



Lake Hills and NW Lake Sammamish Sewer Upgrade Project

Eastside Audubon Conservation Committee Briefing

April 11, 2018





Lake Hills and NW Lake Sammamish Sewer Upgrade Project

Key priorities/concerns we've heard from you

- Understanding construction impacts
- Protecting nesting birds and bird habitat
- Conservation of critical habitat in Marymoor Park, including Audubon BirdLoop Nature Trail
- Being engaged in restoration plans for the project



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Agenda

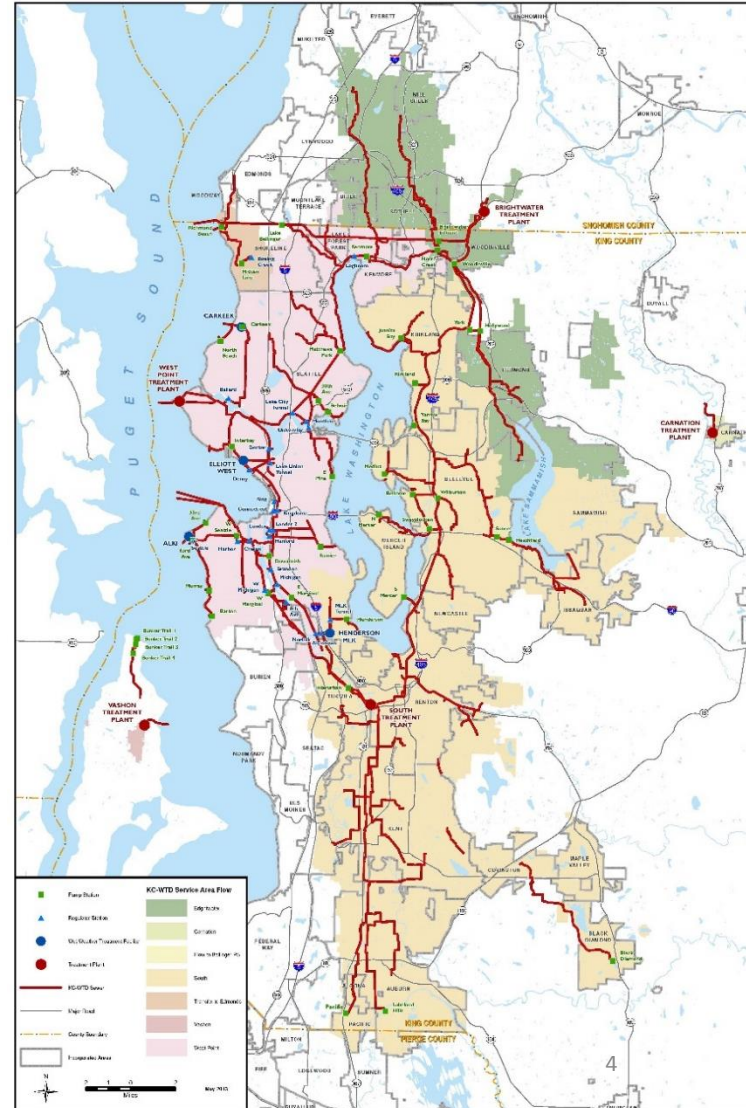
- What we've heard from you
- Project overview
- Environmental review
 - Existing conditions
 - Anticipated construction impacts
 - Restoration plans
 - Habitat enhancement
- What's next
- Our commitment to you



A wide-angle photograph showing a row of houses with dark roofs in the foreground. Beyond the houses is a large, calm body of water, likely a lake or bay, which reflects the sky. The far shore is lined with dense evergreen forests and rolling hills under a clear, bright sky.

King County WTD

- 1.7 million people served
- 424 square mile area served
- 5 treatment plants
- 391 miles of pipe
- 185 million gallons sewage treated/day



Objective

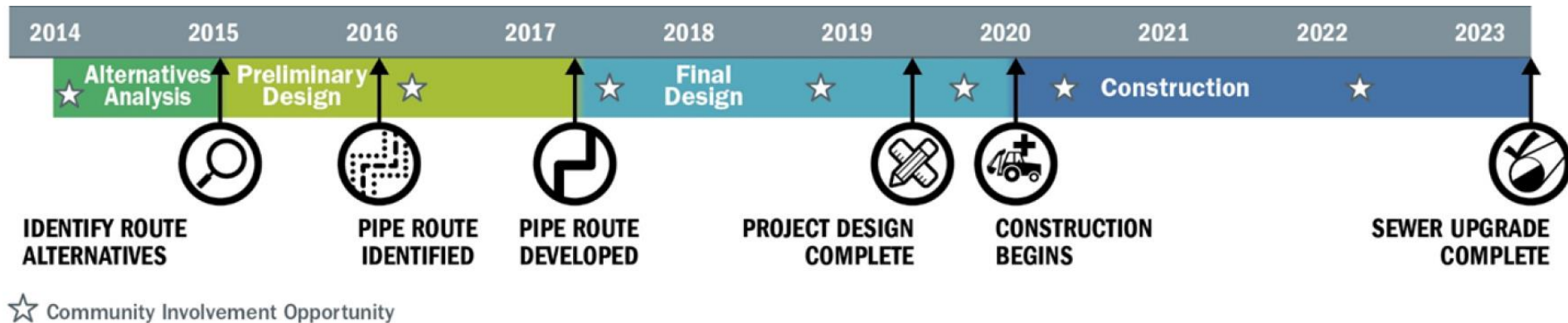
- Upgrade 4.5 miles of sewer pipes in Redmond to provide service for 50+ years
- Provide important connection for the potential future use of recycled water



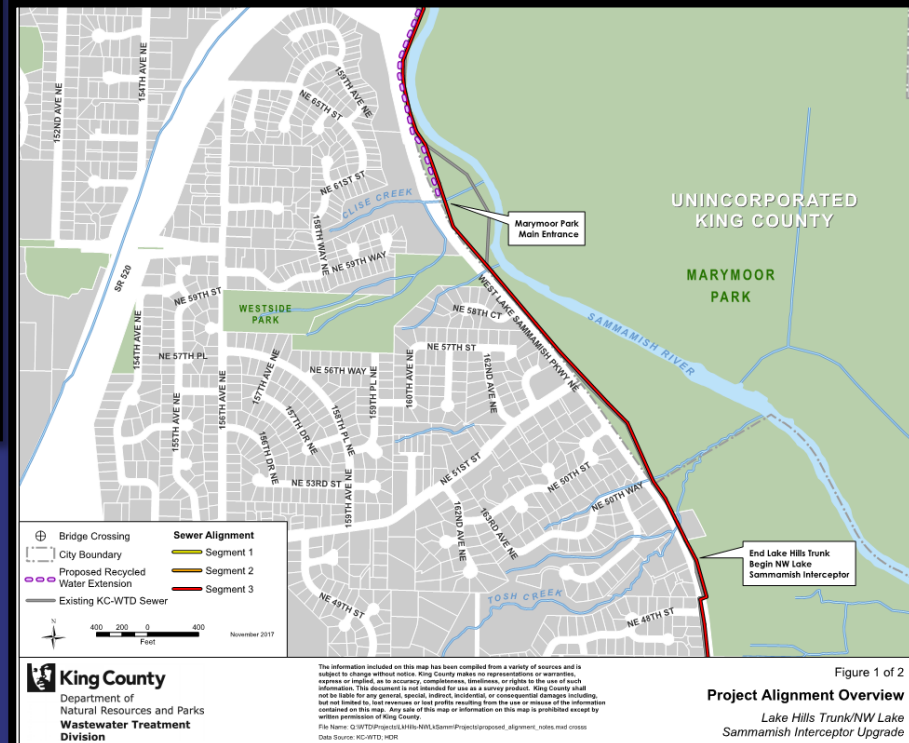


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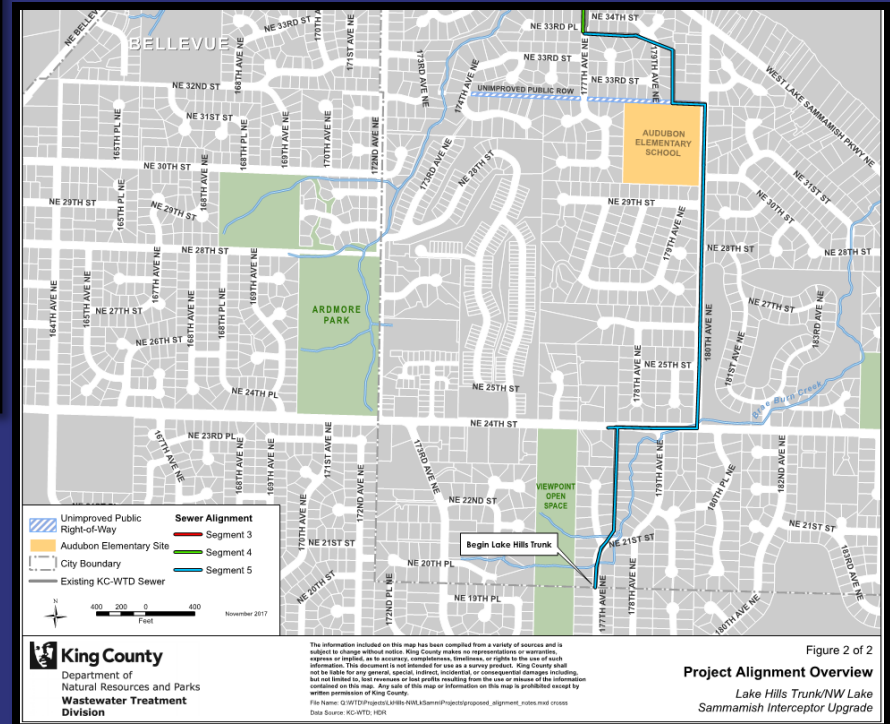
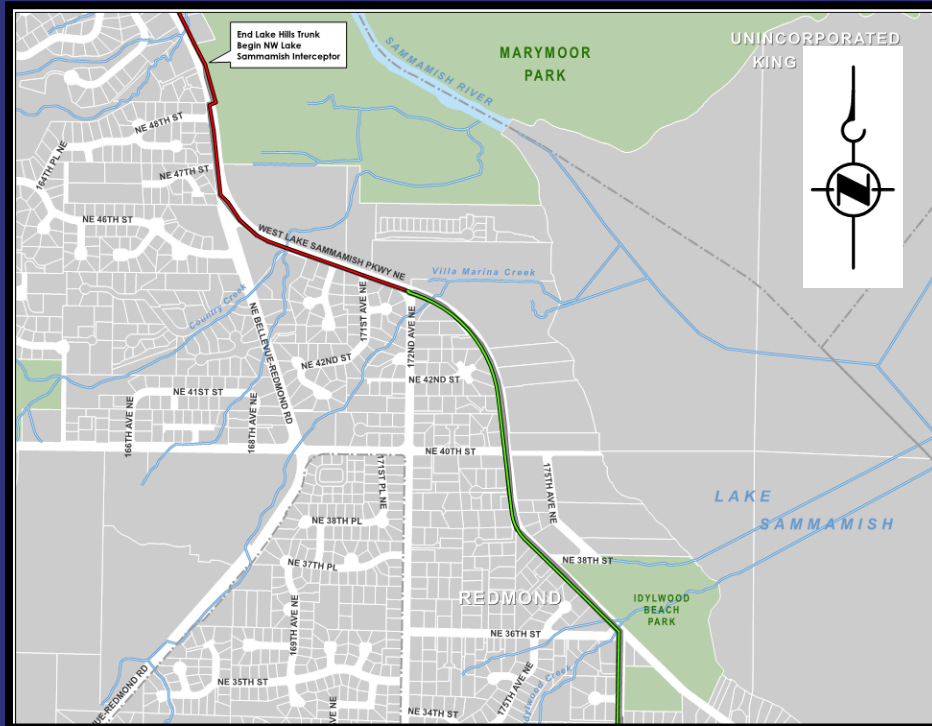
Schedule



Project alignment



Project alignment





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Construction methods

- Primarily open trench
 - Ideal for shallow work zones
 - Surface impacts will include traffic detours, trail detours
- Short, trenchless sections
 - Protects environmentally sensitive areas
 - Limits surface impacts
 - Not appropriate for all situations





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Environmental review process





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Existing conditions

- Primarily native and ornamental vegetation with some large, mature deciduous trees
- Invasive species in river corridor
- 18 wetlands and 7 streams along the project alignment
- Eagles, songbirds, beaver, salmon, trout
- Migration routes:
 - Pacific Flyway
 - Sammamish River

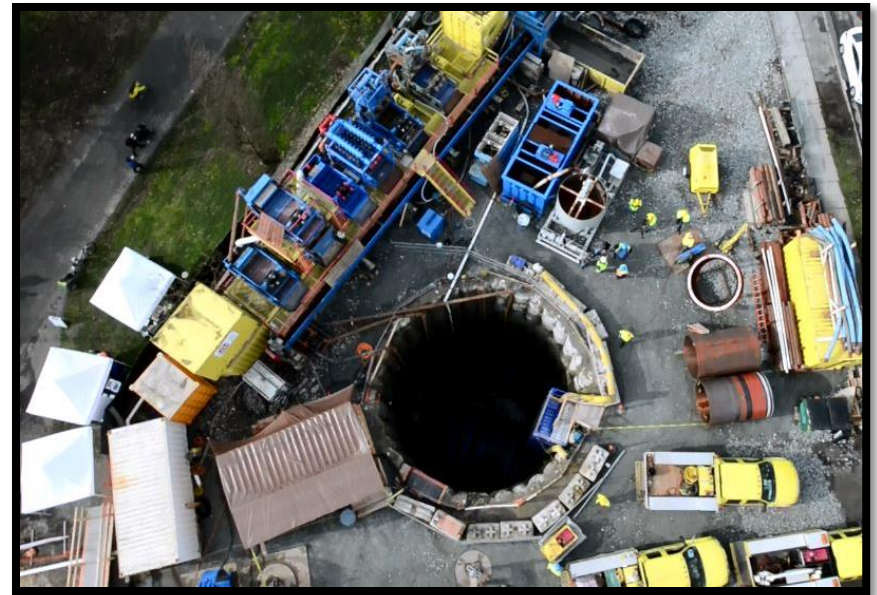




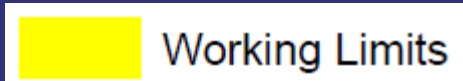
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Designing to limit impacts to habitat

- Keep pipe route in approximately same location as existing pipe
- Trenchless construction methods at Sammamish River
- Limiting work areas to only necessary space
- Protecting large, significant trees wherever possible
- Planning to avoid all but one culvert



Working limits





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Unavoidable impacts

- Plants and trees will be removed within working limits (30 - 45 ft wide)
- Some vegetation removal within wetlands and along streambanks
- Temporary impacts at Country Creek culvert





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Site restoration

- Replant diversity of native plant species where vegetation has been removed
 - 1:1 tree replanting ratio
 - 3:1 when tree diameter > 30 inches
 - No net ecological loss in wetlands, streams or buffers
- Remove invasive species
- Leave downed large woody debris within wetland and stream buffers wherever possible
- All impacted wetlands, streams and buffers restored to pre-construction conditions





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Restoration examples





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Enhancement along the Sammamish River

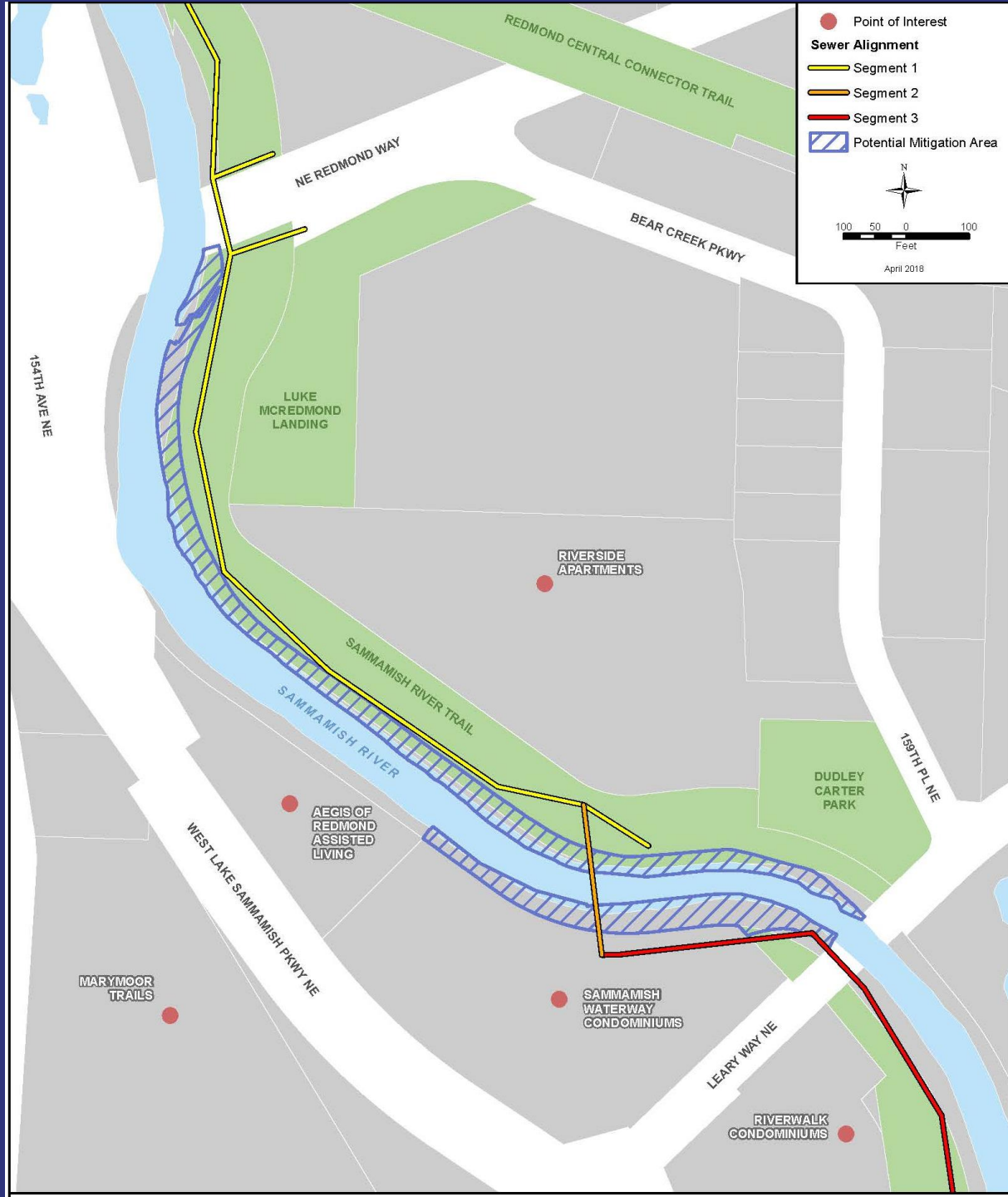
- Goal: Achieve no net loss of habitat area, increase habitat function, improve water quality and hydrology
- Remove invasive species
- Higher density of native trees and shrubs
- Large woody debris 50 feet apart along the banks of the River
 - Provide habitat, food, nesting material



Enhancement area



Potential Mitigation Area





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What's next?

- State Environmental Policy Act (SEPA) determination
 - Anticipated public comment period in June 2018
- Conduct additional fieldwork
- Acquire necessary permits
- Refine construction sequencing (when we will build what)
- Complete design by end of 2019
- Begin construction in mid-2020



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Our commitment to you

- Keep you up to date and informed
- Address concerns, answer questions
- Whenever possible, use your feedback to shape the design
- No surprises during construction





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Questions and comments

- **Contact** Kelly Foley, community relations at 206-477-8621 or kelly.foley@kingcounty.gov
- **Visit** the project website at: www.kingcounty.gov/KCRedmondSewer
- **Sign up** for email updates on our website
- **Enroll** in text alerts: text **KING REDMONDSEWER** to **486-311**