



## **King County**

Department of Natural Resources and Parks  
**Wastewater Treatment Division**

# ***Puget Sound Beach Combined Sewer Overflow (CSO) Control Projects***

## ***North Beach Basin***

### **Public Meeting Summary**

*October 19, 2010 6:30-8:30 pm*

*Loyal Heights Community Center, 2101 NW 77th St, Seattle, WA 98117*

### **Overview**

On October 19, 2010, the King County Wastewater Treatment Division (WTD) hosted a public meeting for the Puget Sound Beach Combined Sewer Overflow (CSO) Control Projects in the North Beach basin. The meeting was intended to present the recommended proposal for CSO control in North Beach, review the County's decision process for the control project, convey how community input influenced the decision, describe how King County works with communities during design and construction, and discuss next steps in the project.

Seventeen members of the public attended the meeting.

### **Presentations**

Through presentations from the project team, meeting participants learned about the recommended proposal for CSO control in the North Beach basin. Participants were updated on the CSO project status. The project team reviewed the project history, provided details on the proposed project including how the facility would function, outlined known construction impacts and likely operation and maintenance activities, and shared how King County works with communities during design and construction. The presentation ended with a timeline for next steps. The presentation and other meeting materials can be found at [www.kingcounty.gov/csobeachprojects](http://www.kingcounty.gov/csobeachprojects).

Before the presentation, there was a period for meeting attendees to view display boards, ask questions of the project team and express concerns related to design and construction of the proposed project. Afterwards, meeting attendees had the opportunity to view informational posters that were set up around the meeting room and talk with members of the project team. Flip charts were available to record questions and input.

Meeting attendees were informed of and encouraged to use a variety of methods for submitting questions and input, which include the following:

- Web: [www.kingcounty.gov/csobeachprojects](http://www.kingcounty.gov/csobeachprojects)

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- E-mail: [monica.vandervieren@kingcounty.gov](mailto:monica.vandervieren@kingcounty.gov)
- Phone: 206-263-7301
- Feedback forms (available at the public meeting)

Meeting attendees were encouraged to ask questions, express concerns, and provide input. King County staff indicated that input is always welcome and will be used throughout the facility design process.

## **Summary of Questions and Input**

Questions, feedback, and discussion from the meeting attendees are summarized below.

### **Storage capacity and flows**

One meeting attendee expressed concerns about the ability of the proposed storage tank to hold sufficient flows during storm events. WTD staff and the consultant team explained that the size of the storage tank had been determined based on flow monitoring and hydraulic models using historic rainfall records that simulate sewer flows during peak wet weather events. The hydraulic models were used to determine storage and/or conveyance criteria to meet the Department of Ecology requirements for no more than one overflow per year on a long-term average.

Participants learned that the peak flow during a large storm is estimated at 8.5 mgd (million gallons per day). This peak is an instantaneous rate that may last for only a short duration (5-10 minutes), exceeding the pump station capacity of 3 mgd during that period. The storage tank will be approximately 230,000 gallons and, based on extensive modeling, is sized to limit CSOs to no more than one overflow per year on a long-term average.

A meeting participant asked what would happen if there is more than one overflow per year on average after the project is completed. The analysis that has gone into the project shows that the tank will be sized for the worse conditions so it will be in compliance with Department of Ecology requirements. To measure compliance, King County will continue monitoring and reporting requirements for the North Beach Facility.

### **Separating wastewater and stormwater**

One participant asked whether there was a plan to separate stormwater from the sewage system. It is being discussed in some parts of King County and the City of Seattle, but not in North Beach, partly due to the cost of putting in an entirely new stormwater conveyance system.

A participant asked whether road runoff is separated or combined. Olympic Manor has a dedicated stormwater collection system with an outfall to Puget Sound. The rest of the basin is composed of ditch and culvert; water flows overland and does not necessarily enter the combined sewer system except in the form of I/I (infiltration and inflow).

### **Construction staging**

In response to questions about the size and location of the construction staging area, WTD staff and consultants explained that the staging area will be remote due to lack of available space near the construction site. The lead engineer explained that staging will require about an acre. WTD

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staff recognizes the impact of staging on the community, and will work to engage neighbors of staging area(s) when they are identified.

**Construction impacts**

Community members expressed concern about local road conditions and the ability of roads to handle heavy construction equipment. Participants felt that the most obvious haul route- 24<sup>th</sup> Avenue NW- is already failing and expressed concern that heavy truck traffic will result in further damage. Attendees commented that even buses make the road shake. Participants expressed the desire for road improvements prior to construction to insure the road will remain usable.

Participants asked about the duration and impacts of construction on Triton Dr N.W. and N.W. Blue Ridge Dr. In the PowerPoint presentation, the project team described potential impacts to private improvements in the right-of-way and a range of construction impacts that can be expected on this type of project. Construction in the public right-of-way is expected to take 18-24 months. King County will have a permitted traffic plan and a public involvement plan based on community concerns and feedback. The details will be addressed during the design phase of the project, when the team will define the exact location of the facility and work out details that will maintain residential access and needed services. Traffic impacts, including rerouting of Metro bus service, will be addressed during this time.

A meeting participant asked about the maximum noise level allowed during construction. The City of Seattle determines construction sound limits. A construction permit may outline the times of day construction activities are allowed.

**New facility impact on current outfalls**

Participants asked how the new facility will impact current outfalls on the local beaches. WTD staff explained that one of the pipe outfalls is a dedicated stormwater pipe from Olympic Manor; a second pipe collects two streams that converge higher up in the basin and drains them to the beach. The CSO control project will reduce CSO discharges from the beach outfall to no more than one per year, but the outfall will not be eliminated as a result of the project. Staff indicated that King County is aware of concerns about human and environmental exposure from this outfall and will investigate addressing the issue as a separate project.

Community members expressed concern about waiting three or more years to address the beach outfall, and asked whether WTD could encourage community education regarding care for the wastewater and combined sewer system. WTD staff offered tours of Carkeek Treatment Plant and will incorporate information as part of project outreach.

**Impacts on Carkeek Treatment Plant**

One participant suggested that repositioning the collection system higher in the basin would eliminate the need for the North Beach Pump Station and storage tank. A project engineer explained that water flows by gravity down to the North Beach Pump Station and is then pumped to Carkeek. The pump station is needed to convey flows collected lower in the North Beach basin than the elevation of Carkeek Pump Station, so a collection system at a higher elevation does not eliminate the need for a pump station. Three million gallons per day is the current

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maximum that is transferred to the Carkeek Treatment Plant and that would not change with the proposed storage tank.

**Above ground structures**

One participant asked about potential for odor from the facility and odor control. Odor control will be included in this project. The odor control facility will operate by passing air through carbon scrubbers before releasing it into the atmosphere. The lead engineer explained that CSOs are dilute wastewater with over 95% stormwater, and CSO flows are stored for short time periods before they are returned to the conveyance system. Therefore, the odor potential from the CSO facilities should be minimal.

Meeting participants expressed concerns about the size of the odor and electrical facility to be located on the North Beach Pump Station property. The maximum size for the facility is approximately 40 feet by 20 feet, or 800 square feet. The maximum height is one story, or approximately 18 feet as set by City of Seattle code. One participant requested that the facility be built underground. WTD staff understands the importance of visual impacts on views and will work closely with the community during design to minimize those impacts.

**Closing**

The project team thanked the participating citizens for their active involvement in the planning phase of the project. Citizen input was very important to informing the decision process, resulting in a recommended CSO proposal for North Beach that will meet the technical needs while addressing citizen concerns. Staff reminded the audience that there is still a lot of work remaining in the design phase of the project and encouraged the community to remain involved and continue to provide input.

**Attendance**

**Puget Sound Beach CSO Control Project Team**

*King County Wastewater Treatment Division*

Shahrzad Namini, Project Manager; Linda Sullivan, Capital Projects Managing Supervisor; Mary Wohleb, Assistant Project Manager; Monica Van der Vieren, Community Relations

*Carollo Engineers*

Brian Matson, consultant team project manager; Karl Hadler, lead engineer for North Beach basin

*Triangle Associates, Inc.*

Bob Wheeler, facilitator; Kristine Cramer, community relations support