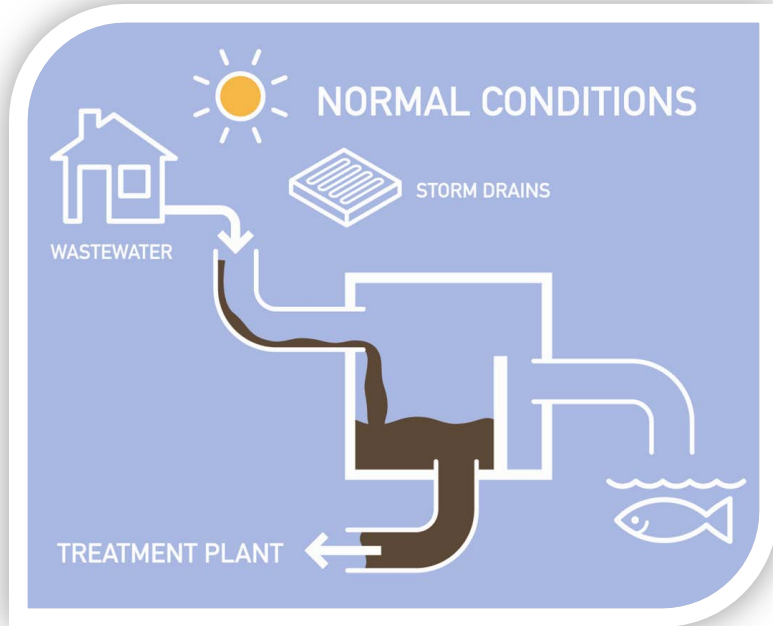


Genesee Area Combined Sewer Overflow Reduction Project

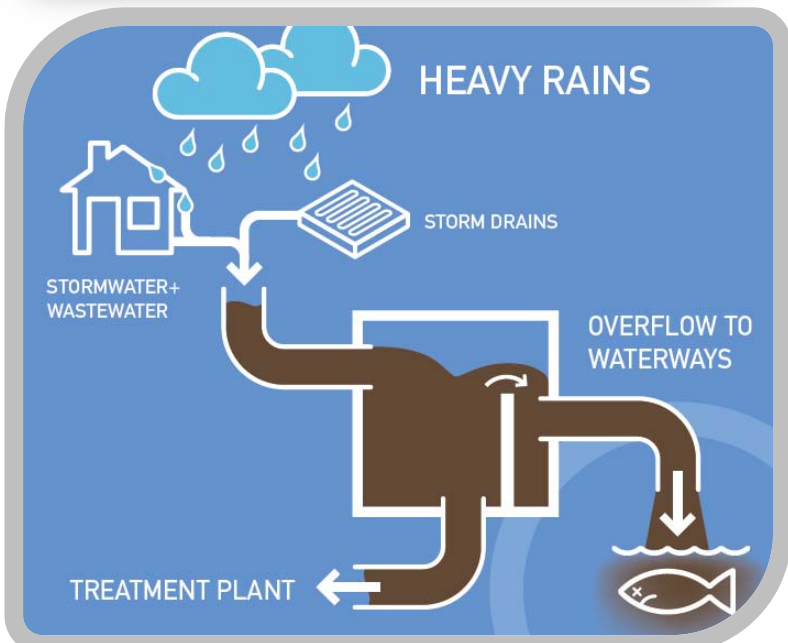


**Cleaner waterways for a
healthy Seattle**

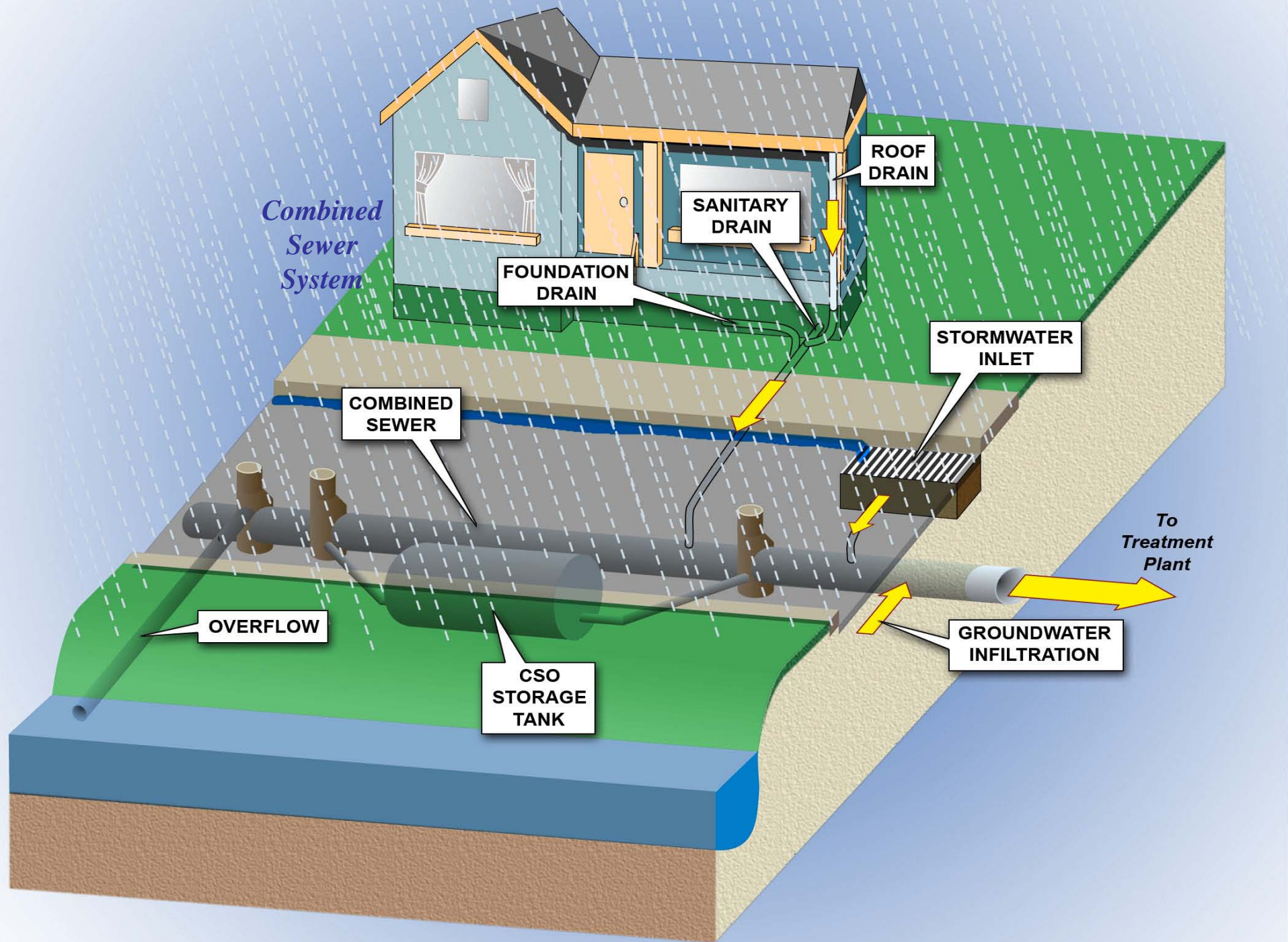
What is a Combined Sewer Overflow?



💧 *Wastewater* (from homes) and *stormwater* (from rooftops, streets) flow in a single pipe - a “combined sewer.”



💧 During heavy rains, stormwater (~90%) and sewage (~10%) exceed the system, causing a combined sewer overflow (CSO) into nearest waterway.



Combined Sewer Overflows (CSOs)

- 90 permitted CSO outfalls
- 100 million gallons CSO discharge annually
- About 200 CSO discharge events annually



CSO Reduction Program Goals

- 💧 Finish historic effort
- 💧 Improve water quality
- 💧 Comply with Clean Water Act, state/federal regulations
- 💧 Minimize rate impacts
- 💧 Partner for cost-effective solutions



CSO Reduction Solutions



Retrofits

Optimize
and repair
existing
system.



Green

Increase holding
capacity of soil
and slow the
flow.

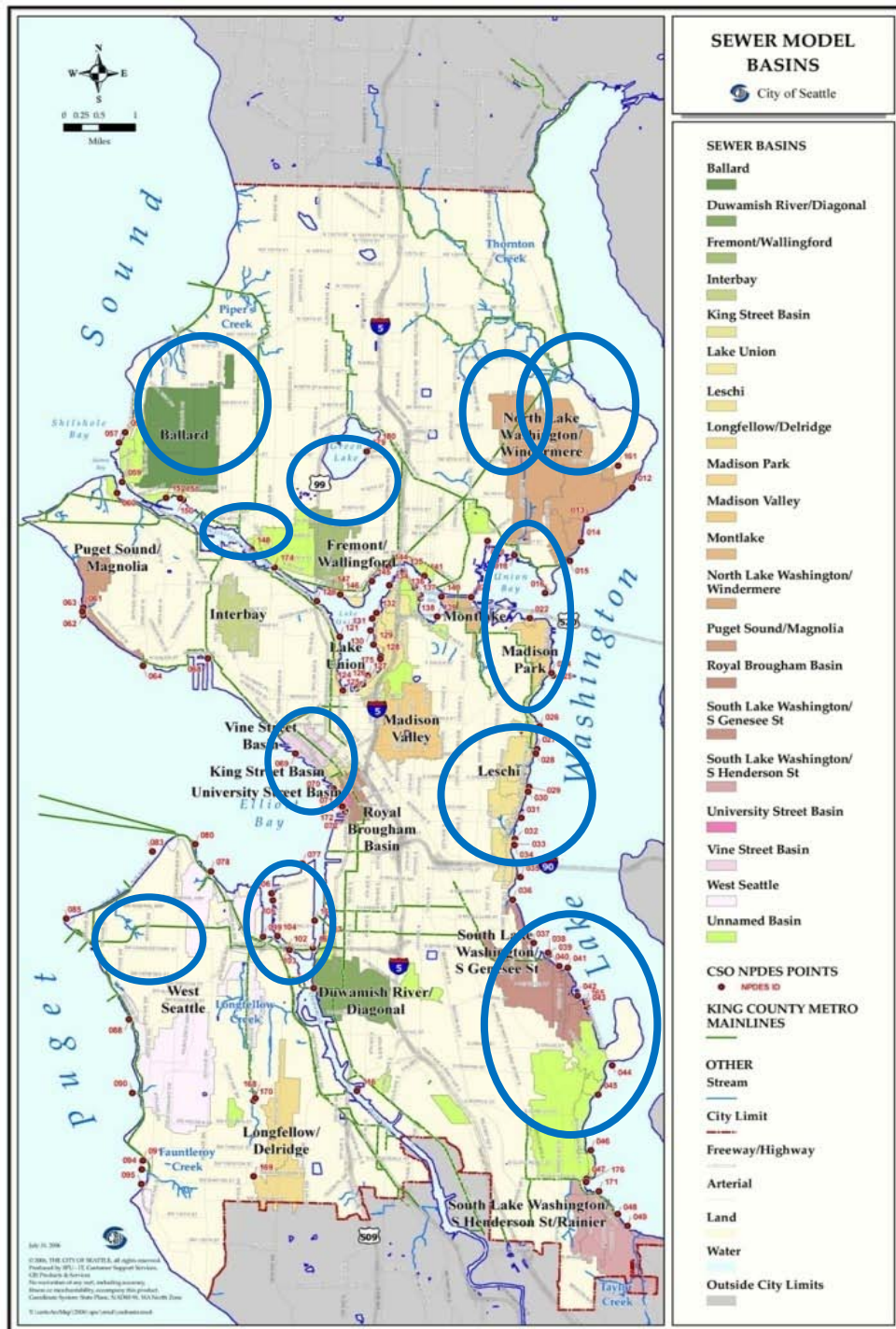


Storage

Increase
capacity of
underground
pipes and
tanks.

Focus on Next 5 Years

- 💧 Improve existing system - retrofits
- 💧 Construct CSO control projects
 - 💧 Windermere, Genesee, and Henderson basins
- 💧 Pilot green infrastructure projects
- 💧 Complete Long-Term Control Plan





Green Stormwater Infrastructure (GSI)



- 💧 National leader in GSI
- 💧 Allows stormwater to slowly filter into ground, keeping it out of sewer system
- 💧 Incentives for property owners to install rain gardens & cisterns

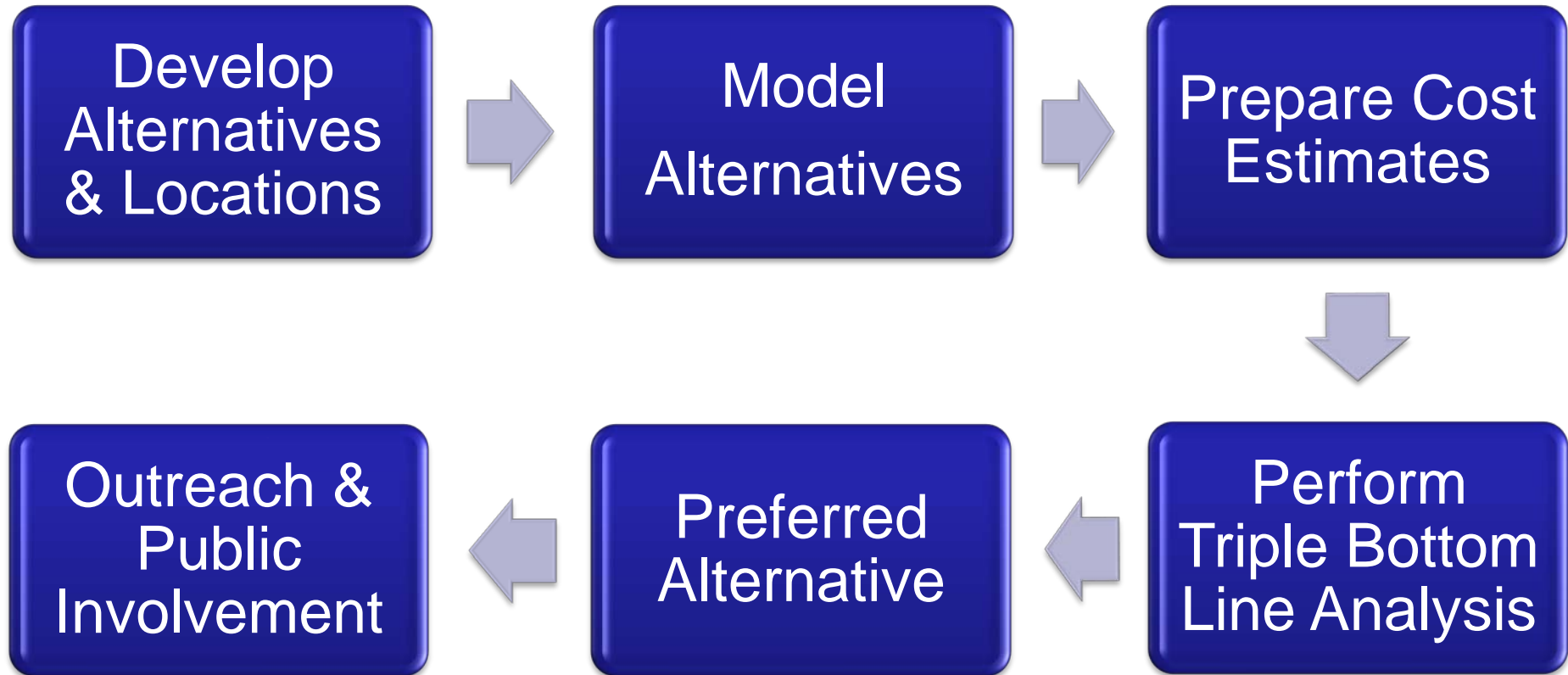
www.rainwise.seattle.gov

Genesee CSO Reduction Project

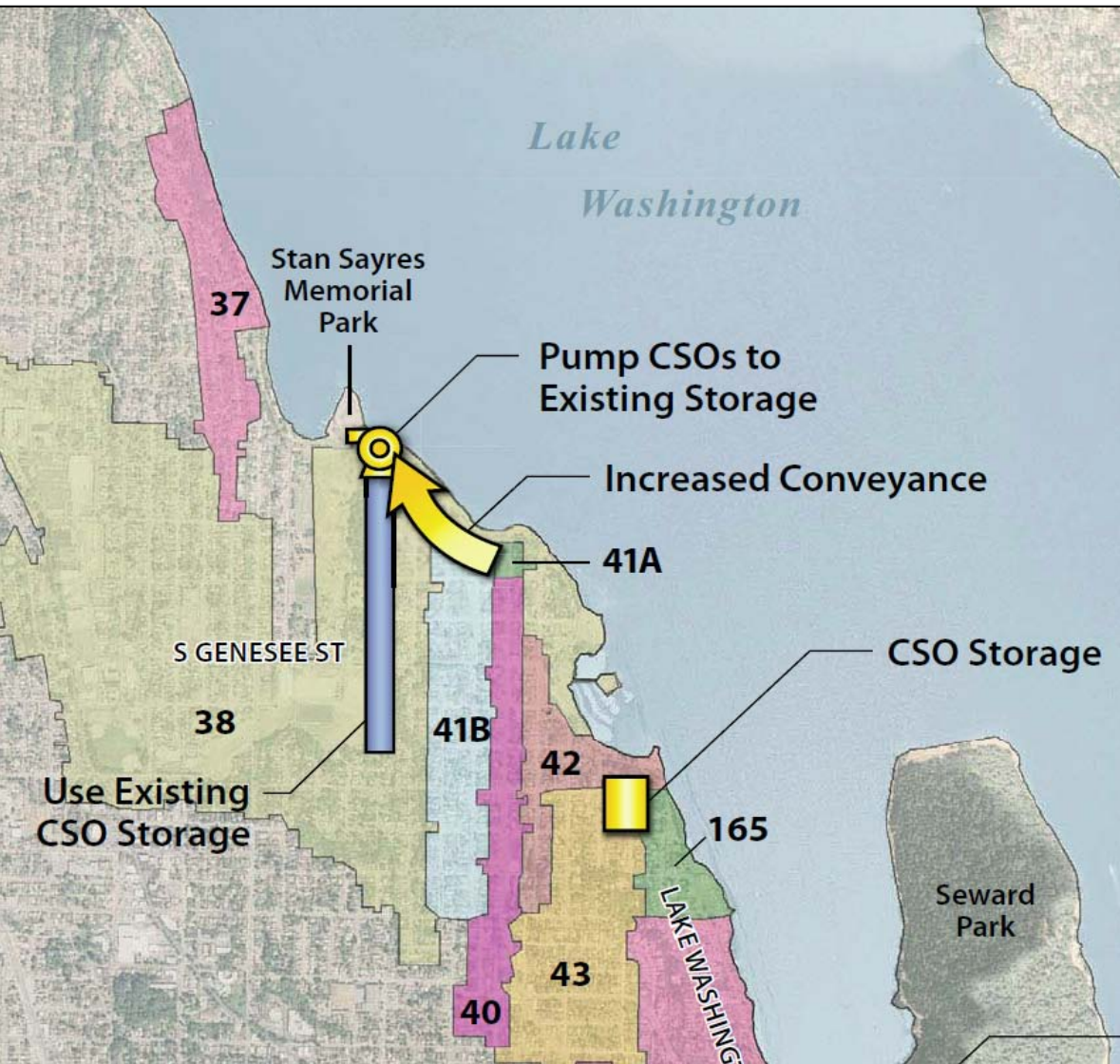


- 💧 Top Priority Basin
- 💧 700 Acres
- 💧 Construction 2013-2015
- 💧 Reduces CSOs from 10 times to 1 time per year
- 💧 Storage Volumes:
 - 💧 Basins 40/41: 430,000 gal
 - 💧 Basin 43: 190,000 gal

Genesee CSO Reduction Screening Process



Genesee Basin Alternative #1: Pipe, Pump and Store



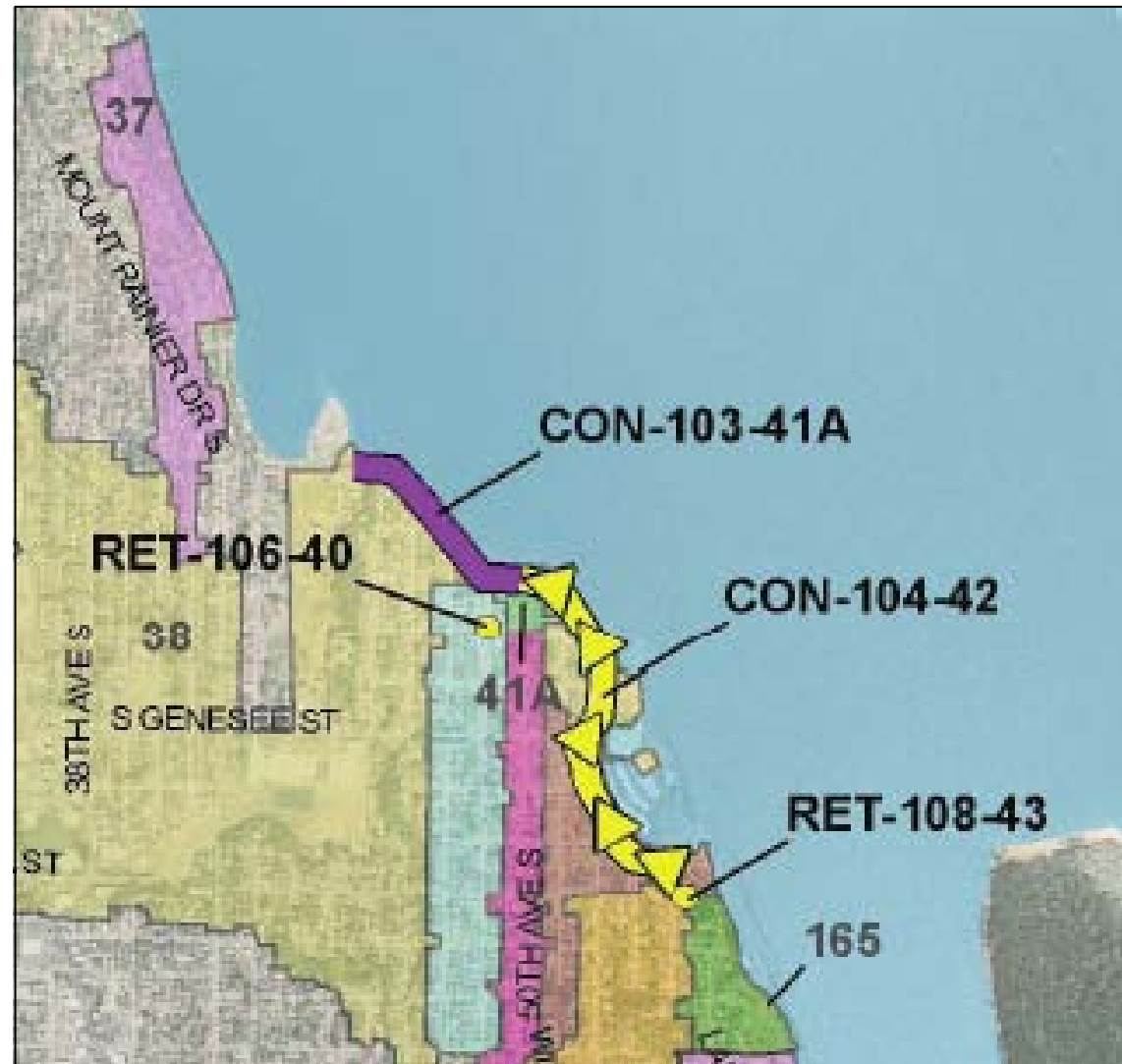
Includes:

- Pipeline under Lake Washington Blvd
- New pump station near Stan Sayres Park
- Enlarging existing storage facility on S. Alaska St.

Genesee Basin Alternative #2: Storage Under Street

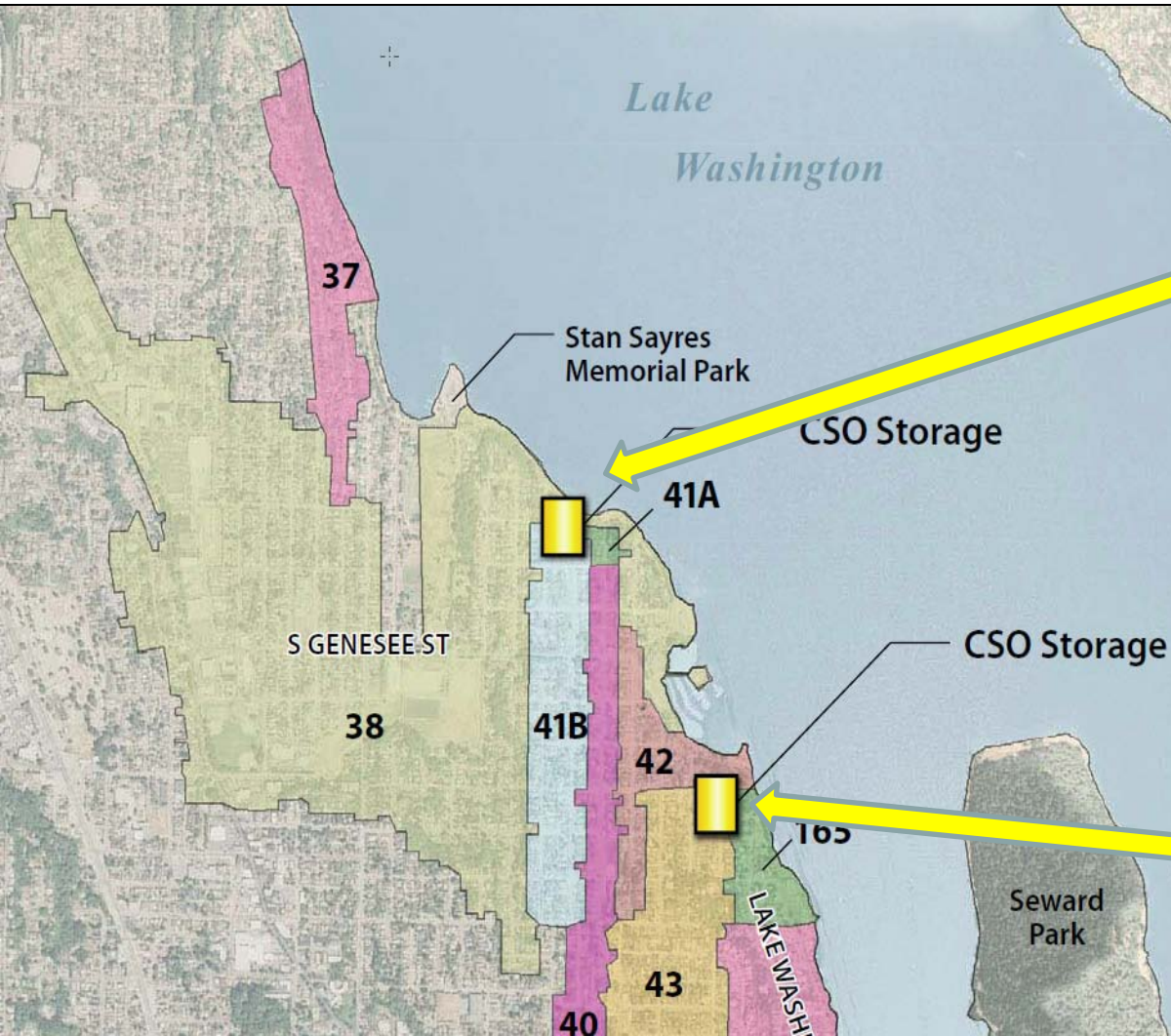
Includes:

- Storage in-line with pipeline under Lake Washington Blvd
- Project would require 15-foot-wide excavation down middle of street



Genesee Basin Alternative #3: Distributed Storage (Preferred)

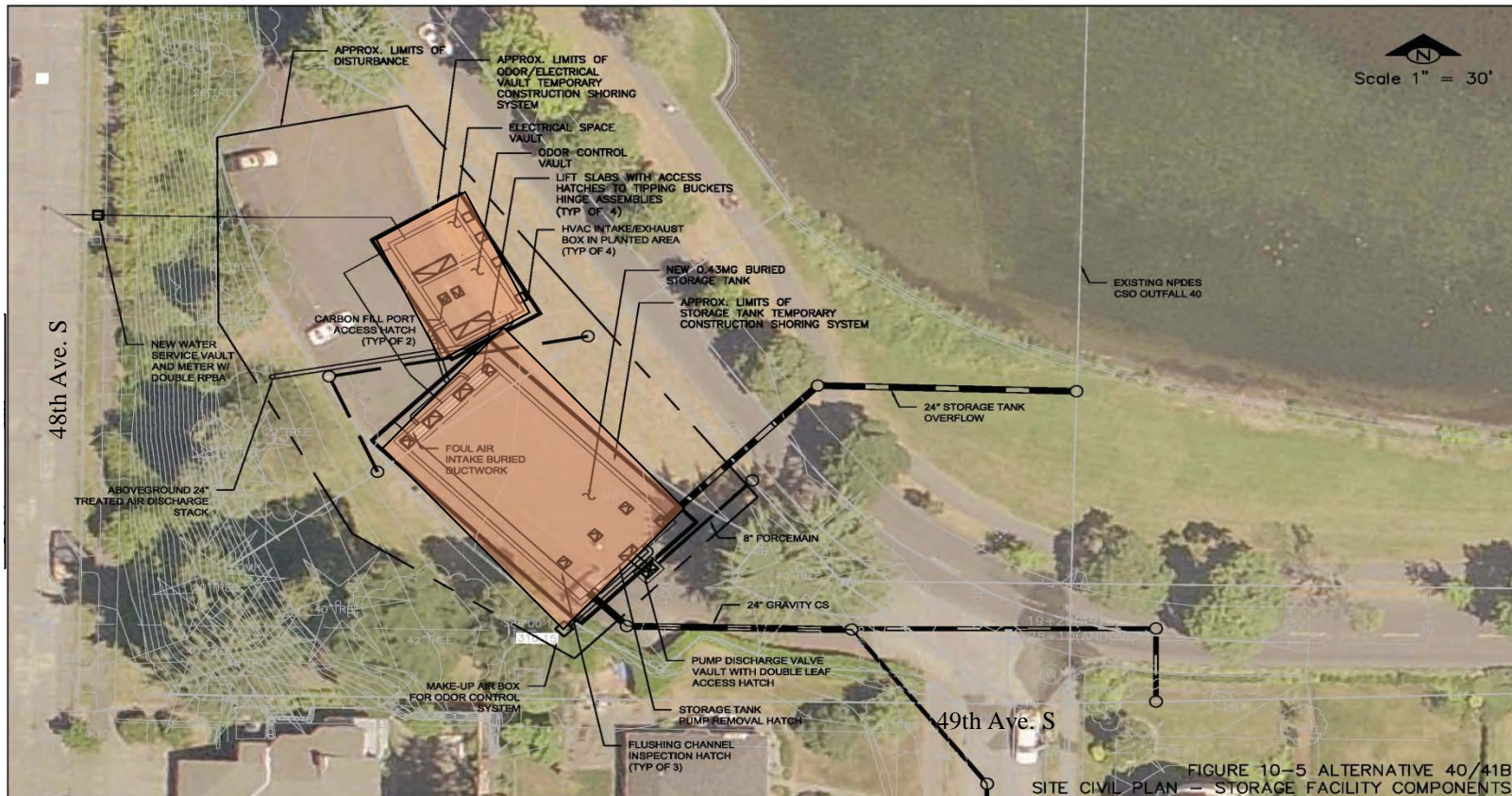
a) Storage in Triangle Parking



b) Storage along S. Alaska St



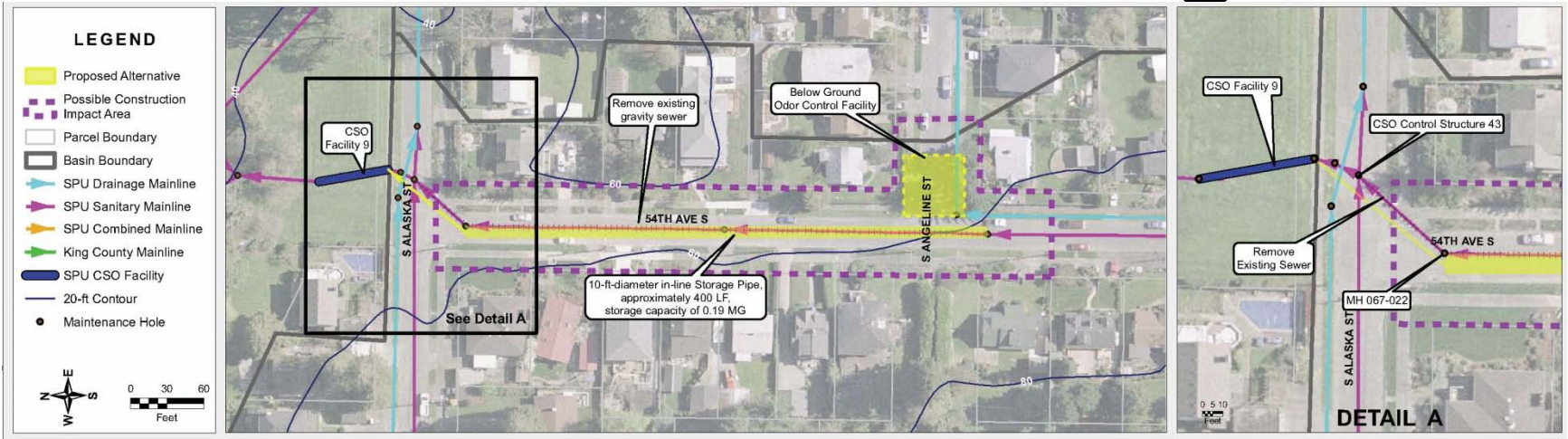
Genesee Basin Alternative #3a: Distributed Storage (Preferred)



Storage in Triangle Parking Lot

Capacity: Approx. 430,000 gallons

Genesee Basin Alternative for #3b: In-line Storage

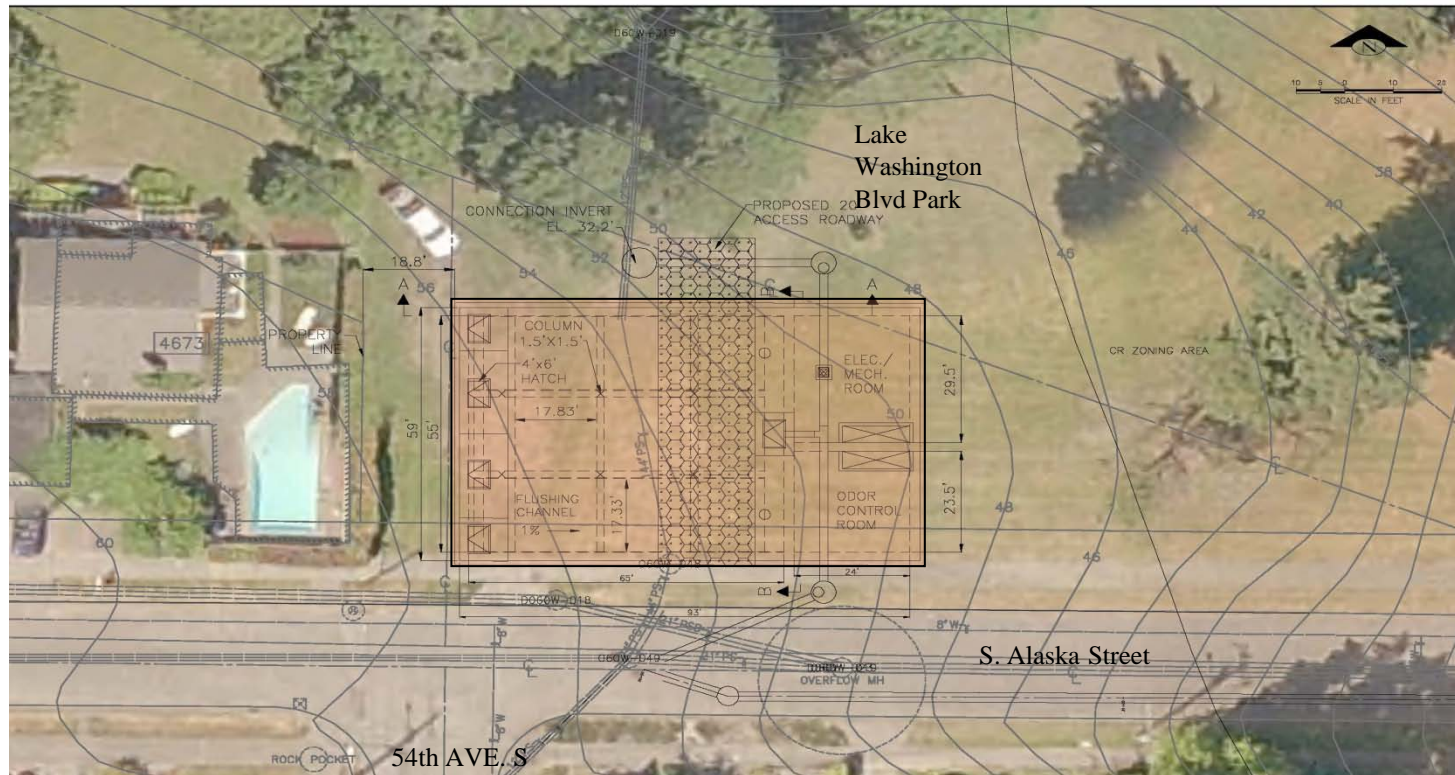


Looking south down 54th Ave S
from S. Alaska Street

Add in line storage and odor control in 54th Ave.

- Costly to construct
- Space constraints
- Street closed during construction/
significant impacts to residents

Genesee Basin Alternative #3b: Distributed Storage (Preferred)



Expand existing storage in Park near S. Alaska St.
Capacity: Approx. 250,000 gallons

Common Concerns

- 💧 Traffic & Park Access
 - 💧 Workplace Expectations
 - 💧 Parking
 - 💧 Noise
 - 💧 Odors
 - 💧 Maintenance
 - 💧 Structural Integrity
 - 💧 Site Restoration
- 💧 Expectations around community events:
 - 💧 Seafair
 - 💧 Furry 5K
 - 💧 Bicycle Sundays
 - 💧 Live Strong Challenge
 - 💧 Danskin Triathlon
- Others?

Traffic Requirements

- 💧 Minimize lane closures & impact
- 💧 Maximize # of traffic lanes open during peak hours
- 💧 Safe pedestrian & bicycle walkways
- 💧 Access for emergency vehicles
- 💧 Minimize construction impacts to traffic during peak hours



Noise During Construction

- 💧 City of Seattle noise requirements for construction.
- 💧 Sounds created by construction are limited to:
 - 7 a.m. to 7 p.m. weekdays
 - 9 a.m. to 7 p.m. weekends and legal holidays
 - *Exceptions granted under special conditions



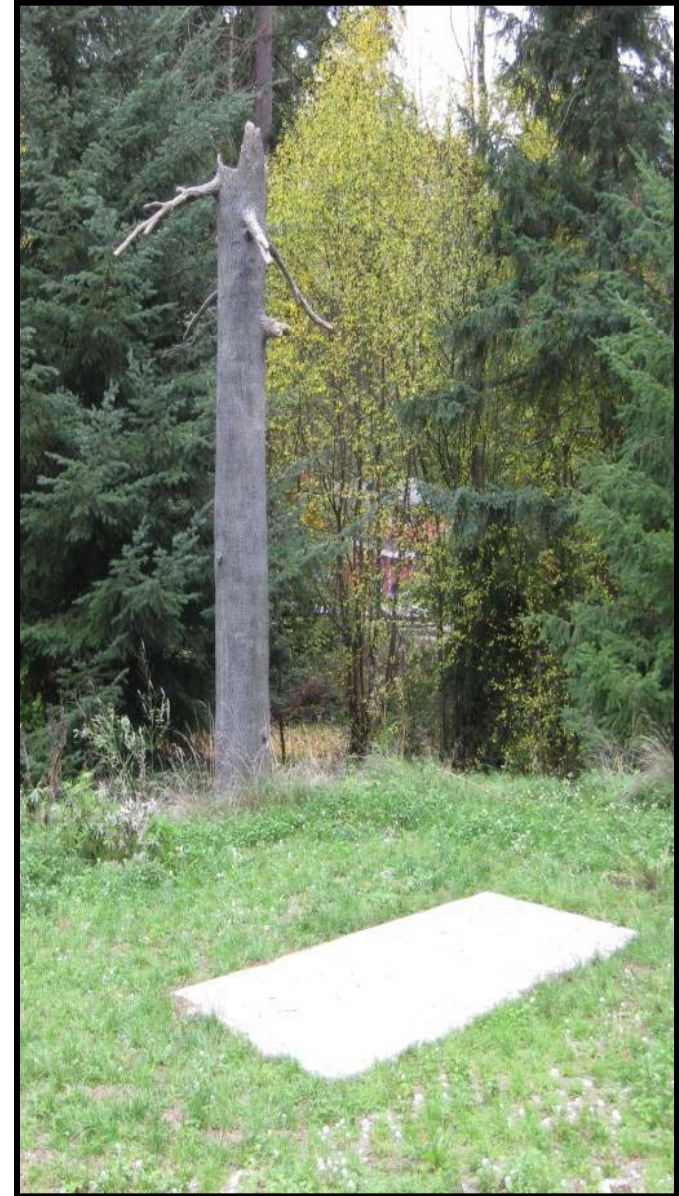
Workplace Expectations

- 💧 Respect for the community & neighbors
- 💧 Partner with the contractor for workplace expectations
- 💧 Public call line



Odor Control During Operation

- 💧 Buried odor control in vaults
- 💧 Odor system operates year round
- 💧 Carbon-based air scrubber
- 💧 Vent designed to blend with other site features



Maintenance Requirements

- 💧 Routine inspection (1 day/month)
- 💧 Event inspection (2-3 times/year)
- 💧 Regular equipment inspection – truck or van
- 💧 Cleaning (2-3 days every 1 to 5 years)
- 💧 Cleaning Equipment – vactor truck or crane



Structural Integrity

- 💧 Earthquake design standards
- 💧 Structural inspection after an earthquake
- 💧 Tanks will fill a few times per year on average



Project Progress

- 💧 Engineering Activities - ongoing
- 💧 Land surveying (*completed for Basin 40/41*)
- 💧 Preliminary geotechnical study (*completed*)
- 💧 Historical/cultural research (*completed*)
- 💧 Environmental review - underway
- 💧 Continued public outreach - ongoing

Preliminary Project Schedule

[illegible]

Project Outreach

Presentations and briefings to community:

- ✓ **June 7** - Mt. Baker Community Club
- ✓ **June 23** - Southeast District Council
- ✓ **August 21** - On-site Question & Answer sessions
- ✓ **August 26** - Genesee Park Neighbors Association

Upcoming Project Outreach

- ❖ **Sept. 14** – Lakewood/Seward Park Community Association
At Lakewood Seward Park Community Club
- ❖ **Sept. 21** – Public Meeting
6:30 – 8:30 p.m., Rainier Valley Cultural Center
- ❖ **Suggestions?**

Contact Information

SPU_GCSO@Seattle.gov

206-826-4767

www.seattle.gov/CSO

If you would like to be included on the project email list – sign up in back, or send an email to SPU_GCSO@Seattle.gov with "distribution list" in the subject line.