

To the Mayor and Members of the City Council

April 15, 2025

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SUBJECT: WASTEWATER SYSTEM EXPANSION AND IMPROVEMENTS

This Informal Report provides an update on the wastewater system expansion and capacity improvements in the fast growing northern and western portions of Fort Worth’s service area. This report was requested following the February 18, 2025 Council Work Session briefing on water system expansion and capacity improvements.

As part of the recent impact fee land use assumptions and capital improvement plan update, population and employment projections were developed for the period from 2025 to 2035. Growth projections over the next ten years of the wastewater customer base (both wholesale and retail) are as follows:

| Customer Base | Service Area Population | | Service Area Employment | |
|-----------------------------|-------------------------|------------------|-------------------------|----------------|
| | 2025 | 2035 | 2025 | 2035 |
| City of Fort Worth (Retail) | 1,017,863 | 1,264,157 | 683,904 | 775,564 |
| Wholesale Customers (23) | 371,547 | 436,431 | 168,165 | 196,475 |
| TOTAL | 1,389,410 | 1,700,588 | 852,069 | 972,039 |
| 10 Year Increase | | 311,178 | | 119,970 |

This explosive growth requires significant wastewater system capital investment. This report, and the maps on the following pages, outline the wastewater treatment plant, lift station, force main, and major gravity sewer lines necessary to provide wastewater service to these fast-growing areas.

North Area – Lake Grapevine Watershed – TRA Wastewater Assets

The Trinity River Authority (TRA) Denton Creek Wastewater Treatment Plant (DCWWTP) provides wastewater treatment service to areas of Fort Worth that drain to Lake Grapevine, including the Henrietta Creek and Elizabeth Creek watersheds. The DCWWTP is currently rated at 11 million gallons per day (MGD), with approximately 55% of the existing flow into the plant originating from Fort Worth. With flows approaching the hydraulic rating of the plant, in 2024 the TRA recently began construction on a \$238M expansion of this plant to increase the permitted capacity to 16.5 MGD. In addition, TRA will be installing parallel relief sewer lines along Henrietta Creek necessary to increase conveyance capacity from the City of Fort Worth to the Denton Creek Plant.

North Area – Eagle Mountain Lake – Fort Worth Assets

The Eagle Mountain Lake watershed generally includes the area west of Business 287, with planned developments in the Lake Country, Bonds Ranch Road, and Peden Road areas. Wastewater flows that drain to Eagle Mountain Lake are conveyed to the existing Dosier Creek Lift Station, where they are pumped into the Big Fossil collection system and conveyed to the Fort Worth Village Creek Water Reclamation Facility (VCWRF), which has a permitted capacity of 166 MGD.

Fort Worth is designing three wastewater lift stations generally located along Boat Club Road that will pump wastewater generated from undeveloped areas west of Business 287 into the Big Fossil collection system. There is also a proposed lift station, force main, and gravity main that will convey wastewater from the North Star subdivision, south across Business 287, where a gravity main has recently been constructed as part of the Nance and Wellington subdivisions, conveying flows into the Big Fossil system.

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The Clear Fork watershed includes Mary’s Creek, Walnut Creek, and Dutch Branch. Fort Worth recently initiated sewer extension projects on Walnut Creek, and will in the future partner with the Benbrook Water Authority to extend sewer lines along Dutch Branch through the City of Benbrook to the Veale Ranch development.

The Mary’s Creek watershed includes many undeveloped properties, including Brown Ranch, Dean Ranch, and Beggs Ranch as well as properties that are partially developed – like Walsh Ranch. The City’s plan is to convey wastewater from developed and undeveloped areas to the Mary’s Creek Water Reclamation Facility (MCWRF) through a series of gravity sewer lines, lift stations, and force mains.

To that end, the City purchased the 100 acre Mary’s Creek Water Reclamation Facility site in 2011 (M&C L-15222), the 3.7 acre Walnut Creek Lift Station Site in 2020 (M&C 20-0363) and is working to obtain the Mary’s Creek Confluence Lift Station site (M&C 25-0258), as well as necessary force main easements along Mary’s Creek.

West Area – Live Oak and Silver Creek

There is also the need for additional wastewater capacity in the Live Oak/Silver Creek watersheds. The City is in the process of designing the Silver Creek Lift Station, located adjacent to Silver Creek Road between Live Oak and Silver Creek, which will pump wastewater from the Lake Worth watershed to proposed gravity mains and then connecting to existing wastewater mains in the Farmers Branch watershed near the White Settlement city limits.

Should you have any questions, please contact Chris Harder, P.E., Water Director, at 817-392-5020.

Jesus “Jay” Chapa
City Manager

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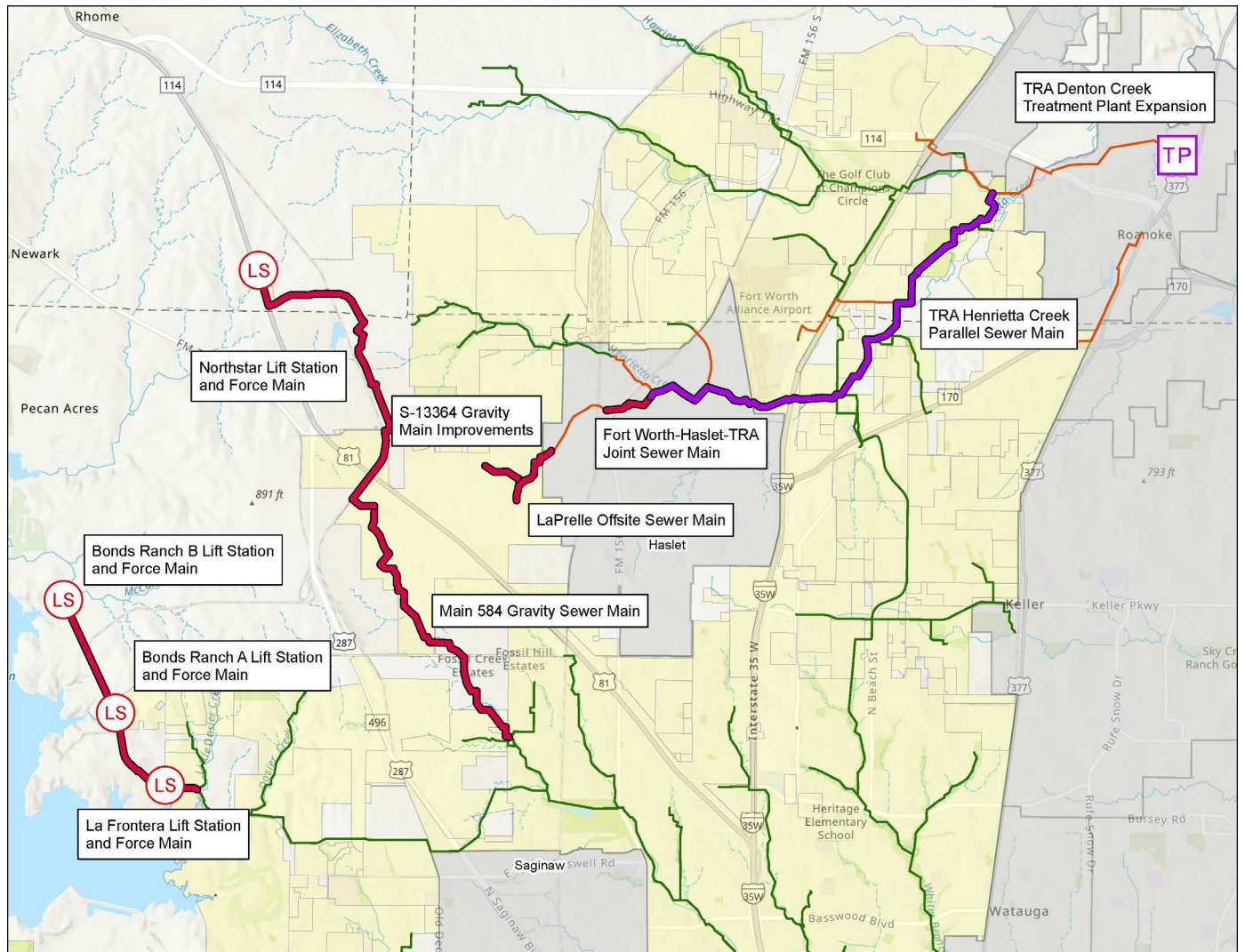
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North Area Wastewater System Improvements



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West Area Wastewater System Improvements

