

Ship Canal Water Quality Project

Project Update

Civil Rights, Utilities, Economic Development & Arts Committee

February 12, 2019



Ship Canal Water Quality Project

- Overview
- Schedule
- Cost
- Uncertainties and risks
- Communications next steps

Ship Canal Water Quality Project

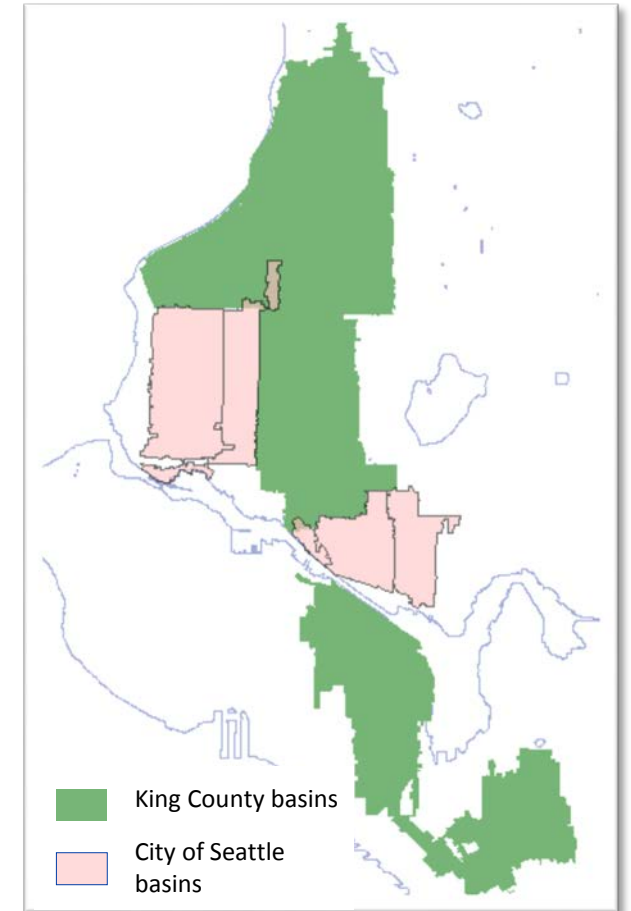
This project will improve water quality by reducing SPU and King County's combined sewer overflows.

Consent decree

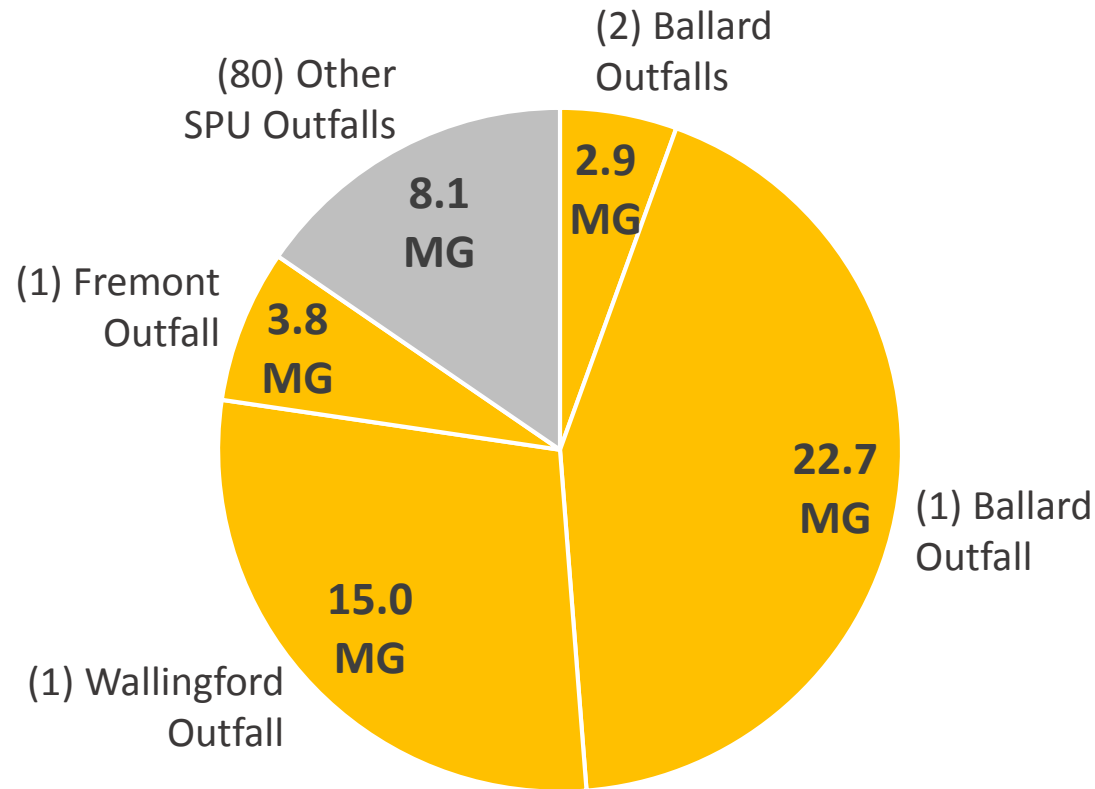
- With US Department of Justice, US Environmental Protection Agency, and WA Department of Ecology
- Less than 1 combined sewer overflow per outfall per year on a 20-year moving average

Joint Project: King County & City of Seattle

- 7 Outfalls: 2 KC, 5 Seattle
- Joint Project Agreement
 - 12/8/2015: City of Seattle – 65%
 - 6/21/2016: King County – 35%



Seattle's 2018 Combined Sewer Overflow Volume (Million Gallons)



84%

of Seattle's 2018 sewer overflow volume came from **five** Ship Canal Water Quality Project outfalls

16%

of Seattle's 2018 sewer overflow volume came from remaining **eighty** outfalls



Seattle
Public
Utilities



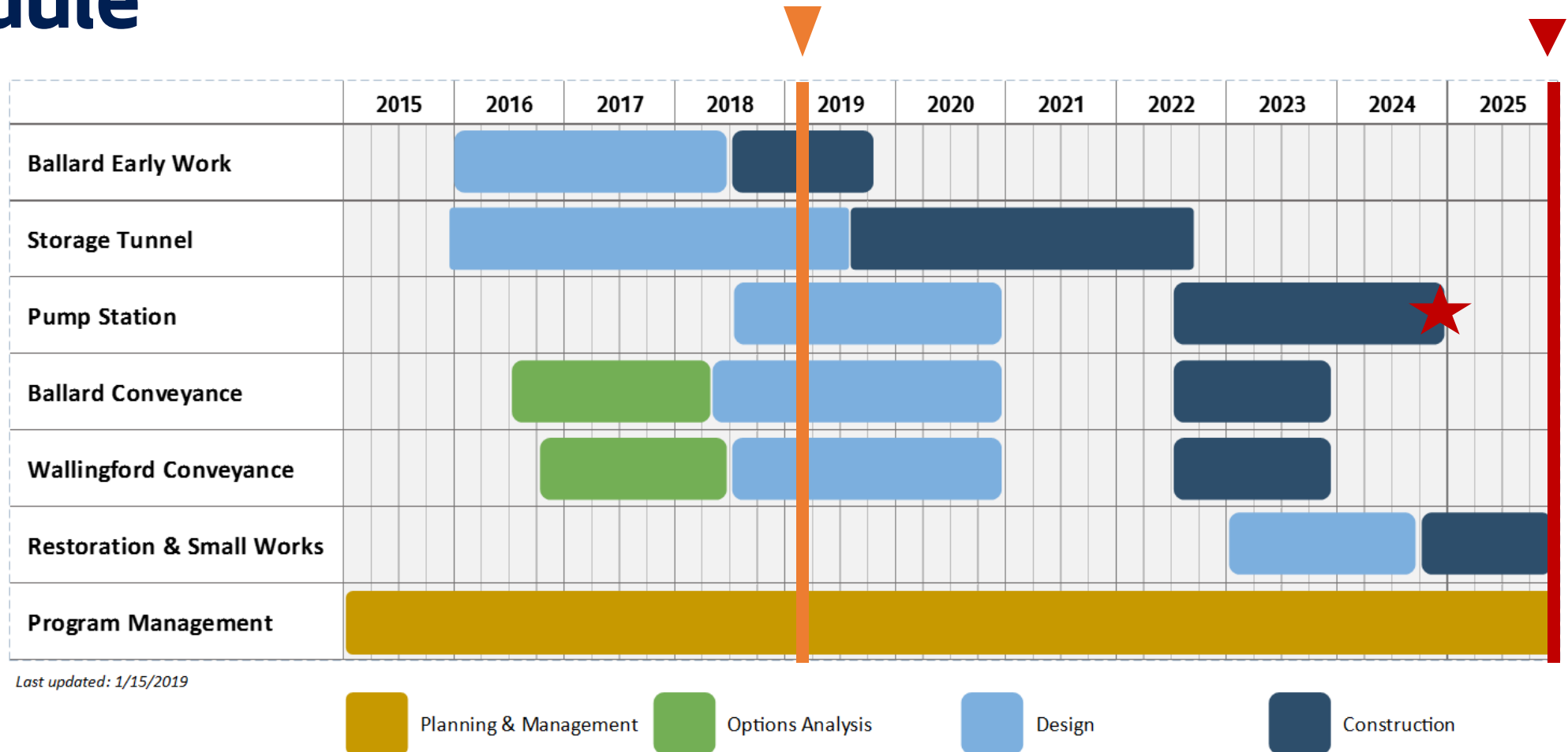
King County

Ship Canal Water Quality Project



Schedule

Five major construction packages



Construction: Ballard Early Work



Project Cost Estimate: \$570M with 70% confidence*

SPU's share is approximately \$389M

Cost Categories	April 2018 Cost Estimate	January 2019 Cost Estimate
Base Costs (Hard + Soft + Property) & Change Orders	\$447	\$438
Escalation	\$59	\$64
Cost Reserves for Uncertainty, Risk Costs, and Schedule Risks	\$64	\$68
Schedule Risk Impact Escalation	\$0	\$0
Subtotal Cost Projection	\$570**	\$570**
Subtotal % Confidence	65%	70%

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

**Joint Project Agreement:
City of Seattle – 65%, King
County – 35%

Potential Scope Adjustments - Update

Partially or Fully Realized

- Use of selective refurbished Tunnel Boring Machine
- Pump Station Value Engineering Recommendations
- Construction staging cost reduction

Evaluating

- SDOT Street Use Permit Credit

Not realized

- Earlier construction of Wallingford and Ballard Conveyance projects
- Tunnel bid alternative
- Odor control changes at 3rd, Fremont, and 11th Sites

New!

- Shilshole Pipe Removal

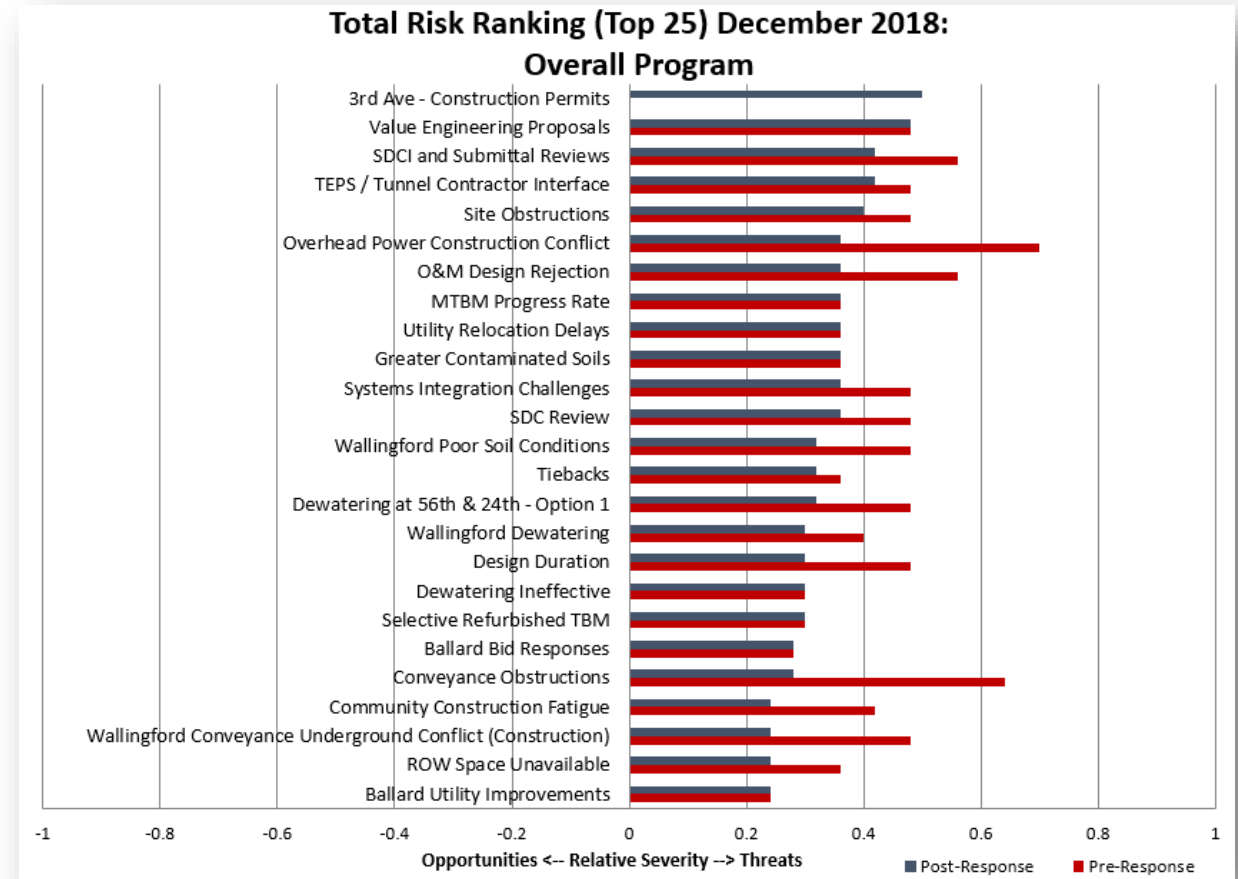
Uncertainty and Risk Management

Uncertainties

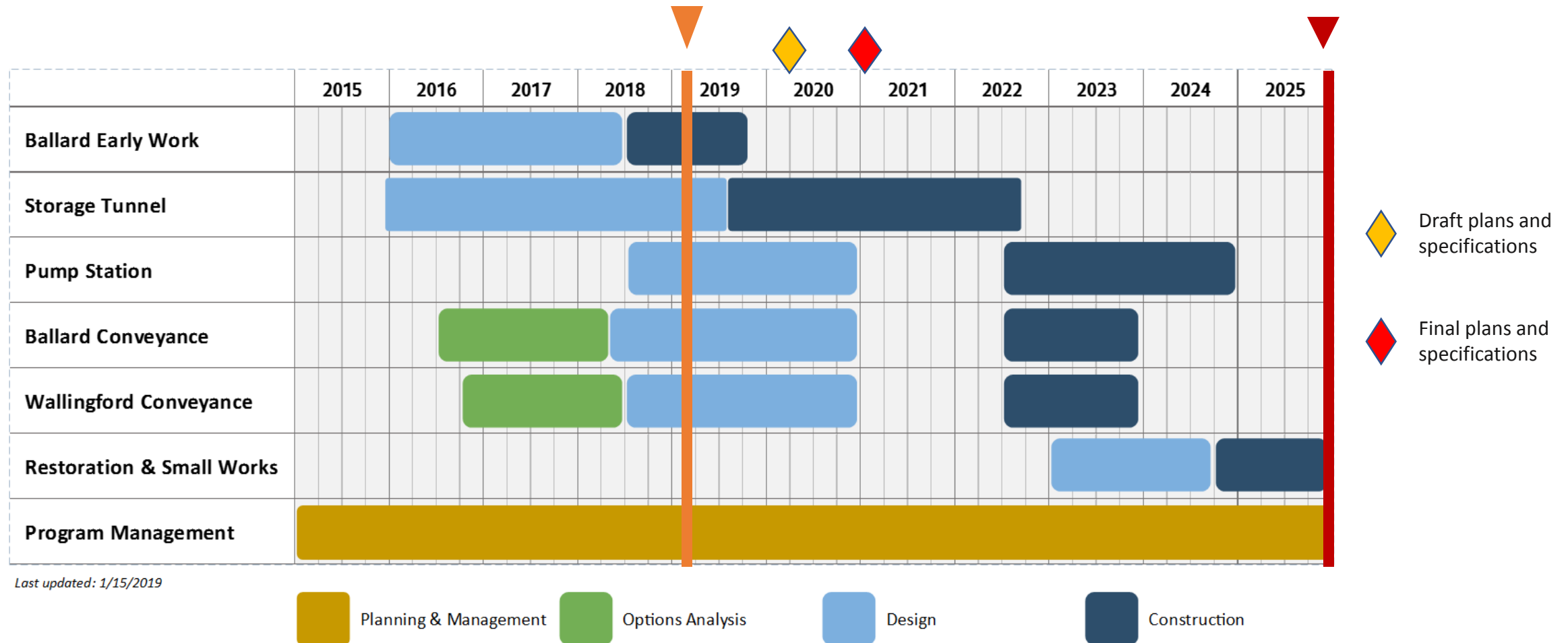
- Decreases as designs develop
- Decreases with construction bids

Risks

- Cost and schedule risks
- Manage based on likelihood and impact
- Update cost and schedule confidence every 4 months

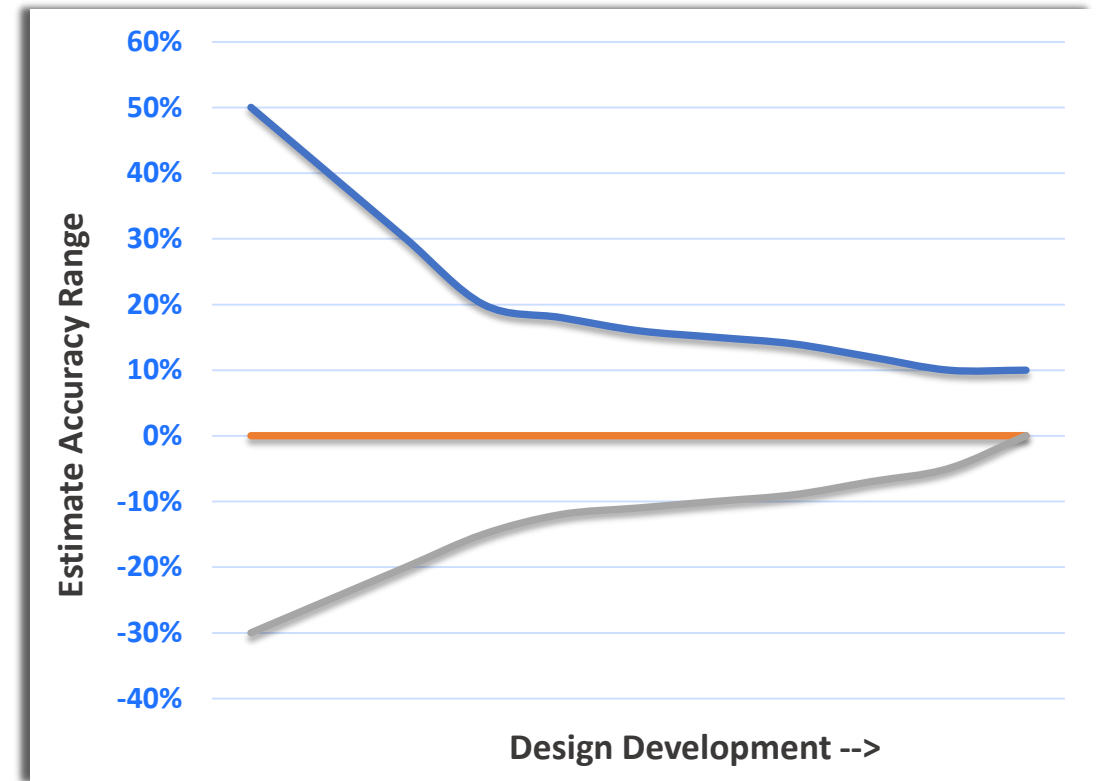


Key Risk: Remaining Consent Decree Milestones



Key Uncertainty: Tunnel Construction Package Cost

- 2018 Contractor outreach
- Estimated cost of \$220 million
- Uncertainty range has decreased
- **Milestone:** We will receive bids for 80% of our construction costs summer 2019



Key Risk: Construction Issues

Community and business impacts

- Traffic and noise
- Long construction durations

Construction issues

- Underground
- Unknown risk events

Communication Next Steps

- Semi-annual reports, continued
- Proviso, March/April 2019
- Project update, Summer 2019
- Groundbreaking celebration, Q1 2020



**Seattle
Public
Utilities**



King County

Ship Canal Water Quality Project

