

Lake Washington Wastewater Lake Line Management Plan

Angela Chung, City of Bellevue Project Manager



XXX XX, 2024

Agenda

- Introductions
- Project overview and history
- Service area prioritization and alternatives evaluation
- Incorporating community feedback
- Final recommendations
- Next steps



Project overview and history



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Lake Washington Lake Line system

- Bellevue Utilities manages 14.6 miles of lake lines, including 23 pump stations, serving more than 1,000 properties in Bellevue and neighboring communities
- Carries wastewater from homes and properties along the shoreline of Lake Washington to King County Regional sewage system and treatment



Management plan



- Bellevue Utilities developed a management plan for the future maintenance and replacement of the lake line
- A Programmatic Environmental Impact Statement (EIS) was completed concurrently with the management plan development
- Both the management plan and the EIS were completed in 2024



Why is a management plan important?

- Minimizes the risk of failure
- Equips Bellevue Utilities to provide reliable service
- Identifies potential improvement projects or strategies

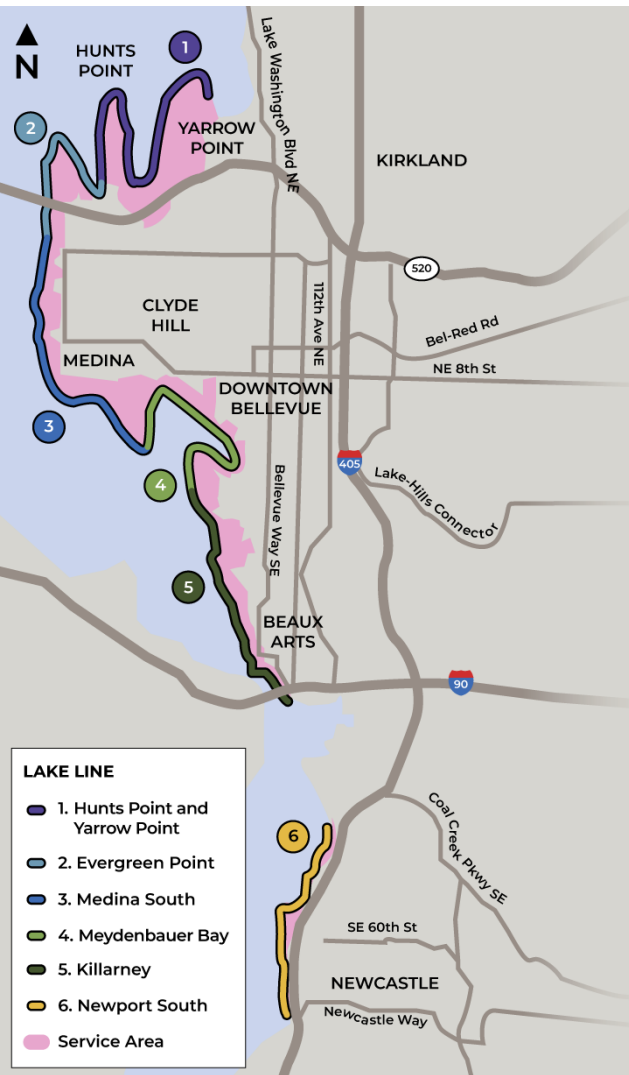


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Prioritization of service areas



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Six service areas

- Hunts Point and Yarrow Point
- Evergreen Point
- Medina South
- Meydenbauer Bay
- Killarney
- Newport South



Service Area Prioritization

- Determine which service area is the highest risk
- Incorporates City's Risk and Resiliency framework
- Workshop with staff to determine:
 - Likelihood of Failure (LoF)
 - Consequence of Failure (CoF) assessment
- Risk Exposure = LoF + CoF

LoF Factors (70%)
Lake Line EUL
Pipe Material
Couponing (Wall Loss)
Pump & Flush Station Condition
Outside Influences
Overflow History

CoF Factors (30%)
Environmental Impact
Land Use
Number of Customers
Flow
Lake Line Location
Operational Access



Prioritization process



Service area plan implementation period

Area	Priority
Meydenbauer Bay	Near-term
Newport South	Mid-term
Hunts Point and Yarrow Point	Mid-term
Killarney	Mid-term
Evergreen Point	Mid-term
Medina South	Long-term



Alternatives



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Programmatic EIS and Management Plan alternatives

No action

In water

On shore

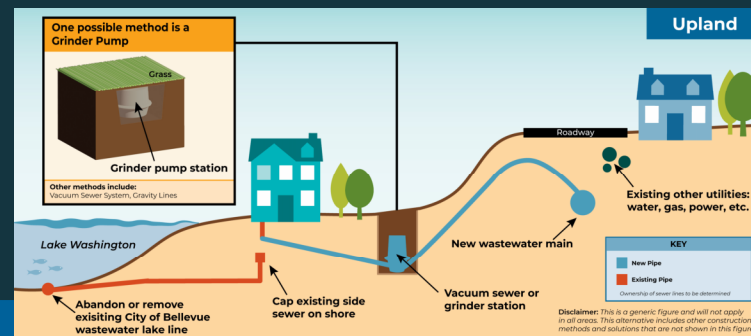
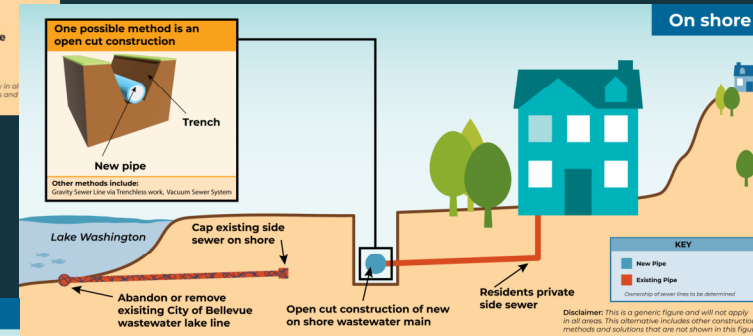
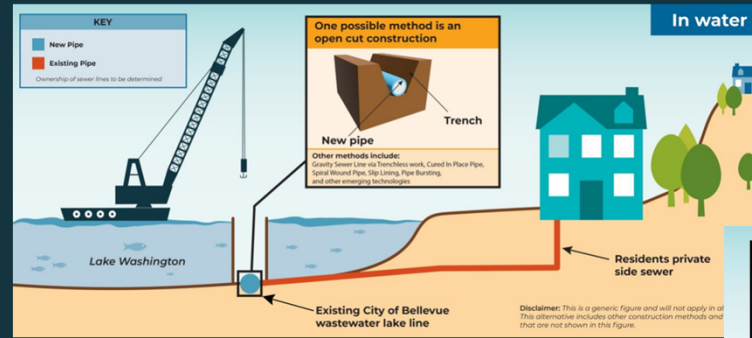
Upland





System Alternatives

- Programmatic EIS
- System Alternatives:
 - No Action
 - In Water
 - On Shore
 - Upland
- Selected using 7 weighted criteria

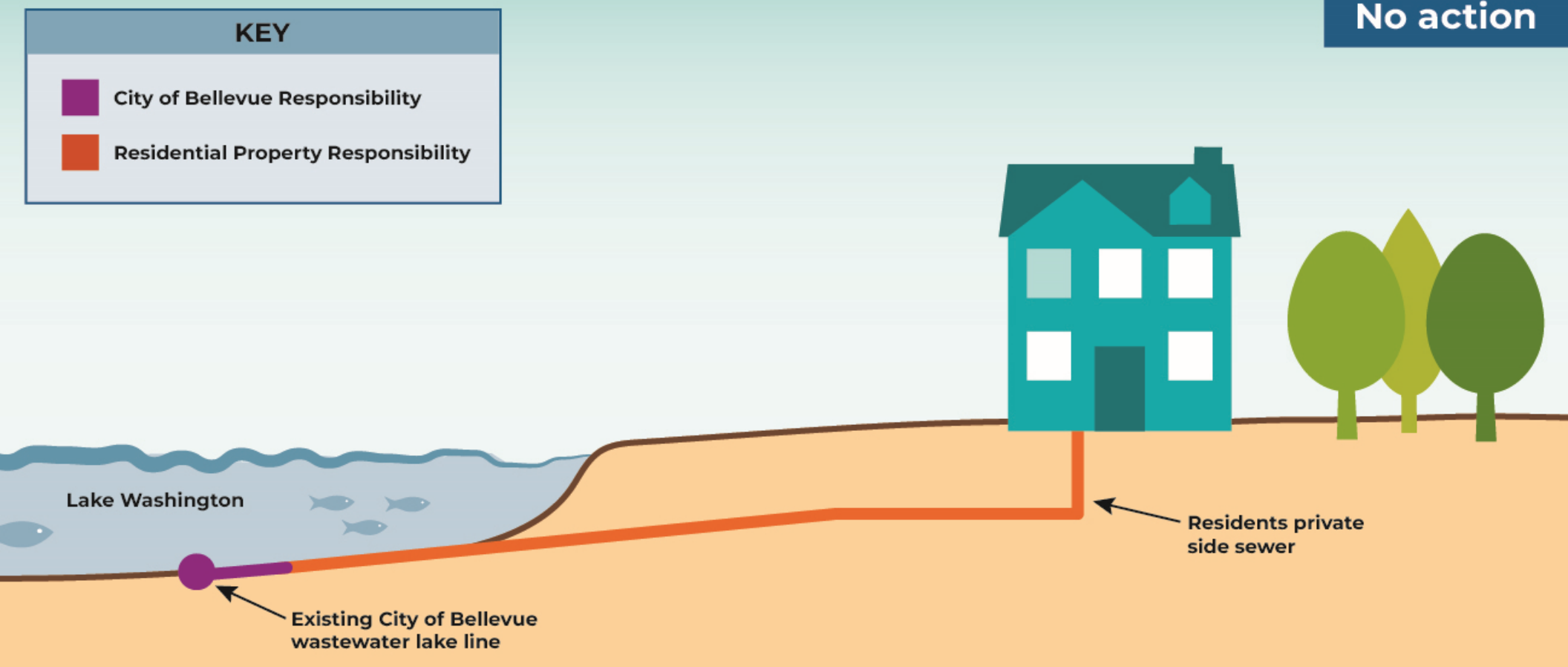


Alternative – no action

No action

KEY

- City of Bellevue Responsibility
- Residential Property Responsibility





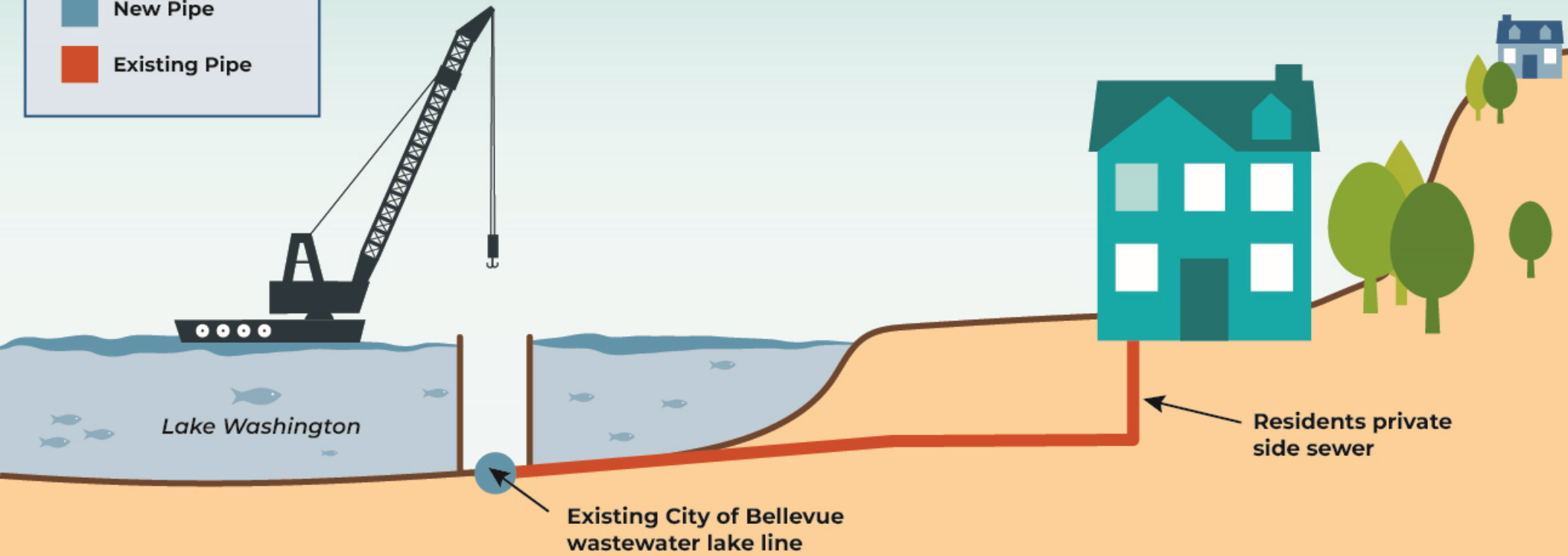
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Alternative – in water

In water

KEY

-  New Pipe
-  Existing Pipe





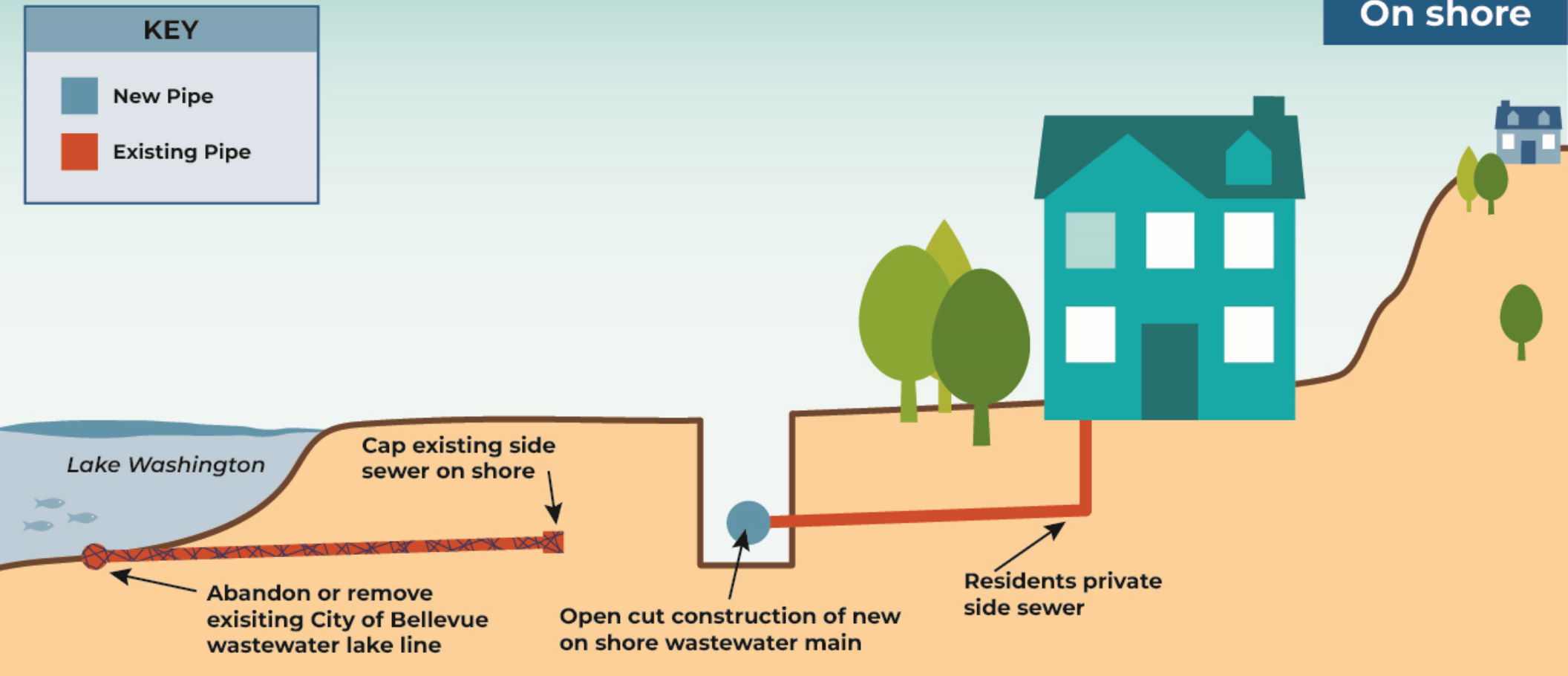
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Alternative – on shore

On shore

KEY

-  New Pipe
-  Existing Pipe



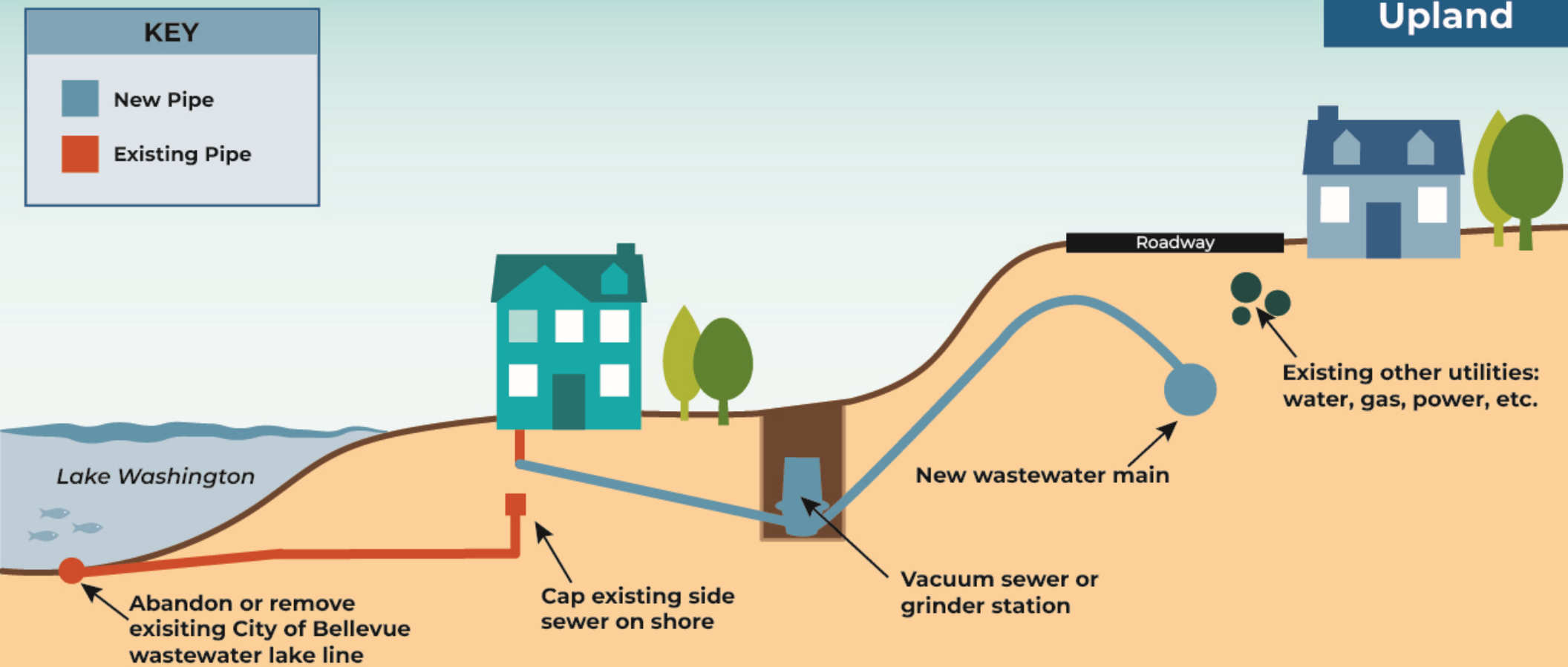
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Alternative - upland

Upland

KEY

- New Pipe
- Existing Pipe



Evaluation factors for alternatives



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Evaluation Factors for Alternatives



17% each



12% each



8% each



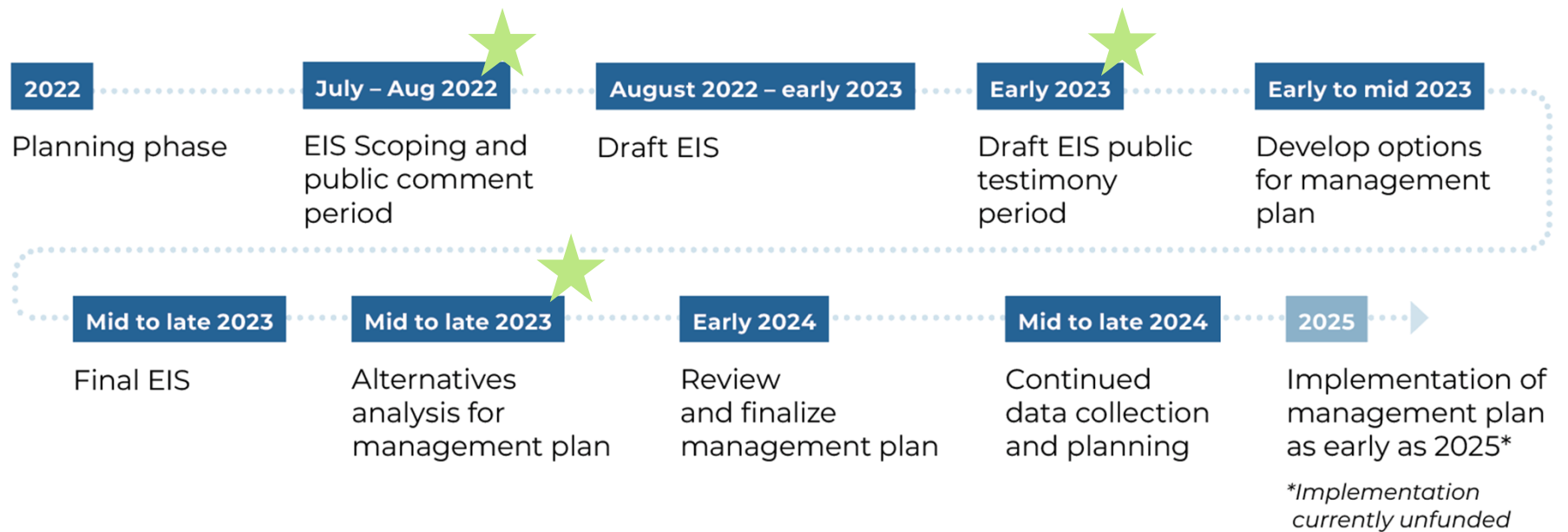
April 11, 2024

Incorporating community feedback



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Timeline



 Public input period



Opportunities for sharing input

- Pop-up events at parks and the Bellevue Farmers Market
- City Council and other community briefings
- Through surveys on our website
- Through an email or call to our project staff



LAKE WASHINGTON WASTEWATER LAKE LINE MANAGEMENT PLAN AND EIS

You're invited!

Join the EIS team for a virtual public meeting to learn more about the plan and the EIS process, comment and ask questions about the EIS!

- Tuesday, July 26, 6-7 p.m.
- Visit our online open house through August 5 at: engagingbellevue.com/lake-washington-line



Bellevue Utilities is developing a management plan for the repair, replacement and maintenance of the Lake Washington sewer lake lines, which include 14.6 miles of pipes along the lake's shore. The plan will help ensure the city can continue to provide safe and reliable wastewater service to the community and help us protect public health and the delicate Lake Washington ecosystem.

To understand the potential impacts of this plan on the environment, Bellevue Utilities will produce an environmental impact statement (EIS). The EIS team is currently determining the most important factors to study and wants your input.



您被邀請!

貝佛維爾市 (The City of Bellevue) 正在為湖濱線 Lake Washington 的污水管線管理計畫，擬定湖濱線管理計畫草案。歡迎您參加公眾諮詢活動，提出意見或詢問有關計畫的問題。如有任何問題，請洽：

Clayton Isaac
isaac@bellevuewa.gov,
[206.462.1100](tel:2064621100)

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Администрация города Бельево (Bellevue) приглашает вас принять участие в публичных слушаниях по проекту управления ливневых канализационных труб вдоль берега озера Вашингтон (Lake Washington). Мы хотим услышать от вас свои мысли, предложения и вопросы по проекту. Если у вас есть вопросы, свяжитесь с нами по телефону или электронной почте.

Clayton Isaac
isaac@bellevuewa.gov,
[206.462.1100](tel:2064621100)

La ciudad de Bellevue está invitando a un plan de gestión de alcantarillado del lago Washington. Le invitamos a participar en las audiencias públicas para compartir sus ideas, sugerencias y preguntas sobre el proyecto. Si necesita más información, comuníquese con Clayton Isaac.

Clayton Isaac
isaac@bellevuewa.gov,
[206.462.1100](tel:2064621100)

Other ways to get involved

If you can't join us at the meeting, you can still stay updated on latest information at bellevuewa.gov/lake-washington-line

Questions?

For more information about the EIS, email LakeLineEIS@bellevuewa.gov

For alternate formats, interpreters or reasonable accommodations, please contact Clayton Isaac at isaac@bellevuewa.gov or 425-452-4448 at least 48 hours in advance. For complaints regarding accommodations, please contact the city's ADA/TITLE VI administrator at ada@bellevuewa.gov or 425-452-4161.

Information 資訊

If you are deaf or hard of hearing, dial 711. All meetings are wheelchair accessible.

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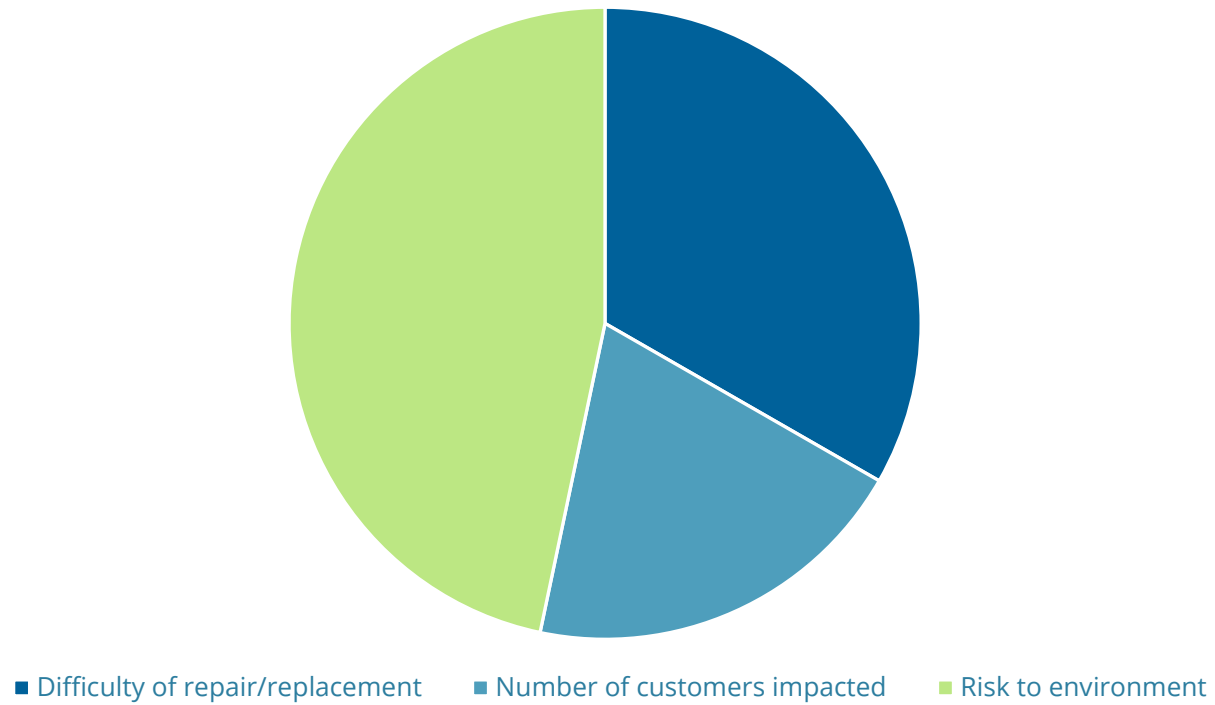
What we asked about

- In which service area respondents live
- Priorities for analyzing consequences of failure for each service area
- Priorities for the evaluation criteria for each alternative
- What we should know about each service area
- How best to reach out to folks moving forward



What we heard

Most important consequences of failure



What we heard



Most important factors:

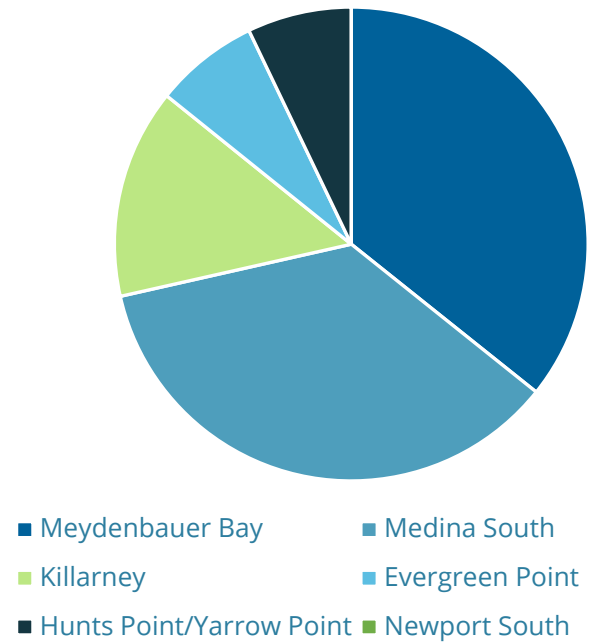
- Impact to land use and property easements
- Environmental impacts
- Feasibility of long-term maintenance

What we heard

Best way to stay informed



Where they live, work, or play



What we heard

Other feedback included:

- Maintain water quality and protect native habitat
- Implement a long-term, sustainable solution
- Project costs are a concern, but consistent prioritizing people over cost



How community input was used

Topic	How we used it
Specifics about each service area	Management plan development and saved for future planning use
Priorities for consequences of failure	Compared to our analysis and assessed different scenarios if community priorities were different than our baseline
Priorities for evaluation criteria	Compared to our analysis and factored into high-level alternative evaluation, and saved for future planning use
How to reach folks	Will be used to prioritize outreach methods during project implementation and saved for future planning use



Plan recommendations

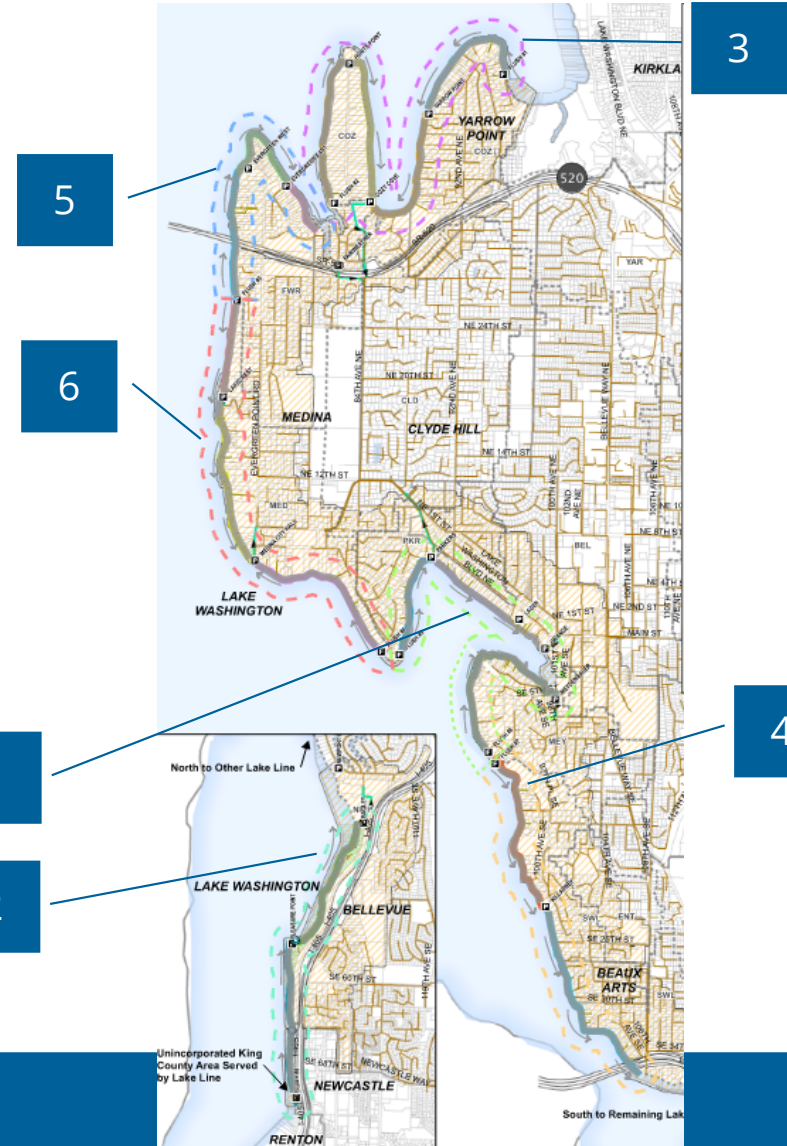


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Service Area Plans

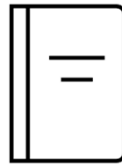
Priority	Service Area	Preferred Alternative	Implementation Period
1	Meydenbauer Bay	Upland	Near-term
2	Newport South	Upland	Medium-term
3	Hunts Point & Yarrow Point	On-shore	
4	Killarney	Upland	
5	Evergreen Point	On-shore	
6	Medina South	Upland	Long-term

The preferred alternatives may be change as data and stakeholder feedback is collected during pre-design. Focused improvements for high-risk assets will occur sooner than service area as a whole





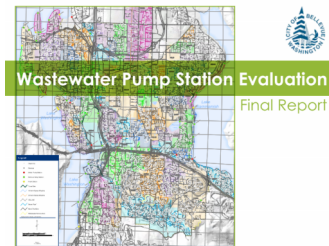
Service Area Plans



Preferred System Alternative

- In-water
- On-shore
- Upland

Pump & Flush Station Improvements



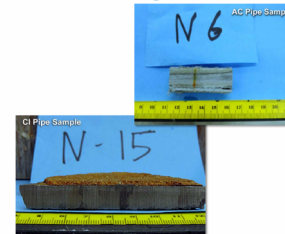
May 2015



Emergency Repair Fund



Sewer Lake Line Condition Assessment,
Phase 2—Lake Washington



TETRA TECH

December 2016

Other System Improvements

- Coupon collection
- Cleaning & CCTV



June 27, 2024

Typical Service Area Implementation



Chapter 7 –
Implementation
Plan



June 27, 2024



Next steps (Ongoing)



- Publish the management plan, submit the EIS, and add both to the project website



- Notify the community of the plan completion and preferred alternatives



- Continue planning before implementing the management plan
 - Evaluate financial and policy implications
 - Continue data collection and evaluation by service area
 - Develop an emergency plan

Questions?

For questions, or to learn more about the Management Plan:

- Visit bellevuewa.gov/lake-washington-line
- Contact the Lake Line, Project Manager, at LkWaLakeLine@bellevuewa.gov

Thank you!



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