



Thornton Creek Basin Sewer Study and Upgrade

June 2022

Frequently Asked Questions

Through all our projects, King County Wastewater Treatment Division (County) works to protect our region’s environment, public health, and waterways by collecting and treating wastewater.

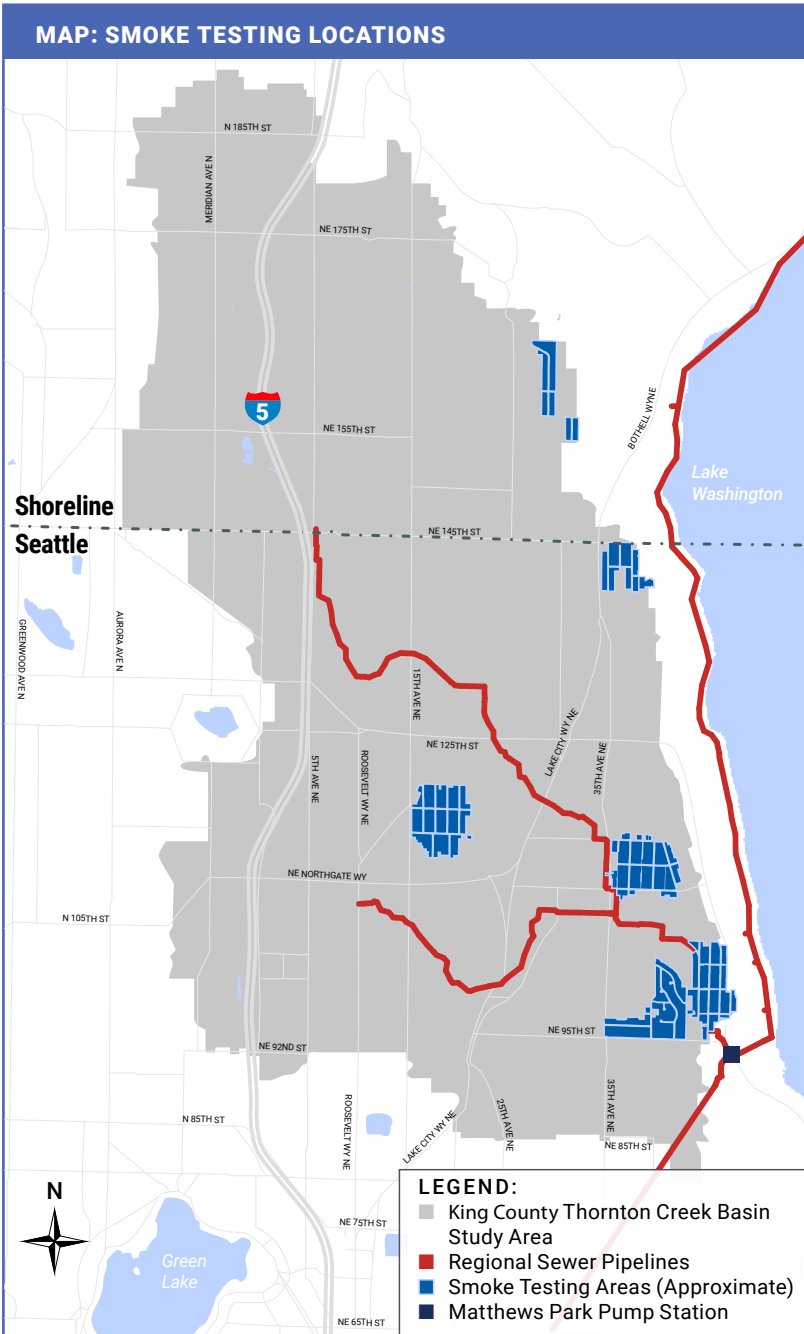
What is the Thornton Creek Basin Sewer? The Thornton Creek sewer is an approximately 1.2-mile-long sewer pipe that collects wastewater from other pipes in our sewer system, serving 9.6 square miles of North Seattle and Shoreline. The pipe carries this wastewater to the Matthews Park Pump Station, where it is then sent to the West Point Treatment Plant to be treated.

Why is King County doing this work? During heavy storms, the sewer pipe sometimes reaches its capacity. To avoid possible overflow, the County will need to either reduce the amount of stormwater and groundwater entering the system – known as infiltration and inflow (I/I) – or increase the size of the sewer pipe. Increasing the size of the sewer pipe may also require more costly upgrades to other parts of the regional wastewater system, including Matthews Park Pump Station.

This project is studying local and regional sewer pipes, maintenance hole covers, and drainage connections to identify the locations and type of improvements that have the potential for the largest reduction in I/I.

Why is King County conducting smoke testing in my area? King County is conducting smoke testing to locate problem areas within the local sewer system that lead to the County’s Thornton Creek sewer pipe. This test helps identify leaks in pipes and where stormwater enters the wastewater system.

Smoke testing is a safe method to find sewer line problems and stormwater connections. This efficient and cost-effective test will help us minimize environmental and property damages that occur when the sewer system is overfilled with stormwater.



What is smoke testing? Smoke testing involves pumping the sewers in a small geographic area of several blocks with a non-toxic, non-flammable, water-based smoke from the maintenance holes. While the smoke flows through the sewer system, field crews will observe the area and mark the locations where smoke comes out.

During the test, it is not unusual to see smoke come up from cracks in the street or in yards. If there are stormwater connections to the system, smoke will come out of sources like catch basins in the street and roof drains on residential properties. If the sewer line has defects or breaks, the smoke may appear from where it is damaged.

What is the smoke made from? The product used in the testing is a non-toxic, non-flammable, water-based smoke that is more like a vapor. It leaves no residuals or stains and contains no harmful materials. The smoke is safe for humans and animals.

How was my neighborhood selected for smoke testing?

Over the past year, King County has studied its Thornton Creek sewer system. We prioritized your neighborhood based on multiple factors, including responses to a community survey we distributed last year, presence of a storm drainage system in the neighborhood, and a review of City of Seattle utility mapping.

Do I need to be home, or will the field crews need to get in my house?

No. Field crews do not need to enter your home during the test. Field crews observe your property from streets and alleys. Since the smoke disappears quickly, field crews will use drones to help identify the locations of smoke. Drones are used only during active smoke testing at a height of 400 feet in accordance with federal regulations. Field crews will photograph locations where smoke is present.

What does it mean if smoke enters my house? Smoke should not enter your home. If this occurs, it may mean you have a problem with your plumbing. It is the responsibility of each property owner to maintain the plumbing and sewer pipes on their property. You may want to call a plumber to examine your home's plumbing and make sure that it is working properly.

Who is completing this work and how can I identify them while they are working? King County has contracted with specialized field crews from Interactive Pipe Inspection LLC (IPI) to conduct this work. IPI field crews will wear bright construction vests. You may see IPI work vehicles in the area.

Will I be charged for this work? No, you will not be charged. King County is paying for the smoke testing work.

Tips to Prepare

Fewer than 1% of homes have smoke enter them during testing. However, there is a chance for smoke to enter your home through infrequently used drains or a problem in the sewer pipes.

- The day before the testing, run water for at least 15–30 seconds through any drains, toilets, sinks or showers that haven't been used in the last month.
- Running water adds water to the drain trap (the S-shaped curve in the pipe typically found under sinks).
- The drain trap holds water, which creates a type of seal and blocks sewer gases from rising through the drain and into your home.

What do I do if I see smoke in my house? Opening your windows during the test can help any smoke that may enter your home disappear quickly. Since it is a water-based, non-toxic product, this should only take a few minutes. Please call 800-859-5060 to notify field crews, so they are aware and can document the smoke's presence.

We have notified the Seattle and Shoreline Fire Department that smoke testing is taking place in your area. Call 911 if you notice smoke that is different from the water-based smoke testing vapor.

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Alternative Formats Available /
206-477-5371 / 711 (TTY Relay)

Learn more at kingcounty.gov/thornton-creek-sewer