

Mouth of Duwamish Wet Weather Facilities



Combined Sewer Overflow (CSO) Control Program

FREQUENTLY ASKED QUESTIONS

What is happening now?

King County is moving forward with a plan to reduce sewer overflows from five locations at the mouth of the Duwamish River. We are working to meet federal and state requirements. We must limit pollution entering local waterways during heavy rains.

The plan includes:

- **A new wet weather treatment station in SODO:** This building will clean extra rainwater and sewage during storms.
- **A new outfall between SODO and Harbor Island:** This underwater pipe will release cleaned water into the Duwamish River.
- **A new underground storage tank in West Seattle:** This tank adds capacity to our system by holding extra water during storms. After the storm, the water will go to West Point Treatment Plant in Magnolia for full cleaning.
- **New pipes and support facilities:** These will connect the future wet weather treatment station and storage tank to the sewer system. They will help move water where it needs to go.

Next steps:

- **We are working on an engineering report** for approval by the Washington Department of Ecology.
- **We are also working on the project design and environment review.** Environmental review will help us to study potential impacts.

Why is King County building these facilities?

Much of Seattle was built using a combined sewer system. These systems carry sewage and stormwater in the same pipes. When heavy rains fill the pipes, outfalls release stormwater and sewage into local water bodies. This prevents sewer backups in homes, businesses, and streets during heavy rain.

This program will help us control five of these outfalls. A controlled outfall will overflow no more than once per year, on a long-term average. The facilities included in our plan will help us meet this standard.

When will construction start?

We expect construction to start as soon as 2029. It will last approximately five years. We plan to open the new facilities in 2034. As we approach construction, we will share more information about what project neighbors can expect and how we will keep you informed.

Where are the five outfalls located?

This map shows the five outfalls this project will control as blue circles. They are in the following locations:

- **the end of Chelan Avenue** in West Seattle, on the bank of the west waterway of the Duwamish River
- **the end of South Hanford Street** in SODO, on the bank of the east waterway of the Duwamish River
- **the end of South Lander Street** in SODO, on the bank of the east waterway of the Duwamish River
- **the end of South Royal Brougham Way** in Pioneer Square, on the shore of Elliott Bay
- **the end of South King Street** in Pioneer Square, on the shore of Elliott Bay

How did King County identify the proposed plan?

We looked at many ways to overflows at the five outfalls. After reviewing the options, we found that the best approach is to build two major facilities:

- **A new wet weather treatment station** to clean extra rainwater and sewage during storms.
- **A new underground storage tank** to adds capacity to our system by holding extra water during storms.

We studied many locations for these major facilities. The best locations were close to the existing system, the Duwamish River, and Elliott Bay. We compared locations by evaluating the following factors:

- impact on the community
- cost
- impact on the environment
- operations and maintenance
- how long it would take to build

The facilities in our plan performed the best across the five factors.

What does King County's wastewater system do?

We run and maintain many facilities and pipes to collect and move wastewater from homes and businesses. The biggest part of this work happens at our treatment plants. They clean dirty water from local sewers. Some of that water is turned into useful resources like energy and fertilizer alternative, and the rest is released to Puget Sound. Together, our system serves about two million people every day.



How does this project connect to King County’s wastewater system?

Most days, our wastewater system can handle the flows just fine. But when heavy rain hits, the pipes that carry both rainwater and sewage can fill up fast.

This project adds new facilities that will help during storms. On very rainy days, extra rainwater and sewage will go to a treatment station to be cleaned or to a storage tank to be held. This will prevent the extra water from backing up into homes or businesses or from spilling into the river. Unlike our regional plants, wet weather facilities only operate on rainy days.

What happens during the design phase?

During the design phase, we will:

- create detailed plans for building each facility
- apply for permits to start building
- write contracts that will explain the work and who will do it
- study soil and groundwater samples to learn more about the project area
- share updates with the community before any field work begins

You can expect regular updates about the design and construction plans. We will ask for your ideas through surveys, interviews, and a Community Sounding Board. Our team may also visit in person to explain the work and answer questions.

How are you working with affected property owners?

Our real estate team will support property owners and tenants who need to move because of this project. Our goal is to follow King County policy and state and federal law. We will also work to address the needs and concerns of property owners. Learn more by visiting kingcounty.gov/wastewater/property.

How will construction impact travel in the area?

Construction may slow down traffic near the project site. You might see short-term detours or changes to your usual routes.

We will notify you before anything changes. Flaggers and signage will be on site to help guide people driving, walking, or biking. We will share more details as we get closer to construction.

Other projects are happening nearby and may cause additional travel delays. We are working with other agencies to help reduce these impacts as much as possible.

Will the facilities be sustainable?

Our goal is to protect the environment and support the community for many years to come. The new facilities will be able to handle bigger storms and prepare for rising sea levels. As the design progresses, we also will look for ways to save energy, cut down on waste, and make the system work better.

How are you planning to maintain security at the future facilities?

We are designing the facilities with both safety and upkeep in mind. Each site will have fencing to help keep it secure. King County will take care of long-term maintenance.

Will King County have operators on site at the facilities?

Yes. During heavy rain, operators will be on site to keep the facilities running smoothly. On dry days, they may be there to support maintenance and security. Security staff will also monitor the facilities 24/7.

Does this project include green stormwater solutions?

Many people are excited about green solutions, like rain gardens. For this project, those solutions will not work well. There are two main reasons:

- **High groundwater:** In SODO, the soil and high groundwater do not soak up water well. That means we cannot store enough water to stop overflows.
- **Contaminated soil:** Parts of the area have polluted soil, which makes it unsafe to build rain gardens or other green systems.

Even though green stormwater tools will not work here, we are still looking for ways to include sustainable features in the design.

We will also share information about the RainWise program at community events. RainWise offers rebates that may cover the full cost of a rain garden or cistern for eligible homes in Seattle. Learn more at rainwise.seattle.gov.

When will the wet weather treatment station turn on?

The station turns on during heavy rain. That means a lot of rain falls in a short amount of time. In the past five years, heavy rain caused sewer overflows between 5 and 21 times a year at each project outfall.

How will the new wet weather treatment station clean water on rainy days?

On rainy days, the new wet weather treatment station will clean the extra water in several ways.

- **First**, solids settle out and are removed.
- **Next**, ultraviolet (UV) light will kill germs. This method cleans the water without using harmful chemicals.
- **Finally**, the cleaned water will be released into the Duwamish River through a new pipe, called an outfall.

Will there be public art at the future wet weather facilities?

Yes. This project will include temporary or permanent public art. We partner with 4Culture through the County's 1% for Art Program. During design, we will also ask the community for input to help guide public art opportunities.

Will the wet weather treatment station clean out heavy metals and toxic chemicals?

No. The new station will not remove heavy metals or other toxic chemicals. It is designed to meet state and federal rules for handling sewer overflows. During big storms, it will remove waste and kill germs to help protect public health.

Do other treatment plants in King County remove heavy metals and toxins?

Our three regional wastewater treatment plants also do not fully remove all heavy metals and chemicals. There is a risk of some pollution from homes and businesses that can still pass through and reach Puget Sound.

The best way to protect rivers, streams, and Puget Sound is to stop pollution before it enters the sewer system.

At home, you can:

- use non-toxic cleaning products
- reduce pesticides in yards and gardens
- pick up pet waste
- take paints, oils, and chemicals to special drop-off sites instead of pouring them down the drain.

To learn more, visit kingcounty.gov/en/categories/waste-services/wastewater-treatment.

Want to learn more?

Go to kingcounty.gov/MDWetWeatherFacilities to:

- get the latest project updates
- find all project materials
- sign up for email updates

