# **Ship Canal Water Quality Project**

**Project Overview** 

Keith Ward, PMP, PE, Ship Canal Water Quality Project Executive **December 5, 2018** 

**Seattle Public Utilities** 

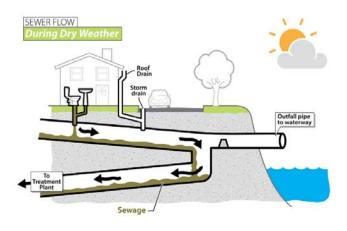


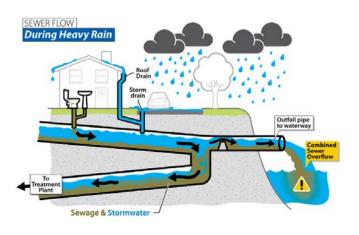
#### **Ship Canal Water Quality Project**

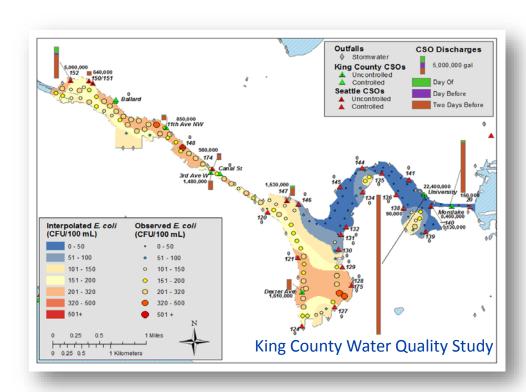
- Project background and overview
- Project work in Ballard
- Schedule summary
- Cost summary



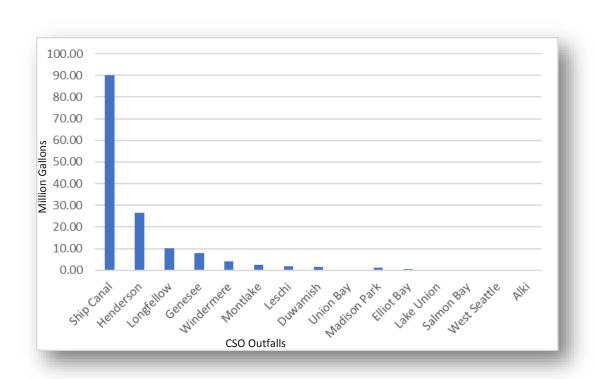
#### **Combined Sewer Overflows**

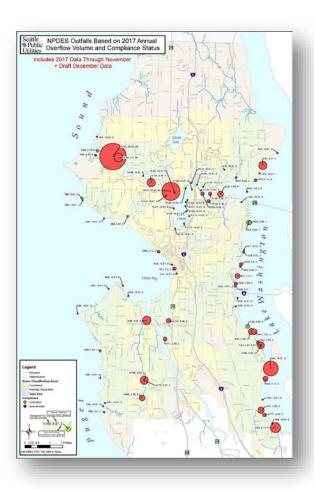






#### 2017 Combined Sewer Overflows





#### **Ship Canal Water Quality Project**

#### **Consent decree**

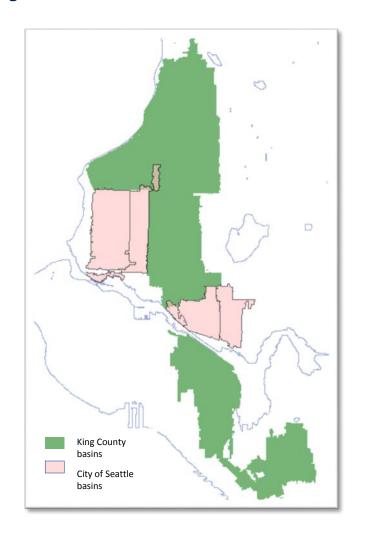
- With US Department of Justice, US Environmental
  Protection Agency, and WA Department of Ecology
- Less than 1 combined sewer overflow per outfall per year on a 20-year moving average

#### **Joint Project**

- Outfalls: 2 King County, 5 Seattle
- Four projects reduced to one
- Reduced community impacts
- Improved operational flexibility

#### **Joint Project Agreement**

- 12/8/2015: City of Seattle 65% of shared costs
- 6/21/2016: King County 35% of shared costs



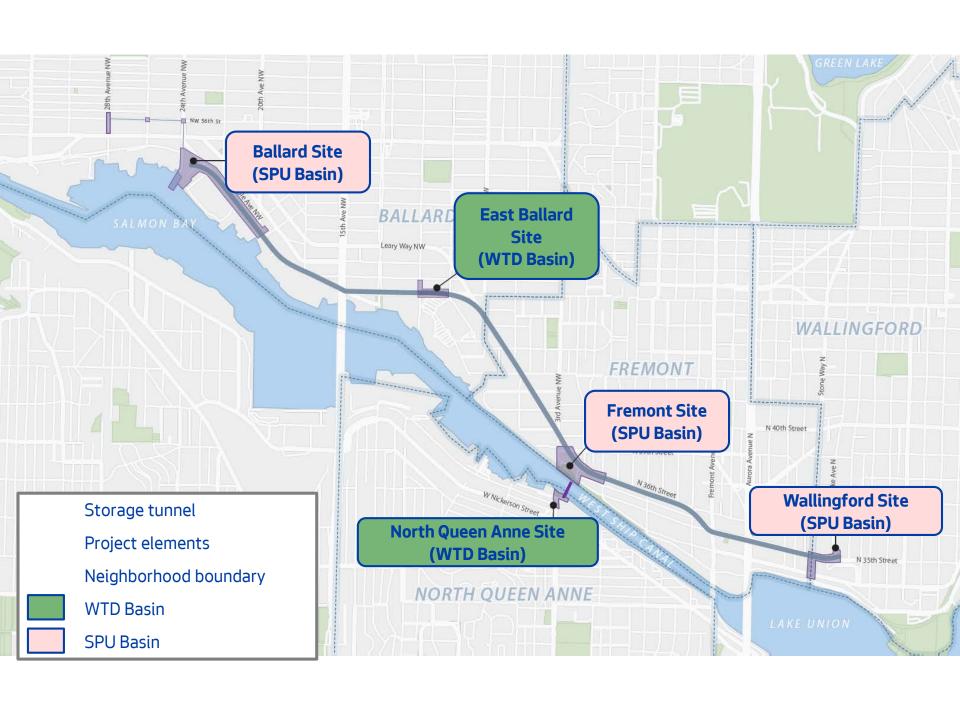


# **Ship Canal Water Quality Project**

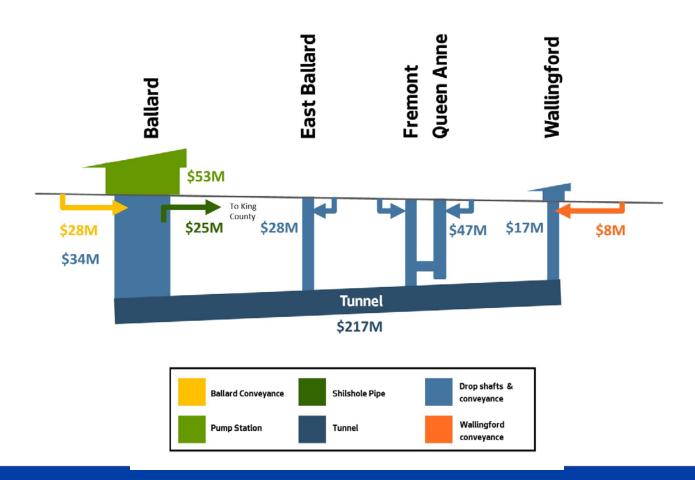
The storage tunnel connects to King County's West Point Treatment Plant.







#### **Project Components**



### **Construction Techniques**



18 ft. 10 in. dia. Storage Tunnel



4 to 7 ft. dia. Trenchless

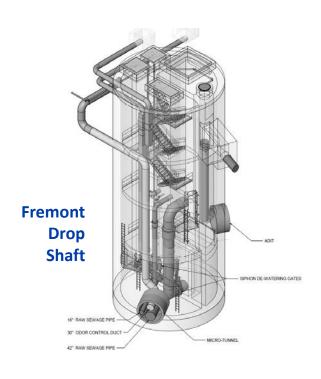


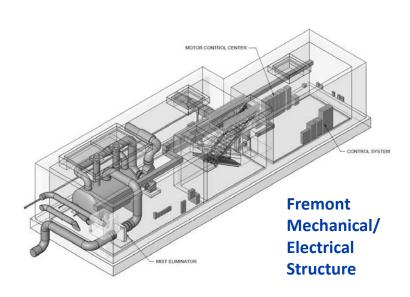


**Conveyance Pipes** 

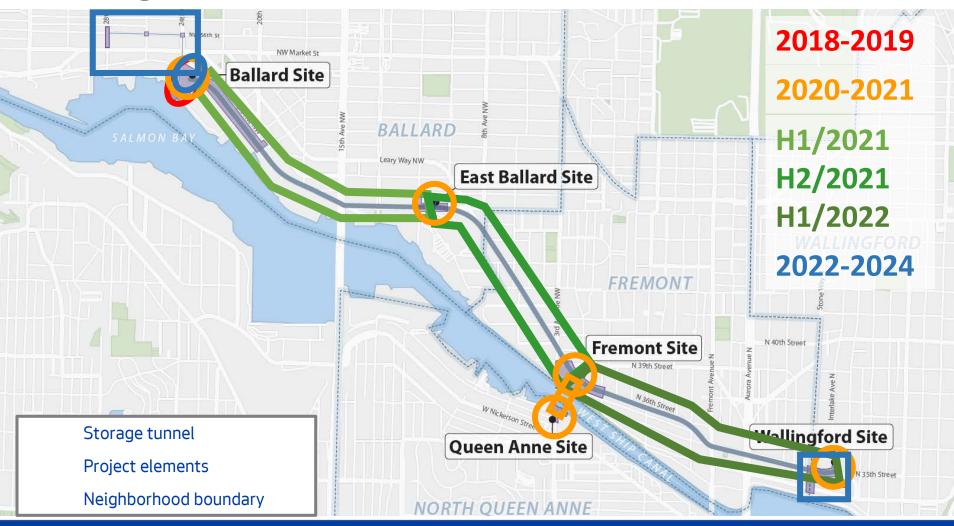


# **Project Components - examples**



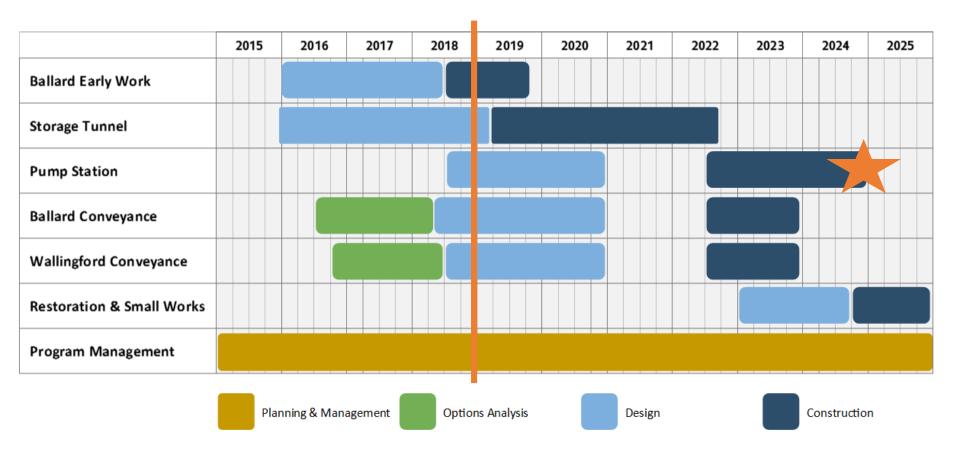


#### Neighborhoods





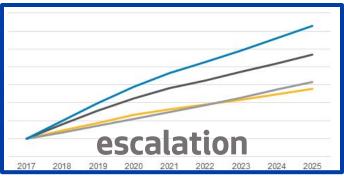
## **Schedule Summary**





#### **Cost Estimate - Key Factors**







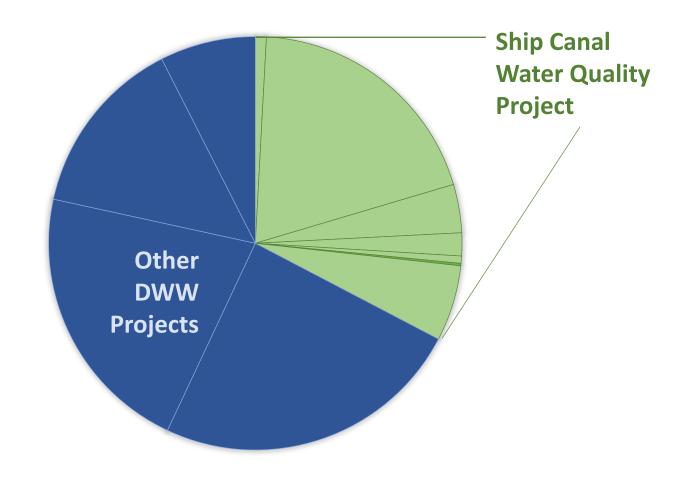


#### **Shared Project Budget**

City of Seattle's Share	~ \$388M
King County's Share	~ \$182M
Shared project budget	\$570M, 70% confidence*

\* There is a 70% chance costs will be at or below the estimated cost and a 30% chance the estimated cost will be exceeded.

#### **2018-2024 DWW Spending**



#### **Project Funding**

SPU is managing the project's budget within the 2018-2023 Endorsed Strategic Business Plan (SBP) rate path.

- \$540M cost estimate used for SBP
- Bond Issue interest savings
- Loans







**Ship Canal Water Quality Project** 

