measure to Access Full Lavon Yield
Carrizo-Wilcox Groundwater From Counties TBD
Chapman Booster Pump Station
Develop Muenster Lake Supply
Lake Dredging
Expansion of Treatment and Delivery System
Freestone/Anderson County Groundwater (Forestar)
IPL Connect to Lake Palestine

Potentially Feasible Water Management Strategies
IPL Connection of Supplies (Cedar Creek wetlands and Richland-Chambers)
IPL Connection to Bachman
Lake O' the Pines
Lake Texoma Blending
Lake Texoma Desalination
Lake Texoma Raw Water for SEP
Navarro Mills (Additional)
Oklahoma
Renew/Expand Contract for Supplies from Current Provider
Toledo Bend
Development of New Supplies:
New Groundwater
New Surface Water
Lake Tehuacana
Lake Columbia (New IBT)
Neches Run-of-River Diversions (IBT)
Richland-Chambers Reservoir for SEP
George Parkhouse North Lake (New IBT)
George Parkhouse South Lake (New IBT)
Red River Off Channel Reservoir (New IBT)
New Supplies From Raised Dam at Wright Patman (New IBT)
Sulphur Basin Supplies (New IBT)
Marvin Nichols Reservoir (New IBT)
New reservoir in Wise County
Reallocation/Management of Supplies:
Expansion of Treatment and Delivery System
Expansion of Raw Water Supply System
Unallocated Supply Utilization
Conjunctive Use:
Conjunctive Use of Multiple Sources of Water
Aquifer Storage and Recovery:
General Aquifer Storage and Recovery
Aquifer Storage and Recovery - NTMWD
Aquifer Storage and Recovery Pilot - TRWD
Acquisition of Available Supplies:
Lake Texoma

Potentially Feasible Water Management Strategies
Additional Lake Texoma
Additional Supplies From Current Provider
Begin Purchasing From New Provider
Connect to and Begin Purchasing From New Provider
Connect to and Purchase From Lake Texoma
New Well(s) in Trinity Aquifer
New Well(s) in Carrizo-Wilcox Aquifer
New Well(s) in Woodbine Aquifer
New Well(s) in Queen City Aquifer
New Well(s) in Nacatoch Aquifer
New Well(s) in Cross Timbers Aquifer
New Well(s) in Other Aquifer
Treatment of Brackish Groundwater
Raw Water From TRWD for SEP
Water Rights in Navarro Mills Reservoir
Development of Regional Water Supply or Providing Regional Management of Water Supply Facilities:
TRA Ellis County Water Supply Project
Collin-Grayson Municipal Alliance
Cooke County Water Supply Project
Fannin County Water Supply Project
Grayson County Water Supply Project
Infrastructure to Deliver to Cooke County WUGs
Other Regional Systems as Feasible
Voluntary Transfer of Water (Incl. Regional Water Banks, Sales, Leases, Options, Subordination Agreements, and Financing Agreements):
Interim Purchase From Water Provider
Emergency Transfer of Water:
System Optimization, Subordination, Leases, Enhancement of Yield, Improvement of Water Quality:
System Operation
Desalination:
Desalination Plant
Supplies From the Gulf of Mexico with Desalination
Desalination Plant - Grayson County WUGs, Sherman, Denison
Desalination of Texoma supplies for NTMWD

APPENDIX E
Infeasible Water Management Strategy Assessment

REGION C WATER PLANNING GROUP

Senate Bill One Sixth Round of Regional Water Planning - Texas Water Development Board

January 2024

Jeff Walker
Texas Water Development Board
1700 North Congress
Austin, Texas 78711-3231

RE: Region C Identification and Evaluation of Infeasible Water Management Strategies

Dear Mr. Walker:

We would like to thank the Texas Water Development Board (TWDB) for granting Region C a two-month extension for the submittal of its Technical Memorandum (TM). As discussed, this extension will not affect the deadlines for other deliverables. As such, Region C hereby submits its results from the identification and evaluation of infeasible water management strategies.

No water management strategies or water management strategy projects were identified as infeasible as a result of Region C's analysis. If affirmative steps were taken by the project sponsor, but the strategy/project has not yet been implemented, this will be updated as necessary in the 2026 Region C Plan. Region C approved the results of the infeasibility analysis at the meeting held on November 6, 2023. Attached to this letter is a memorandum detailing the methodology and results of the infeasibility analysis. This information will be included within the Technical Memorandum deliverable as well.

Please call me if you have any questions.

Sincerely,

J. KEVIN WARD
Chair, Region C Water Planning Group

Attachment A

Identification of Infeasible Water Management Strategies Memorandum

MEMORANDUM

FREESE AND NICHOLS

Innovative approaches
Practical results
Outstanding service

801 Cherry Street, Suite 2800 + Fort Worth, Texas 76102 + 817-735-7300 + FAX 817-735-7491

www.freese.com

TO: Region C Regional Water Planning Group

CC: File

FROM: Freese and Nichols, Inc.

SUBJECT: Identification of Infeasible Water Management Strategies

DATE: 10/30/2023

PROJECT: TRA21862

The purpose of this memorandum is to review the methodology used to evaluate the infeasibility of water management strategies and projects from the *2021 Region C Plan* and the results of the analysis. The Texas Legislature passed a new requirement for the 2026 planning cycle that requires the regional water planning groups (RWPGs) to conduct a one-time, mid-cycle analysis of the previous regional water plan (RWP) to identify any newly infeasible water management strategies (WMSs) and water management strategy projects (WMSP) that were feasible and recommended at the time of the adoption of the previous RWP but which have since become infeasible and must be modified or amended out of the previous RWP.

The following summarizes the methodology and criteria by which Region C identified infeasible WMS and WMSPs. This methodology was presented to the Region C Water Planning Group on July 17, 2023, and was approved at the same meeting.

The Texas Water Development Board (TWDB) conducted a preliminary screening of the *2021 Region C Plan* and provided lists of WMS and WMSPs for review . Region C then conducted an initial screening of these WMS and WMSPs based on the following criteria:

1) Does the strategy require construction or permitting?
2) Is it recommended to be online in 2020?
3) Is there an identifiable sponsor (e.g., livestock has no sponsor)?
4) Is the WMS a major project type (e.g., reservoir)?

If a WMS met all the screening criteria, then the WMS was retained for further evaluation. Initial screening eliminated all conservation strategies, strategies for self-supplied aggregated WUGs, and infrastructure projects that were recommended to be online in 2030 or later.

Each of the WMSs and WMSPs retained for further evaluation was compared to the TWDB criteria for feasibility. If a WMS or WMSP had been implemented or affirmative steps had been taken, then it was considered feasible. Affirmative steps included but were not limited to 1) spending money on the strategy or project, 2) voting to spend money on the strategy or project, or 3) applying for a federal or state permit for the strategy or project in accordance with the implementation schedule in the state water plan. The TWDB also clarified that a WMS or WMSP may also be considered feasible if it was not in the correct planning decade, but the sponsor had taken affirmative steps towards implementation.

The WMS online date for these projects would be moved to the appropriate decade in the *2026 Region C Plan.*

The TWDB identified 710 strategies (WMS) and 356 projects (WMSP) for review by the Region C planning group. A WMS is a plan to meet an identified need for additional water by an entity, which can mean increasing the total water supply or maximizing an existing supply, including through reducing demands. A WMSP is a water project that has a capital cost and is developed to implement a WMS. When a WMSP is implemented, it is intended to develop, deliver, and/or treat additional water supply volumes, or conserve water for an entity(s). There may be multiple projects for a single strategy. While both strategies and projects are interrelated, they are tracked separately by the TWDB and require evaluation separately.

To assess whether these strategies and projects are feasible, FNI conducted a secondary screening process to refine the list of strategies that do not require a permit or construction or do not have an identifiable sponsor. We also assessed the time necessary to develop a strategy to determine if a future strategy could be implemented within the timeframe specified in the regional plan. Following this screening, FNI reached out to each of the sponsors of the remaining strategies through email and then follow-up phone calls. We also reviewed available public information, such as the State drilling records database. For entities that did not respond to our inquests, we assumed the strategies or projects are feasible in accordance with the guidance provided by the TWDB.

The review of these strategies and projects found all are considered feasible and are documented in **Appendix A**. A summary of this review is presented below.

- **Conservation.** Of the 710 strategies, 657 were conservation related and therefore do not require a permit or construction and were found to be feasible.
- **Unallocated Supply or Conservation Surplus Reallocation.** Seventeen strategies were pertaining to unallocated supply or conservation surplus reallocation. These WMSs were primarily developed for database purposes and represent existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the supply became available or the constraint was resolved, these additional existing supplies are able to be allocated. Since these WMSs do not require a permit or construction they were found to be feasible.
- **Strategies that were not evaluated.** Three strategies were not evaluated and are considered feasible for the purposes of this analysis. Of those, two are strategies developed for mining and there is no longer a projected need. This has been reflected in revisions made to demands in the *2026 Region C Plan*. The other strategy not evaluated is the DWU off-channel reservoir for indirect reuse, which has an online date of 2050. Permitting for new reservoirs is expected to take between 10 and 20 years, and design and construction between 6 and 8 years. Therefore, no activity is required for reservoir projects recommended after 2040 and are considered to be technically feasible.
- **Strategies that have been implemented.** Twenty-four strategies were found to have been implemented. Of those, 21 strategies were pertaining to groundwater well development and were verified against the TWDB Submitted Drillers Report Database as having been implemented in some capacity. Eight of the groundwater strategies were for county-aggregated water user groups that represent a conglomeration of entities (such as county-other or mining). In these instances, the TWDB recognizes that without a distinct identifiable sponsor, information is not available to assess the feasibility of these projects and they can be considered feasible for this analysis. The remaining three included Bois d'Arc Lake, Weatherford Indirect Reuse, and

Gainesville Direct Reuse. The sponsor and/or engineering consultant were contacted, and they confirmed that the strategies had been implemented by the deadline of January 5, 2023.

- **Other strategies that have not yet been implemented but the sponsor has taken affirmative steps.** The TWDB clarified that if a strategy is shown as online in 2020 and has not yet been implemented, but the sponsor has taken any affirmative steps, it could still be considered technically feasible, and no amendment to the *2021 Region C Plan* is needed. The online decade will be corrected as necessary in the *2026 Region C Plan*. The remaining nine strategies fall within this category. Of these strategies, three are for new major reservoirs. UTRWD's Ralph Hall Reservoir and Reuse strategy began construction June 2021 with plans to deliver water by the 2030 online date. TRWD's Tehuacana strategy has been part of TRWD's long-range planning and the TRWD has taken affirmative action towards implementation via numerous studies. The joint strategy of Marvin Nichols Reservoir was recommended in the *2021 Region C Plan* with a projected online date of 2050. As discussed previously, permitting for new reservoirs is expected to take between 10 and 20 years, and design and construction between 6 and 8 years. Therefore, the strategy is considered technically feasible for the purposes of this analysis. However, it is important to note that project sponsors have continued to finance studies on the strategy and taken affirmative actions to gather data necessary for permitting.

In addition to the WMSs, 356 projects were reviewed as part of this analysis.

- **Conservation.** Of these projects, 273 were related to conservation and were found to be feasible. For the types of conservation projects identified, capital costs are assumed to be budgeted annually and therefore, expenditures have been made.
- **Projects that were not evaluated**. 32 projects were not evaluated and were considered feasible for the purposes of this analysis. Of those, six of the projects were not able to be evaluated because the project sponsor did not respond to request for information and affirmative action was not able to be verified. Four of those projects were for groundwater wells and two of the projects were for connections to new water providers. Three of the projects were for county-aggregated water user groups and do not have a specific sponsor. In these instances, the TWDB recognizes that without a distinct identifiable sponsor, information is not available to assess the feasibility of these projects and they can be considered feasible for this analysis. Two of the projects were not evaluated because they refer to new major reservoirs with a recommended online date after 2040 (Lake Columbia and DWU Off-channel reservoir). Permitting for new reservoirs is expected to take between 10 and 20 years, and construction between 6 and 8 years. Therefore, no activity is required for reservoir projects recommended after 2040 and are considered to be technically feasible. The remaining 21 projects can be implemented in less than 10 years and do not have project related strategy supply until 2030. Therefore, the projects are considered feasible for the purposes of this analysis.
- **Projects that have been implemented.** 23 projects were found to have been implemented. Of those, 17 strategies were pertaining to groundwater well development and were verified against the TWDB Submitted Drillers Report Database as having been implemented in some capacity. The remaining six included Bois d'Arc Lake, Gainesville Direct Reuse, B H P WSC Connection to NTMWD, Hudson Oaks and Willow Park Connection to Fort Worth, and Midlothian WTP Expansion. The sponsor and/or engineering consultant were contacted, and they confirmed that the projects had been implemented.
- **Other projects that have not yet been implemented but the sponsor has taken affirmative steps.** The TWDB clarified that if a project is shown as online in 2020 and has not yet been implemented, but the sponsor has taken any affirmative steps, it could be considered still technically feasible, and no amendment to the *2021 Region C Plan* is needed. The online decade

will be corrected as necessary in the *2026 Region C Plan*. The remaining 28 strategies fall within this category. Of these projects, three are for new major reservoirs. UTRWD's Ralph Hall Reservoir and Reuse strategy began construction June 2021 with plans to deliver water by the 2030 online date. TRWD's Tehuacana strategy has been part of TRWD's long-range planning and the TRWD has taken affirmative action towards implementation via numerous studies. The joint strategy of Marvin Nichols Reservoir was recommended in the *2021 Region C Plan* with a projected online date of 2050. As discussed previously, permitting for new reservoirs is expected to take between 10 and 20 years, and design and construction between 6 and 8 years. Therefore, the project is considered technically feasible for the purposes of this analysis. However, it is important to note that project sponsors have continued to finance studies on the strategy and taken affirmative actions to gather data necessary for permitting.

Appendix A includes the WMS and WMSPs that the TWDB selected for the infeasibility analysis. Also included is additional information on the recommendations that were made on whether the WMS and/or WMSP was identified as feasible. Conservation WMS and WMSPs are not included in the Appendix since they do not require a permit or construction and were found to be feasible.

No WMS or WMSPs were identified as infeasible as a result of this analysis. If affirmative steps were taken by the project sponsor but the strategy/project has not yet been implemented, this will be updated as necessary in the *2026 Region C Plan*.

Appendix A

TWDB Listed Water Management Strategies and Projects for Infeasibility Analysis

WMS identified as infeasible? (Y/N)	RWPG Comments	WMS Sponsor Region	WMS Type	WMS Description	WMSId	WMS Name	WMS Group Name	WMS Sponsor and/or select WUG Beneficiary List	Source Description	Strategy Supply 2020	Strategy Supply 2030	Strategy Supply 2040	Strategy Supply 2050	Strategy Supply 2060	Strategy Supply 2070	Is Strategy Supply Related to a WMS Project?
Unallocated Supply or Conservation Surplus Reallocation																
N	The WMS of 'Unallocated Supply Utilization' is primarily for database purposes. This represents existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the demand reduction WMS of conservation is applied, these existing supplies are able to be allocated within the constraints.	C	Groundwater wells and other	Transfer/Transaction	5458	Gainesville - Unallocated Groundwater Supply Utilization		Gainesville	Trinity Aquifer | Cooke	484	83	77	72	84	56	N
N	The WMS of 'Unallocated Supply Utilization' is primarily for database purposes. This represents existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the demand reduction WMS of conservation is applied, these existing supplies are able to be allocated within the constraints.	C	Indirect reuse	Transfer/Transaction	5233	Seagoville - Unallocated Supply Utilization		Seagoville	Trinity Indirect Reuse	7	39	48	58	80	100	N
N	The WMS of 'Unallocated Supply Utilization' is primarily for database purposes. This represents existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the demand reduction WMS of conservation is applied, these existing supplies are able to be allocated within the constraints.	C	Other surface water	Transfer/Transaction	2871	Denton - Unallocated Supply Utilization		Denton	Lewisville Lake/Reservoir Non-System Portion	1,338	1,609	1,884	2,386	2,356	2,250	Y
N	The WMS of 'Unallocated Supply Utilization' is primarily for database purposes. This represents existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the demand reduction WMS of conservation is applied, these existing supplies are able to be allocated within the constraints.	C	Other surface water	Transfer/Transaction	2871	Denton - Unallocated Supply Utilization		Denton	Ray Roberts Lake/Reservoir Non-System Portion	3,235	3,884	4,502	5,647	5,607	5,408	Y
N	Assumed unallocated supply utilization strategy does not require a permit or involve construction, thus not evaluated.	C	Other surface water	Transfer/Transaction	4948	DWU - Conservation Surplus Reallocation		Dallas; Upper Trinity Regional WD - Unassigned Water Volumes	Tawakoni Lake/Reservoir	1,272	368	355	345	155	21	N
N	The WMS of 'Unallocated Supply Utilization' is primarily for database purposes. This represents existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the demand reduction WMS of conservation is applied, these existing supplies are able to be allocated within the constraints.	C	Other surface water	Transfer/Transaction	3415	Jacksboro - Unallocated Supply Utilization		Jacksboro	Lost Creek-Jacksboro Lake/Reservoir System	7	7	7	7	7	7	Y
N	The WMS of 'Unallocated Supply Utilization' is primarily for database purposes. This represents existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the demand reduction WMS of conservation is applied, these existing supplies are able to be allocated within the constraints.	C	Other surface water	Transfer/Transaction	5239	Midlothian - Unallocated Supply Utilization		Grand Prairie; Midlothian	TRWD Lake/Reservoir System	1,399	4,800	4,743	3,855	3,484	3,366	Y
N	The WMS of 'Unallocated Supply Utilization' is primarily for database purposes. This represents existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the demand reduction WMS of conservation is applied, these existing supplies are able to be allocated within the constraints.	C	Other surface water	Transfer/Transaction	5263	Runaway Bay - Unallocated Supply Utilization		Runaway Bay	TRWD Lake/Reservoir System	652	567	442	516	542	1,685	N
N	The WMS of 'Unallocated Supply Utilization' is primarily for database purposes. This represents existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the demand reduction WMS of conservation is applied, these existing supplies are able to be allocated within the constraints.	C	Other surface water	Transfer/Transaction	5233	Seagoville - Unallocated Supply Utilization		Seagoville	Fork Lake/Reservoir	9	43	55	66	79	96	N
N	The WMS of 'Unallocated Supply Utilization' is primarily for database purposes. This represents existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the demand reduction WMS of conservation is applied, these existing supplies are able to be allocated within the constraints.	C	Other surface water	Transfer/Transaction	5233	Seagoville - Unallocated Supply Utilization		Seagoville	Ray Hubbard Lake/Reservoir	8	39	47	50	56	61	N
N	The WMS of 'Unallocated Supply Utilization' is primarily for database purposes. This represents existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the demand reduction WMS of conservation is applied, these existing supplies are able to be allocated within the constraints.	C	Other surface water	Transfer/Transaction	5233	Seagoville - Unallocated Supply Utilization		Seagoville	Ray Roberts-Lewisville-Grapevine Lake/Reservoir System	21	80	90	94	99	102	N
N	The WMS of 'Unallocated Supply Utilization' is primarily for database purposes. This represents existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the demand reduction WMS of conservation is applied, these existing supplies are able to be allocated within the constraints.	C	Other surface water	Transfer/Transaction	5233	Seagoville - Unallocated Supply Utilization		Seagoville	Tawakoni Lake/Reservoir	32	133	149	163	174	190	N
N	The WMS of 'Unallocated Supply Utilization' is primarily for database purposes. This represents existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the demand reduction WMS of conservation is applied, these existing supplies are able to be allocated within the constraints.	C	Other surface water	Transfer/Transaction	5236	Sherman - Unallocated Supply Utilization		Sherman	Texoma Lake/Reservoir Non-System Portion	321	339	1,278	813	0	0	N
N	The WMS of 'Unallocated Supply Utilization' is primarily for database purposes. This represents existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the demand reduction WMS of conservation is applied, these existing supplies are able to be allocated within the constraints.	C	Other surface water	New Infrastructure Only	3628	TRWD - Unallocated Supply Utilization		Tarrant Regional WD	TRWD Lake/Reservoir System	282	64	66	50	71	108	N

WMS identified as infeasible? (Y/N)	RWPG Comments	WMS Sponsor Region	WMS Type	WMS Description	WMSId	WMS Name	WMS Group Name	WMS Sponsor and/or select WUG Beneficiary List	Source Description	Strategy Supply 2020	Strategy Supply 2030	Strategy Supply 2040	Strategy Supply 2050	Strategy Supply 2060	Strategy Supply 2070	Is Strategy Supply Related to a WMS Project?
N	The WMS of 'Unallocated Supply Utilization' is primarily for database purposes. This represents existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the demand reduction WMS of conservation is applied, these existing supplies are able to be allocated within the constraints.	C	Other surface water	Transfer/Transaction	3628	TRWD - Unallocated Supply Utilization		Tarrant Regional WD; Tarrant Regional WD - Unassigned Water Volumes	TRWD Lake/Reservoir System	7,371	1,621	557	550	926	1,752	Y
N	The WMS of 'Unallocated Supply Utilization' is primarily for database purposes. This represents existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the demand reduction WMS of conservation is applied, these existing supplies are able to be allocated within the constraints.	C	Other surface water	Transfer/Transaction	5257	Walnut Creek SUD - Unallocated Supply Utilization		Walnut Creek SUD	TRWD Lake/Reservoir System	97	118	160	166	174	180	Y
N	The WMS of 'Unallocated Supply Utilization' is primarily for database purposes. This represents existing supplies that were not able to be allocated to a customer due to a reported constraint (infrastructure/contract). Once the demand reduction WMS of conservation is applied, these existing supplies are able to be allocated within the constraints.	C	Other surface water	Transfer/Transaction	5446	Wise County WSD - Unallocated Supply Utilization		Wise County WSD	TRWD Lake/Reservoir System	45	44	40	36	32	30	Y
Strategies that were not evaluated																
N	Strategy not evaluated as there is no longer a projected mining need in Jacksboro.	C	Indirect reuse	Potable Reuse	2073	Mining, Jack - Indirect Reuse (Jacksboro)		Jacksboro	Trinity Indirect Reuse	330	342	348	351	356	359	N
N	Strategy not evaluated as there is no longer a projected mining need in Gainesville.	C	Other direct reuse	Non-Potable Reuse	3469	Gainesville - Expand Direct Reuse for Mining		Gainesville	Direct Reuse	99	67	71	74	77	80	Y
N	Reservoir project recommended online date after 2040, thus not evaluated.	C	New major reservoir	New Major Reservoir	2419	DWU - Indirect Reuse Implementation		Dallas; Dallas - Unassigned Water Volumes; Upper Trinity Regional WD - Unassigned Water Volumes	Trinity Indirect Reuse	0	0	0	78,447	89,741	95,829	Y
Other Strategies that have been implemented																
N	Bois D'Arc Lake is currently online.	C	New major reservoir	New Major Reservoir	2236	NTMWD - Bois D'Arc Lake		North Texas MWD; North Texas MWD - Unassigned Water Volumes	Bois D'Arc Lake/Reservoir	50,000	83,979	60,510	65,514	43,184	33,477	Y
N	Project implemented by 1/5/2023.	C	Indirect reuse	Potable Reuse	2070	Weatherford - Indirect Reuse (Lake Weatherford/Sunshine)		Weatherford	Trinity Indirect Reuse	2,242	2,803	3,363	3,363	3,363	3,363	Y
N	Sponsor has implemented the project by 1/5/2023. The sponsor is currently utilizing reuse for one of their parks and is planning to increase reuse after the installation of their UV system.	C	Other direct reuse	Non-Potable Reuse	3015	Gainesville - Expand Direct Reuse for Irrigation		Gainesville	Direct Reuse	70	70	70	70	70	70	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	2007	County-Other, Denton - New Well(s) in Woodbine Aquifer		County-Other, Denton	Woodbine Aquifer | Denton	817	817	817	817	817	817	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	2032	County-Other, Parker - New Well(s) in Trinity Aquifer		County-Other, Parker	Trinity Aquifer | Parker	235	235	235	235	235	235	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	4994	Cross Timbers WSC - New Well(s) in Trinity Aquifer		Cross Timbers WSC	Trinity Aquifer | Denton	250	250	250	250	250	250	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	2021	Gunter - New Well(s) in Trinity Aquifer		Gunter	Trinity Aquifer | Grayson	50	50	50	50	50	50	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	4768	Irrigation, Fannin - New Well(s) in Trinity Aquifer		Irrigation, Fannin	Trinity Aquifer | Fannin	1,592	1,592	1,592	1,592	1,592	1,592	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	2008	Justin - New Well(s) in Trinity Aquifer		Justin	Trinity Aquifer | Denton	244	244	244	244	244	244	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	2009	Krum - New Well(s) in Trinity Aquifer		Krum	Trinity Aquifer | Denton	202	202	202	202	202	202	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	4725	Lakeside - New Well(s) in Trinity Aquifer		Lakeside	Trinity Aquifer | Tarrant	58	61	71	80	77	76	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	4724	Livestock, Henderson - New Well(s) in Carrizo-Wilcox Aquifer		Livestock, Henderson	Carrizo-Wilcox Aquifer | Henderson	403	403	403	403	403	403	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	4726	Livestock, Tarrant - New Well(s) in Trinity Aquifer		Livestock, Tarrant	Trinity Aquifer | Tarrant	75	75	75	75	75	75	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	2035	Manufacturing, Wise - New Well(s) in Trinity Aquifer		Manufacturing, Wise	Trinity Aquifer | Wise	201	201	201	201	201	201	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	2024	Mining, Grayson - New Well(s) in Trinity Aquifer		Mining, Grayson	Trinity Aquifer | Grayson	100	100	100	100	100	100	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	4721	Northwest Grayson County WCID 1 - New Well(s) in Trinity Aquifer		Northwest Grayson County WCID 1	Trinity Aquifer | Grayson	29	29	34	55	130	247	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	4996	Pelican Bay - New Well(s) in Trinity Aquifer		Pelican Bay	Trinity Aquifer | Tarrant	24	24	24	24	24	24	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	2010	Pilot Point - New Well(s) in Trinity Aquifer		Pilot Point	Trinity Aquifer | Denton	313	313	313	313	313	313	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	4720	South Freestone County WSC - New Well(s) in Carrizo-Wilcox Aquifer		South Freestone County WSC	Carrizo-Wilcox Aquifer | Freestone	16	11	23	110	255	571	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	2015	Teague - New Well(s) in Carrizo-Wilcox Aquifer		Teague	Carrizo-Wilcox Aquifer | Freestone	13	0	169	409	613	822	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	4713	Anna - New Well(s) in Woodbine Aquifer		Anna	Woodbine Aquifer | Collin	200	200	200	200	200	200	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	4992	Argyle WSC - New Well(s) in Trinity Aquifer		Argyle WSC	Trinity Aquifer | Denton	250	250	250	250	250	250	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	4993	Bolivar WSC - New Well(s) in the Trinity Aquifer		Bolivar WSC	Trinity Aquifer | Denton	250	250	250	250	250	250	Y
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Groundwater wells and other	Groundwater Well Development	2006	County-Other, Denton - New Well(s) in Trinity Aquifer		County-Other, Denton	Trinity Aquifer | Denton	504	504	504	504	504	504	Y
Other Strategies that have not yet been implemented but the sponsor has taken affirmative steps																
N	Reservoir project recommended online date (2050) is after 2040. Project sponsors have continued to finance studies on the reservoir and take affirmative actions to gather data necessary for permitting.	C	New major reservoir	New Major Reservoir	2429	Marvin Nichols (328) Strategy for NTMWD, TRWD, and UTRWD		Marvin Nichols Reservoir - Unassigned Water Volumes; North Texas MWD; North Texas MWD - Unassigned Water Volumes; Tarrant Regional WD; Tarrant Regional WD - Unassigned Water Volumes; Upper Trinity Regional WD; Upper Trinity Regional WD - Unassigned Water Volumes	Marvin Nichols Lake/Reservoir	0	0	0	451,500	451,500	451,500	Y
N	Sponsor has taken affirmative steps towards implementation. The TRWD ASR pilot well is currently in the final design phase and is out for construction bid.	C	Aquifer storage and recovery	Aquifer Storage & Recovery	4936	TRWD - Aquifer Storage and Recovery Pilot		Tarrant Regional WD - Unassigned Water Volumes	Trinity Aquifer ASR | Tarrant	2,500	1,710	2,011	2,430	1,581	1,042	Y
N	Sponsor has taken affirmative steps towards implementation. This WMS includes both the share of additional discharges to Lewisville Lake (no associated costs; implemented) and the Elm Fork Swap/Ray Hubbard Exchange with NTMWD (affirmative steps taken towards implementation). There are also no permitting or construction costs involved with this WMS.	C	Indirect reuse	Potable Reuse	2419	DWU - Indirect Reuse Implementation		Dallas; Dallas - Unassigned Water Volumes; Upper Trinity Regional WD - Unassigned Water Volumes	Trinity Indirect Reuse	29,234	34,336	27,813	27,722	25,114	24,204	Y
N	Sponsor has taken affirmative steps towards implementation. Sponsor has secured water rights from TRA from Mountain Creek.	C	Indirect reuse	Potable Reuse	5245	Midlothian - Indirect Reuse		Midlothian	Trinity Indirect Reuse	2,107	9,203	10,100	10,224	10,324	10,470	Y

WMS identified as infeasible? (Y/N)	RWPG Comments	WMS Sponsor Region	WMS Type	WMS Description	WMSId	WMS Name	WMS Group Name	WMS Sponsor and/or select WUG Beneficiary List	Source Description	Strategy Supply 2020	Strategy Supply 2030	Strategy Supply 2040	Strategy Supply 2050	Strategy Supply 2060	Strategy Supply 2070	Is Strategy Supply Related to a WMS Project?
N	Direct reuse has been ongoing since 2007. Sponsor has taken affirmative steps towards implementation. Additional pumping capacity has not been completed but has a proposed in-service for summer 2024.	C	Other direct reuse	Non-Potable Reuse	2071	Frisco - Additional Direct Reuse		Frisco	Direct Reuse	325	594	856	1,118	1,379	1,379	Y
N	Sponsor has taken affirmative steps towards implementation. Sponsor has a current CMAR contract for a Lake Texoma raw water intake pump station and pipeline.	C	Other surface water	Transfer/Transaction	2868	Denison - Texoma with Infrastructure Improvements		Denison	Texoma Lake/Reservoir Non-System Portion	341	697	844	1,695	3,517	6,764	Y
N	Sponsor has taken affirmative steps towards implementation. Sponsor has paid off Lake Muenster and is currently in the design phase for the WTP.	C	Other surface water	New Infrastructure Only	3416	Muenster - Develop Muenster Lake Supply		Muenster	Muenster Lake/Reservoir	280	280	280	280	280	280	Y
N	Tehuacana has been part of TRWD's long-range planning and the District has taken affirmative action towards implementation via numerous studies.	C	New major reservoir	New Major Reservoir	2182	TRWD - Tehuacana		Tarrant Regional WD; Tarrant Regional WD - Unassigned Water Volumes	Tehuacana Lake/Reservoir	0	0	21,070	21,070	21,070	21,070	Y
N	Construction of Lake Ralph Hall began in June 2021 with plans to deliver water by the 2030 online date.	C	New major reservoir	New Major Reservoir	2469	UTRWD - Ralph Hall Reservoir and Reuse		Upper Trinity Regional WD; Upper Trinity Regional WD - Unassigned Water Volumes	Ralph Hall Lake/Reservoir	0	39,220	39,142	39,064	38,986	38,908	Y

WMS Project identified as infeasible? (Y/N)	RWPG Comments	Project Sponsor Region	Project Category	WMS Project Id	WMS Project Name	Capital Cost	Online Decade	Project Sponsors	Project Components	Project Related WMS Types	Project Related Source Subtypes	Project Related Strategy Supply 2020 AFY	Project Related Strategy Supply 2030 AFY	Project Related Strategy Supply 2040 AFY	Project Related Strategy Supply 2050 AFY	Project Related Strategy Supply 2060 AFY	Project Related Strategy Supply 2070 AFY
Projects that were not evaluated																	
N	Project sponsor did not respond to request for information and affirmative steps were not able to be verified.	C	Other project type	4016	Cross Timbers WSC - New Well(s) in Trinity Aquifer	$2,955,000	2020	Cross Timbers WSC	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	250	250	250	250	250	250
N	Project sponsor did not respond to request for information and affirmative steps were not able to be verified.	C	Other project type	3831	Lakeside - New Well(s) in Trinity Aquifer	$1,413,000	2020	Lakeside	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	58	61	71	80	77	76
N	Project sponsor did not respond to request for information and affirmative steps were not able to be verified.	C	Other project type	3825	South Freestone County WSC - New Well(s) in Carrizo-Wilcox Aquifer	$6,485,000	2020	South Freestone County WSC	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	16	11	23	110	255	571
N	Project sponsor did not respond to request for information and affirmative steps were not able to be verified.	C	Other project type	1065	Teague - New Wells in Carrizo-Wilcox Aquifer Q-135	$5,230,000	2020	Teague	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	13	0	169	409	613	822
N	Project sponsor did not respond to request for information and affirmative steps were not able to be verified.	C	Other project type	1136	Newark - Connect to Rhome	$1,584,000	2020	Newark	Conveyance/Transmission Pipeline	Aquifer storage and recovery;Groundwater wells and other;Indirect reuse;New major reservoir;Other surface water	Aquifer Storage and Recovery;Groundwater;Indirect Potable Reuse;Reservoir;Reservoir System	13	39	88	188	349	546
N	Project sponsor did not respond to request for information and affirmative steps were not able to be verified.	C	Other project type	1047	Sardis Lone Elm - Connect to TRWD	$11,696,000	2020	Sardis Lone Elm WSC	Pump Station; Conveyance/Transmission Pipeline	Aquifer storage and recovery;Groundwater wells and other;Indirect reuse;New major reservoir;Other surface water	Aquifer Storage and Recovery;Groundwater;Indirect Potable Reuse;Reservoir;Reservoir System	767	1,983	2,582	2,959	3,410	3,639
N	Project does not have an identifiable sponsor, thus not evaluated.	C	Other project type	1081	County Other, Jack - Infrastructure to Connect to Jacksboro	$2,152,000	2020	Municipal county-other (Jack)	Conveyance/Transmission Pipeline; Pump Station	Other surface water	Reservoir System	7	7	7	7	7	7
N	Project does not have an identifiable sponsor, thus not evaluated.	C	Other project type	1082	County Other, Jack - Infrastructure to Connect to Walnut Creek SUD	$5,002,000	2020	Municipal county-other (Jack)	Conveyance/Transmission Pipeline; Pump Station	Aquifer storage and recovery;Groundwater wells and other;Indirect reuse;New major reservoir;Other surface water	Aquifer Storage and Recovery;Groundwater;Indirect Potable Reuse;Reservoir;Reservoir System	7	12	16	24	29	32
N	Project does not have an identifiable sponsor, thus not evaluated.	C	Other project type	1079	County Other, Kaufman - WTP and Connect to TRWD	$11,016,000	2020	Municipal county-other (Kaufman)	Conveyance/Transmission Pipeline; New Water Treatment Plant; Pump Station	Aquifer storage and recovery;Groundwater wells and other;Indirect reuse;New major reservoir;Other surface water	Aquifer Storage and Recovery;Groundwater;Indirect Potable Reuse;Reservoir;Reservoir System	58	53	86	91	157	328
N	Reservoir project recommended online date (2070) is after 2040, thus not evaluated.	C	New major reservoir	969	DWU - Lake Columbia	$322,267,000	2070	Dallas	New Contract; New Water Right/Permit Non-Exempt IBT; Conveyance/Transmission Pipeline; New Surface Water Intake; Pump Station; Reservoir Construction	New major reservoir	Reservoir	0	0	0	0	0	56,000
N	The DWU Main Stem Balancing Reservoir is not recommended to be online until 2050. Project related strategy supply in 2020 is associated with other indirect reuse supply such as the share of additional discharges to Lewisville Lake (implemented) and the Elm Fork Swap/Ray Hubbard Exchange with NTMWD (affirmative action has been taken).	C	New major reservoir	834	DWU - Main Stem Balancing Reservoir	$772,904,000	2050	Dallas	Conveyance/Transmission Pipeline; Pump Station; Reservoir Construction; New Surface Water Intake	Indirect reuse;New major reservoir	Indirect Potable Reuse	29,234	35,751	42,119	129,300	148,673	158,388
N	This project was not evaluated for feasibility because the constraint on existing supplies for the City of Azle is based on a contractual limit with TRWD and not a WTP capacity constraint. The online date of this project should be in a later decade. This will be revised as appropriate in the 2026 Region C Plan.	C	Other project type	859	Azle - 4 MGD WTP Expansion	$25,410,000	2020	Azle	Water Treatment Plant Expansion	Groundwater wells and other;Indirect reuse;New major reservoir;Other surface water	Groundwater;Indirect Potable Reuse;Reservoir;Reservoir System	224	311	424	624	999	1,734
N	Project related strategy supply does not occur until 2060.	C	Other project type	1074	Athens MWA - New Wells Phase 1	$15,151,000	2020	Athens Municipal Water Authority	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	0	0	0	0	590	1,693
N	Project related strategy supply does not occur until 2060.	C	Other project type	3861	Athens MWA - New Wells Phase 2	$2,573,000	2020	Athens Municipal Water Authority	Single Well	Groundwater wells and other	Groundwater	0	0	0	0	590	1,693
N	Project related strategy supply does not occur until 2060.	C	Other project type	1075	Athens MWA - WTP Infrastructure Improvements	$65,000	2020	Athens Municipal Water Authority	Water Treatment Plant Expansion	Indirect reuse	Indirect Potable Reuse	0	0	0	0	538	1,817
N	Project related strategy supply does not occur until after 2020.	C	Other project type	4017	Dorchester - New Well(s) in Trinity Aquifer	$1,845,000	2020	Dorchester	Single Well	Groundwater wells and other	Groundwater	0	90	90	90	90	90
N	Project related strategy supply does not occur until after 2020.	C	Related to out of state source	1084	Forney - Increase Delivery Infrastructure from NTWMD	$13,054,000	2020	Forney	Pump Station	Indirect reuse;New major reservoir;Other surface water	Indirect Potable Reuse;Reservoir;Reservoir System;Run-of-River	0	436	892	1,558	2,977	5,187
N	Project related strategy supply does not occur until after 2020.	C	Other project type	998	Fort Worth Direct Reuse - Alliance Corridor	$23,008,000	2020	Fort Worth	Water Treatment Plant Expansion; Conveyance/Transmission Pipeline; Pump Station	Other direct reuse	Direct Non-Potable Reuse	0	2,903	7,254	8,310	8,396	8,396
N	Project related strategy supply does not occur until after 2020.	C	Other project type	997	Fort Worth Village Creek WRF Future Direct Reuse	$97,410,000	2020	Fort Worth	Conveyance/Transmission Pipeline; Pump Station; Water Treatment Plant Expansion	Other direct reuse	Direct Non-Potable Reuse	0	6,687	6,687	6,687	6,687	6,687
N	Project related strategy supply does not occur until 2060.	C	Other project type	1018	Grand Prairie - Additional Delivery Infrastructure from DWU	$72,782,000	2020	Grand Prairie	Conveyance/Transmission Pipeline; Pump Station	Other surface water	Run-of-River	0	0	0	0	1,522	1,385
N	Project related strategy supply does not occur until after 2020.	C	Other project type	956	NTMWD & Irving - Lake Chapman Pump Station Expansion	$43,318,000	2020	Irving; North Texas MWD	Pump Station; Storage Tank	Indirect reuse	Indirect Non-Potable Reuse	0	27,539	27,539	27,539	27,539	27,539
N	Project related strategy supply does not occur until after 2020.	C	Related to out of state source	1113	Rockwall - Additional Delivery Infrastructure from NTWMD	$28,750,000	2020	Rockwall	Conveyance/Transmission Pipeline; Pump Station	Indirect reuse;New major reservoir;Other surface water	Indirect Potable Reuse;Reservoir;Reservoir System;Run-of-River	0	1,422	3,088	4,349	5,965	7,540
N	Project related strategy supply does not occur until after 2020.	C	Related to out of state source	1088	Terrell - Infrastructure Improvements to Wholesale Customer	$7,945,000	2020	Terrell	Conveyance/Transmission Pipeline	Indirect reuse;New major reservoir;Other surface water	Indirect Potable Reuse;Reservoir;Reservoir System;Run-of-River	0	1,222	3,763	5,386	7,023	9,479
N	Project related strategy supply does not occur until after 2020.	C	Other project type	1108	Weatherford - Expand Lake Benbrook Pump Station	$2,299,000	2020	Weatherford	Pump Station	Groundwater wells and other;Indirect reuse;New major reservoir;Other surface water	Groundwater;Indirect Potable Reuse;Reservoir;Reservoir System	0	18	16	1,557	7,478	13,313
N	Project related strategy supply does not occur until after 2020.	C	Related to out of state source	1109	Blackland WSC - Direct Connection to NTWMD	$6,804,000	2030	Blackland WSC	Conveyance/Transmission Pipeline; Pump Station; Storage Tank	Indirect reuse;New major reservoir;Other surface water	Indirect Potable Reuse;Reservoir;Reservoir System;Run-of-River	0	91	163	238	346	435
N	Project related strategy supply does not occur until after 2020.	C	Related to out of state source	1001	Celina - Connect to and Purchase Water from NTMWD	$17,491,000	2030	Celina	Conveyance/Transmission Pipeline; Pump Station	Indirect reuse;New major reservoir;Other surface water	Indirect Potable Reuse;Reservoir;Reservoir System;Run-of-River	0	1,500	3,000	4,863	4,709	4,193
N	Project related strategy supply does not occur until after 2020.	C	Related to out of state source	1111	East Fork SUD - Additional Delivery Infrastructure from NTMWD	$5,308,000	2030	East Fork SUD	Conveyance/Transmission Pipeline; Storage Tank	Indirect reuse;New major reservoir;Other surface water	Indirect Potable Reuse;Reservoir;Reservoir System;Run-of-River	0	213	375	567	787	993
N	Project related strategy supply does not occur until after 2020.	C	Related to out of state source	1007	Prosper - Additional Delivery Infrastructure from NTMWD	$4,608,000	2030	Prosper	Conveyance/Transmission Pipeline; Pump Station; Storage Tank	Indirect reuse;New major reservoir;Other surface water	Indirect Potable Reuse;Reservoir;Reservoir System;Run-of-River	0	1,077	2,881	4,764	6,636	6,592
N	Project related strategy supply does not occur until after 2020.	C	Related to out of state source	2757	Rowlett - Additional Delivery Infrastructure from NTWMD	$4,105,000	2030	Rowlett	Pump Station; Storage Tank	Indirect reuse;New major reservoir;Other surface water	Indirect Potable Reuse;Reservoir;Reservoir System;Run-of-River	0	1,215	2,048	3,012	3,973	4,833
N	Project related strategy supply does not occur until after 2020.	C	Related to out of state source	1023	Sunnyvale - Additional Delivery Infrastructure from NTMWD	$2,575,000	2030	Sunnyvale	Conveyance/Transmission Pipeline; Pump Station	Indirect reuse;New major reservoir;Other surface water	Indirect Potable Reuse;Reservoir;Reservoir System;Run-of-River	0	342	581	922	1,152	1,358
N	Project related strategy supply does not occur until after 2020.	C	Related to out of state source	1072	Van Alstyne - Water System Improvements	$2,844,000	2040	Van Alstyne	Pump Station; Storage Tank	Indirect reuse;New major reservoir;Other strategies;Other surface water	Indirect Potable Reuse;Reservoir;Reservoir System;Run-of-River	0	31	110	239	842	1,310
N	Project related strategy supply does not occur until after 2020.	C	Related to out of state source	1010	Wylie Northeast SUD - Additional Delivery Infrastructure from NTWMD	$5,731,000	2030	Wylie Northeast SUD	Storage Tank; New Surface Water Intake	Indirect reuse;New major reservoir;Other surface water	Indirect Potable Reuse;Reservoir;Reservoir System;Run-of-River	0	114	193	417	769	1,294
Projects that have been implemented.																	
N	Bois D'Arc Lake is currently online.	C	New major reservoir	955	NTMWD - Bois D'Arc Lake	$939,638,000	2020	North Texas MWD	Conveyance/Transmission Pipeline; New Surface Water Intake; Pump Station; Reservoir Construction	New major reservoir	Reservoir	50,000	120,200	120,200	119,200	118,400	117,600
N	Project has been implemented.	C	Other project type	1011	Gainesville - Expand Direct Reuse	$2,026,000	2020	Gainesville	Conveyance/Transmission Pipeline; Pump Station	Other direct reuse	Direct Non-Potable Reuse	169	137	141	144	147	150
N	Project has been implemented.	C	Other project type	4096	B H P WSC - Direct Connection to NTWMD	$3,108,000	2020	B H P WSC	Conveyance/Transmission Pipeline; Pump Station; Storage Tank	Other surface water	Reservoir System	0	67	86	63	96	109
N	Project has been implemented.	C	Other project type	4079	Hudson Oaks - Direct Connection to Fort Worth	$5,500,000	2020	Hudson Oaks	Conveyance/Transmission Pipeline; Pump Station; Storage Tank	Aquifer storage and recovery;Groundwater wells and other;Indirect reuse;New major reservoir;Other surface water	Aquifer Storage and Recovery;Groundwater;Indirect Potable Reuse;Reservoir;Reservoir System	299	482	598	670	720	763
N	Project has been implemented.	C	Other project type	1139	Willow Park - Connect to Fort Worth	$4,017,000	2020	Willow Park	Conveyance/Transmission Pipeline; Pump Station	Aquifer storage and recovery;Indirect reuse;New major reservoir;Other surface water	Aquifer Storage and Recovery;Indirect Potable Reuse;Reservoir;Reservoir System	155	448	557	924	1,307	1,545
N	Project has been implemented.	C	Other project type	924	Midlothian - Expand Auger WTP to 16 MGD	$7,498,000	2020	Midlothian	Water Treatment Plant Expansion	Aquifer storage and recovery;Groundwater wells and other;Indirect reuse;New major reservoir;Other surface water	Aquifer Storage and Recovery;Groundwater;Indirect Potable Reuse;Reservoir;Reservoir System	1,399	5,147	5,627	4,741	4,733	5,131
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	4012	Anna - New Well(s) in Woodbine Aquifer	$2,846,000	2020	Anna	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	200	200	200	200	200	200
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	4013	Argyle WSC - New Well(s) in Trinity Aquifer	$2,955,000	2020	Argyle WSC	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	250	250	250	250	250	250
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	4015	Bolivar WSC - New Well(s) in Trinity Aquifer	$2,955,000	2020	Bolivar WSC	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	250	250	250	250	250	250
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	1103	County Other, Parker - New Well(s) in Trinity Aquifer	$2,157,000	2020	Municipal county-other (Parker)	Conveyance/Transmission Pipeline; New Water Treatment Plant; Pump Station; Multiple Wells/Well Field	Groundwater wells and other	Groundwater	235	235	235	235	235	235
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	1032	County-Other, Denton - New Well(s) in Trinity Aquifer	$5,387,000	2020	Municipal county-other (Denton)	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	504	504	504	504	504	504
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	1031	County-Other, Denton - New Well(s) in Woodbine Aquifer	$8,554,000	2020	Municipal county-other (Denton)	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	817	817	817	817	817	817
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	1069	Gunter - New Well(s) in Trinity Aquifer	$1,835,000	2020	Gunter	Single Well	Groundwater wells and other	Groundwater	50	50	50	50	50	50
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	3823	Irrigation, Fannin - New Well(s) in Trinity Aquifer	$234,000	2020	Irrigation (Fannin)	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	1,592	1,592	1,592	1,592	1,592	1,592
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	1034	Justin - New Well(s) in Trinity Aquifer	$2,377,000	2020	Justin	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	244	244	244	244	244	244

WMS Project identified as infeasible? (Y/N)	RWPG Comments	Project Sponsor Region	Project Category	WMS Project Id	WMS Project Name	Capital Cost	Online Decade	Project Sponsors	Project Components	Project Related WMS Types	Project Related Source Subtypes	Project Related Strategy Supply 2020 AFY	Project Related Strategy Supply 2030 AFY	Project Related Strategy Supply 2040 AFY	Project Related Strategy Supply 2050 AFY	Project Related Strategy Supply 2060 AFY	Project Related Strategy Supply 2070 AFY
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	1035	Krum - New Well(s) in Trinity Aquifer	$1,805,000	2020	Krum	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	202	202	202	202	202	202
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	3830	Livestock, Henderson - New Well(s) in Carrizo-Wilcox Aquifer	$3,469,000	2020	Livestock (Henderson)	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	403	403	403	403	403	403
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	3832	Livestock, Tarrant - New Well(s) in Trinity Aquifer	$584,000	2020	Livestock (Tarrant)	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	75	75	75	75	75	75
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	1138	Manufacturing, Wise County - New Well(s) in Trinity Aquifer	$502,000	2020	Manufacturing (Wise)	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	201	201	201	201	201	201
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	1068	Mining, Grayson County - New Well(s) in Trinity Aquifer	$806,000	2020	Mining (Grayson)	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	100	100	100	100	100	100
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	3826	Northwest Grayson County WCID 1 - New Well(s) in Trinity Aquifer	$2,730,000	2020	Northwest Grayson County WCID 1	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	29	29	34	55	130	247
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	4018	Pelican Bay - New Well(s) in Trinity Aquifer	$529,000	2020	Pelican Bay	Single Well	Groundwater wells and other	Groundwater	24	24	24	24	24	24
N	Project is in the TWDB SDR Database and has been implemented by 1/5/2023.	C	Other project type	1036	Pilot Point - New Well(s) in Trinity Aquifer	$4,127,000	2020	Pilot Point	Multiple Wells/Well Field	Groundwater wells and other	Groundwater	313	313	313	313	313	313
Projects that have not yet been implemented but the sponsor has taken affirmative steps.																	
N	Reservoir project recommended online date (2050) is after 2040. Project sponsors have continued to finance studies on the reservoir and take affirmative actions to gather data necessary for permitting.	C	New major reservoir	835	Marvin Nichols (328) - TRWD, NTMWD, UTRWD	$4,467,478,000	2050	Upper Trinity Regional WD; North Texas MWD; Tarrant Regional WD	Pump Station; Storage Tank; New Water Right/Permit Amendment Non-Exempt IBT; Reservoir Construction; Conveyance/Transmission Pipeline	New major reservoir	Reservoir	0	0	0	451,500	451,500	451,500
N	Tehuacana has been part of TRWD's long-range planning and the District has taken affirmative action towards implementation via numerous studies.	C	New major reservoir	980	TRWD - Tehuacana Reservoir	$325,468,000	2040	Tarrant Regional WD	Pump Station; Reservoir Construction	New major reservoir	Reservoir	0	0	21,070	21,070	21,070	21,070
N	Construction of Lake Ralph Hall began in June 2021 with plans to deliver water by the 2030 online date.	C	New major reservoir	982	UTRWD - Lake Ralph Hall and Reuse	$443,091,000	2030	Upper Trinity Regional WD	Conveyance/Transmission Pipeline; New Surface Water Intake; Pump Station; Reservoir Construction	Indirect reuse;New major reservoir	Indirect Potable Reuse;Reservoir	0	53,164	53,831	54,492	54,376	54,299
N	Sponsor has taken affirmative steps towards implementation. The TRWD ASR pilot well is currently in the final design phase and is out for construction bid.	C	Aquifer storage and recovery	3841	TRWD - ASR Pilot	$14,264,000	2020	Tarrant Regional WD	Multiple Wells/Well Field	Aquifer storage and recovery	Aquifer Storage and Recovery	2,500	2,500	5,000	5,000	5,000	5,000
N	Project sponsor has taken affirmative action and the TWDB approved a commitment to the City in 2017. In 2019 the TWDB approved a request from the City to change the scope from groundwater to surface water. In 2020 TWDB approved an amendment to the 2017 State Water Plan and the project was included in the 2022 State Water Plan. Another amendment was approved in 2022 to include improvements to the surface water treatment plant.	C	Other project type	1105	Springtown - Infrastructure Improvements- Surface Water Treatment Plant & Supply Project	$4,163,000	2020	Springtown	New Water Treatment Plant; Pump Station	Indirect reuse;New major reservoir;Other surface water	Indirect Potable Reuse;Reservoir;Reservoir System	448	544	450	492	490	493
N	Project sponsor has completed a preliminary engineering study to expand treatment capacity.	C	Other project type	943	Wise County WSD - 9 MGD WTP Expansion	$53,339,000	2020	Wise County WSD	Water Treatment Plant Expansion	Other surface water	Reservoir System	45	44	40	36	32	30
N	Sponsor has taken affirmative steps towards implementation. Sponsor received a loan from TWDB in 2022 and have submitted plans and drawings for the WTP expansion.	C	Other project type	917	Mabank - 3 MGD WTP Expansion	$19,817,000	2020	Mabank	Water Treatment Plant Expansion	Aquifer storage and recovery;Groundwater wells and other;Indirect reuse;New major reservoir;Other surface water	Aquifer Storage and Recovery;Groundwater;Indirect Potable Reuse;Reservoir;Reservoir System	596	734	797	1,497	2,576	4,069
N	Project is currently in construction with a target completion of April 2024.	C	Other project type	925	Midlothian - Expand Auger WTP to 24 MGD	$24,798,000	2020	Midlothian	Water Treatment Plant Expansion	Aquifer storage and recovery;Groundwater wells and other;Indirect reuse;New major reservoir;Other surface water	Aquifer Storage and Recovery;Groundwater;Indirect Potable Reuse;Reservoir;Reservoir System	1,399	5,147	5,627	4,741	4,733	5,131
N	Sponsor has taken affirmative action towards implementation and has completed a preliminary study to expand treatment capacity.	C	Other project type	4025	Midlothian - Expand Tayman WTP to 20 MGD	$46,259,000	2020	Midlothian	Water Treatment Plant Expansion	Indirect reuse	Indirect Potable Reuse	2,107	9,203	10,100	10,224	10,324	10,470
N	Sponsor has taken affirmative steps towards implementation by submitting several funding requests.	C	Other project type	932	Runaway Bay - 3 MGD WTP Expansion-1	$19,823,000	2020	Runaway Bay	Water Treatment Plant Expansion	Groundwater wells and other;Indirect reuse;New major reservoir;Other surface water	Groundwater;Indirect Potable Reuse;Reservoir;Reservoir System	6	77	130	231	315	447
N	Sponsor has taken affirmative steps towards implementation. Sponsor is currently under design for the 10 MGD WTP expansion.	C	Surface water desalination	933	Sherman - 10 MGD WTP Expansion (Desal)-1	$82,213,000	2020	Sherman	Water Treatment Plant Expansion	Other strategies	Reservoir	0	10,621	18,076	22,009	30,759	40,778
N	Sponsor has taken affirmative steps towards implementation. Sponsor has completed a preliminary study to expand treatment capacity.	C	Other project type	856	Walnut Creek SUD - 6 MGD WTP Expansion	$36,582,000	2020	Walnut Creek SUD	New Water Treatment Plant	Aquifer storage and recovery;Groundwater wells and other;Indirect reuse;New major reservoir;Other surface water	Aquifer Storage and Recovery;Groundwater;Indirect Potable Reuse;Reservoir;Reservoir System	437	719	893	1,639	2,804	3,998
N	Sponsor has taken affirmative action towards implementation. Consultants are currently scoping the contract.	C	Other project type	938	Weatherford - 8 MGD WTP Expansion	$47,753,000	2020	Weatherford	Water Treatment Plant Expansion	Groundwater wells and other;Indirect reuse;New major reservoir;Other surface water	Groundwater;Indirect Potable Reuse;Reservoir;Reservoir System	0	18	16	1,557	7,478	13,313
N	Sponsor has taken affirmative steps towards implementation. Sponsor is currently scoping preliminary design of the WTP expansion.	C	Other project type	4086	Weatherford - Additional Indirect Reuse Phase 1	$14,840,000	2020	Weatherford	Pump Station; Water Treatment Plant Expansion; Conveyance/Transmission Pipeline	Indirect reuse	Indirect Potable Reuse	2,242	2,803	3,363	3,363	3,363	3,363
N	Sponsor has taken affirmative steps towards implementation. Sponsor has completed a Master Plan, coordinated with the Trinity River Authority (TRA) to install a stub out and manually operated valve (MOV) to Flower Mound, funded installation of reuse waterlines, and TRA is in preliminary design phase for plant expansion, renewal of their TPDES permit, and will be obtaining type 1 reclaimed water permit.	C	Other project type	4100	Flower Mound - Alliance Direct Reuse	$1,732,000	2020	Flower Mound	Conveyance/Transmission Pipeline; Pump Station; Water Treatment Plant Expansion	Other direct reuse	Direct Non-Potable Reuse	0	2,903	7,254	8,310	8,396	8,396
N	Sponsor has taken affirmative steps towards implementation. Sponsor is currently designing the Mary's Creek WRF and it is planned to be online by 2028. This includes reuse.	C	Other project type	4075	Fort Worth Mary's Creek WRF Future Direct Reuse	$46,576,000	2020	Fort Worth	Conveyance/Transmission Pipeline; Pump Station; Water Treatment Plant Expansion	Other direct reuse	Direct Non-Potable Reuse	0	6,687	6,687	6,687	6,687	6,687
N	Direct reuse has been ongoing since 2007. Sponsor has taken affirmative steps towards implementation. Additional pumping capacity has not been completed but has a proposed in-service for summer 2024.	C	Other project type	1004	Frisco - Direct Reuse	$77,241,000	2020	Frisco	Conveyance/Transmission Pipeline; Pump Station; Storage Tank	Other direct reuse	Direct Non-Potable Reuse	325	594	856	1,118	1,379	1,379
N	Sponsor has taken affirmative steps towards implementation. GTUA conducted the GTUA Regional Water System Study in March 2020 to investigate the feasibility of the project and developed preliminary pipeline routes.	C	Surface water desalination	3849	GTUA - Regional Water System Phase 1	$243,986,000	2020	Greater Texoma Utility Authority	Water Treatment Plant Expansion; Conveyance/Transmission Pipeline; Pump Station; Storage Tank	Other strategies	Reservoir	0	7,871	14,801	17,592	22,572	22,691
N	Sponsor has taken affirmative steps towards implementation and plans to implement by 2030.	C	Related to out of state source	996	GTUA - Parallel Collin-Grayson Municipal Alliance Pipeline	$89,989,000	2030	Greater Texoma Utility Authority	Storage Tank; Conveyance/Transmission Pipeline; Pump Station	Indirect reuse;New major reservoir;Other surface water	Indirect Potable Reuse;Reservoir;Reservoir System;Run-of-River	0	418	3,386	5,250	7,519	10,534
N	Sponsor has taken affirmative steps towards implementation. Sponsor has paid off Lake Muenster and is currently in the design phase for the WTP.	C	Other project type	1015	Muenster - Develop Lake Muenster Supply	$9,998,000	2020	Muenster	Conveyance/Transmission Pipeline; New Surface Water Intake; New Water Treatment Plant; Pump Station	Other surface water	Reservoir	280	280	280	280	280	280
N	Sponsor has taken affirmative steps towards implementation. This project is a generalized version of NTMWD's Capital Improvement Plan (CIP).	C	Other project type	1145	NTMWD Treatment & Treated Water Distribution Improvements 2020-2030	$1,693,455,000	2020	North Texas MWD	Conveyance/Transmission Pipeline; New Water Treatment Plant; Pump Station; Water Treatment Plant Expansion	New major reservoir	Reservoir	50,000	120,200	120,200	119,200	118,400	117,600
N	Sponsor has taken affirmative steps towards implementation and has conducted preliminary studies.	C	Other project type	1110	Cash WSC - Additional Delivery Infrastructure from NTMWD	$7,888,000	2020	Cash SUD	Conveyance/Transmission Pipeline; Pump Station	Other surface water	Reservoir System	332	671	886	858	724	553
N	Sponsor has taken affirmative steps towards implementation and this project is listed in Melissa's 2017 Water Master Plan under their 10-year water project list.	C	Related to out of state source	1005	Melissa - Additional Delivery Infrastructure from NTMWD	$2,754,000	2030	Melissa	Conveyance/Transmission Pipeline	Indirect reuse;New major reservoir;Other surface water	Indirect Potable Reuse;Reservoir;Reservoir System;Run-of-River	208	8,306	13,075	17,119	20,153	20,910
N	Sponsor has taken affirmative steps towards implementation. This project is listed in Parker's 2016 Water Distribution System Master Plan Update under their CIP list.	C	Related to out of state source	1006	Parker - Additional Delivery Infrastructure from NTWMD	$4,309,000	2020	Parker	Pump Station	Indirect reuse;New major reservoir;Other surface water	Indirect Potable Reuse;Reservoir;Reservoir System;Run-of-River	142	335	605	997	1,373	1,804

WMS Project identified as infeasible? (Y/N)	RWPG Comments	Project Sponsor Region	Project Category	WMS Project Id	WMS Project Name	Capital Cost	Online Decade	Project Sponsors	Project Components	Project Related WMS Types	Project Related Source Subtypes	Project Related Strategy Supply 2020 AFY	Project Related Strategy Supply 2030 AFY	Project Related Strategy Supply 2040 AFY	Project Related Strategy Supply 2050 AFY	Project Related Strategy Supply 2060 AFY	Project Related Strategy Supply 2070 AFY
N	Sponsor has taken affirmative action towards implementation. Sponsor has submitted a contract and is waiting for it to be returned executed.	C	Related to out of state source	1087	Terrell - Ground Storage Tank and Pump Station at NTWMD Delivery Point	$3,527,000	2020	Terrell	Pump Station; Storage Tank	Indirect reuse;New major reservoir;Other surface water	Indirect Potable Reuse;Reservoir;Reservoir System;Run-of-River	0	1,222	3,763	5,386	7,023	9,479
N	Sponsor has taken affirmative steps towards implementation. This project is a generalized version of UTRWD's Capital Improvement Plan (CIP).	C	Other project type	1150	UTRWD WTP and Treated Water Distribution System Water Management Strategies 2020-2030	$176,357,000	2020	Upper Trinity Regional WD	Conveyance/Transmission Pipeline; Pump Station; Water Treatment Plant Expansion	Indirect reuse;New major reservoir	Indirect Potable Reuse;Reservoir	0	53,164	53,831	64,832	64,716	68,137
N	Sponsor has taken affirmative steps towards implementation. They are currently doing a study to determine the impacts of improvements at their Wataguga pump station where they purchase water from Fort Worth.	C	Other project type	1132	Watauga & N Richland Hills - Increase Delivery Infrastructure from Fort Worth	$9,544,000	2020	North Richland Hills	Storage Tank; Conveyance/Transmission Pipeline; Pump Station	Aquifer storage and recovery;Groundwater wells and other;Indirect reuse;New major reservoir;Other surface water	Aquifer Storage and Recovery;Groundwater;Indirect Potable Reuse;Reservoir;Reservoir System	0	204	463	370	462	584
N	Sponsor has taken affirmative steps towards implementation. Wilmer is in current discussions with Lancaster/DWU to increase their supply. This project is listed in both of Wilmer's and Lancaster's Capital Improvement Plan (CIP).	C	Other project type	1025	Wilmer - Increase Capacity of Connection with Lancaster	$5,280,000	2020	Wilmer	Storage Tank; Conveyance/Transmission Pipeline	Indirect reuse;New major reservoir;Other surface water	Indirect Potable Reuse;Reservoir;Run-of-River	0	32	112	283	510	1,018

Agenda Item IV.E – Attachment

Task 5B Scope: Evaluation of Water Management Strategies

REGION C WATER PLANNING GROUP

Senate Bill One Sixth Round of Regional Water Planning - Texas Water Development Board

April 29, 2024

Jeff Walker
Texas Water Development Board
1700 North Congress
Austin, Texas 78711-3231

RE: Region C Task 5B Scope of Work

Dear Mr. Walker:

At the April 29, 2024, Region C Water Planning Group (RCWPG) meeting, the RCWPG approved a region-specific scope and budget for Task 5B (Evaluation and Recommendation of WMSs and Associated WMS Projects). For your consideration, attached is the RCWPG-approved scope and budget. The fee for the Task 5B region-specific scope is $1,241,051.

The RCWPG also authorized our political subdivision, Trinity River Authority, to amend the Regional Planning Contract with TWDB and to request from TWDB a Notice-to-Proceed on this Task 5B scope.

Please call me if you have any questions regarding our request.

Sincerely,

J. KEVIN WARD
Chair, Region C Water Planning Group

CC: Kevin Smith, TWDB Project Manager for Region C

MEMORANDUM

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www.freese.com

TO: Region C Regional Water Planning Group

CC: File

FROM: Freese and Nichols, Inc.

SUBJECT: Task 5B Scope of Work for Water Management Strategies

DATE: 4/22/2024

PROJECT: TRA21862

The TWDB developed a scope of work for Water Management Strategies (Task 5B), which includes the development and evaluation of water management strategies and development of Chapter 5 of the 2026 Region C Water Plan (see **Attachment 1**). This scope of work considers all regulatory requirements and TWDB guidance. The scope items that are necessary for regulatory compliance are outlined in the executed contracts. However, specific scopes of work for the evaluations of potentially feasible water management strategies are to be developed by the regions. All funds for this task are contingent upon written notice to proceed. The scope items shown in **Attachment 1** apply to the evaluations of all potentially feasible water management strategies and are not repeated in the scope descriptions below. The total budget in the executed contract for this effort is $1,241,051. This memorandum presents the scope and fee to complete this task.

SCOPE OF WORK FOR WATER MANAGEMENT STRATEGIES (TASK 5B) FUNDS

A preliminary needs analysis for Region C was assessed as part of the Technical Memorandum deliverables. To meet Region C's water user groups projected water needs, many of the strategies in the 2021 Plan will be retained for the 2026 Regional Water Plan. A few strategies have been implemented or are no longer being considered by the sponsor. In addition, there will be several new strategies developed to meet the projected needs for new water user groups. A list of initial potentially feasible water management strategies is included in **Attachment 2**.

The types of strategies to be evaluated include:

- Infrastructure and Water Treatment Improvements
- Reuse
- New Groundwater Development
- Voluntary Redistribution (includes increases in contracts)
- New Surface Water
- Aquifer Storage and Recovery
- Conjunctive Use
- Regional Projects
- Dredging Existing Surface Water Sources
- Desalination
- Conservation

Infrastructure Improvements and Water Treatment

There are over 30 wholesale water providers in Region C. Most of these providers are shown to have projected water needs over the planning horizon. Many of the water management strategies developed for the wholesale water providers require infrastructure improvements to move and/or treat the water for the end user. Some of these strategies are considered projects under the umbrella source strategy. There are at least 28 treatment and delivery system projects identified to utilize water from wholesale providers. Others are a separate unique water management strategy that is sponsored by the end user. Specific tasks associated with this effort include:

Scope of Work

- Evaluate the available supplies and appropriate sizing required for the infrastructure improvements.
- Evaluate each strategy in accordance with the Regional Water Planning Guidelines. This will include the evaluation of reliability, cost, environmental issues, impacts to agricultural and rural areas, natural resources and other issues deemed relevant by the region.
- Develop cost estimates for all infrastructure strategies.
- Develop GIS maps for selected strategies showing linear infrastructure improvements and supply sources. (Note: GIS maps are to be provided to the TWDB and any maps included in the Region C plan will be approved by the respective sponsor of the strategy.)
- Distribute supplies to customers of the sponsoring entity.

Reuse

Wastewater reuse is an important strategy in Region C. The TWDB has authorized funding for the larger reuse projects for wholesale water providers, but several of the smaller wholesale providers, cities, and non-municipal water groups are planning to develop reuse projects. There are at least 24 direct and indirect reuse projects identified for the 2026 Region C Water Plan. Other water user groups may also be considering reuse to reduce demands on fresh water supplies. Specific tasks associated with this effort include:

Scope of Work

- Evaluate the available supplies and appropriate infrastructure improvements to treat and/or deliver the reuse water to the end destination.
- Evaluate each strategy in accordance with the Regional Water Planning Guidelines. This will include the evaluation of reliability, cost, environmental issues, impacts to agricultural and rural areas, natural resources and other issues deemed relevant by the region.
- Develop cost estimates for all reuse strategies.
- Develop GIS maps for selected strategies showing linear infrastructure improvements and supply sources. (Note: GIS maps are to be provided to the TWDB and any maps included in the Region C plan will be approved by the respective sponsor of the strategy.)
- Distribute supplies to customers of the sponsoring entity, where appropriate.

New Groundwater Development

New groundwater development has been and will continue to be a water supply strategy for rural communities in Region C. New groundwater is also a considered strategy for non-municipal water users. Groundwater strategies will need to be re-evaluated in light of the projected need and available groundwater supplies. There are at least 43 groundwater strategies that will need to be re-evaluated in light of the projected need and available groundwater supplies. Specific tasks associated with this effort include:

Scope of Work

- Evaluate the available supplies and appropriate sizing required for the infrastructure improvements for new groundwater development. Available supply will consider MAGs, other demands on the aquifer, desalination/treatment needs (if any), and needs of the entity. As appropriate, consider potential phasing of new groundwater projects to economically meet projected needs.
- Consider potential regionalization, as appropriate.
- Coordinate with other regions for strategies that propose to use water from outside of Region C.
- Evaluate the water quality of the potential source(s) for the end use purpose.
- Evaluate each strategy in accordance with the Regional Water Planning Guidelines. This will include the evaluation of reliability, cost, environmental issues, impacts to agricultural and rural areas, natural resources and other issues deemed relevant by the region.
- Develop cost estimates for all new and/or expanded groundwater strategies.
- Develop GIS maps for all strategies showing linear infrastructure improvements and supply sources. (Note: GIS maps are to be provided to the TWDB and any maps included in the Region C plan will be approved by the respective sponsor of the strategy.)
- Distribute supplies to customers of the sponsoring entity, if appropriate.

Voluntary Redistribution

The Voluntary Redistribution strategy is a general strategy that includes sales of water from one entity to another, new or extended contracts, or other types of transfers of water. This strategy does not apply to entities having sufficient existing contracts with sellers that are developing additional water supplies to meet the contractual demands. In Region C most of the voluntary redistribution strategies involve new sales or increased sales of water from a provider and may include new infrastructure as needed to transport the water. New strategies will be considered for entities with needs. Also, we will consider change of use type strategies, such as using surface water permitted for steam electric use for municipal, industrial and/or mining use. There are at least 22 water providers that will need additional supply through increased contracts or new contracts. Specific tasks associated with this effort include:

Scope of Work

- Coordinate with entities with expiring contracts to confirm whether the contracts will be extended and at what level of supply.
- Evaluate whether an entity has supply available for redistribution. Confirm with the water provider that it is willing to provide water to the respective WUG(s). Confirm with the receiving WUG(s), as appropriate, that it is willing to purchase water.
- Develop or update the appropriate sizing required for the infrastructure improvements for transfers of water. As appropriate, consider potential phasing of new re-distribution projects to economically meet projected needs.
- Consider potential regionalization, as appropriate.
- Evaluate the water quality of the potential source(s) for the end use purpose.
- Evaluate each strategy in accordance with the Regional Water Planning Guidelines. This will include the evaluation of reliability, cost, environmental issues, impacts to agricultural and rural areas, natural resources and other issues deemed relevant by the region.
- Develop cost estimates for all new and/or expanded voluntary re-distribution strategies.
- Develop GIS maps for all strategies showing linear infrastructure improvements and supply sources. (Note: GIS maps are to be provided to the TWDB and any maps included in the Region F plan will be approved by the respective sponsor of the strategy.)
- Distribute supplies to customers of the sponsoring entity.

New Surface Water
The 2021 Plan had multiple new surface water strategies. Each of these strategies will be updated and evaluated in accordance with the Regional Water Planning Guidelines, except for Bois d'Arc Lake and Lake Ralph Hall as these reservoirs have been implemented. Strategies need to be revisited and updated for reasons such as updating cost estimates with revised unit costs, confirmation of supply amount, changes to transmission routes, additions/deletions of users of supply, etc. For example, the strategies that require new water rights (Neches Run-of-River and Lake Tehuacana) will need to be re-evaluated with the latest TCEQ WAMs.

New surface water strategies to be updated and evaluated:

- Sulphur Basin Supplies
- Marvin Nichols Reservoir
- George Parkhouse North Lake
- George Parkhouse South Lake
- Lake Columbia
- Lake Tehuacana
- Neches Run-of-River Diversions
- Red River Off Channel Reservoir
- Lake O' the Pines (Cypress Basin Supplies)
- Toledo Bend Reservoir
- Oklahoma Water
- Lake Palestine
- New reservoir in Wise County

Aquifer Storage and Recovery
The TWDB requires aquifer storage and recovery (ASR) to be considered for all needs. To address this requirement, Region C will develop a generic regional ASR project for the major water providers. The generic strategy will be evaluated in accordance with the Regional Water Planning Guidelines. This will include the evaluation of reliability, cost, environmental issues, impacts to agricultural and rural areas, natural resources and other issues deemed relevant by the region. Specific ASR strategies will be developed for NTMWD and TRWD. Region C will also address the reasons ASR is not selected for water user groups as appropriate.

Conjunctive Use
Conjunctive Use is the practice of using multiple sources of water by a provider to more efficiently use the available sources to increase supplies during drought. The types of water supplies include surface water, reuse, groundwater, and ASR. Many Region C water providers currently practice conjunctive use of their resources. Region C will continue to evaluate conjunctive use of new water sources for providers that have multiple types of supplies. Scope and fee associated with Conjunctive Use is incorporated in the development of the strategies for new water sources.

Regional Water Projects
Several regional projects were identified and evaluated in previous special studies for Region C. These projects, referenced as County Water Supply Project, will be retained and refined for the 2026 Water Plan. There are five regional county projects: Cooke County, Ellis County, Fannin County, Grayson County, and Collin-Grayson Municipal Alliance. Each of these projects will be updated and evaluated in

accordance with the Regional Water Planning Guidelines. Additional regional projects may be identified for the 2026 plan and are included under this subtask.

Dredging Existing Lakes

Dredging existing lakes has been a public suggestion during past planning cycles as a means to meet water needs in Region C. Dredging is a strategy for Lake Waxahachie and the 2021 Plan introduced a generic regional lake dredging strategy for the major water providers in Region C. This task will reevaluate the Lake Waxahachie dredging project and generic strategy in accordance with the Regional Water Planning Guidelines. This will include the evaluation of reliability, cost, environmental issues, impacts to agricultural and rural areas, natural resources and other issues deemed relevant by the region.

Desalination

With limited surface water and groundwater supplies, some entities in Region C are considering brackish surface water with desalination for future water sources. The 2021 Plan identified a general Gulf of Mexico desalination strategy and a desalination treatment plant strategies for users of Lake Texoma water (NTMWD, Sherman, and Denison). These strategies along with other potential desalination strategies identified by Region C entities will be evaluated for the 2026 Region C Water Plan. Specific tasks associated with this effort include:

Scope of Work

- Evaluate the available supplies from brackish groundwater sources, considering MAGs, other demands on the aquifer and the needs of the entity.
- Identify sources of brackish surface water. Examples include Lake Texoma and Brazos River. Evaluate availability of raw water supplies and treated water quantities based on estimated treatment losses.
- Develop infrastructure requirements for desalination strategies. This will include treatment facilities, transmission, and handling of treatment wastes (saline reject water).
- Evaluate each desalination strategy in accordance with the Regional Water Planning Guidelines. This will include the evaluation of reliability, cost, environmental issues, impacts to agricultural and rural areas, natural resources and other issues deemed relevant by the region.
- Develop cost estimates for all desalination strategies.
- Develop GIS maps for all strategies showing infrastructure improvements and supply sources. (Note: GIS maps are to be provided to the TWDB and any maps included in the Region F plan will be approved by the respective sponsor of the strategy.)

Conservation

Region C proposes to develop and/or update conservation strategies for municipal water users in the region with a water need and work together with other water use sectors to identify potential conservation measures that may be appropriate for each sector. Entities potentially receiving water from conservation strategies include all municipal WUGs, and non-municipal WUGs, MWPs, and WWPs with a need. Specific tasks associated with this effort include:

Scope of Work

- Review conservation measures previously adopted and update applicability and water savings for each municipal water user group with a need. Identify and review measures for non-municipal water needs as appropriate.

- Evaluate conservation measures in accordance with the Regional Water Planning Guidelines. This will include the evaluation of reliability, cost, environmental issues, impacts to agricultural and rural areas, natural resources and other issues deemed relevant by the region.
- Prepare a technical memorandum detailing the assumptions and findings.

Data Base Entry

As required by the TWDB rules, all water management strategies and projects that are recommended must be entered into the TWDB database for the 2026 State Water Plan. Also, specific reports must be included in the 2026 Region C Water Plan. Specific tasks associated with the database entry include:

Scope of Work

- Define each water management strategy (WMS) in accordance with the specific requirements of the database.
- Assign WUGs and WWPs to a specific WMSs. Enter the amount of supply received for each decade. Enter other data required for the WMS source, user and seller, as appropriate.
- Relate WMSs to projects with an associated capital cost and WUG/WWP as appropriate.
- Enter capital costs and annual costs for each WUG/WWP as appropriate.
- Coordinate with shared regions as appropriate.
- Perform appropriate QC checks on data entry.
- Coordinate with TWDB database staff.
- Prepare all necessary reporting for the 2026 Region C Water Plan.

Report Preparation and Coordination

Chapter 5 of the 2026 Region C Water Plan is one of the most important chapters in the plan. This chapter is the compilation of the future direction for water supply in the region. The 2021 Region C Water Plan has six subchapters dedicated to this section of the report along with several appendices that document the data evaluation. The basics of the strategy development and technical evaluations are included in the scopes of work for the specific strategy types. This task is for the effort to compile all the information into Chapter 5 of the 2026 Region C report. It also includes coordination with the RWPG on the draft chapter and the incorporation of comments for the final chapters in the Initially Prepared Plan and Final Plan.

Fee Summary

The total budget for developing the water management strategies for the 2026 Region C Water Plan (Task 5B) is $1,241,051. Below in **Table 1** is a breakdown of the fee by major strategy category. **Table 2** shows the TWDB required scoping spreadsheet format.

Table 1: Task 5B Fee Breakdown

Strategy	Budget
Infrastructure Improvements	$151,000
Reuse	$119,000
New Groundwater	$91,000
Voluntary Redistribution	$46,000
New Surface Water	$46,000
Aquifer Storage and Recovery	$78,000
Regional Projects	$109,000
Dredging Existing Lakes	$75,000
Conservation	$119,000
Desalination	$46,000
Database Entry	$112,000
Report Preparation and Coordination	$249,051
TOTAL	**$1,241,051**

ATTACHMENT NO. 1

TASK 5B SCOPE OF WORK
REGION C CURRENT CONTRACT

Task 5B – Evaluation and Recommendation of Water Management Strategies and Projects

The objective of this task is to evaluate and recommend WMSs and their associated WMSPs, and to prepare a separate chapter (in accordance with 31 TAC §357.22(b)) to be combined with Task 5A and 5C and included in the 2026 RWP that identifies, evaluates, and recommends WMSs and WMSPs. Work includes presenting alternative WMSs and WMSPs and includes all technical evaluations.

In addition to generally meeting all applicable rules and statute requirements governing regional and state water planning under 31 TAC Chapters 357 and 358, this portion of work must include all work necessary to meet all the requirements of 31 TAC §357.22(a), §357.34, and §357.35 that is not already included under Tasks 5A or 5C.

Performance of work associated with any 5B subtasks will be <u>contingent upon a written notice-to-proceed in the form of a contract amendment.</u> This task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Perform technical evaluations of all potentially feasible WMSs including previously identified or recommended WMSs and newly identified WMSs, including drought management and conservation WMSs; WMS and WMSP documentation must include a strategy description, discussion of associated facilities, project map, and technical evaluation addressing all considerations and factors required under 31 TAC §357.34(e)-(i) and §357.35. If an identified potentially feasible WMS is, at any point, determined to be not potentially feasible by the planning group and therefore not evaluated, the plan must provide documentation of why the WMS was not evaluated.
2. Include documentation of the RWPG's process for selecting recommended WMSs and associated WMSPs including development of WMS evaluations matrices and other tools required to assist the RWPG in comparing and selecting recommended WMSs and WMSPs. Include this documentation in the IPP and final RWP.
3. Consider water conservation plans and drought contingency plans from each WUG, as necessary, to inform WMS evaluations and recommendations.
4. Ensure necessary communication, coordination, and facilitation occurs within the RWPA and with other RWPGs to develop recommendations.
5. Update descriptions and associated technical analyses and documentation of any WMSs and WMSPs that are carried forward from the previous RWP to address:
    a. Changed conditions or project configuration.
    b. Changes to sponsor of WMS and WMSP(s).
    c. Updated costs (based on use of required costing tool[11]).
    d. Other changes that must be addressed to meet requirements of 31 TAC §357.34 and §357.35.
6. Assign all recommended WMS water supplies to meet projected needs of specific WUGs.
7. Document the evaluation and selection of all recommended WMS and WMSPs, including an explanation for why certain types of strategies (e.g., aquifer storage and recovery, seawater desalination, brackish groundwater desalination) may not have been recommended.
8. Determine whether the region has 'significant' identified water needs and if so, assess the potential for aquifer storage and recovery to meet those needs. The plan must include at a minimum, the methodology used by the planning group to determine what volume constitutes a 'significant' water need in their region.
9. Provide documentation of the implementation status, in a separate chapter subsection

and in table format, of the status of certain recommended WMSs. *Second Amended General Guidelines for Development of the 2026 Regional Water Plans Section 2.5.2.7* outlines the required WMS types that implementation status must be provided for and outlines the required minimum table contents depicting key milestones.

10. Coordinate with sponsoring WUGs, WWPs, rural entities, and/or other resource agencies regarding any changed conditions in terms of projected needs, strategy modifications, planned facilities, market costs of water supply, endangered or threatened species,etc.
11. If TWC §11.085 applies to the proposed inter-basin transfer (IBT), determine the "highest practicable level" of water conservation and efficiency achievable (as existing conservation or proposed within a WMS) for each WUG or WWP WUG customer recommended to rely on a WMS involving the IBT. Recommended conservation WMSs associated with this analysis shall be presented by WUG.
12. Present the water supply plans in the RWP for each WUG and WWP relying on the recommended WMSs and WMSPs.
13. Consider alternative WMSs and WMSPs for inclusion in the plan. Alternative water management strategies must be fully evaluated in accordance with 31 TAC §357.34(e)-(i). Technical evaluations of alternative WMSs must be included in the plans and the data associated with alternative WMS must be entered into DB27.
14. Review the TWDB reports (report numbers 10-19) from DB27 and incorporate these agency planning database reports (including as populated final RWP must incorporate these standard TWDB DB27 reports, in the IPP and final RWP, by reference, as part of the regional water plan by including links to TWDB Database Reports application and inform the reader that the report may be accessed via that application.
15. Submit data through DB27 to include the following work:
    a. Review of the data.
    b. Confirm that data is accurate.
16. Disseminate the chapter document and related information to RWPG members for review.
17. Modify the chapter document based on RWPG, public, and/or agency comments.
18. Submit the chapter document to the TWDB for review and approval.
19. Make all efforts required to obtain final approval of the RWP chapter and associated DB27data by the TWDB.
20. *[REGION-SPECIFIC SCOPE OF WORK TO BE APPROVED AT FUTURE DATE BY TWDB EXECUTIVE ADMINISTRATOR PRIOR TO NOTICE-TO-PROCEED]*

Deliverables: A completed Chapter 5 (including work from Tasks 5A-5C) including technical analyses of all evaluated WMSs and WMSPs must be included in the IPP and final 2026 RWP. Data must be submitted and finalized through DB27 in accordance with the *Guidelines for 2026 Regional Water Planning Data Deliverables*.

ATTACHMENT NO. 2

List of Potentially Feasible Water Management Strategies

List of Potentially Feasible Water Management Strategies

Potentially Feasible Water Management Strategies
Conservation:
Conservation Measures
Drought Management:
Implementation of Drought Contingency Plans/Measures as needed
Reuse:
Purchase Reuse Water from DCPCMUD (Lake Grapevine)
Additional Reuse (TBD)
Athens Indirect Reuse
Cedar Creek Reuse (Wetlands)
Direct Reuse
Direct Reuse From Local WWTPs
Direct Reuse From Sherman
Direct Reuse From UTRWD
Ennis Indirect Reuse
Indirect Reuse (Athens MWA) (Interbasin Transfer)
Indirect Reuse to Lake Weatherford/Sunshine
Indirect Reuse From Jacksboro
Irving Indirect Reuse
Joe Pool Reuse
Las Colinas Direct Reuse
Main Stem Balancing Reservoir
Main Stem Pump Station
Reuse for Steam Electric Power
Reuse from TRA Central Regional WWTP
TRA Reuse for SEP
Lake Ralph Hall Reuse - UTRWD
Existing Supplies:
Additional Measure to Access Full Lavon Yield
Carrizo-Wilcox Groundwater From Counties TBD
Chapman Booster Pump Station
Develop Muenster Lake Supply
Lake Dredging
Expansion of Treatment and Delivery System
Freestone/Anderson County Groundwater (Forestar)
IPL Connect to Lake Palestine

Potentially Feasible Water Management Strategies
IPL Connection of Supplies (Cedar Creek wetlands and Richland-Chambers)
IPL Connection to Bachman
Lake O' the Pines
Lake Texoma Blending
Lake Texoma Desalination
Lake Texoma Raw Water for SEP
Navarro Mills (Additional)
Oklahoma
Renew/Expand Contract for Supplies from Current Provider
Toledo Bend
Development of New Supplies:
New Groundwater
New Surface Water
Lake Tehuacana
Lake Columbia (New IBT)
Neches Run-of-River Diversions (IBT)
Richland-Chambers Reservoir for SEP
George Parkhouse North Lake (New IBT)
George Parkhouse South Lake (New IBT)
Red River Off Channel Reservoir (New IBT)
New Supplies From Raised Dam at Wright Patman (New IBT)
Sulphur Basin Supplies (New IBT)
Marvin Nichols Reservoir (New IBT)
New reservoir in Wise County
Reallocation/Management of Supplies:
Expansion of Treatment and Delivery System
Expansion of Raw Water Supply System
Unallocated Supply Utilization
Conjunctive Use:
Conjunctive Use of Multiple Sources of Water
Aquifer Storage and Recovery:
General Aquifer Storage and Recovery
Aquifer Storage and Recovery - NTMWD
Aquifer Storage and Recovery Pilot - TRWD
Acquisition of Available Supplies:
Lake Texoma

Potentially Feasible Water Management Strategies
Additional Lake Texoma
Additional Supplies From Current Provider
Begin Purchasing From New Provider
Connect to and Begin Purchasing From New Provider
Connect to and Purchase From Lake Texoma
New Well(s) in Trinity Aquifer
New Well(s) in Carrizo-Wilcox Aquifer
New Well(s) in Woodbine Aquifer
New Well(s) in Queen City Aquifer
New Well(s) in Nacatoch Aquifer
New Well(s) in Cross Timbers Aquifer
New Well(s) in Other Aquifer
Treatment of Brackish Groundwater
Raw Water From TRWD for SEP
Water Rights in Navarro Mills Reservoir
Development of Regional Water Supply or Providing Regional Management of Water Supply Facilities:
TRA Ellis County Water Supply Project
Collin-Grayson Municipal Alliance
Cooke County Water Supply Project
Fannin County Water Supply Project
Grayson County Water Supply Project
Infrastructure to Deliver to Cooke County WUGs
Other Regional Systems as Feasible
Voluntary Transfer of Water (Incl. Regional Water Banks, Sales, Leases, Options, Subordination Agreements, and Financing Agreements):
Interim Purchase From Water Provider
Emergency Transfer of Water:
System Optimization, Subordination, Leases, Enhancement of Yield, Improvement of Water Quality:
System Operation
Desalination:
Desalination Plant
Supplies From the Gulf of Mexico with Desalination
Desalination Plant - Grayson County WUGs, Sherman, Denison
Desalination of Texoma supplies for NTMWD

Table 2: Scoping Currently Contracted Task 5B Funding for Region-Specific Subtasks

Strategy Type(s)

ASR	Conservation/Drought Management	Groundwater Desal	Groundwater Dvlp	Reuse	New Major Reservoir	Other Surface Water	Seawater Desal	Conjunctive Use	Other WMS (Subordination, etc)	Region	Overall TWDB Task Number	SubTask WMS evaluation number	SubTask WMS	SubTask Scope of Work Write-up	Deliverable	SubTask Budget ($)	WUG(s) &/OR WWP Entities Potentially Served by WMS(s)	Addressing a changed condition from previous cycle? If yes, describe the changed condition.	When was this WMS identified by RWPG as potentially feasible?	Was the WMS evaluated in any previous Regional Water Planning Cycles?	Is evaluation a limited update to previous technical evaluation information? If no, indicate specific update in subtask sow column E
									x	C	**5B**	1	Infrastructure Improvements and Water Treatment	See scope of work. Includes multiple supply and infrastructure configurations; coordination with project sponsors, re-evaluation of supplies, costs and infrastructure requirements.	Chapter 5 discussion	$ 151,000	Wholesale water providers and WUGs with need	Yes, changes in supplies and demands	Previous plans	Yes	No
				x						C	**5B**	2	Reuse	See scope of work. Includes coordination with project sponsors, costs and infrastructure requirements	Chapter 5 discussion	$ 119,000	Wholesale water providers, cities, and non-municipal WUGs with need	Yes, changes in supplies and demands	Previous plans	Yes	No
			x							C	**5B**	3	New Groundwater	See scope of work. Includes multiple supply and infrastructure configurations; coordination with project sponsors, re-evaluation of supplies, costs and infrastructure requirements. New MAGs.	Chapter 5 discussion	$ 91,000	WUGs not served by Major Water Provider	Yes, new MAGs and new needs	Previous plans	Yes	No
									x	C	**5B**	4	Voluntary Redistribution	See scope of work. Includes coordination with project sponsors, re-evaluation of supplies, costs and infrastructure requirements	Chapter 5 discussion	$ 46,000	Wholesale water providers and WUGs with need	Yes, new needs and new sellers	Previous plans	Yes	No
					x	x				C	**5B**	5	New Surface Water	See scope of work. Includes coordination with project sponsors, re-evaluation of costs and impacts review.	Chapter 5 discussion	$ 46,000	Major Water Providers, WUGs with need	Yes. Updated WAM	Previous plans	Yes	Yes
x										C	**5B**	6	Aquifer Storage and Recovery	See scope of work. Includes development of new strategies, coordination with project sponsors, assessment of supplies, costs, and infrastructure requirements, and evaluation of imapcts. Also includes assessment for each WUG with a need.	Chapter 5 discussion	$ 78,000	Major Water Providers, WUGs with need	No	2021 Plan	Yes	No
									x	C	**5B**	7	Regional Projects	See scope of work. Includes coordination with project sponsors, re-assessment of available supplies, costs and infrastructure requirements	Chapter 5 discussion	$ 109,000	WUGs in Cooke, Ellis, Fannin, and Grayson Counties	Yes. Supplies and participants	Previous plans	Yes	No
									x	C	**5B**	8	Dredging Existing Lakes	See scope of work. Includes coordination with project sponsors, re-evaluation of supplies and costs.	Chapter 5 discussion	$ 75,000	Waxahachie, Major Water Providers	Yes. Updated WAM	Previous plans	Yes	No
	x									C	**5B**	9	Conservation	See scope of work. Includes coordination with project sponsors, re-evaluation of supplies and costs.	Chapter 5 discussion	$ 119,000	MWPs, WWPs and WUGs	Yes. Review of BMPS and TWDB Conservation Tool	Previous plans	Yes	No
							x			C	**5B**	10	Desalination	See scope of work. Includes coordination with project sponsors, re-evaluation of supplies and costs.	Chapter 5 discussion	$ 46,000	WMPs, Grayson, Sherman, Denison	No	Previous plans	Yes	No
										C	**5B**	10	Database Entry	See scope of work. Includes coordination with project sponsors, re-evaluation of supplies, costs and infrastructure requirements	Completed DB27 entry for selected strategies	$ 112,000	MWPs, WWPs and WUGs	NA	NA	NA	NA
										C	**5B**	11	Report Preparation and Coordination	See scope of work. Includes coordination with project sponsors, re-evaluation of supplies, costs and infrastructure requirements	Chapter 5 for IPP and Final Plan	$ 249,051	MWPs, WWPs and WUGs	NA	NA	NA	NA
														REGION-SPECIFIC SUBTASKS TOTAL BUDGET		**$ 1,241,051**					