

Marine Outfall at Point Wells

20555 Richmond Beach Dr NW, Shoreline, WA 98177

Summer 2008

In response to continuing growth in our region, King County is building Brightwater, a new wastewater treatment system to serve north King and south Snohomish counties. Brightwater construction will take place at five sites: the treatment plant site north of Woodinville and four portals in Bothell, Shoreline, Kenmore, and at Point Wells. Construction of the entire system will continue until late 2010 and restoration will be complete in 2011.

Two phases of work at Point Wells

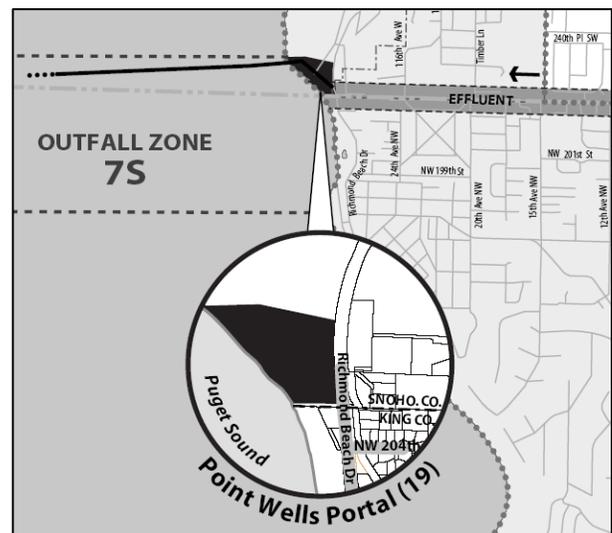
Portals, pipelines and tunneling: The first phase of work at Point Wells is part of the conveyance system, a network of pipes that brings wastewater to the treatment plant and treated wastewater to Puget Sound. These pipelines will be built almost entirely below ground in tunnels, which will reduce impacts to surrounding communities. Portal shafts ranging from 20 to 200 feet in depth will provide access shafts to the tunnel construction. For more information about portal and tunnel construction, please refer to our separate fact sheet, *Point Wells Portal*.

The marine outfall: The second phase of work at Point Wells got under way in spring 2008. It is the final segment of the Brightwater conveyance system where treated wastewater, or effluent, will be discharged into Puget Sound. Twin outfall pipes, each five feet in diameter, will extend offshore one mile into Puget Sound. A nearshore trench will be excavated for the first 500 feet of pipe; the remainder will be laid directly on the seafloor. Treated effluent will be discharged through diffuser ports on the last 250 feet of each pipe. The diffusers will lie about 600 feet below the surface. The marine outfall pipeline and diffuser are now under construction at an assembly site at the Port of Everett. When construction is completed, the pipes will be towed to Point Wells by tugboat, and lowered to the seafloor by a method called *controlled submergence*.

King County used a *Design/Build* contract for the marine outfall, which takes advantage of close designer/contractor relationships to facilitate design and construction. The selected contractor team, led by Triton Marine Construction Corporation from Bremerton, Wash., is overseeing the planning, design and installation of the outfall.

Outfall construction activities

Early 2008	• Select design/build team
Spring 2008	• Complete project design
Late spring 2008	• Marine outfall construction begins
Fall 2008	• Marine outfall construction completed
Spring 2009	• Marine and beach restoration completed



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Marine Outfall..... *continued*

What can you expect during construction?

King County is committed to being a good neighbor and will work to minimize impacts to nearby residents and businesses during construction. Intermittently during this work, nearby community may experience:

- Some truck traffic as materials are transported to the site, and again in the fall when they are removed
- Construction noise from construction of the nearshore trench
- A barge in view during nearshore construction
- One week of 24-hour activity during transport and submergence of the twin HDPE pipes



After construction

King County will undertake a restoration program to replant eelgrass harvested from the site and cultured during construction. Beach restoration will occur in spring 2009. Marine monitoring programs will measure recovery from nearshore construction activities.

Construction facts

- The marine outfall will be 5,200 feet in length.
- The first 500 feet of pipe will be installed in a nearshore trench, the remaining pipe will be laid directly on the seafloor.
- The outfall pipes will be 63 inches in diameter and will extend offshore about a mile into the Puget Sound.
- The diffuser at the end of the pipe will rest on the seafloor at a depth of about 600 feet deep.



For more information about the Brightwater project

Web: <http://dnr.kingcounty.gov/brightwater>.

Email: brightwater@kingcounty.gov for general questions and information requests.

Contact information for construction related problems and concerns.

For construction-related problems and concerns, contact the construction hotline at 206-205-5989 or Monica Van der Vieren at 206-263-7301. **In an emergency, dial 911.**

This information is available in alternative formats upon request by calling 206-684-1280 or Relay Service 711