



Protecting Puget Sound with CSO control at North Beach

To limit combined sewer overflows (CSOs), King County will design and build an underground storage pipeline in the right-of-way of Northwest Blue Ridge Drive and Triton Drive Northwest. This facility will store about 230,000 gallons of peak flows during large storms when the North Beach Pump Station reaches maximum capacity, reducing discharges of untreated stormwater and wastewater to Puget Sound near a recreational beach. After storms have passed and system capacity is available, an underground pump system will transfer stored flows to the North Beach Pump Station for conveyance to King County's Carkeek Pump Station and Wet Weather Treatment Facility.

Why King County needs to do this project

In 2008, King County reported that the North Beach CSO facility has ten overflows per year on average, discharging a total of 2.2 million gallons of untreated stormwater and wastewater into Puget Sound off North Beach. King County will build the underground storage facility at North Beach to meet current regulations set by the Washington State Department of Ecology, requiring no more than one untreated discharge per location per year on a long-term average.

Project Elements

- An underground diversion structure located on King County property
- A pipeline connecting the diversion structure to the storage facility to divert flows for storage
- An underground storage pipeline approximately 325 feet long and 12 feet inside diameter, located in the right-of-way
- Two underground structures at each end of the pipeline, one for pump equipment and one for flushing equipment
- Access hatches for operations and maintenance of the underground structures and pipeline in the right-of-way
- A pipeline connecting the storage facility to the pump station to return flows to the conveyance system
- An ancillary equipment facility including odor control and electrical on King County's property
- Restoration of the right-of-way in accordance with permit conditions
- Restoration of landscaping on King County's property



*King County's North Beach
Pump Station*

Similar King County projects

King County Wastewater Treatment Division operates and maintains a regional wastewater treatment system with over 350 miles of conveyance pipelines. To add needed capacity to part of our system in the City of Shoreline, a similar type of underground storage pipeline was built in Boeing Creek Park in 2006 to capture up to 600,000 gallons of flows. The Hidden Lake Underground Storage Pipeline involved installation of concrete pipeline segments 12 feet inside diameter, weighing about 30 tons each, and construction of associated odor control, flow control, and electrical facilities. Conveyance lines were installed in surrounding residential streets to connect the new storage facility to the Hidden Lake Pump Station.



*Hidden Lake Underground
Storage Pipeline*

Did You Know?

CSOs can occur at any time of the year when stormwater fills the sewer system beyond capacity. These facilities act as a relief valve for the system, preventing flooding and backups on public and private property. In Summer 2011, there were CSO events at North Beach in June and July during heavy local rainstorms. You can find real-time information on CSO events in your area at www.kingcounty.gov/environment/wastewater/CSOstatus.aspx.

For more information

North Beach CSO Control Project

www.kingcounty.gov/environment/wtd/Construction/Seattle/NBeachCSOStorage.aspx

King County's CSO Control Program

www.kingcounty.gov/environment/wastewater/CSO.aspx

Contact us

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ALTERNATIVE FORMATS AVAILABLE
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