



King County

Department of Natural Resources and Parks
Wastewater Treatment Division

NORTH MERCER ISLAND/ENATAI Sewer Upgrade Project

Bellevue – Enatai - January 25, 2017
Mercer Island - January 26, 2017
Community meeting





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NORTH MERCER ISLAND/ENATAI Sewer Upgrade Project

Agenda

- 6 – 6:30 p.m. Check-in and open house
- 6:30 – 7:10 p.m. Presentation
- 7:10 – 7:30 p.m. Q & A
- 7:30 – 8 p.m. Open house
- 8 p.m. Adjourn



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Presentation agenda

- Welcome and introductions
- Project overview
- Final alignment
- Construction methods
- Pump station upgrades
- Next steps



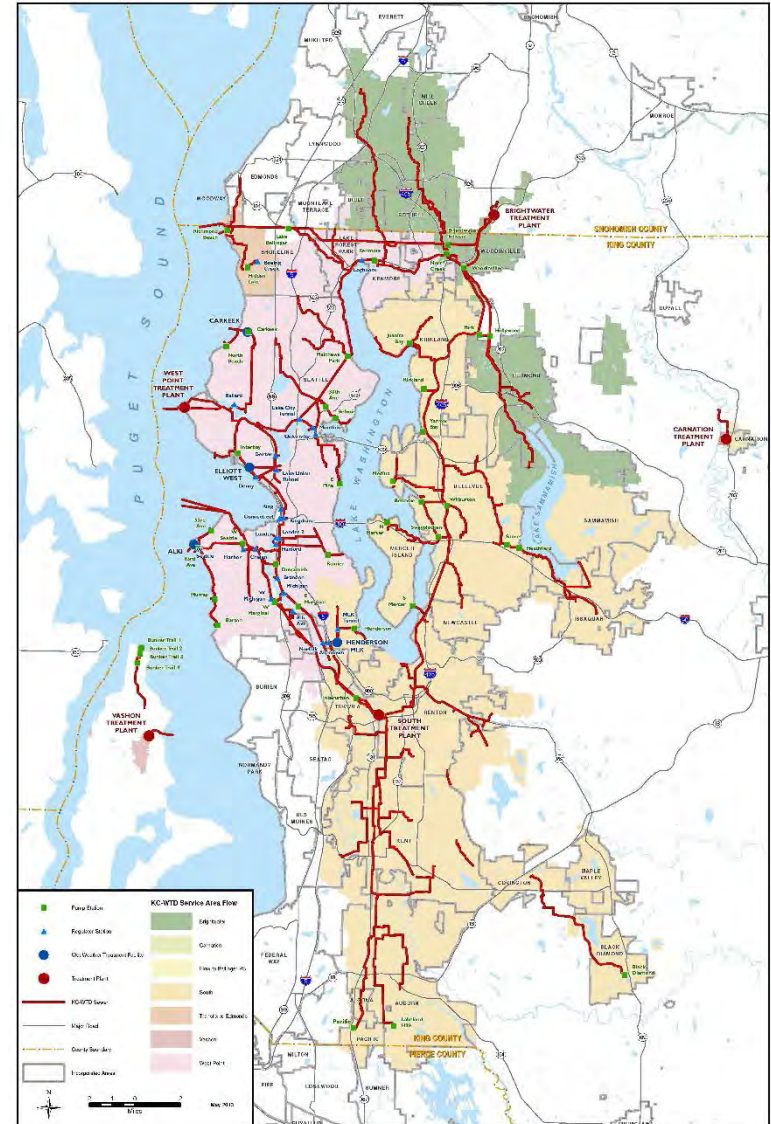
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What does the Wastewater Treatment Division do?

- Serves 17 cities and 17 sewer districts
- Operates 5 treatment plants and 42 pump stations
- Manages 350+ miles of pipe





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In the last 50 years, treating the area's wastewater has transformed Lake Washington into one of the cleanest urban lakes in the world.

- The North Mercer / Enatai Interceptor was built in the 1970s.
- Pipeline upgrades will provide safe, reliable service to north Mercer Island and southwest Bellevue for the next 50+ years.





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Service area and existing system



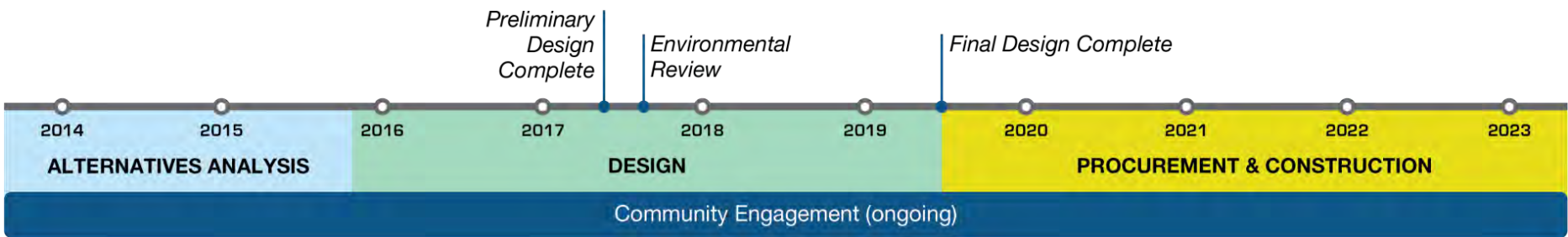


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Schedule



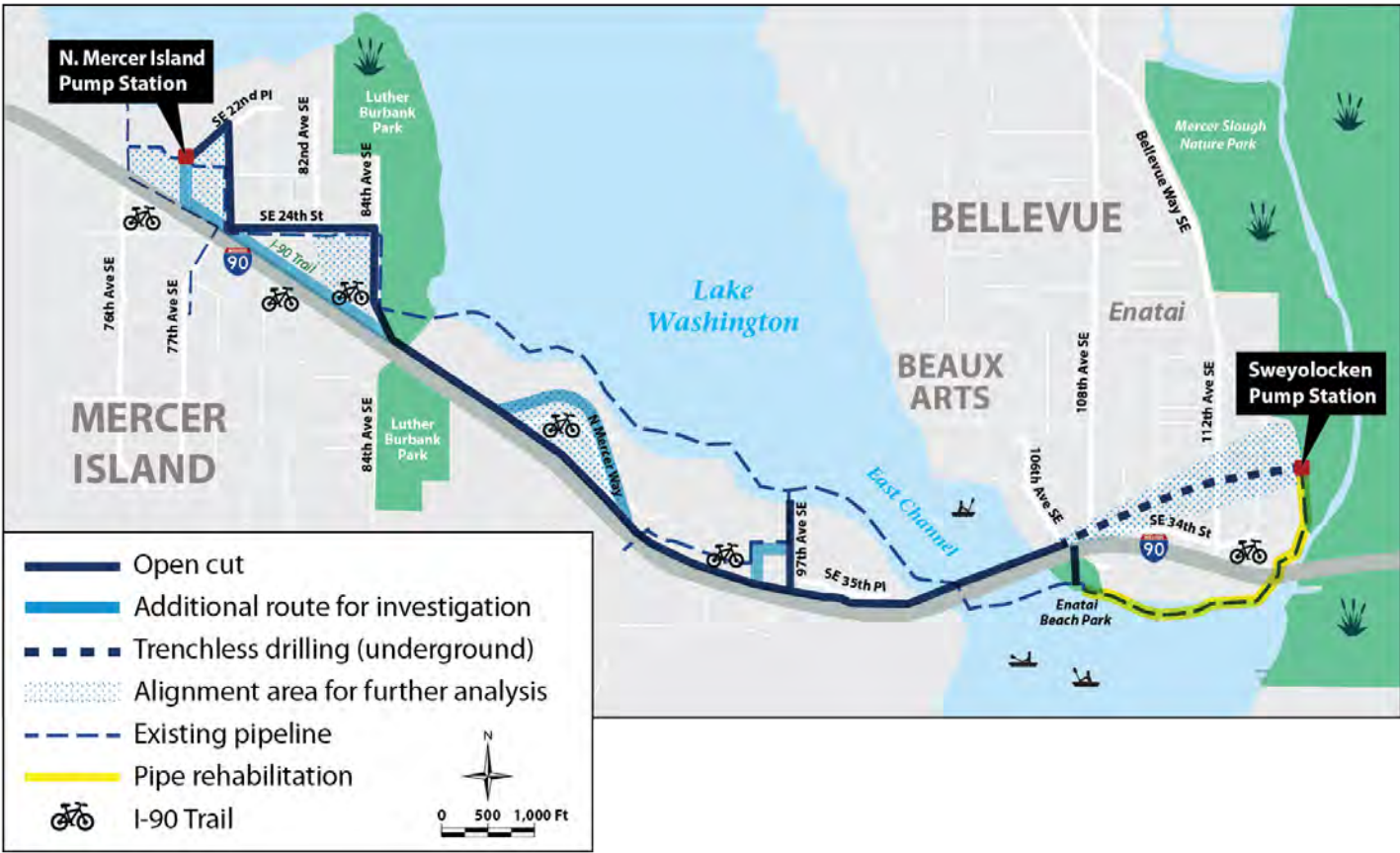


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What alternatives did we consider?





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Community outreach to date



- 4 open houses
- 14 community briefings
- 20 field work notices
- 4 community events
- Hundreds of conversations with project area neighbors and interested stakeholders



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What we've heard

- Use the I-90 trail as much as possible
- Reduce North Mercer Way traffic impacts
- As much as possible, avoid impacts to events such as Rotary Half Marathon and Seafair
- Reduce impacts to Enatai Beach and Luther Burbank Park
- Maintain boating access and stay out of the water as much as possible
- Coordinate with Sound Transit, WSDOT, and cities of Mercer Island and Bellevue



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Where we're at now





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Considerations for pipeline route

- Technical
- Constructability
- Operation and maintenance
- Permitting
- Environmental
- Community



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Section 1

- Wide gravel shoulder on 78th Avenue SE
- 84th Ave SE: too many utilities
- Luther Burbank Park
- Follows N Mercer Way (~500 ft)





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Mercer Island, Washington
Street View - Aug 2011

Image capture: Aug 2011 © 2016 Google



NORTH MERCER ISLAND/ENATAI Sewer Upgrade Project

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- **Luther Burbank Park too steep**
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Section 2

- I-90 trail
- 90th PL SE keeps wastewater flows moving efficiently
- Lift Station 11 improvements needed





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Section 3

- The only feasible option to cross the East Channel requires in-water work





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Section 4

- A new pipe (HDD) will run under the Enatai hillside
- Existing line will be rehabilitated
- Enatai Beach Park connects existing and new line





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Construction methods

- Open-cut
- In-water
- Trenchless (Horizontal Directional Drilling)
- Pipe rehabilitation



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Construction methods: *Open-cut*

- Used to install the majority of the new pipe
- Safer for shallower work zones
- Traffic impacts include lane closures and detours (rolling work zone)
- Access to residences and businesses will be maintained





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Construction methods: *In-water*

- East Channel crossing requires in-water work
- Cities and community members asked the team to avoid major boating times such as Seafair
- Most in-water work will take place from barges





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Construction methods: *Trenchless*

- Crews will use HDD (horizontal directional drilling) to install the pipeline under the Enatai hillside
- Drilling equipment on either end of the pipe will be used for underground installation without the need for open trenches
- Will be used in areas where the pipe is too far underground to be installed from the surface

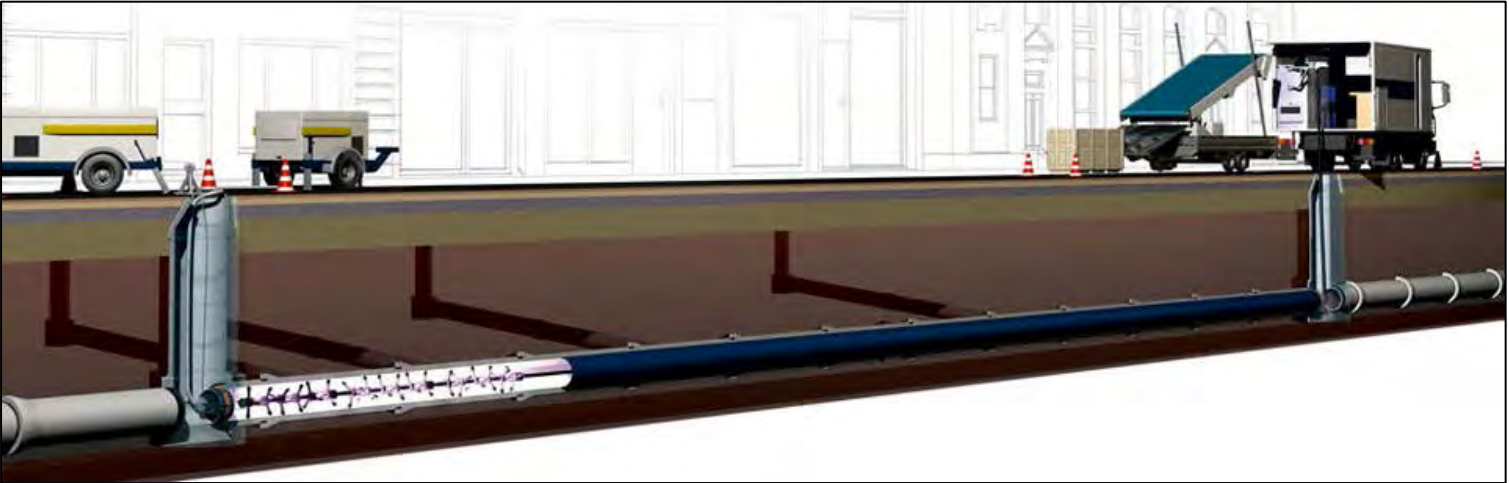




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Construction methods: *Pipe rehabilitation*

- A section of the existing North Mercer Island/Enatai Sewer pipeline must be rehabilitated and remain in service to receive flows from 25 homes and two City of Bellevue sewer lines
- Some of this work will be conducted from the water





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Pump station improvements: *North Mercer Island Pump Station*

- Existing station built in 1970
- Upgrades needed to increase reliability
- Equipment will be reused when possible
- An additional building will be added to house a generator and electrical equipment





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Pump station improvements: *Lift Station 11*

- Upgrades are also being planned at Lift Station 11, a City of Mercer Island facility used to direct flows from City pipes to the County's regional wastewater system

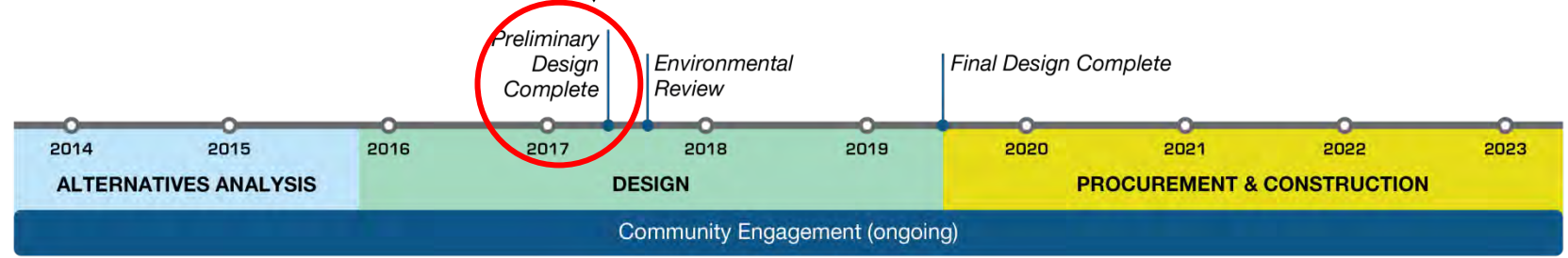




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Next steps:

Preliminary Design – mid-2017



- Initial design drawings
- Confirm property easement needs
- Refine construction methods
- Begin identifying construction sequencing (when we will build what)



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Next steps:

Environmental Review – fall 2017



- Identify environmental impacts
- Conduct environmental review under State Environmental Policy Act (SEPA)
- Opportunity for public input



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Our commitment to you

- Outreach and coordination with individual property owners
- Community group briefings
- Street walk and talks
- Gather community input where we can





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Questions and comments

For more information:

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- 206-477-5415