



# Water Resources Council (WRC)

April 16, 2025



[www.nctcog.org/  
WaterResources](http://www.nctcog.org/WaterResources)

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# Housekeeping Items

- Please remember to sign in, take an agenda & past meeting summary.
- Bathrooms, Emergency Exits, and Safety Procedures
- Thank you all for attending!



# Speaker Presentation

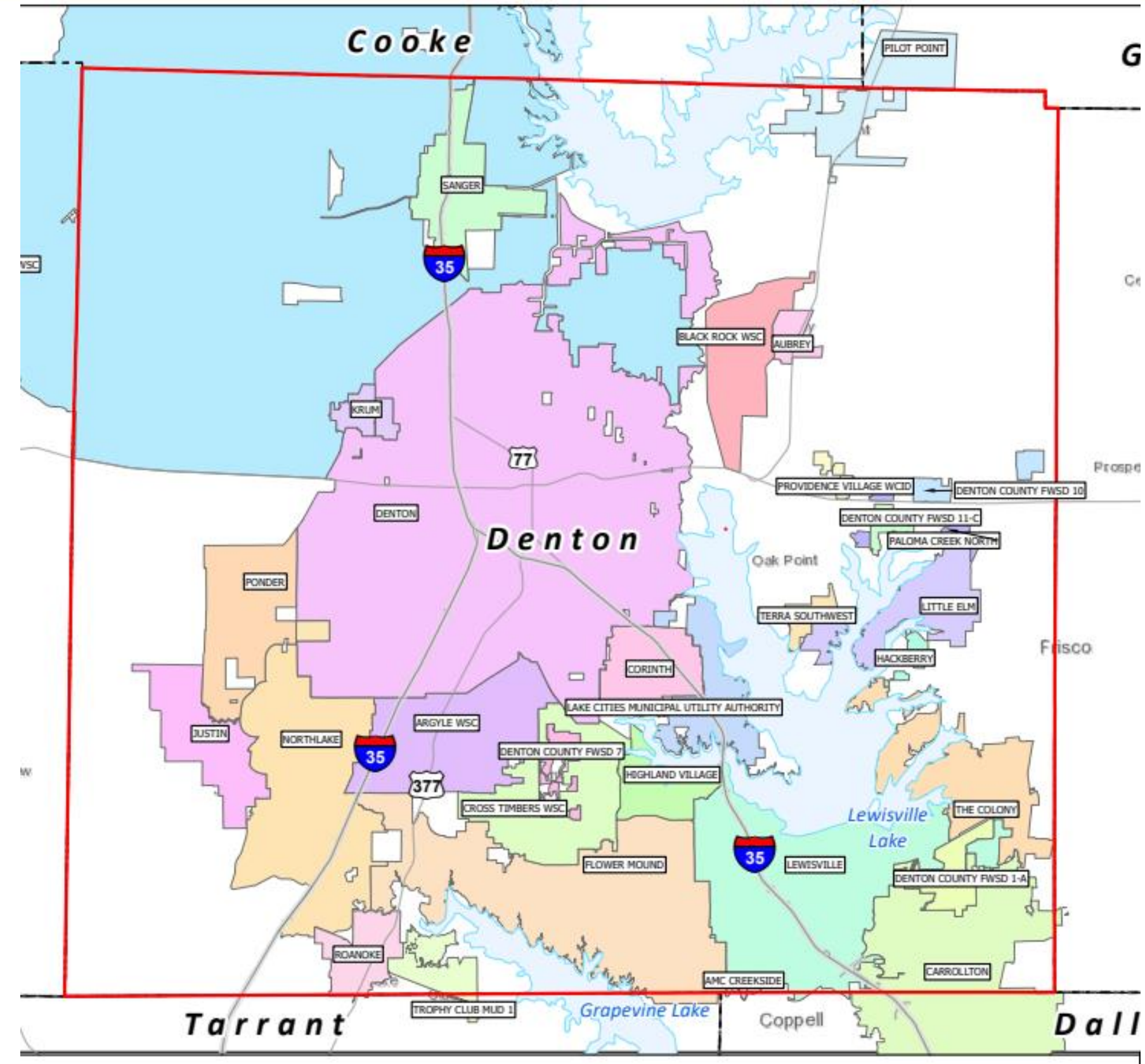
## Water Planning with Municipal Utility Districts

Stephen Gay and Kyle Pedigo, City of Denton



# Denton Water Utilities Overview

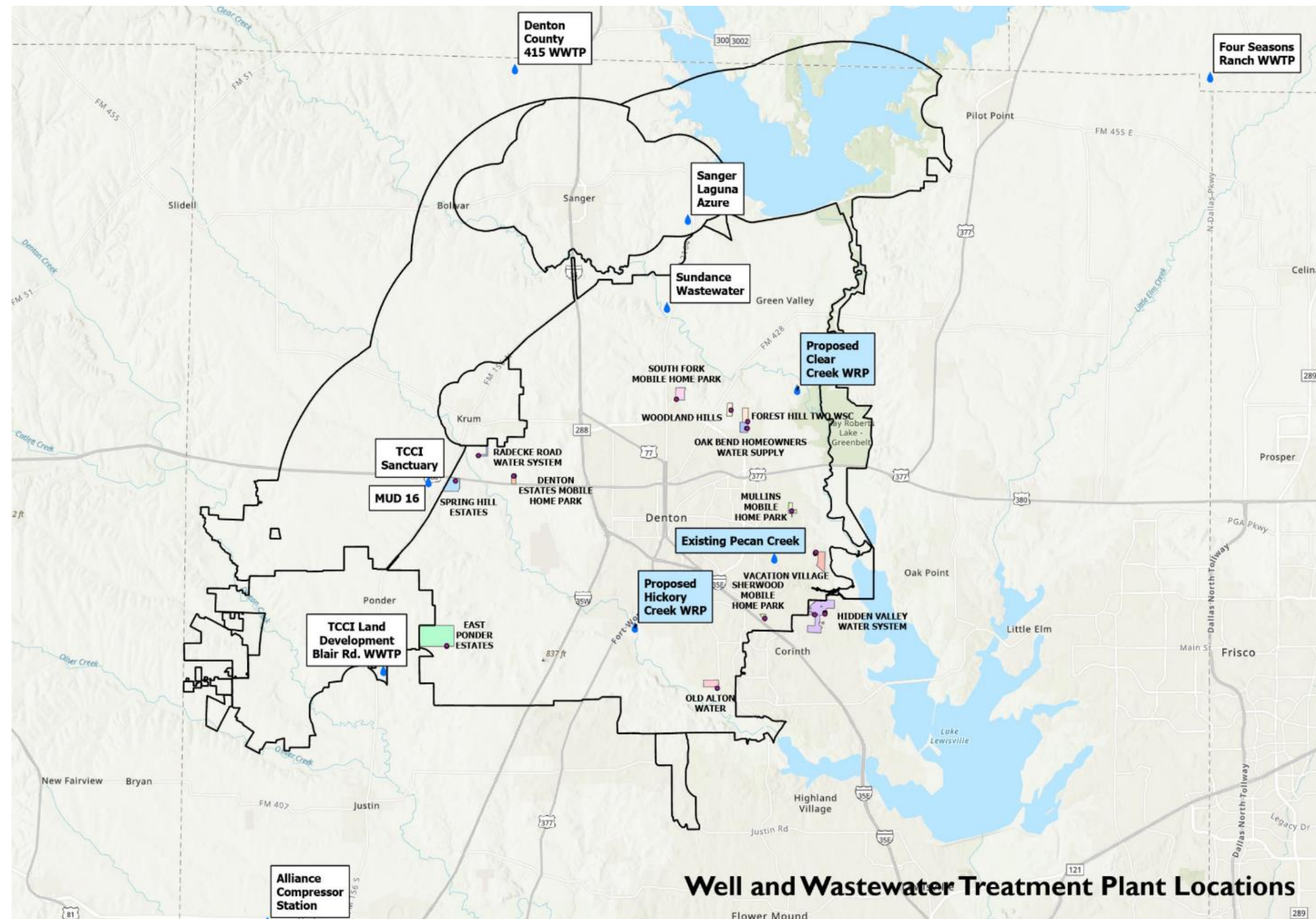
- Denton is part of the Region C Water Planning Group (RCWPG) of the Texas Water Development Board (TWDB)
- Denton is a full-service water utility with water rights in both Lake Lewisville and Lake Ray Roberts
- Statistics:
  - Population: 171,017
  - Service Connections: 45,106
  - Current Usage: 18 – 42 MGD





Focus on our ETJ addresses  
Water and Wastewater risks to  
Denton's Watershed, including  
risks caused by the  
development of MUDs

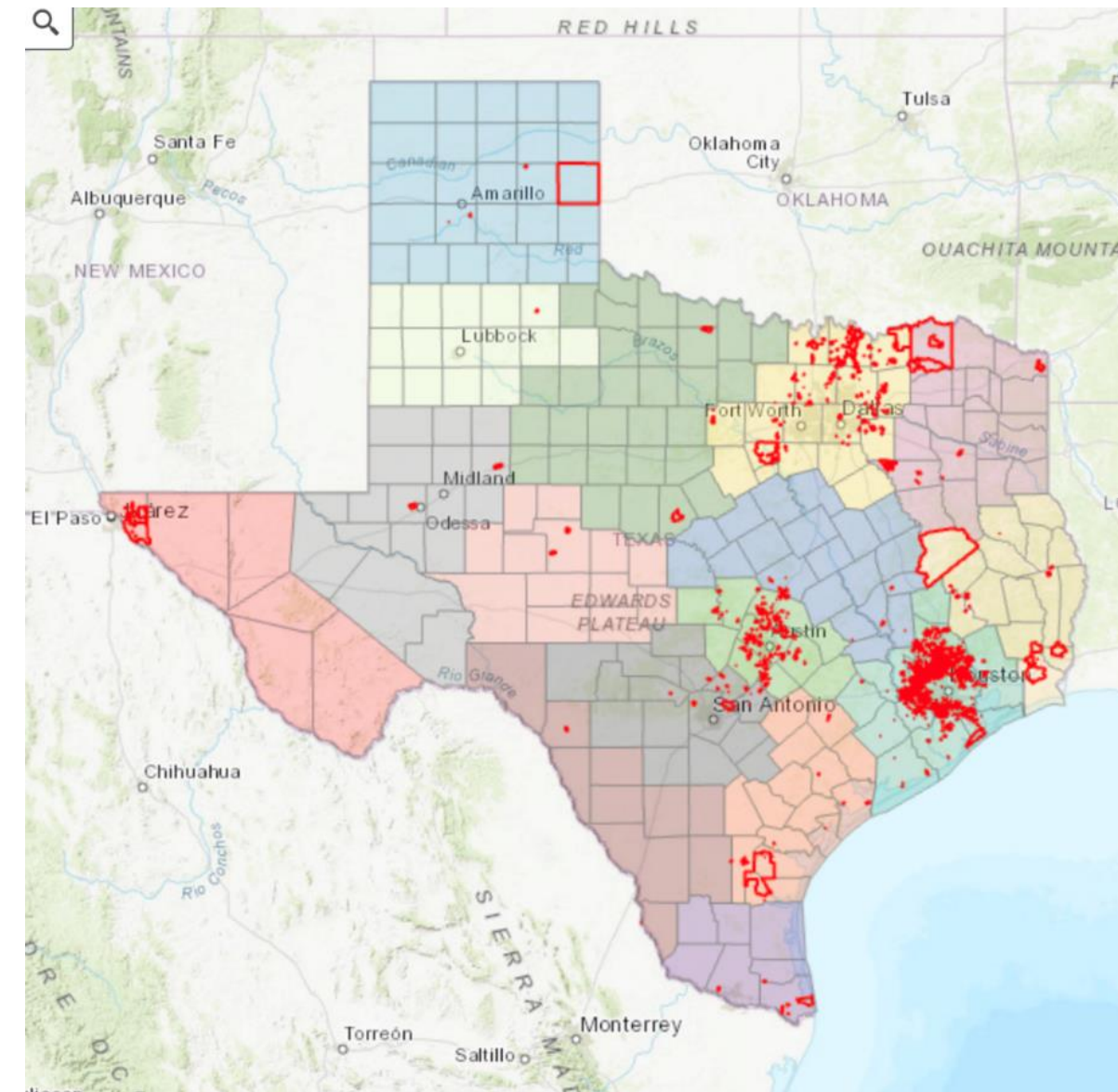
- Water Risks
  - Supply
  - Outlying dependence on wells
  - Water Quality
- Wastewater Risks
  - Independent “Package Plants”
  - Stream/River water quality
  - Access to reuse





## Background – What is a MUD?

- Municipal Utility District (MUD) – special-purpose district created to provide infrastructure to a development area.
- A MUD is created in one of two ways:
  - Legislature; or
  - Texas Commission on Environmental Quality (TCEQ) following a petition and consent process through the City.
- MUDs can annex into the City following repayment of bond funding.





# Denton's MUDs

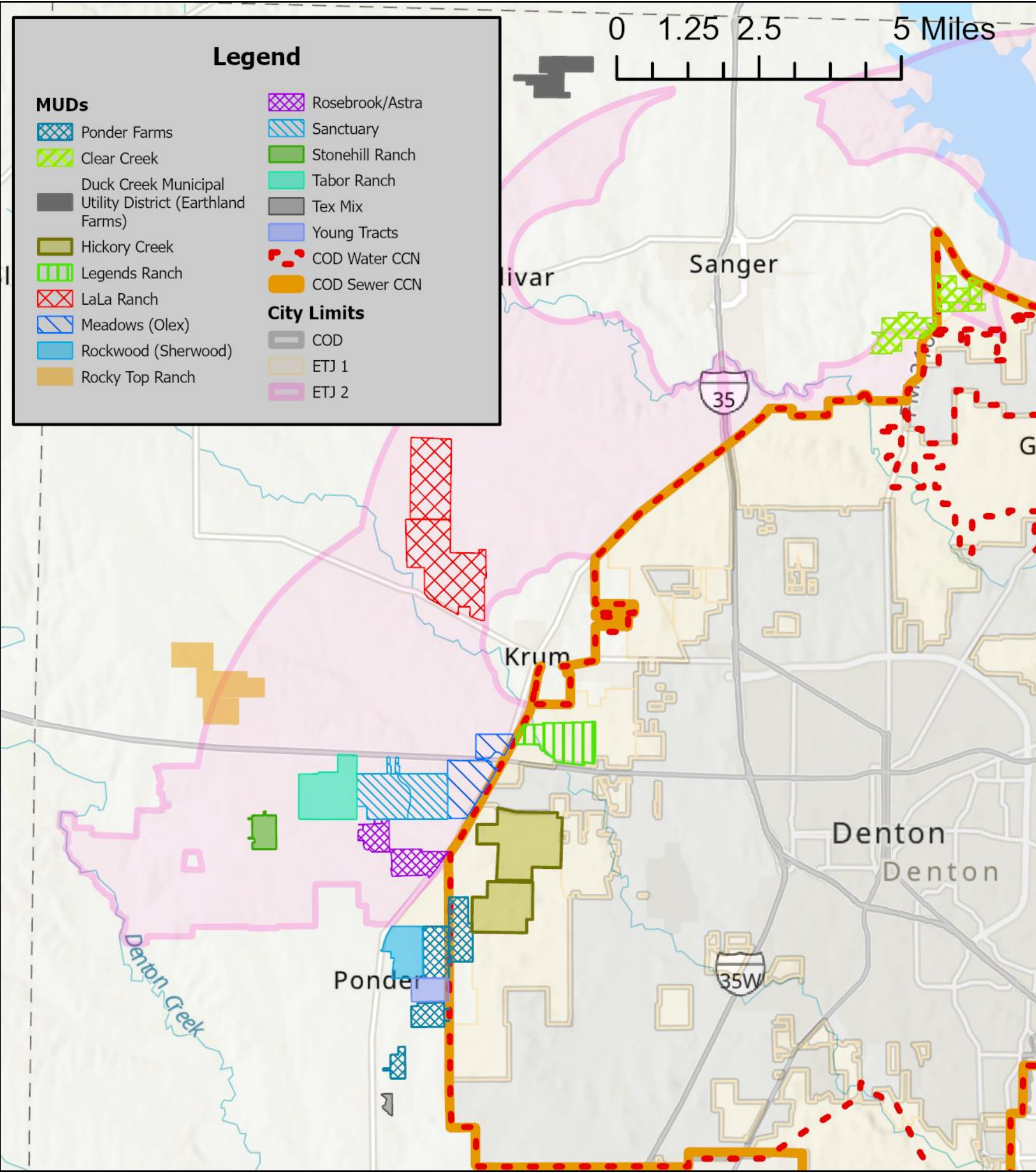
## Consent provided for all or a portion of the following MUDs

- **Legends (2022)**
- La La Ranch (2020)<sup>1</sup>
- **Meadows (2020)**
- Rocky Top (2022)<sup>1</sup>
- Rosebrook/Astra (2020)
- Stonehill Ranch (2021)
- Tabor Ranch (2023)<sup>2</sup>

## The City is aware of the following additional MUDs

- Clear Creek
- Hickory Creek<sup>2</sup>
- Ponder Farms<sup>2</sup>
- Sanctuary<sup>2</sup>
- Young Tracts
- Earthland Farms
- Rockwood
- Tex Mix
- Denton84

<sup>1</sup> MUD was created by the legislature.  
<sup>2</sup> City staff in discussions with developers regarding potential agreements.



# What's it mean for Denton?

MUD Name	Acres	Units	Population
Clear Creek	542	1,900	6,080
Hickory Creek	1,411	5,644	18,061
Legends Ranch	496	1,551	4,963
La La Ranch	1,675	6,656	21,299
Meadows (Olex)	553	1,600	5,120
Ponder Farms	779	3,114	9,965
Rocky Top Ranch	753	3,008	9,626
Rosebrook/Astra	406	1,621	5,187
Sanctuary	810	2,515	8,048
Stonehill Ranch	162	646	2,067
Tabor Ranch	599	2,216	7,091
Young Tracts	169	634	2,029
Earthland Farms	320	1,282	4,102
Rockwood (Sherwood)	347	1,386	4,435
Tex Mix	32	126	403
Denton84	85	333	1,066
<b>Total</b>	<b>9,139</b>	<b>34,232</b>	<b>109,543</b>

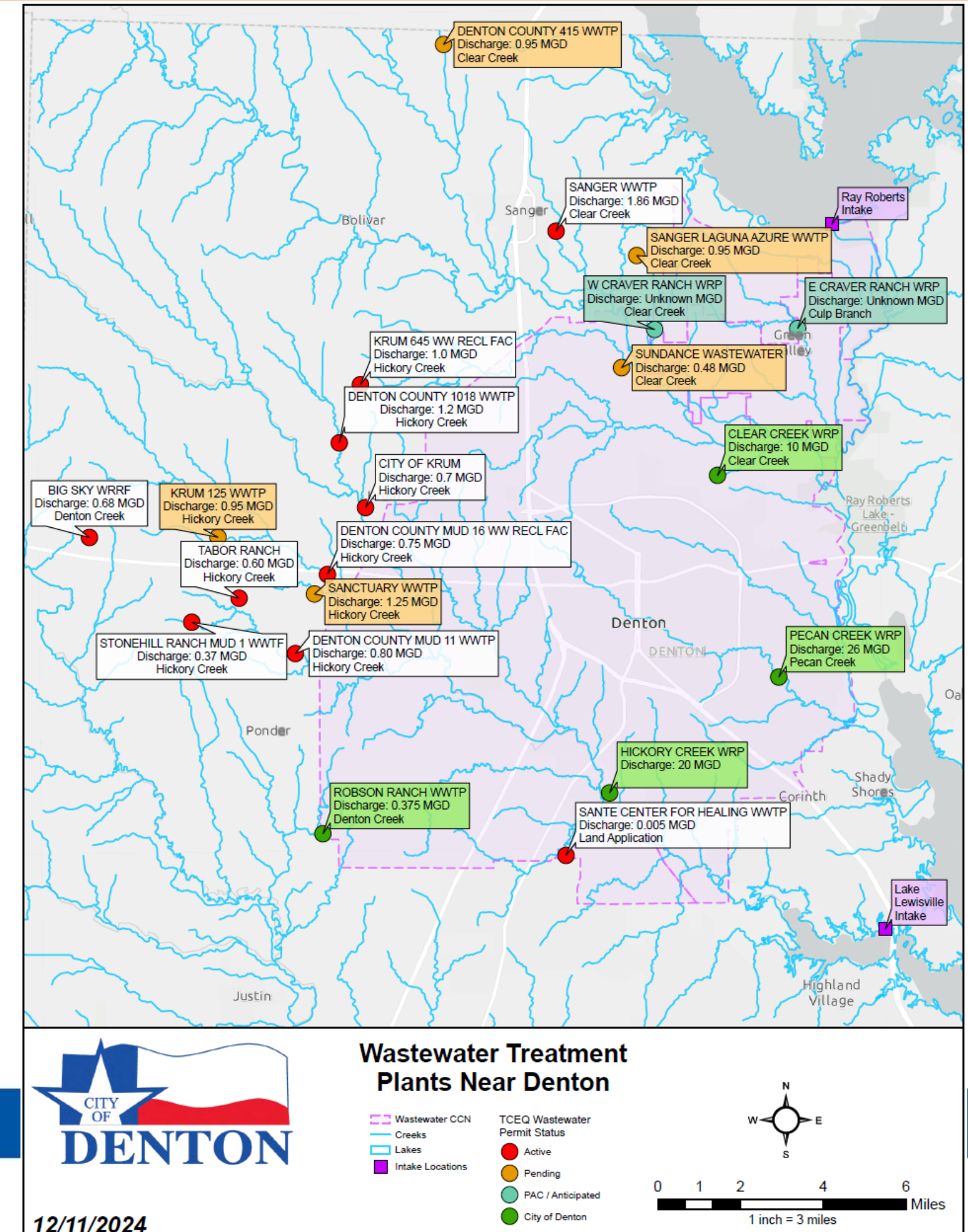
## MUD Impacts

- Utilities
  - Water
  - Wastewater
  - Solid Waste
  - Electricity
- Transportation
  - Traffic
  - Roadways
- Public Safety



# Widespread Impact of Localization

- GREEN – Denton Regional WRP
- WHITE – Existing Local WRP
- YELLOW/BLUE – Proposed Local WRP
- PURPLE – Denton Water Supply Intake
- Local WRPs spread effluent discharge over a widespread area of creeks and rivers
- Concerns:
  - Increased flow in creeks far upstream of lakes limits stormwater carrying capacity. WRP under 1 MGD discharge are not responsible for mitigation
  - Potentially lower-quality effluent causes bacterial concerns in local creeks which flow toward Denton Water Supply Intakes
  - No opportunity for Beneficial Reuse



12/11/2024

# Impact Summary of Regional vs. Local WRPs

Category	Regional	Local	Notes
Maintenance and Operation of Facility	Denton	MUD	Denton has no control over local facilities permitted through TPDES and operated by MUD or other entity.
Discharge Points for Effluent	Localized	Widespread	Local facilities spread effluent discharges over a larger area, affecting more of the watershed.
Effluent Quality	High	Unknown	Denton Water Utilities is pursuing MBR technology. This isn't a requirement for other systems.
Potential for Beneficial Reuse	Yes	No	With regional facilities, Denton controls the effluent and can steer beneficial reuse.
Potential to Negatively Impact Denton Regional Solutions	-	High	Clear Creek is on the 303d list as concerned for bacteria. Local facilities and development may add to that bacteria level which would impact the proposed Clear Creek Water Reclamation Facility.
Stormwater Mitigation	Denton	Denton	Denton is the primary Municipal Storm Sewer System (MS4) Permit in the area. Local facilities under 1 MGD discharge are exempt from stormwater management requirements, therefore the City may need to mitigate the impact of effluent on storm drainage.



# How is Denton addressing it?

## MUD Policy (2022)

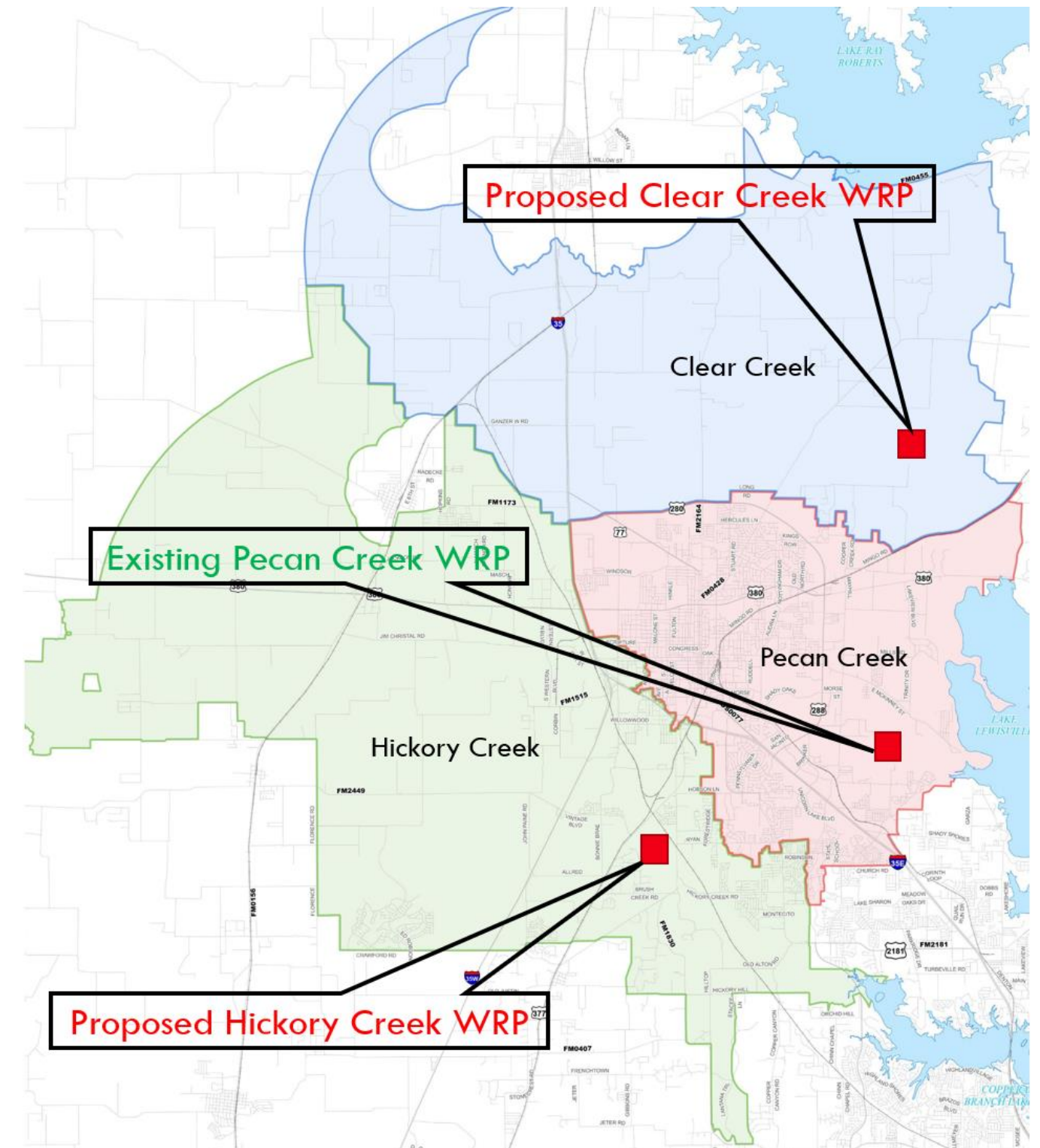
- Goals, considerations, and conditions for the creation and operation of MUDs.
- Framework for development agreements.
- Preferences regarding utility services, emergency services, open spaces, financial stability of the MUD, and future annexations.

## Benefits to the City

- Full-Service City
  - Marketability leading to Influence
  - Development of future infrastructure
- Development Agreements
  - Building to City standards
  - Future annexation

# Denton's Plans for Regionalization of Water Reclamation

- 2023 Wastewater Master Plan (WWMP) adopted by City Council in May of 2024
- WWMP envisions 3 City of Denton Water Reclamation Plants (WRP) corresponding with the 3 drainage basins (Pecan, Clear, and Hickory Creeks)
- All facilities will utilize Membrane Bioreactor (MBR) technology to create high quality effluent prior to discharge







# Questions?



[www.nctcog.org/  
WaterResources](http://www.nctcog.org/WaterResources)

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# Action Item

## Meeting Summary

The January 15, 2025 meeting summary will be presented for approval.



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# Discussion

## 89<sup>th</sup> Texas Legislative Session Update

NCTCOG will share an update on water-related bills of interest.

The full matrix of water-related bills can be found [here](#).

# Discussion

## 89<sup>th</sup> Texas Legislative Session Update\*

\*As of April 7,  
2025

<u>Bill Number</u>	<u>Author</u>	<u>Topic</u>	<u>Status</u>	<u>Companion Bill</u>
<a href="#">HB 685</a>	Bell, Cecil	Relating to rates established by municipalities for water or sewer service for certain entities.	Reported favorably w/o amendment(s) 04/02/2025	<a href="#">SB 2701</a> Creighton (Identical)
<a href="#">HB 1400</a>	Harris & Troxclair	Relating to creation of the groundwater science, research, and innovation fund to be administered by the Texas Water Development Board.	Placed on General State Calendar (04/09/2025)	<a href="#">SB 718</a> Kolkhorst (Identical)



# Discussion

## 89<sup>th</sup> Texas Legislative Session Update\*

\*As of April 7,  
2025

<u>Bill Number</u>	<u>Author</u>	<u>Topic</u>	<u>Status</u>	<u>Companion Bill</u>
<a href="#">HB 1633</a>	Gerdes	Relating to the criteria considered by groundwater conservation districts before granting or denying a permit or permit amendment.	Reported favorably w/o amendment(s) (04/02/2025)	<a href="#">SB 624</a> Kolkhorst (Identical)
<a href="#">HB 1690</a>	Gerdes	Relating to an application for a permit for the transfer of groundwater out of a groundwater conservation district.	Reported favorably w/o amendment(s) (04/02/2025)	N/A
<a href="#">HB 2815</a>	Gerdes	Relating to the financing of water supply projects included in the state water plan; authorizing the issuance of obligations.	Scheduled for public hearing on 04/09/2025.	<a href="#">SB 1261</a> Perry (Identical)

# Discussion

## 89<sup>th</sup> Texas Legislative Session Update\*

\*As of April 7,  
2025

<u>Bill Number</u>	<u>Author</u>	<u>Topic</u>	<u>Status</u>	<u>Companion Bill</u>
<a href="#">SB 565</a>	Perry	Relating to a compliance agreement for the suspension of an enforcement action against a regional water supply, sewer, wastewater treatment, or solid waste disposal service for certain violations.	Passed in the Senate. House received from the Senate (04/1/2025)	<a href="#">HB 2568</a> Harris Davila (Identical)
<a href="#">SB 1253</a>	Perry	Relating to the authority of a political subdivision to provide credits against impact fees to builders and developers for certain water conservation and reuse projects.	Passed in the Senate. House Received (03/31/2025)	<a href="#">HB 3875</a> Bell & Cecil (Identical)



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# Discussion

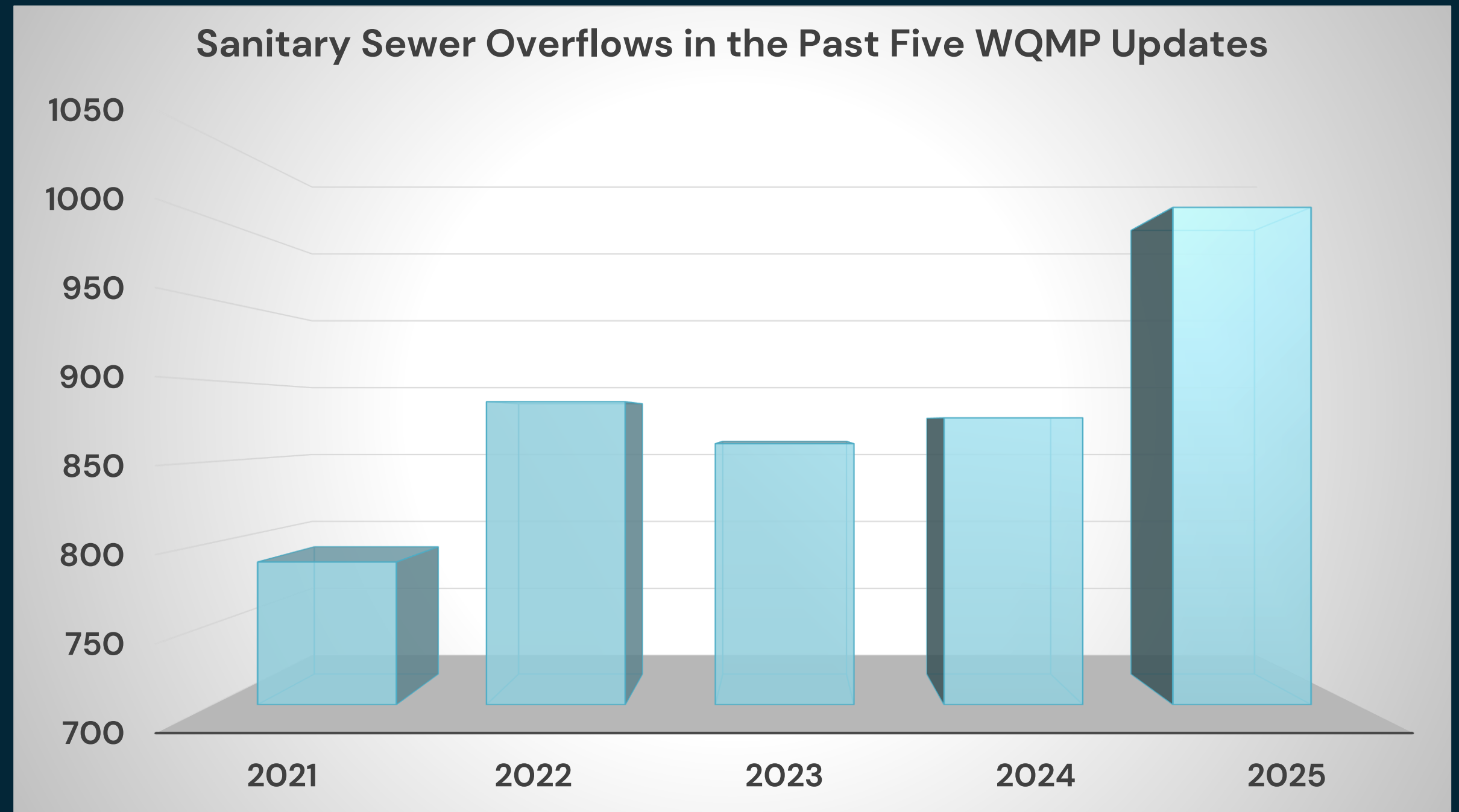
## 2025 Water Quality Management Plan Update

- 1. NCTCOG will provide an update on the progress of this deliverable.

# Discussion

## 2025 Water Quality Management Plan Update

Increase in  
Sanitary  
Sewer  
Overflows

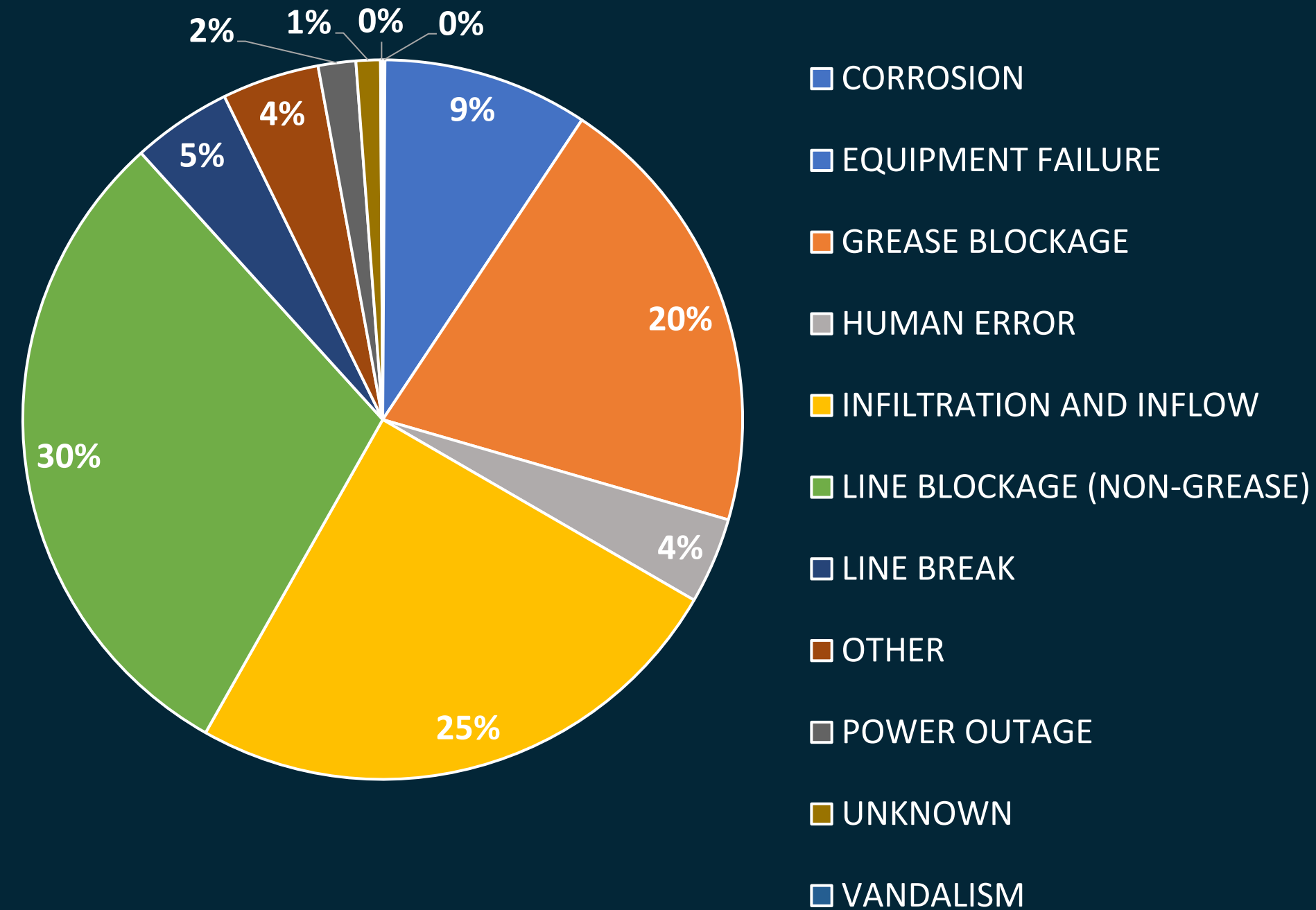




# Discussion

## 2025 Water Quality Management Plan Update

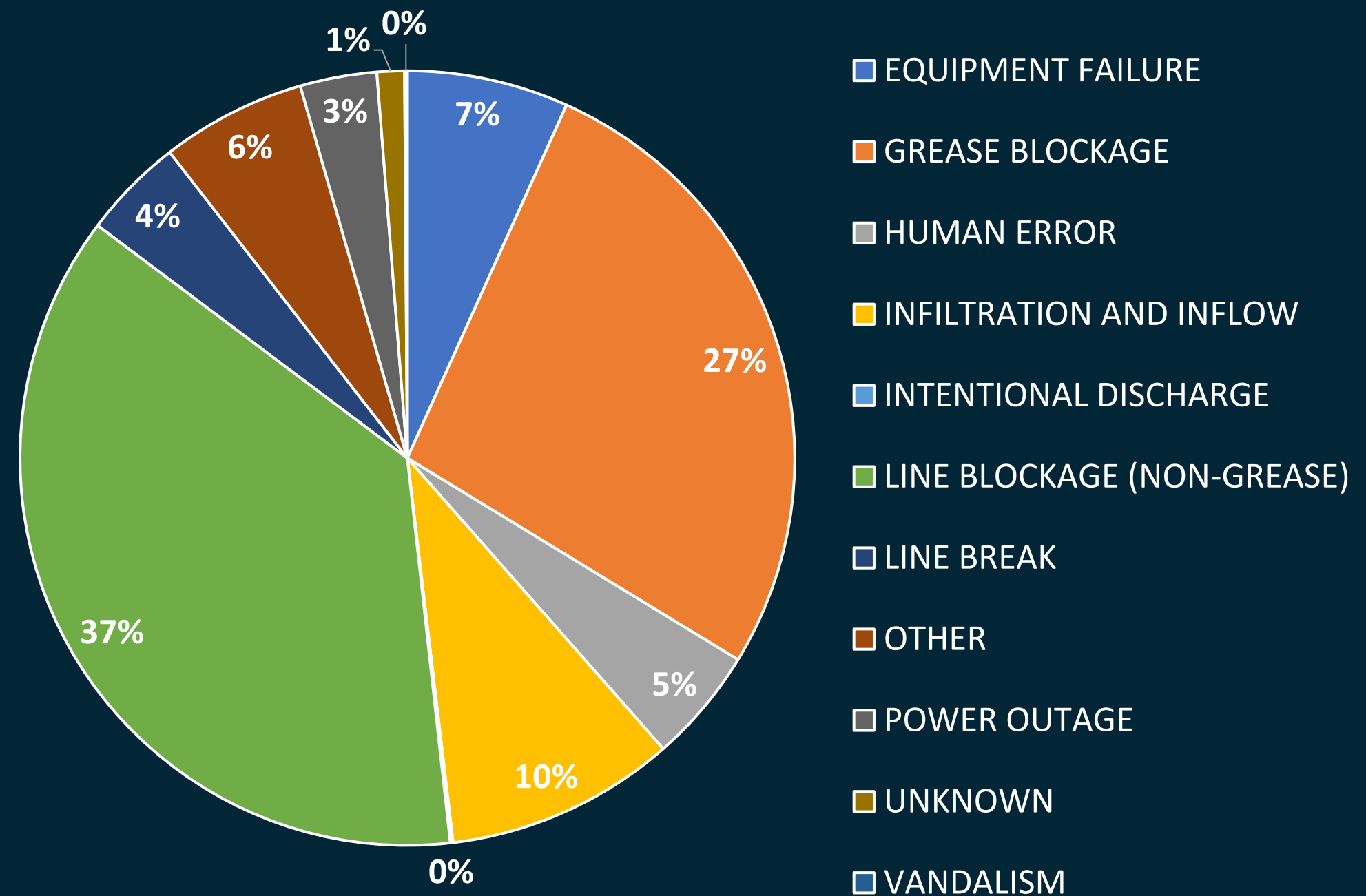
### 2024 Sanitary Sewer Overflow Causes



# Discussion

## 2025 Water Quality Management Plan Update

### 2023 Sanitary Sewer Overflow Causes





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# Discussion

## 2025 Water Quality Management Plan Update

Are there recommended strategies for reducing Inflow & Infiltration SSOs that NCTCOG should include in the plan?

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# Discussion

## 2025 North Central Texas Water Resources Questionnaire

### 2025 Draft Water Resources Questionnaire

#### Changes made

- Streamlined survey for ease of completion
  - Converted many open-ended questions to multi-select, based on previous responses
- Seeking feedback on which previous webinar topics were most useful



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# Discussion

## 2025 North Central Texas Water Resources Questionnaire

### 2025 Draft Water Resources Questionnaire

- Are there any additional changes NCTCOG should make to the questionnaire?
- Are there any questions about the questionnaire?

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# Discussion

## FY26 Call for Nominations Process

NCTCOG will discuss the process and details regarding the FY26 WRC roster, including term reappointments and filling vacant seats.



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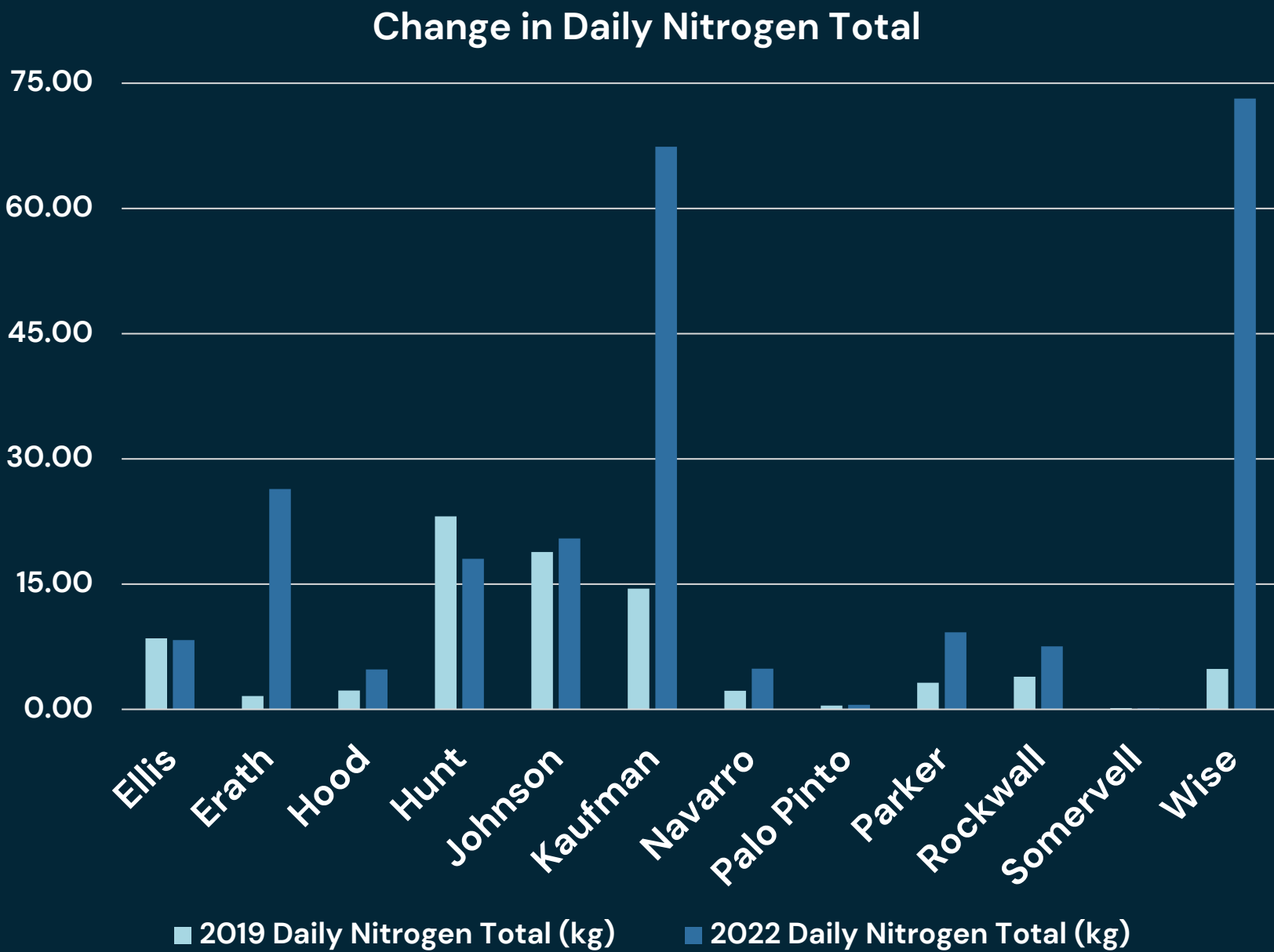
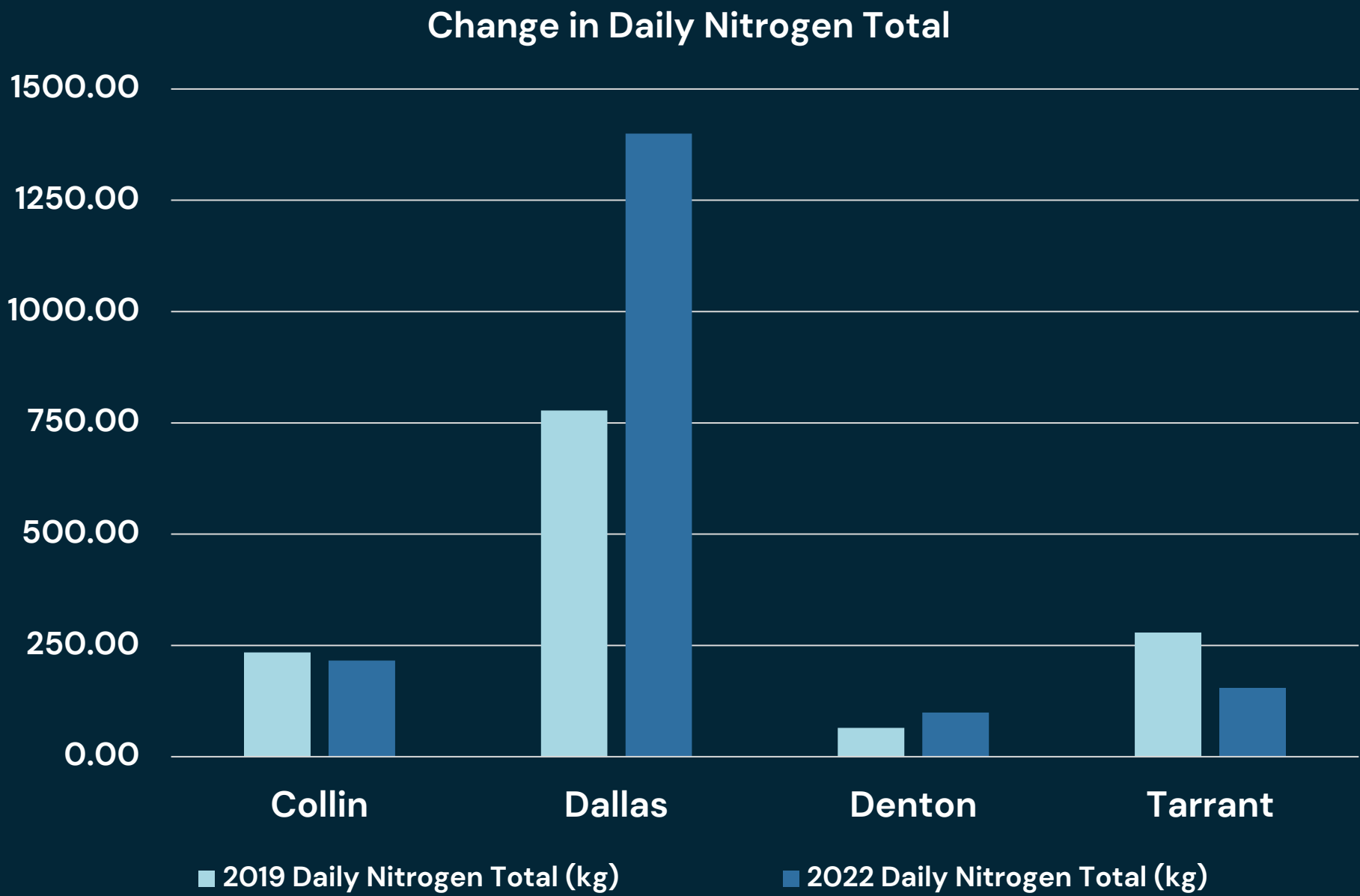
# NCTCOG Updates

## Dallas–Fort Worth Air Quality Improvement Plan (DFW AQIP): Comprehensive Climate Action Plan Updates

- NCTCOG has finished updating the greenhouse gas emissions inventory with 2022 data, and calculating business as usual (BAU) projections for **2030** and **2050**
- Next steps include further measure refinement, measure quantification, and projections if implemented

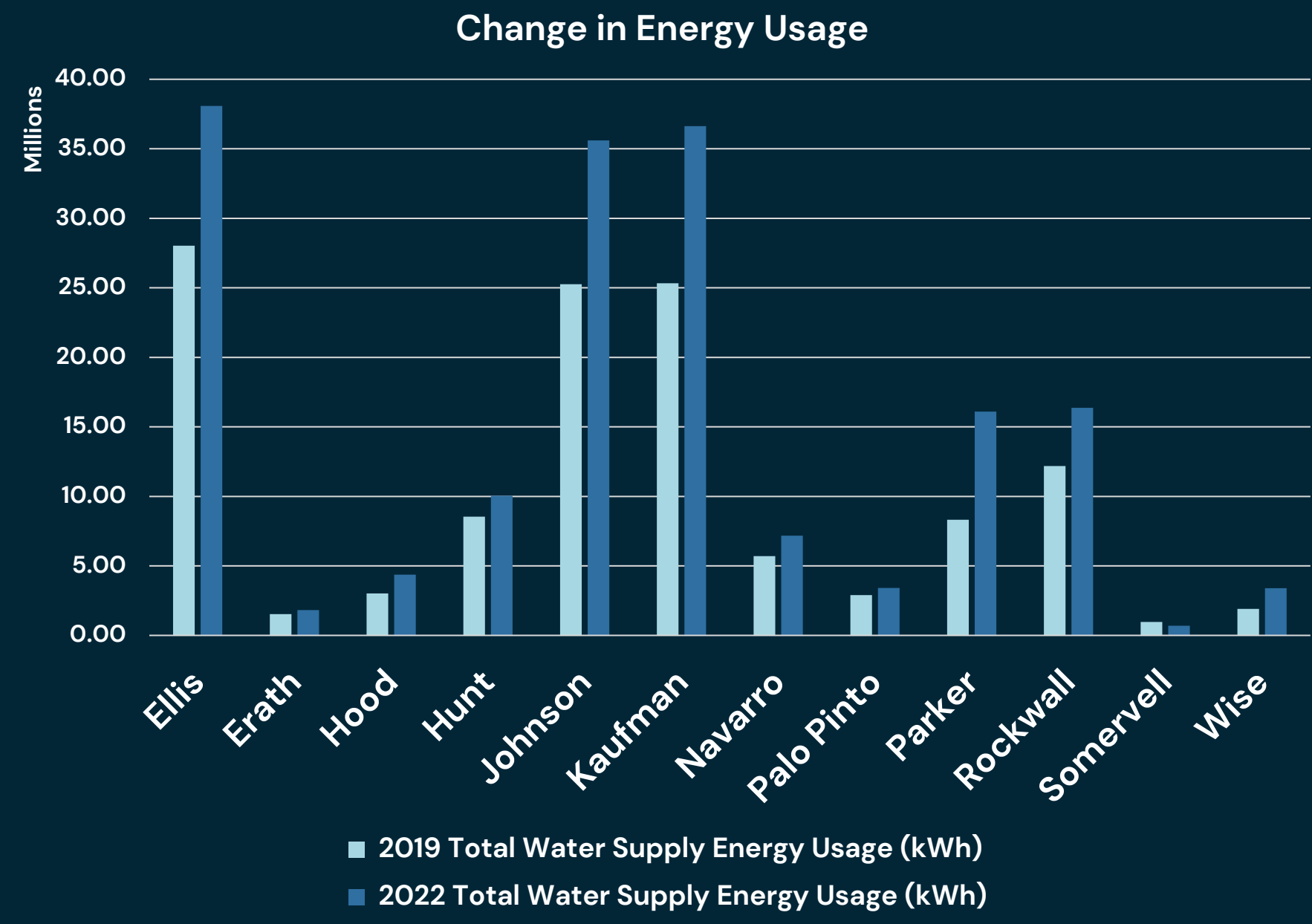
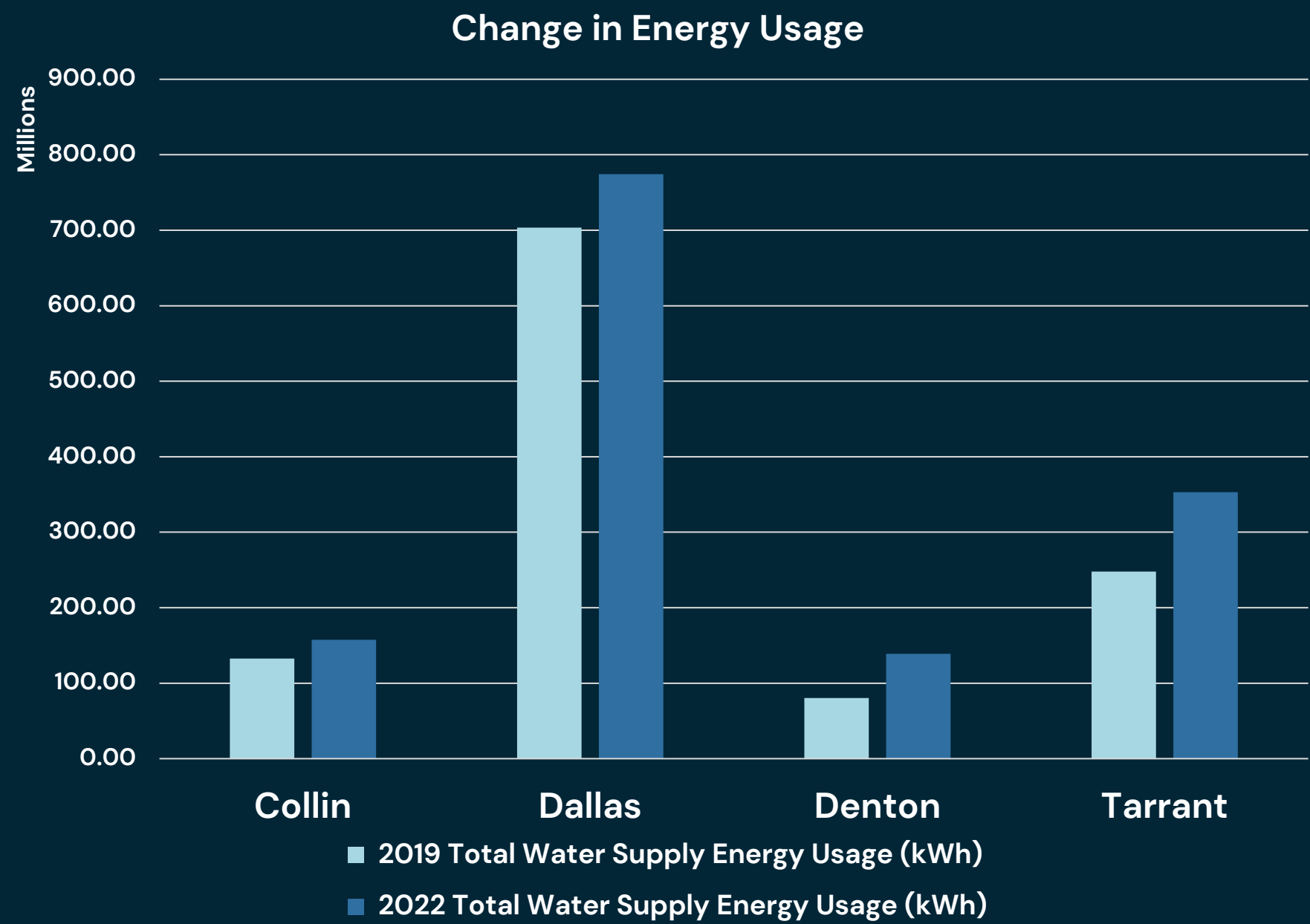
# NCTCOG Updates

## DFW AQIP GHG Emissions Inventory



# NCTCOG Updates

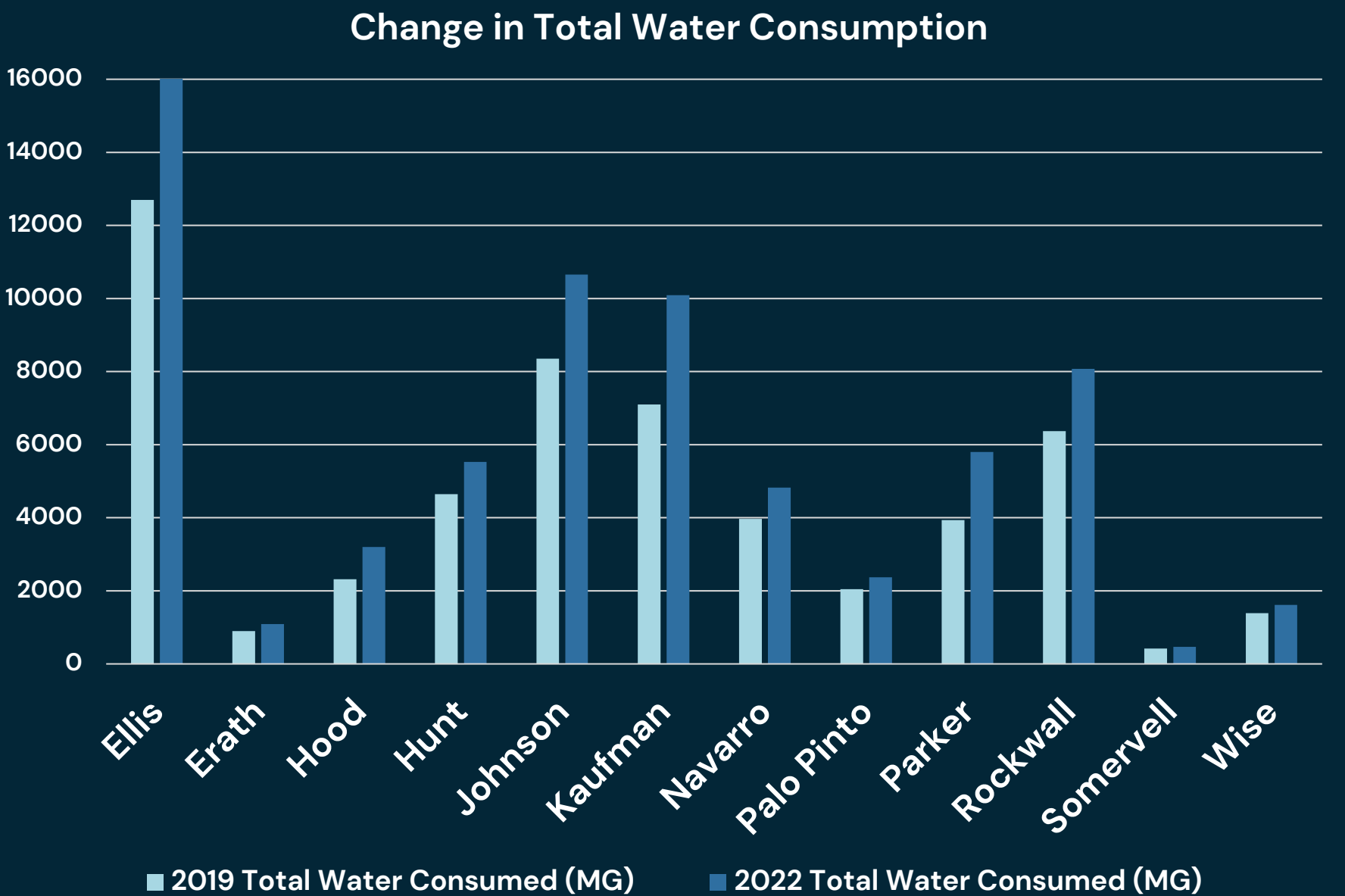
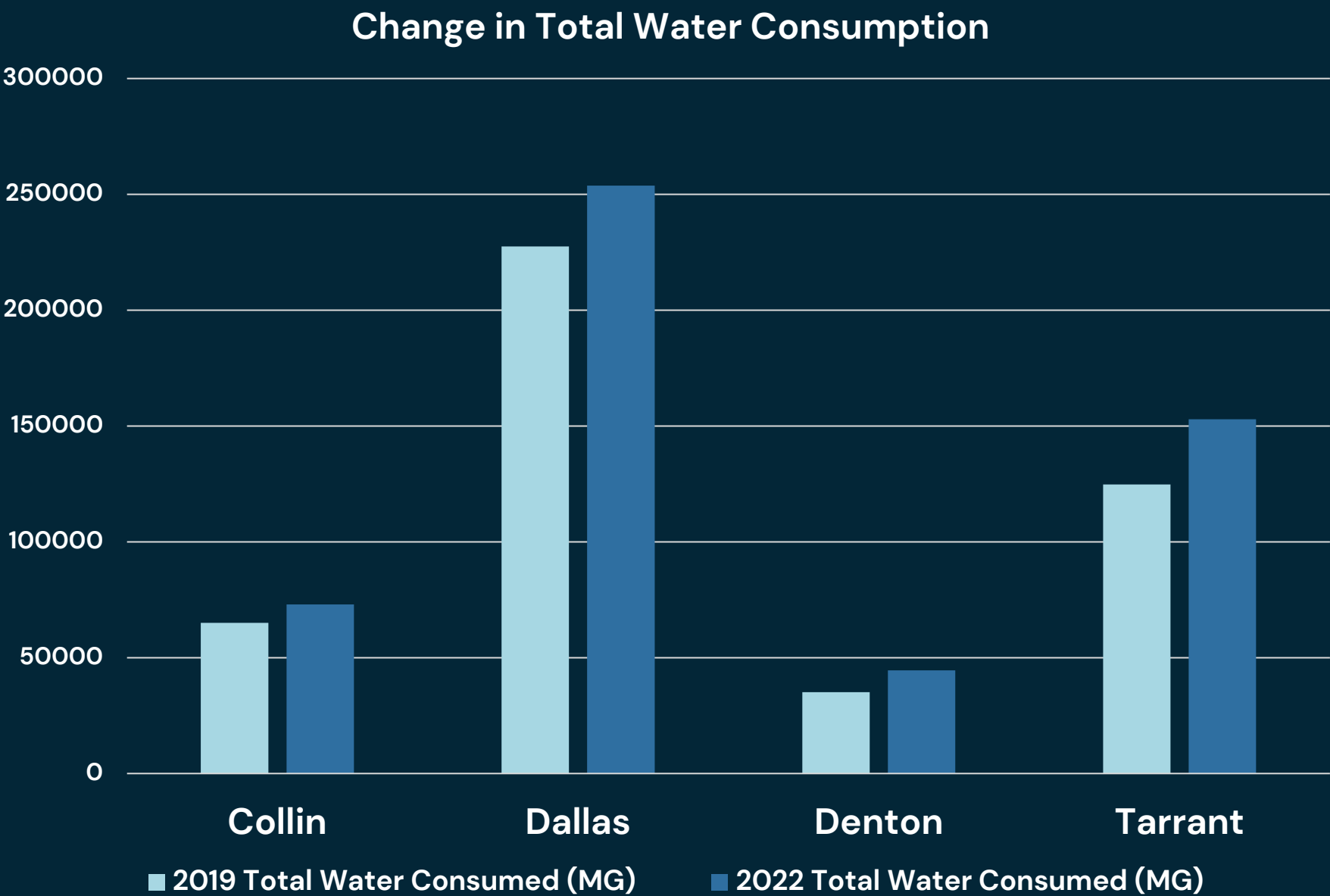
## DFW AQIP GHG Emissions Inventory





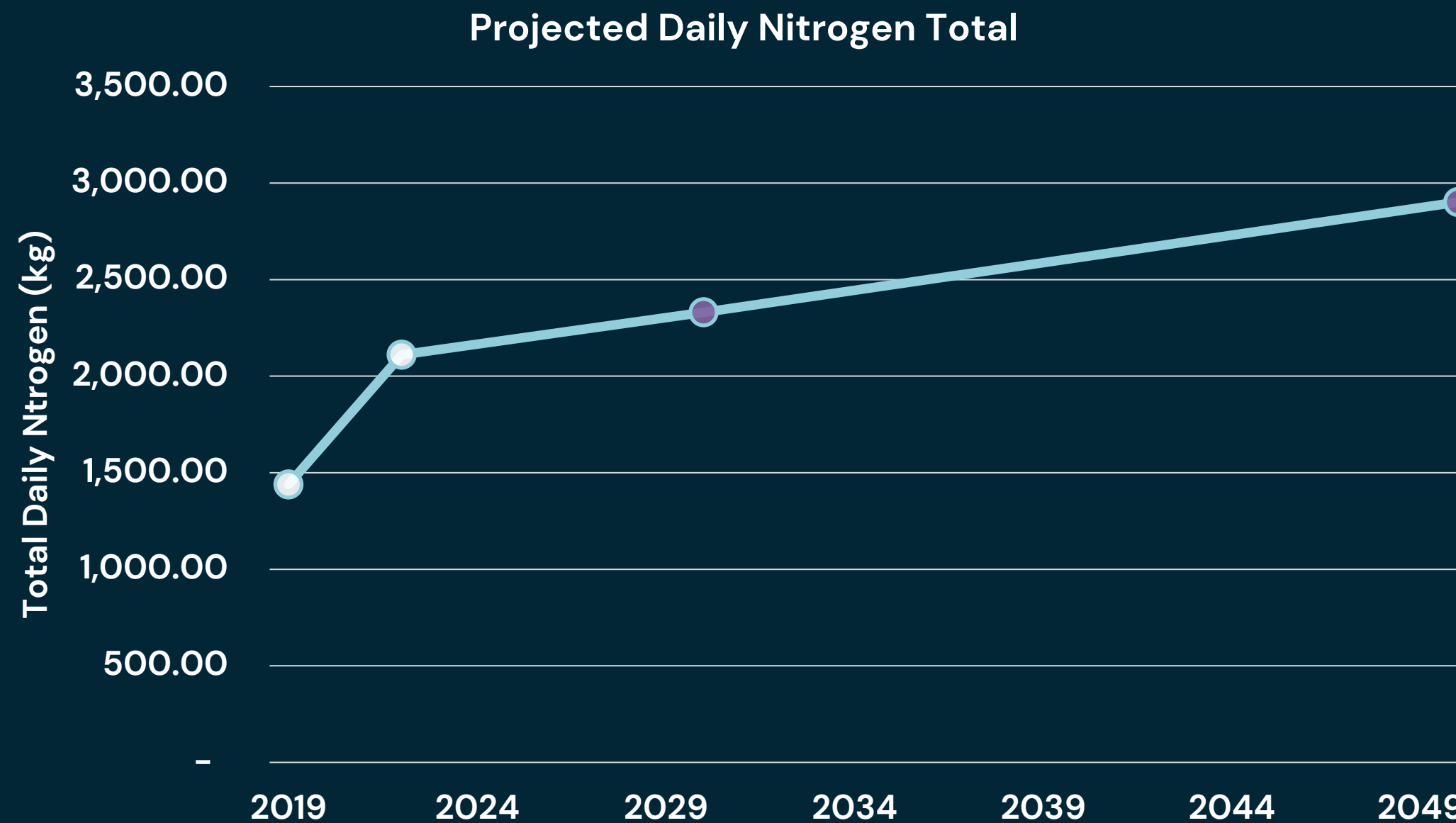
# NCTCOG Updates

## DFW AQIP GHG Emissions Inventory



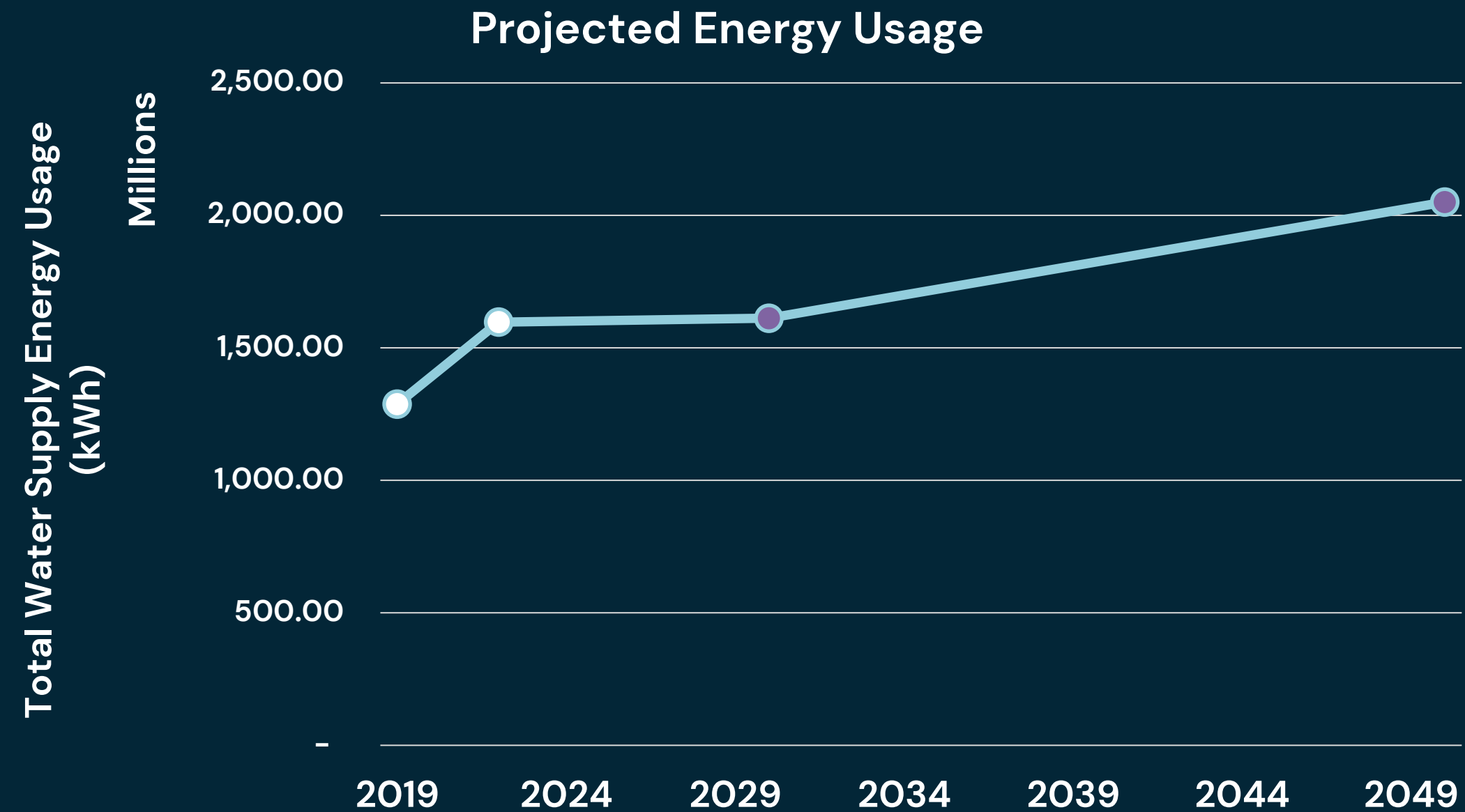
# NCTCOG Updates

## DFW AQIP Business as Usual (BAU) Projections



# NCTCOG Updates

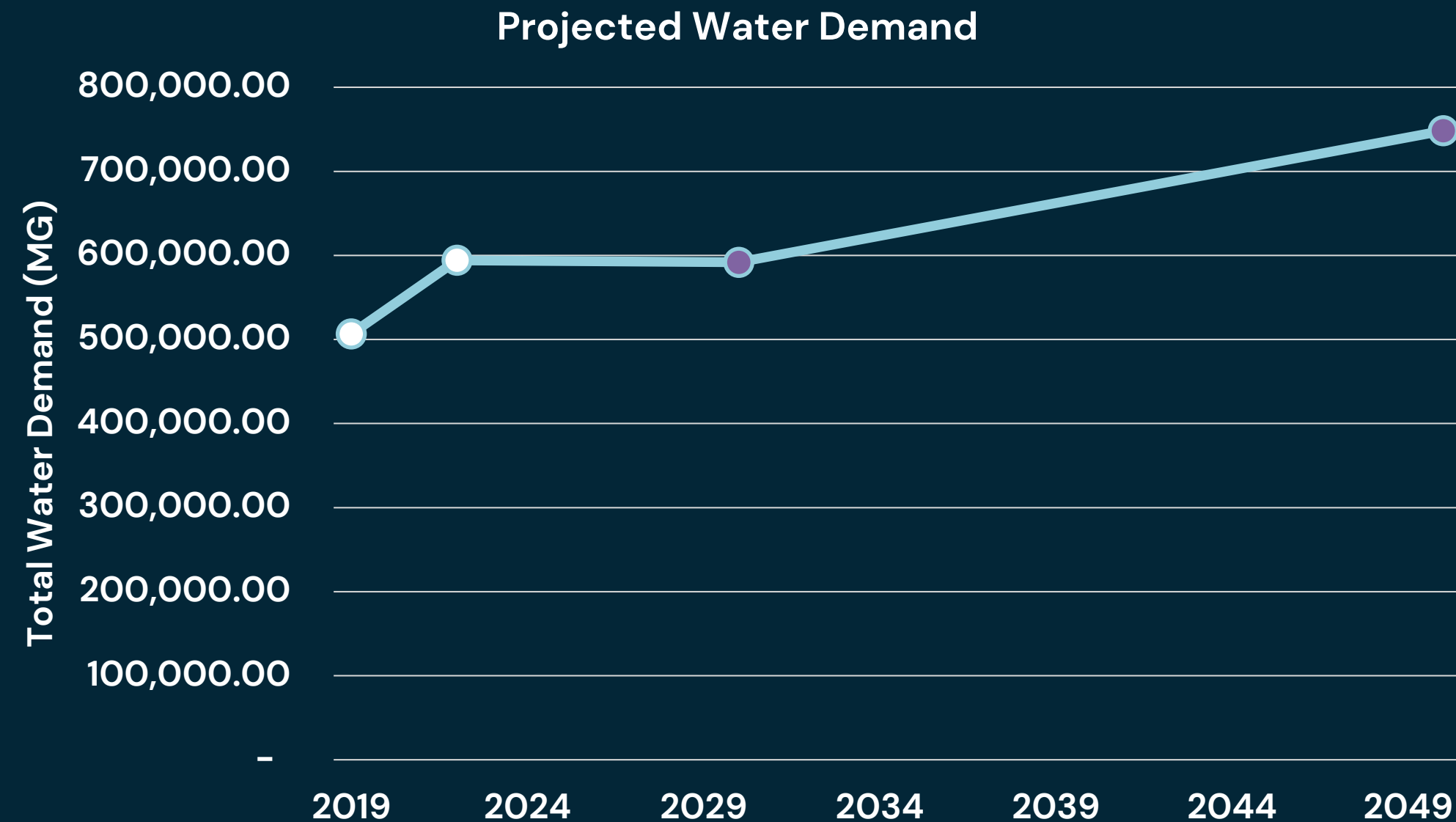
## DFW AQIP BAU Projections





# NCTCOG Updates

## DFW AQIP BAU Projections



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# NCTCOG Updates

## Dallas–Fort Worth Air Quality Improvement Plan: Comprehensive Climate Action Plan Updates

- NCTCOG is continuing to accept feedback on the work being done for the DFW–AQIP Comprehensive Climate Action Plan via [online survey](#)

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# NCTCOG Updates

## Total Maximum Daily Load (TMDL) Implementation Plan (I-Plan) Revisions

- The TMDL program is seeking feedback on implementation strategies for addressing bacteria impairment in the [TMDL I-Plan](#).
- Send comments and feedback to Hannah Ordonez at [hordonez@nctcog.org](mailto:hordonez@nctcog.org).



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# NCTCOG Updates

## Water and Energy Conservation Signage

- Water conservation signage aimed at educating and affecting behavior change with **occupants of municipal buildings**.
  - Specs: acrylic or aluminum signs, 6" x 9" size, corner drill holes.
- Seeking volunteers to pilot or install the signage. Requests for signage can be [submitted through the order form](#).
- Timeline: Requests for signage due by May 7<sup>th</sup>. Signage to be distributed by end of July.
- Reach out to [aknox@nctcog.org](mailto:aknox@nctcog.org) with any questions

# NCTCOG Updates

## Water and Energy Conservation Signage



### DON'T WASTE WATER!

Use leftover drinking water or ice to water indoor plants or ask your coworkers if they have a use for it. The average American uses 80-100 gallons of water a day for indoor use, so reuse when you can to reduce your use!



### FILL THE DISHWASHER

Running full loads in the dishwasher is both a water and energy wise choice! Regularly underfilling the dishwasher could mean up to double the amount of water and energy used compared to a fully loaded dishwasher.

# NCTCOG Updates

## Water and Energy Conservation Signage



### WATCH OUT FOR LEAKS!

Watch for signs of water leakage and report any concerns or issues you see! The sooner a leak is noticed and reported, the sooner it can be fixed.



### SWEEP!

Choose to sweep sidewalks and shop floors instead of pressure washing them. Using a broom can save 8-18 gallons of water per minute!

\*For outdoor use



# NCTCOG Updates

## Water and Energy Conservation Signage



### IRRIGATE WISELY!

What's the weather forecast today? Don't run irrigation in the rain or freezing temperatures. Properly maintaining sprinkler heads and irrigation systems conserves both water and energy resources!

\*For outdoor use

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# NCTCOG Updates

## Public Works Roundup

- Thursday, September 4, 2025
- The Hurst Conference Center (1601 Campus Dr, Hurst, TX 76054) from 8:30 a.m. to 4:00 p.m.
- [Add to Calendar](#)
- Call for Presenters and Registration Coming Soon

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# NCTCOG Updates

## NCTCOG Webinar: *AI: Challenges and Opportunities for Water Resources*

- Date TBD
- Virtual, via Microsoft Teams
- Registration coming soon



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# NCTCOG Updates

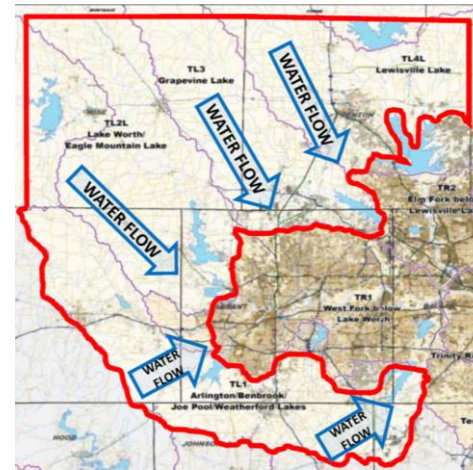
## Region C Initially Prepared Plan Public Hearing

- Monday, May 19, 2025; 1:00 p.m.
- NCTCOG Offices, Transportation Council Room.

# Engaging in the integrated Transportation and Stormwater Infrastructure Study (TSI)

TSI is using innovative modeling to identify projects that will reduce future flood risk in and downstream from rapidly developing areas. Your input is wanted!

Email: [tsi@nctcog.org](mailto:tsi@nctcog.org)



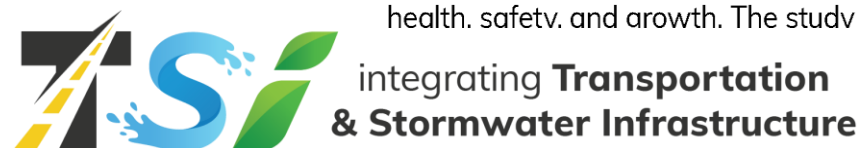
## What is the integrated Transportation and Stormwater Infrastructure (TSI) study?

This planning study coordinates transportation planning, stormwater management, and environmental planning to mitigate flooding risks and optimize infrastructure while supporting sustainable development. The study will recommend tools and best practices to address community health, safety, and growth. The study is led by the North Central Texas

## KEY TERMS

### Community:

A local government or political entity that adopts and enforces ordinances, orders, or regulations applicable to the area under its jurisdiction.



## Technical Advisory Group

Provide input to the TSI Project team regarding policy, outreach, data, and challenges that communities face.

Thursday May 1, 2-3:30 p.m. via Teams  
See project website for future meetings

## Community Site Visits

Invite the project team to visit your community to learn about your flooding and development hotspots.

## Training Workshops

View past trainings on water rights, green asset management, and green stormwater infrastructure at [www.nctcog.org/tsi](http://www.nctcog.org/tsi). Upcoming training will focus on county floodplain management.

## Online

Project Website: [www.nctcog.org/tsi](http://www.nctcog.org/tsi)

### StoryMap:

<https://geospatial.nctcog.org/portal/apps/storymaps/stories/6b73437fc69643cb9b6f239831706191>

### MapYourWatershed! interactive map:

<https://nctcoggis.maps.arcgis.com/apps/CrowdsourcingReporter/index.html?appid=204ebde547fd4f9b813babaa46e2d26c>

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# Future Agenda Items

The WRC can present future agenda items & discuss the priority and format of previously requested items.

Past suggestions include:

- Peer-to-peer sharing on PFAS
- Promoting Blue-Green Infrastructure





# Roundtable

The WRC is invited to share what is happening in their communities.



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# Next Meeting

Wednesday, July 9, 2025

- 10:30 AM – 12:30 PM
- Virtual, via Microsoft Teams
- [Add to Calendar](#)

# Staff Contacts

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