Surface Water Supply Project

SWSP

WHCRWA NFBWA
SURFACE WATER
SUPPLY PROJECT

Spring 2021 Update



To meet water demands for 2025 and beyond the West Harris County Regional Water Authority has partnered with the North Fort Bend Water Authority to deliver treated surface water to west Harris County and north Fort Bend County residents.

The Surface Water Supply Project, including over 55 miles of waterline and two large pump stations, is moving into the Construction Phase. Delivery of surface water to WHCRWA and NFBWA residents through this line is scheduled to begin in 2025.

about the Surface Water Suppy Project -- Learn more about how the Surface Water Supply Project alignment was chosen, how the project is being paid for, delays, detours, and more.

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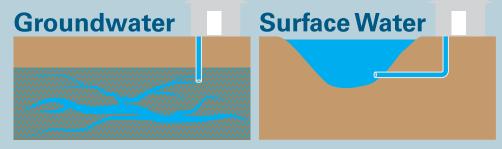


Why is this project necessary?

The Surface Water Supply Project is needed to conserve groundwater and reduce land subsidence.

Drinking Water

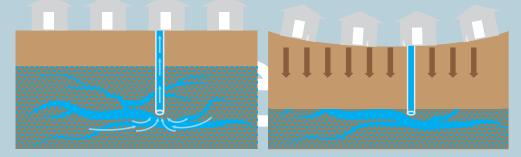
Our drinking water comes from two sources: surface water and groundwater. Surface water is water stored above ground, such as in a river or lake. Groundwater is the water beneath Earth's surface in underground aquifers. In the greater Houston area, sustained pumping and withdrawal of groundwater causes land subsidence.



Groundwater and Land Subsidence in our Area

Land subsidence is sinking of the land surface. Pumping large amounts of groundwater causes the ground to settle, lowering the elevation of the land. From 1906 to 2000, as much as seven feet of subsidence has been measured in northwest Harris County.

Land Surface BEFORE Land Surface AFTER



To conserve groundwater a



The West Harris County Regional Water Authority (WHCRWA) was established in 2001 to supply surface water to the western region of Harris County. The WHCRWA service area includes approximately 120 municipal water providers within the boundaries of the WHCRWA and seven located outside of the WHCRWA boundaries. As mandated by the Texas legislature, the WHCRWA has several objectives:

- To acquire and provide a reliable supply of surface water
- To conserve, preserve, protect, and recharge groundwater resources
- To facilitate compliance with subsidence district requirements
- To encourage water conservation

If you would like to find out more information on the WHCRWA visit www.whcrwa.com.

Land subsidence is sinking of the land surface. Pumping large amounts of groundwater causes the ground to settle, lowering the elevation of the land. From 1906 to 2000, as much as seven feet of subsidence has been measured in northwest Harris County.

Groundwater withdrawal in Harris and Galveston counties is regulated by the Harris-Galveston Subsidence District (HGSD), a special purpose district created by the Texas Legislature in 1975 for the purpose of reducing land subsidence. In general, The HGSD requires all water suppliers in Harris and Galveston counties to reduce groundwater pumping based on the rate of subsidence in their area. Areas 1 and 2 are already required to and primarily use surface water. Area 3 is mandated to convert to 80% surface water supply by 2035. Most of the City of Houston has already converted from groundwater to surface water. Now, surrounding areas must follow suit in meeting these regulatory mandates.

The WHCRWA provides service to a large portion of Area 3, which is still largely dependent on groundwater. To comply with the conversion requirements of the HGSD, the WHCRWA is delivering the Surface Water Supply Project. The project will also allow the NFBWA to comply with Fort Bend Subsidence District groundwater reduction requirements. This project will help to reduce land subsidence and will meet the water needs of a rapidly growing population.

How can I stay informed about the Surface Water Supply Project?

The Surface Water Supply Team provides multiple opportunities for you to receive information about the Project. Visit www.surfacewatersupplyproject.com for project information, or you may call our project hotline at 1-844-638-SWSP (7977) for updates. You may also reach us by email at info@surfacewatersupplyproject.com. If you would like for the Project Team to make a presentation to your local organization (either in-person or virtually), give us a call or email us today!

Area 3

nd reduce land subsidence.



The North Fort Bend Water Authority (NFBWA) was established in 2005 to supply surface water to the northern region of Fort Bend County. The NFBWA service area includes approximately 69 utility districts and two cities, Fulshear and Arcola. Although this project is directly sponsored by the WHCRWA, the NFBWA is funding approximately 45 percent of the total cost and is a beneficiary of the surface water to be provided by the Surface Water Supply Project.

Area

Mandated 80%

supply by 2035

surface water

In Compliance

In Compliance

HARRIS-GALVESTON

SUBSIDENCE DISTRICT

If you would like to learn more about the NFBWA visit www.nfbwa.com.

Project Timeline

spring 2022.

To meet the Harris-Galveston Subsidence District (HGSD) and Fort Bend Subsidence District's (FBSD) groundwater reduction requirements for 2025 and beyond, the West Harris County Regional Water Authority (WHCRWA) has partnered with the North Fort Bend Water Authority (NFBWA) to construct the Surface Water Supply Project.

Once complete, surface water from Lake Houston will be supplied to retail water providers (MUDs, PUDs, WCIDs, etc.) in the WHCRWA and NFBWA by way of the City of Houston's Northeast Water Purification Plant through over 60 miles of pipeline and two large pump stations. These transmission pipelines will vary in diameter from 96 inches to 42 inches, depending on the pipeline segment. Construction of the entire project is expected to take place from 2020 to 2025 and will be completed in segments. In other words, the waterline will be constructed one piece at a time.



• **Kinder Morgan Segment:** All portions of the Kinder Morgan (KM) segment are anticipated to begin construction in mid to late 2021.

All schedule information included here is subject to change, pending design, coordination, and contracting timeframes. Updated construction schedule information will be made available online at www. surfacewatersupplyproject.com.



surfacewatersupplyproject.com

The construction for each segment will aim to minimize impacts to any given area for extensive amounts of time. Delivery of surface water to WHCRWA and NFBWA residents through this line is scheduled to begin in 2025.

As construction starts, residents, business owners and anyone traveling in the vicinity of the pipeline alignment may experience detours, access issues, and other construction activities associated with large-scale linear projects. To minimize these impacts, much of the pipeline will be installed within existing pipeline corridors. Public safety, ease of access, and well-marked detour information will be a priority throughout delivery of the project.

Project team members are committed to communicating proactively with your community. For more information about construction in your area, please visit: www.surfacewatersupplyproject.com/construction.

Traffic Impacts

At this time, there are no road closures or traffic impacts associated with ongoing construction of Segment 3. The WHCRWA is committed to ensuring that construction impacts are minimized whenever possible. For updated road and lane closure information and other related resources, please visit our website dedicated to traffic updates:

www.surfacewatersupplyproject.com/traffic

Project Safety

Safety is a key consideration for the Surface Water Supply Project Team, as contractors will be required to maintain safe job sites with regular facility and property inspections along the corridor. As necessary, contractors will be required to repair damaged roadways impacted

by construction. Access to churches, schools, businesses, and other properties will be maintained throughout construction. SWSP Program Managers will coordinate with these entities and local emergency services in advance to determine any necessary road closures, identify and proactively communicate appropriate detours, and phase construction to minimize disruptions.

Funding for the Surface Water Supply Project

This project is funded through bonds issued by the WHCRWA and the NFBWA. A significant portion of these bonds will be sold to the Texas Water Development Board through a state-wide program for financing water projects. The total project costs are estimated to be more than \$1 billion, and this project is funded solely by the water authorities. The water authorities' interest payments and repayment of principal on the bonds to the Texas Water Development Board will be supported by each water authority's sale of surface water to their customers and pumpage fees charged on well water pumped within the water authorities. No residents outside of the water authorities' groundwater reduction plan will pay for the Surface Water Supply Project.







Frequently Asked Questions

How was the alignment chosen for the Surface Water Supply **Project?**

The WHCRWA negotiated with the City of Houston to purchase additional surface water. The agreement between the City and the WHCRWA stipulates that the water must originate at the City of Houston Northeast Water Purification Plant, thereby excluding other regional surface water sources. To deliver the water from the required source, the WHCRWA took great care to choose a route that considers area residents, businesses, and existing infrastructure. The WHCRWA spent years researching and refining the route and worked with elected officials to choose the most cost-effective alignment with the least impacts to the community as a whole.

To minimize community impacts, a majority of the pipeline will be installed within an existing pipeline corridor purchased by the WHCRWA several years ago. This pipeline corridor, where accessible, has been maintained by the WHCRWA since its

purchase.

How is the project being paid for and who is responsible?

The total project costs are estimated to be more than \$1 billion, and this project is funded solely by the water authorities. No residents outside of the water authorities' groundwater reduction plan will pay for the Surface Water Supply Project.

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As a result of this, the WHCRWA Board of Directors has elected to raise its fees to fund the massive water supply projects that are needed to meet the Harris Galveston Subsidence District (HGSD) groundwater reduction regulations and to avoid the \$9.24 per 1,000 gallons fine that the HGSD imposes for non compliance. The HGSD regulations require reduction of groundwater pumpage to no more than 40 percent of water demand by 2025 and no more than 20 percent of water demand by 2035.

How long will construction take in my area?

Although construction of the project is slated to occur from 2020 to 2025, no specific area is expected to be impacted for the entire period. Construction of the waterline will occur in

segments, and construction of each segment is anticipated to be approximately six to nine months. For updates regarding construction schedules in your area, please visit www. surfacewatersupplyproject.com/construction.

Are there any delays or detours expected during construction?

At this time, detours and traffic plans have not been determined. When construction starts, residents, business owners, and anyone traveling in the vicinity of the project alignment may experience detours, access issues, and other construction activities associated with large-scale linear projects. To minimize these impacts, the majority of the pipeline will be installed within existing pipeline corridors. The public's safety, ease of access, and well-marked detour information will be the priority throughout the life of the project. The WHCRWA is committed to communicating proactively and continuously with the public about this project.

Major roads are planned to remain open during all traffic times. The WHCRWA is working with the applicable agencies to coordinate construction and minimize impacts along the entire route. In addition to complying with all local ordinances regarding



construction, including noise and air quality, the WHCRWA requires that its contractors go above and beyond to minimize disruption and implement best management practices. As necessary, contractors will be required to repair damaged roadways that are impacted by construction.

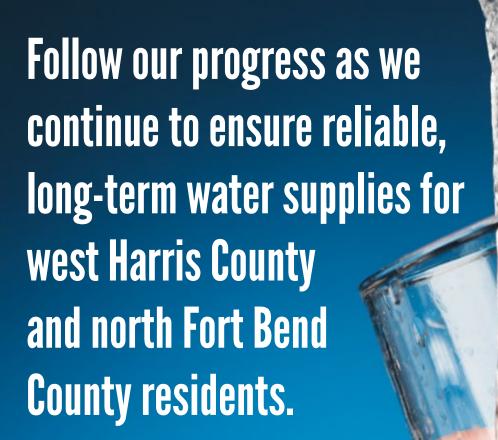
Access to churches, schools, businesses, and other properties will be maintained throughout construction. Surface Water Supply Project Program Managers will coordinate with these entities and local emergency services in advance to determine and communicate necessary road closures, identify appropriate detours, and phase construction so that disruption is minimized.

How will you restrict access to the construction areas?

Contractors will be required to maintain safe and secure job sites, meaning access to constructions sites will be restricted.

In areas where contractors are opencutting the alignment, temporary fencing
will be installed around work areas in
residential backyards, and open trenches
will be covered at the end of each day
for safety, either by backfilling the
trench or covering the trench with
steel plates. The trench will only be
open in areas where the contractor
is actively working each day, and
trenches will be secured overnight. This
is generally known as "cover-as-you-go."

In areas where tunneling is required, the tunnel shafts must remain open; however, construction fencing will restrict access to the area surrounding tunnel shafts. Additionally, construction plates will be in place and secured to prevent access to the tunnels themselves when they are not in use.







www.SurfaceWaterSupplyProject.com