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Meeting Our Region's Needs Today  
And Tomorrow



**WASTEWATER COMMITTEE MEETING**

**APRIL 23, 2025**



# Agenda

- I. CALL TO ORDER
- II. PUBLIC COMMENTS
- III. OPENING REMARKS
- IV. ACTION ITEMS
- V. DISCUSSION ITEMS
- VI. ADJOURNMENT

## IV. ACTION ITEMS

- A. Consider approval of Wastewater Committee meeting minutes – March 26, 2025
- B. Agreement on Industrial Wastewater Discharges by Texas Instruments to the City of Richardson Wastewater Collection System; Resolution No. 25-20

## V. DISCUSSION ITEMS

- A. Panther Creek Wastewater Treatment Plant Expansion
- B. Stover Creek Lift Station Final Engineering Services
- C. Lavon Wastewater Contract
- D. Opportunity for Committee members to provide feedback on Wastewater Committee meeting or request potential future agenda items

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## Overview

- General purpose for considering a temporary industrial wastewater services agreement with Texas Instruments and the City of Richardson
- Review NTMWD's Industrial Pretreatment Program
- Timeline highlights

## General Purpose

- The general purpose for considering a temporary industrial wastewater services agreement with Texas Instruments (TI) and the City of Richardson (Richardson) addresses several goals:
  - Ensure the Rowlett Creek Regional Wastewater Treatment Plant complies with its Texas Pollutant Discharge Elimination System (TPDES) permit and does not experience pass through resulting from high-strength industrial wastewater
  - Be responsive to TI's and Richardson's request to minimize disruptions to TI's manufacturing processes in a unique collaboration involving NTMWD
  - Provide time for TI and/or Richardson to identify and implement a solution or solutions to meet pretreatment program requirements while avoiding major disruptions to TI's manufacturing processes
  - Recognize TI's role as a locally, regionally, and nationally important industry and economic engine
  - Protect the interests of NTMWD's Regional Wastewater System municipal participants by ensuring they are not inappropriately subsidizing TI's industrial wastewater treatment costs



# Overview of NTMWD's Pretreatment Program

- NTMWD is required by Clean Water Act, EPA, TCEQ, and our TPDES permit to manage non-residential discharges through a **pretreatment program** and act as regulators when non-residential discharges could cause compliance issues with TPDES permits
- NTMWD performs daily tasks (sampling, inspections, permitting, tracking compliance, interface with TCEQ, etc.)
- NTMWD drafts and recommends to city appropriate enforcement for violations
- City signs enforcement notices, permits and provides essential data for identifying industrial users (e.g., information regarding new industries, commercial water billing records, certificates of occupancy, etc.)
- NTMWD regulates approximately 70 Industrial User Permits with ~70% of them providing some form of onsite pretreatment



# Key Pretreatment Program Elements

- Multi-jurisdictional agreement between Richardson and NTMWD outlines roles and responsibilities
  - Amended and restated in 7/2022 to delegate additional responsibilities to NTMWD
- Richardson City Ordinance
  - Part II, Chapter 23, Article IV, Division 3.
  - Industrial Pretreatment Program and Other Industrial Wastes
- NTMWD drafts and recommends appropriate enforcement responses for program violations
  - Richardson has obligations to enforce the city's pretreatment ordinance



# Pretreatment Program: Industry's Responsibilities

- Permitted industrial users are responsible for complying with the industrial user permit
  - Monitoring – contract with laboratory
  - Permit limits – install treatment as needed to comply with established limits
  - Reporting – submit periodic reports to NTMWD for review
  - Noncompliance – report to NTMWD when industrial user becomes aware of violation or spill
- Industrial users provide, fund, and maintain treatment systems to comply with categorical and local limits



# Timeline Highlights

- 2019: Richardson approaches NTMWD with Texas Instrument's (TI) RFAB2 expansion
- 2021: Rowlett Creek RWWTP (RCRWWTP) began seeing an increase in ammonia monthly loading
- August 2021: TI submitted Industrial User Permit (Permit) application for RFAB2
- October 2021: NTMWD Pretreatment began investigating high ammonia load at RCRWWTP
- February 2022: TI Permit issued with requirement to report monthly ammonia discharge
- July 2022: NTMWD executes agreement with Richardson to assume pretreatment program administration
- Early 2023: NTMWD presented high ammonia concerns to TI
- November 2023: NTMWD provided draft permit with schedule to begin reducing ammonia discharge
- December 2023: TI responded to draft permit
- April 2024: NTMWD was notified by TI that it's equipment testing would discharge high amounts of ammonia. NTMWD informed TI that the discharge could exceed the plant's capacity to treat wastewater
- May 2024: TI, Richardson, and NTMWD began routine executive and technical engagement to address the high ammonia issue



# Timeline Highlights

- May 2024 to Present: TI, Richardson, and NTMWD have held numerous executive, technical, and legal meetings to collaborate on identifying a path forward that addresses key interests for all parties
  - January 2025:
    - TI committed to implementing a long-term treatment solution
    - NTMWD notified Richardson and TI of a willingness to assist them by providing interim treatment of TI's industrial ammonia discharges while a long-term treatment solution was developed
  - February 2025: TI expressed interest in developing an agreement to implement interim treatment
  - Current Status:
    - Parties have not yet reached agreement on critical terms for an interim agreement that would span approximately five years
    - NTMWD proposed a shorter term agreement to reach a reasonable resolution
    - Time is of the essence to procure and install additional interim treatment equipment needed at the RCRWWTP to treat TI's industrial wastewater

## Executive Session

### Section 551.071, Consultation with Attorney

- Authorizes a government body to consult with its attorney in an Executive Session to seek advice on legal matters regarding pending or contemplated litigation or a settlement offer or on a matter in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the Texas Open Meetings Act.
- A government body may not invoke this Section to convene a closed session and then discuss matters outside of that provision.
- General discussion of policy, unrelated to legal matters, is not permitted under the language merely because an attorney is present.
- Items discussed during Executive Session are privileged and should remain confidential.



## Committee Consideration

The Executive Director and NTMWD staff and Lloyd, Gosselink, Rochelle & Townsend, P.C. recommend the Board of Directors authorize execution of the Agreement on Industrial Wastewater Discharges by Texas Instruments to the City of Richardson Wastewater Collection System:

Contracting Parties: Texas Instruments Incorporated and City of Richardson

Purpose: Contractual arrangement for TI payment of necessary interim treatment and pumping of TI wastewater with excessive ammonia flows

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# Panther Creek WWTP Expansion to 15 MGD

## Project Purpose

- Expansion of treatment capacity of existing facilities from the current 10 MGD average daily flow to 15 MGD average daily flow with a peak two-hour flow of 45 MGD

## Project Components

- 5 MGD treatment train including peak flow storage, primary clarification, secondary treatment, tertiary filtration, and an ultraviolet light (UV) disinfection system
- A 60-inch diameter treated plant effluent outfall pipeline
- A maintenance building and an annex to the existing Administration Building



# Panther Creek WWTP Expansion to 15 MGD

## Tabulation of Bids

Bidder	Total Bid	Recommendation
Crossland Heavy Contractors, Inc.	\$170,618,000	Lowest responsible bid Recommended for Award
Eagle Contracting, LLC	\$179,505,453	
Thalle Construction Co., Inc	\$212,675,000	
Engineer's OPCC	\$140,950,000	

### Crossland Heavy Contractors, Inc. has worked on:

- Springdale Wastewater Treatment Facility Phase I Improvements, Springdale, Arkansas
- Owasso Wastewater Treatment Plant and Main Lift Station, Owasso, Oklahoma
- Hochatown Wastewater Treatment Facility Improvements, Choctaw Nation, Oklahoma

### City of Frisco Coordination

- Project costs are fully funded by City of Frisco
- City Council scheduled briefing on May 6, 2025



## Major Differences Between OPCC and Bid

- OPCC developed October 2024 and bids received March 2025
  - Rising cost due to market uncertainty due to tariffs, raw materials, and supply chain challenges
  - Primary cost differences in electrical equipment, HVAC equipment, copper, and yard piping
  - No significant difference in certain items like concrete and drilled piers
- Sitework appears to be the largest cost difference
  - Site has known challenging soil conditions requiring over excavation and replacement fill without any suitable location on-site for excess material
  - Hauling costs are higher than average due to traffic congestion on US-380 and was not accounted for in the OPCC
  - Manufactured prestressed tank higher due to foundation requirements



## Panther Creek WWTP Expansion to 15 MGD

Project	Year	Location	Expansion	\$/gal
Stewart Creek West WWTP	2015	City of Frisco, TX	5 MGD	\$13/gal
Sister Grove RWRRF	2020	New Hope, TX	16 MGD	\$19/gal
Sabine Creek WWTP	2022	Royse City, TX	4 MGD	\$18/gal
Nelson WWTP	2023	Johnson County, KS	15 MGD	\$34/gal
Rocky River WWTP	2024	Concord, NC	4 MGD	\$35/gal
Walnut Creek WWTP	2024	Austin, TX	25 MGD*	\$42/gal
Hutto South WWTP	2024	Hutto, TX	4 MGD	\$45/gal
Muddy Creek WWTP	2024	Wylie, TX	2.5 MGD	\$29/gal
<b>Panther Creek WWTP</b>	<b>2025</b>	<b>City of Frisco, TX</b>	<b>5 MGD</b>	<b>\$34/gal</b>

\*Expansion with rehab and process change

# Panther Creek WWTP Expansion to 15 MGD

## Engineering Services During Construction (HDR)

- Engineering services for 36-month period
- \$4.4M budget estimate (fee under negotiation)

## Construction Management Services (Garver)

- Outsourced construction management and inspection services to cover all disciplines for 36 months
- Materials testing and special inspections
- \$7.5M budget estimate (fee under negotiation)

*Request to Authorize award of the contract will be presented at the May 2025 Board Meeting*

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## Background & Project Purpose

- The UEFIS Regional Capacity Assessment and Assurance Study identified the need for a new lift station and force main to serve projected growth in McKinney and Prosper north of US 380 to:
  - Reduce risk of surcharge and Sanitary Sewer Overflows (SSOs) in the Upper East Fork Interceptor System (UEFIS)
  - Return capacity to McKinney-owned sewers south of US 380
- All flows entering the Stover Creek Lift Station and Force Main are to be conveyed and treated at the Sister Grove Regional Water Resource Recovery Facility (SGRWRRF)
- Preliminary Design Estimated Construction Cost is \$62,650,000

# Stover Creek Lift Station

## Project Components

- 42 million gallons per day (MGD) lift station with odor control
- 1,700 linear feet of influent pipe with an engineered siphon
- Flow diversion structure and discharge meter vault
- Floodplain mitigation





# Stover Creek Lift Station

## Final Engineering Design (Plummer Associates)

- Basic Services
  - Final design services
  - Early procurement services for long lead equipment
  - Bid phase services
- Special Services
  - Geotechnical engineering
  - Subsurface utility engineering
  - Environmental services and tree survey
  - Topographic survey and easement documents
  - Radio path study
  - Annexation and zoning assistance
- Final engineering fee budget estimate is \$4M (currently under negotiations)

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## Background

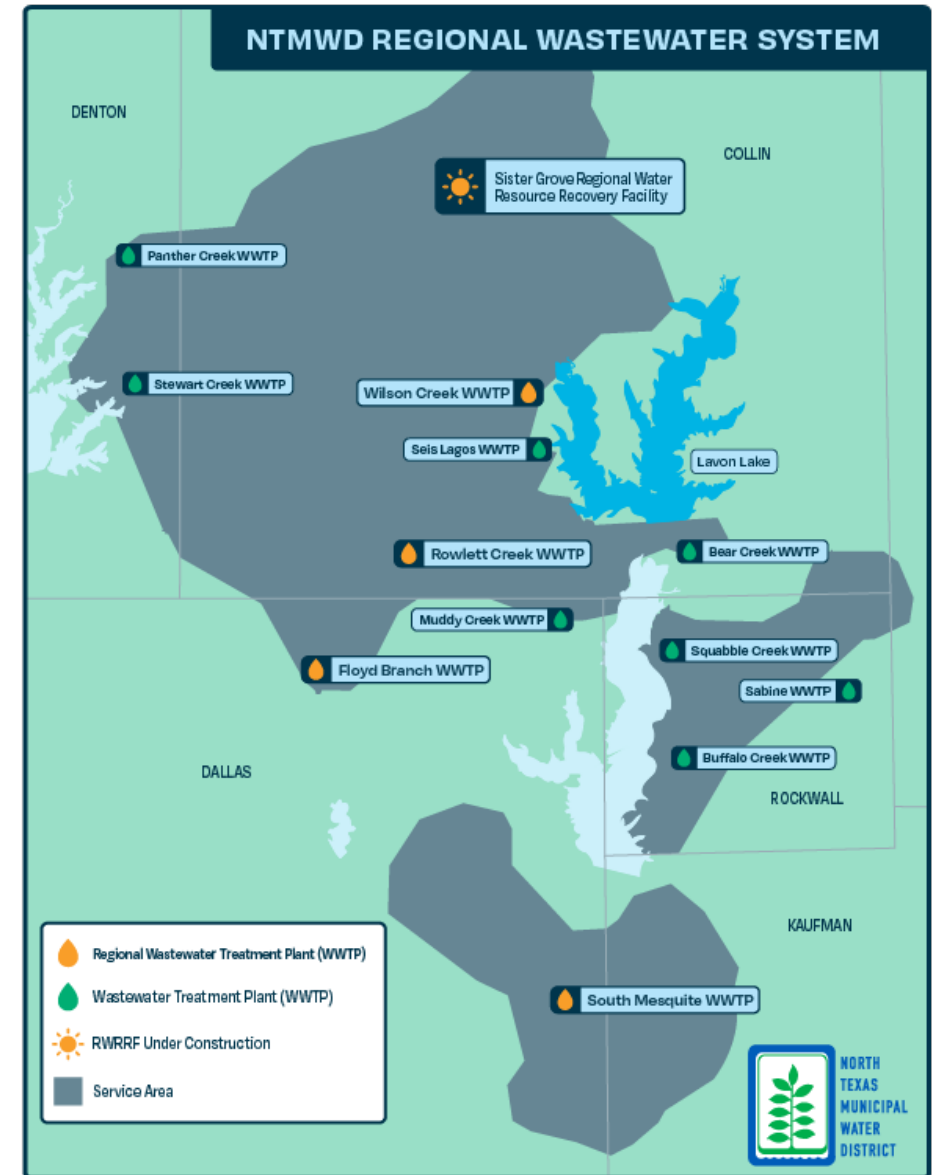
- District currently operates Lavon's Bear Creek WWTP (0.5MGD)
- Lavon is constructing new WWTPs to serve planned developments
  - Lavon North WWTP (0.25MGD)
  - Lavon East WWTP (0.10MGD)
- Lavon has included the District in planning and design process
- Lavon desires to contract with the District for operation of these wastewater treatment facilities





# NTMWD Small Plants Summary

- Small Plants (current)
  - Five (5) WWTPs across a large service area
    - Sabine, Bear, Buffalo, Squabble, Seis Lagos
  - Treatment Capacities range from 0.25MGD to 7.0MGD
  - Eleven (11) Operations Staff
  - Combined Budget of \$8.1M
- Lavon North and Lavon East
  - Creates requirements for additional personnel
- Additional personnel needed to perform additional duties
- Proposed budgets have been discussed with Lavon in conjunction with the contract drafting





# Wastewater Operations Contract

## Contract Timeline

- Lavon and District finalizing contract terms for the District to operate all three plants under one contract
  - District will furnish all labor, materials, vehicles, equipment, and consumables required for proper operation and maintenance of the WWTP(s)
- Lavon North plant construction scheduled for completion approximately July/August 2025
  - FY25 Budget Amendment to capture operational expenses for remaining months of current FY25 budget
- Lavon East plant construction planned for mid-year FY26
  - FY26 Budget request would include operational budget for all three facilities
- Lavon Bear Creek WWTP Expansion from 0.50MGD to 0.75MGD
  - District and Lavon working closely on expansion



# Lavon North & Lavon East Wastewater Plants Operations Contract

## Tentative Next Steps

- Targeting completion of contract discussions with Lavon over the next month
- April 2025 Wastewater Committee Discussion Item
- Consideration item for operating contract and budget amendment as early as May Board Meeting

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