

History of the City of Keller Sanitary Sewer System

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Sanitary Sewer History

The City of Keller's introduction into the sanitary sewer service business was in 1950 when Keller has a population of approximately 6,000 and a wastewater flow of approximately 6,000 gallons per day (gpd).

Today, Keller has a population of nearly 43,000 with an average daily wastewater flow of approximately 3.5 million gpd, which serves approximately 80% of Keller residents.

The following is a brief timeline of Keller's sanitary sewer history.



1950 – City builds its first wastewater treatment plant.

1975 - Little Bear Creek Interceptor – Section II completed.
(Travels through southern Keller, North Richland Hills, Colleyville and Euless.)

1976 – Revised wastewater treatment plant from Imhoff System (glorified septic tank) to Contact Stabilization System with a capacity of 208,000 gallons per day.

1984

- Gravity sewer lines installed in the Little Bear Basin (Burse Ranch Development).
- Existing wastewater treatment plant was hydraulically overloaded. Texas Water Commission required system to meet discharge requirements.
- June 27, 1984 Keller enters into an agreement with Trinity River Authority to provide wastewater treatment via the Central Regional Wastewater System.

1985

- City installs Big Bear Lift Station and starts pumping a portion of Keller's wastewater to the Little Bear Basin.
- TRA recommend that Keller participate in the Denton Creek Wastewater Plant. Keller was not financially able to participate at that time.

1986 – Keller notices infiltration and inflow (I/I) problems in the collection system.

1987

- *Consulting engineers (Hogan and Rasor) develop Keller's first Wastewater Master Plan.*
- February 25, 1987 - Keller enters into a contract with TRA for the extension of the Big Bear Interceptor.

1989

- *Wastewater Master Plan updated.*
- Wastewater treatment plan closed. All wastewater was pumped to the Little Bear Basin.

1990 – Construction of Big Bear Interceptor begins. (Southlake to western edge of Keller)

1991

- Construction of Big Bear Interceptor completed.
- Infiltration/Inflow study started and completed. Study determined failures in system causing excess flow to TRA.
- Eastside Collector construction started. (Along BB-10 / Pearson)
- Bear Creek Road and Pate Orr connections to Big Bear Interceptor
- Old Town East 8" lines (US 377 to Jessie Street)

1992

- Eastside Collector construction completed.
- *Establishment of the Sanitary Sewer Extension Task Force.*
- Keller enters into an agreement with TRA to construct the Cade Branch Interceptor Extension and participate in the Denton Creek Wastewater System.
- Sanitary Sewer in Rufe Snow (FM 1709 to Bluebonnet Lift Station)
- US 377 relocations (Wall Price-Keller to Keller-Hicks)
- Whitley Road south extensions



1993

- Construction of Cade Branch Interceptor Extension begins.
- Pate Orr Road to Johnson Road (Keller High School)

1994

- Construction of Cade Branch Interceptor Extension completed.
- Sanitary Sewer Improvements Along FM 1709 (Rufe Snow west about 1,000 feet)
- Sanitary Sewer Extensions (Whitley Road, Frank Lane, Nightingale Circle and Castleman Court)



1995

- Sanitary Sewer Extensions (Pearson Lane, Vista Lane, Stansbury Drive north, and Florence Road)
- Bear Creek Parkway Phase II (Keller Smithfield to Rufe Snow Drive)
- Highland Terrace Extensions (CDBG Grant through Tarrant County)
- Preston Lane Extension (Bear Creek Parkway to Shady Grove)

1998 – *Wastewater Master Plan updated*



1999

- Bourland Road Sanitary Extension (FM 1709 to Johnson Road)
- Keller Town Center Phase I (Town Center Lane, Bear Creek Parkway – Rufe Snow to east side of Keller Town Hall, Rufe Snow – Big Bear Creek to FM 1709)
- *Windsor Forest Service Area (assessment of citizens)*

2000

- Sanitary Sewer for the Bear Creek Basin (Keller Sports Park)
- Keller Town Center Phase II (Bear Creek Parkway, east of Keller Town Hall to Keller-Smithfield Road)



2004 - Marshall Branch Interceptors Phase I (Oakmont Hills Addition)

2006 - Marshall Branch Interceptors Phase II (north Keller)
Sanitary Sewer Extension – Ravenwood Drive

2009

- Big Bear East Interceptor (Johnson Road to Keller Smithfield Road at the Fire Station)

2010

- Wastewater Master Plan updated



2011 - Garden Lane Sanitary Sewer Extensions (in conjunction with the Darryl/Garden drainage project)

2013 - Robin Court Sewer extension (in conjunction with the Robin Court drainage project).

2014

- Katy Road Sanitary Sewer Improvements (annexation issue)
- 2015 - Marshall Branch East Collector Line Improvements – under construction
- Big Bear East Collector Line Improvements – just started construction



Current Conditions

- The Trinity River Authority (TRA) services all of Keller's wastewater from three basins. The *Big Bear* and *Little Bear* Basin's wastewater flows to TRA's Central Regional Wastewater Treatment Plant in Irving and the Denton Creek Basin wastewater flows to the Denton Creek Wastewater Treatment Plant in Roanoke.
- The City has approximately 2,200 homes without a sewer system adjacent to their home.
- CIP for the City of Keller - \$24 million



Funding

The City of Keller has constructed and paid for sanitary sewer improvements in the following ways:

- Capital Improvement Projects (Water/Wastewater Enterprise Fund and Impact Fees)
- Developer Projects (residential and commercial)
- Citizen Assessment (Windsor Forest Addition)
- Cost Sharing – builder pays for materials, city performs the installation. (not more than 500' of line)
- Developer Agreements (cost sharing)

