King County Protecting Our Waters Doing our part on rainy days

SPRING 2020 NEWSLETTER

GEORGETOWN

Wet Weather Treatment Station

# **Protecting the Duwamish River**

Once completed, the wet weather treatment station will be able to treat up to 70 million gallons of combined rain and wastewater a day (influent). The station would prevent this influent from being discharged directly into the Duwamish River without treatment during storm events.

A system of underground pipes will carry (convey) the treated flows from the station to the new outfall pipe. The outfall pipe, will release treated flows into the Duwamish River under the First Avenue South Bridge. The shoreline area that has been disturbed by construction of the outfall will be restored to prevent erosion, stabilize the riverbank, and improve wildlife habitat by landscaping with native plants and other natural features.

### **Construction progress** Outfall construction is wrapping up!

In-water work is expected to be completed in early Spring with landscape restoration work to follow. Restoration will include native plants and logs to stabilize the shoreline and improve



wildlife habitat.

Crews removed a section of an existing sunken dock at the outfall site. This is separate from the project and was completed as an improvement for the river.



### Want to stay up to date on project progress?

- ▶ Check out the Construction page for more progress photos: <u>https://bit.ly/2l1lo6j</u>
- Sign-up for email updates on the Public Involvement page to receive project updates and see construction videos of progress: <u>https://bit.ly/2sHdOYb</u>

### **Treating Wastewater During Heavy Rainfall Events**

Combined sewer overflows (CSOs) are relief points in sewer systems that carry sewage and stormwater in the same pipe. When the weather is dry, the system transports all the wastewater it collects to a sewage treatment plant to be cleaned, then discharged to a water body. But during heavy rainfall, stormwater and wastewater can overfill the pipes, and CSOs release sewage and stormwater into rivers, lakes, or the Puget Sound. While this prevents sewage backup into homes and businesses, overflows can harm people, animals, and aquatic life because they carry chemicals and germs. When complete, the Georgetown Wet Weather Treatment Station will reduce untreated sewage and stormwater currently entering the Lower Duwamish River by 95 percent.

#### See the steps below, to learn how wastewater will be cleaned inside the station:

**Regulator station:** The Georgetown regulator station will receive and send flows from large sewer pipes, the Michigan Trunk Sewer and the Elliott Bay Interceptor, and deliver them through a 96" pipe to the equalization basin.

2 Equalization basin and pump station: The equalization basin, is a large reservoir that will be able to store up to 1.1 million gallons of wastewater at one time. This basin will help to level out the variations in wastewater flow rates to help the treatment station to run efficiently. Metal screens inside the basin will be used to remove debris often carried by the incoming stormwater. From the equalization basin, flows will be pumped to the treatment station by six vertical turbine pumps.

**3** Ballasted sedimentation: To further clean the flows, an innovative process called ballasted sedimentation, will use sand, polymer and coagulant to remove solids from the flow stream. The sand will be continuously recycled, by collecting and returning it to the beginning of the sedimentation process. The solids will be collected and pumped to the solids holding tank.

4 Solids holding tank: Solids that end up in the holding tank will be sent to the West Point Treatment Plant for processing through the Elliott Bay Interceptor pipe. After processing at West Point, the product is sent to the Loop facilities to be made into compost.

**5 UV disinfection:** Ultraviolet (UV) disinfection will use ultraviolet light to kill germs in the sewage. Treated water will be stored in a tank at the end of the UV channels and used to wash down the equalization basin and solids tank at the end of a rainfall event.



7. Conveyance

6 The odor control system: The system will collect foul air from the plant treatment areas and pass the air though a series of activated carbon odor scrubbers.

**Conveyance:** After cleaning, underground pipes will carry treated flows from the station to the outfall structure where they will be released into the Duwamish River.

## Celebrating art, community, and the environment through collaboration



Through a collaboration between King County and 4Culture, artist team Sans façon have designed an artwork that highlights the importance of rain to our environment and its relationship to the Georgetown Wet Weather Treatment station. When complete, the monument will respond to a real rain event and serve as a memory of that event. For example, when it's raining outside, no rain will fall in the monument. When the rainy weather stops, the monument will begin to rain internally at an intensity and quality that reflects the rain event that just passed. The monument will stand as a signal for the frequency or lack of rain and connect the public to this site to the story of Georgetown, its geographic size and it's relation to estimated rainfall in this area.



## What to expect during construction:

During construction, we expect the following impacts:

• Traffic detours and lane shifts:

Crews will establish traffic control as approved by the City and State to safely install pipes under roadways. Uniformed police officers and flaggers will be used as needed.

#### Pedestrian detours:

People travelling near the active work areas will be rerouted for your safety and the safety of our crews.

 Noise and vibrations typical of a construction worksite: We will do our best to notify the

nearby neighbors of construction activities beforehand and share updates when they are known.







Seattle, WA 98104

Alternative formats available

206-477-5371 or TTY relay: 711

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Find out what's happening with the Georgetown Wet Weather **Treatment Station!** 

GEORGETOWN Wet Weather Treatment Station

Want to learn more about the project?

- ▶ Sign up for email updates about construction activities and progress at www.kingcounty.gov/georgetownWWTS
- ▶ **Request a briefing** Near neighbors will be provided the opportunity to have meetings with the project team to learn more about what to expect during construction, ask questions or share concerns. Contact Bibiana Ocheke-Ameh below for info.
- ► Attend community meetings Learn more about project progress and what to expect during construction at neighborhood meetings.
- Read the Georgetown Gazette and direct mailings.
- ► Call the project hotline Call us with your specific questions or concerns 24 hours a day/7 days a week at 206-205-9286.
- ► Contact: Bibiana Ocheke-Ameh 206-205-9286 Bibiana.Ocheke-Ameh@kingcounty.gov

Este texto brinda información sobre la estación de tratamiento Georgetown Wet Weather Treatment Station. Para obtener más información, llame al 206-205-9286, deje un mensaje con su número telefónico e indigue su idioma. Se le proporcionará un intérprete de

该文指出,"乔治城暴雨处理工作站 (Georgetown Wet Weather Treatment Station) 已经选定在乔治城附近。如需更 多信息,请拨打 206-205-9286 留言,留 下您的电话号码和您的语言。将提供免费 翻译。

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