Ship Canal Water Quality Project

Project Overview

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Ship Canal Water Quality Project Executive
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Ship Canal Water Quality Project

• Project background and overview
• Project work in Ballard
• Schedule summary
• Cost summary
Combined Sewer Overflows

King County Water Quality Study
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

Ballard: $53M

East Ballard: $25M

Fremont: $28M

Queen Anne: $47M

Wallingford: $17M

Tunnel: $217M

Legend:
- Ballard Conveyance: Yellow
- Shilshole Pipe: Green
- Pump Station: Dark Green
- Drop shafts & conveyance: Blue
- Tunnel: Grey
- Wallingford conveyance: Orange
Construction Techniques

18 ft. 10 in. dia. Storage Tunnel

4 to 7 ft. dia. Trenchless

Conveyance Pipes
Project Components - examples

Fremont Drop Shaft

Fremont Mechanical/Electrical Structure
## Schedule Summary

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- **Planning & Management**: Yellow
- **Options Analysis**: Green
- **Design**: Light blue
- **Construction**: Dark blue

*City of Seattle*
Cost Estimate - Key Factors

- **Base Costs**: A construction site image with workers and equipment.
- **Escalation**: A graph showing escalation rates from 2017 to 2025.
- **Uncertainty**: A graph showing uncertainty levels from 0% to 100%.
- **Risks**: A construction trench image with equipment involved.

Design Development -->
# Shared Project Budget

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<tr>
<td>City of Seattle’s Share</td>
<td>~ $388M</td>
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<td>King County’s Share</td>
<td>~ $182M</td>
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<td><strong>Shared project budget</strong></td>
<td><strong>$570M, 70% confidence</strong>*</td>
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<td>Cost range</td>
<td>$533M to $598M</td>
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* 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

- Other DWW Projects
- Ship Canal
- Water Quality Project
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