



City of Seattle
Seattle Public Utilities
Determination of Significance and
Request for Comments on Scope of Project-Level Supplemental EIS
The Plan to Protect Seattle's Waterways

Ship Canal Water Quality Project
July 2015

What is the Ship Canal Water Quality Project?

Seattle Public Utilities (SPU) and King County Department of Natural Resources (DNRP) are working together to build an underground storage tunnel to reduce the amount of sewage and stormwater that discharges into the Lake Washington Ship Canal at Ballard, Fremont, Wallingford, and North Queen Anne. During storms that exceed the sewer system's capacity, sewage and polluted runoff from these areas flow into the Ship Canal without treatment. These discharges are referred to as combined sewer overflows (CSOs).

The Ship Canal Water Quality Project (Ship Canal Project, formerly called the Shared West Ship Canal Tunnel Project) will convey excess flows to an underground storage tunnel. The proposed 2.7 mile, up to 18-foot diameter tunnel will capture and temporarily hold more than 15 million gallons of combined sewer flows during heavy rains. When a storm passes, flows will be sent to the existing King County West Point Wastewater Treatment Plant.

Why is the project needed?

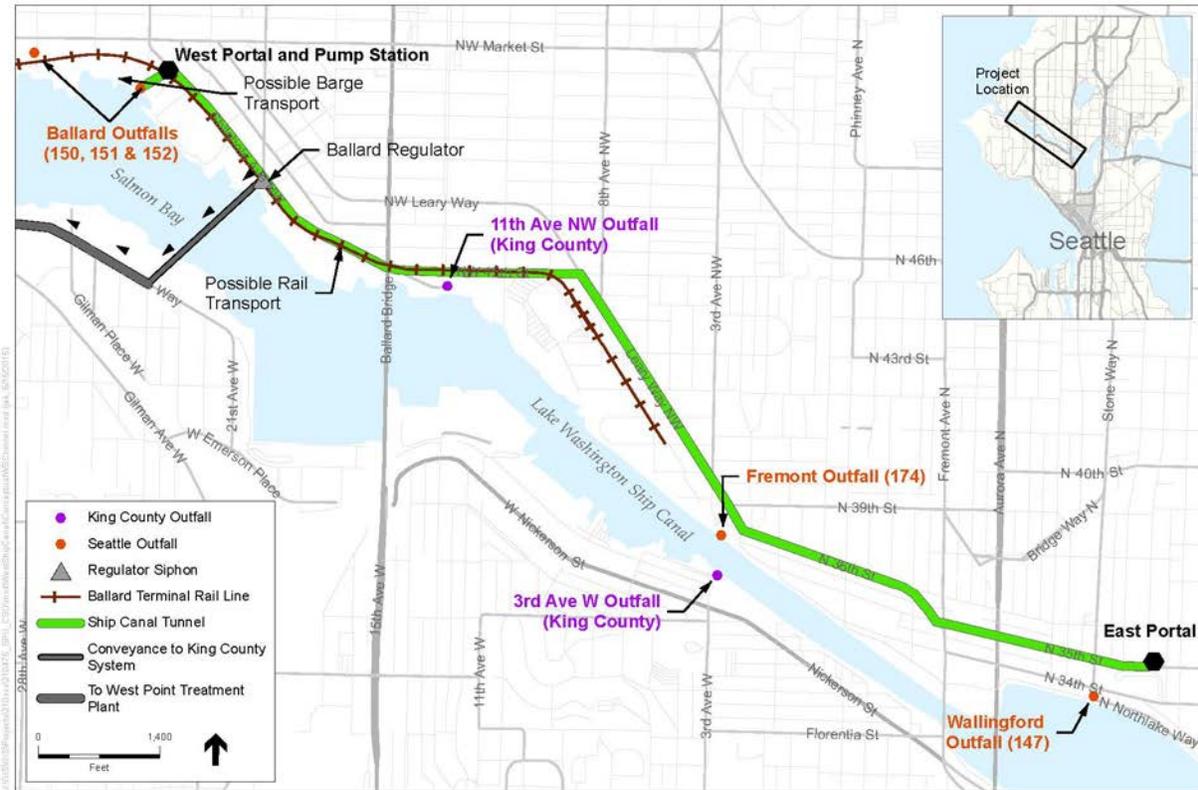
This project is needed to meet federal and state standards that limit CSOs at each outfall to no more than one per year on average. The Ship Canal Project will store excess flows from seven basins (five basins are part of SPU's wastewater system, and two basins are part of the DNRP system) that are currently not meeting the federal and state standards. These basins are mostly located on the north side of the Ship Canal, generally in the Ballard, Fremont and Wallingford neighborhoods, with one basin on the south side of the Ship Canal in the North Queen Anne neighborhood.

What are the project components?

The main components of the Ship Canal Project include the following:

- Storage tunnel (constructed with a tunnel boring machine)
- Two portals that will provide access and retrieval for the tunnel boring machine and that will become drop shafts later in construction
- Three additional drop shafts, two of which are along the tunnel route and one of which is on the south side of the Ship Canal
- Conveyance facilities to transport flows from the neighborhoods into the tunnel drop shafts
- Grit removal and odor control facilities, and
- A pump station to empty the tunnel

The project location is shown in the figure below, with major features of the project summarized following.



Conceptual Ship Canal Water Quality Project

- Storage Tunnel:** up to an approximately 18-foot diameter, 2.7 mile long tunnel, holding at least 15.2 million gallons (MG), largely underlying street rights-of-way along the north side of the Ship Canal. The tunnel would be located more than 100 feet below ground.
- West Portal:** a structure where the tunnel boring machine would be launched and all tunnel-excavated materials (called “spoils”) would be removed. During construction, material handling facilities would be located on the portal site, an approximately 2-acre site to be acquired by the City. An adjacent existing City-owned pier will be rebuilt to transport spoils to a barge. Privately owned piers at other locations along the north side of the Ship Canal may be used as well. Construction may also include transport along an existing rail line. Following construction, the same portal used for tunnel mining will receive flows from the Ballard area, as well as house a pump station used to empty the tunnel. The above-ground, two-story pump station building will include equipment to remove grit and debris from flows entering the tunnel, an electrical motor, and instrumentation. An odor control facility and standby generator will be located outside the building within the site boundary.
- East Portal:** a structure on an approximately half-acre City-owned site where the tunnel boring machine would be retrieved. Following construction, the portal will receive flows from the Wallingford area, as well as house odor control equipment and an above-ground standby generator building.

- **Drop shafts:** vertical structures that convey flows into the storage tunnel. The drop shafts will be located close to existing outfalls near 11th Ave. NW in Ballard, 3rd Ave. NW in Fremont, 3rd Ave. W on the south side of the Ship Canal, and at the West and East tunnel portals. Following construction, two of the drop shafts will house odor control equipment and standby generators.
- **Conveyance facilities:** buried near-surface pipes to transport flows from the Ballard, Wallingford, Fremont, and North Queen Anne neighborhoods to the tunnel drop shafts. Conveyance facilities include below-ground pipes, diversion structures (e.g., weirs), and associated piping components. Approximately 3,400 lineal feet of conveyance pipes ranging from 36- to 72-inches in diameter will be constructed to bring flows to the drop shafts. These pipes will be built using a combination of open-cut and microtunnelling construction methods, largely in public rights of way. Approximately 1,900 lineal feet of dual 24-inch diameter pipes will be constructed to transfer stored flows from the tunnel to the King County wastewater treatment plant in Magnolia. Other conveyance components, including points of connection with the tunnel and/or diversion structures, will be included as needed. Surface disruption of streets and public rights of way, including the potential for loss of street parking and temporary lane closures or detours, will be required to construct many of these facilities.
- **Existing infrastructure replacement and protection projects:** During tunnel construction, crews could disrupt or damage existing infrastructure, particularly older sewer lines, water pipes, and other utility infrastructure. In some cases, this project presents an opportunity to proactively replace or repair aging infrastructure, combine construction projects, and reduce the number of times streets and neighborhoods would be disrupted. One such case is replacement of an existing aging outfall near the 24th Ave. NW street end.

How does this project relate to the Plan to Protect Seattle’s Waterways?

SPU recently prepared a long-range plan to reduce sewage overflows and stormwater runoff, referred to as The Plan to Protect Seattle’s Waterways (Plan). The Plan was evaluated in a programmatic Environmental Impact Statement (EIS) issued by SPU in May 2014 and finalized in December 2014. The Plan, and the Draft and Final Plan EIS, can be found at www.seattle.gov/CSO. The Plan EIS evaluated the effects of two alternatives: the Long-Term Control Plan Alternative and the Integrated Plan Alternative, as well as the No Action Alternative. The Ship Canal Project is one of the first projects in the Plan to be implemented.

What is a Supplemental EIS?

Under the State Environmental Policy Act (SEPA), a supplemental EIS can be prepared when there is “new information indicating a proposal’s probable significant adverse impacts”. SPU, as the SEPA lead agency, determined that the newly-developed project-level information on the Ship Canal Project requires additional analysis to reflect changes and refinements in the proposed project since the issuance of the programmatic Plan EIS. Although it may be shown that the impacts would be temporary or could be mitigated, SPU has decided to prepare a Supplemental EIS to allow a comprehensive evaluation of the potential impacts.

What alternatives or options are being considered?

Impacts associated with major alternatives for the project (for example, constructing storage tanks instead of a storage tunnel) were evaluated in the Plan EIS. Based upon review of the environmental impacts, costs, and other considerations, SPU determined that a tunnel is the preferred approach for constructing the Ship Canal Project.

Therefore, the tunnel project is the only alternative evaluated in this Supplemental EIS. There are different options for various project components, such as conveyance connections, drop shafts, and other components, which will be described in the Supplemental EIS.

The No Action Alternative also was described in the Plan EIS. Because it has not changed since publication of the Final Plan EIS, it is not re-evaluated in this analysis, consistent with WAC 197-11-620 (1) and SMC 25.05.620.A.

Who is the Proponent and Lead Agency?

Seattle Public Utilities is the project proponent and is serving as the SEPA lead agency. King County DNRP is a cooperating agency for the project.

What will be evaluated in the Supplemental EIS?

This Supplemental EIS provides additional detail and analysis for the Ship Canal Project (called the Shared West Ship Canal Tunnel Project in the Plan EIS) to supplement the information in the Plan EIS. The Supplemental EIS will describe additional project-specific information now available, and assess the impacts of construction options and operation associated with the Ship Canal Project. As described in the Plan EIS, the major impacts of the project are associated with construction activities, which are temporary but unavoidable.

In this Supplemental EIS, SPU plans to address new or modified information for the following environmental elements identified by SEPA :

- Earth and Groundwater
- Surface Water
- Air Quality and Odors
- Biological Resources
- Land and Shoreline Use/Visual Quality
- Recreation
- Transportation
- Noise and Vibration
- Energy and Climate Change
- Cultural Resources

What is Scoping?

Scoping is an opportunity to influence the content and emphasis (the scope) of the Supplemental EIS. SPU invites agencies, affected tribal governments, and members of the public to provide comments on the Supplemental EIS scope, including potential impacts of the proposed project, potential mitigation measures, and required permits and approvals.

How can I learn more about the project?

There are numerous ways to learn about the project, as outlined on SPU's project website www.seattle.gov/util/ShipCanalProject.

For additional information, call Karen Iwasaki at 206-615-0867, or email SPU_ShipCanalProject@Seattle.gov.

For interpretation services please call **206-615-0867**

如需要口譯服務，請撥電話號碼 **206-615-0867**

Para servicios de interpretación por favor llame al **206-615-0867**

Về dịch vụ phiên dịch xin gọi **206-615-0867**

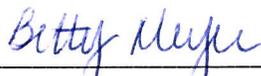
How can I provide comments?

To provide comments on the scope of the Supplemental EIS:

Send comments by email (please include Ship Canal Project Scoping in the subject line) or by U.S. Postal Service to the SEPA Responsible Official at the address below by August 24, 2015:

Seattle Public Utilities
Attention: Betty Meyer, SEPA Responsible Official
Seattle Municipal Tower, Suite 4900
P.O. Box 34018
Seattle, WA 98124-4018
betty.meyer@seattle.gov

Signature:


Betty Meyer

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