

King County Wastewater Treatment Division

Capital Projects Update

Presented to the
Regional Water Quality Committee

December 1, 2021



King County

Department of
Natural Resources and Parks

Wastewater Treatment Division

Approximately 200 Ongoing Capital Projects

Projects in today's presentation fall under two general categories:

- Providing control and treatment of combined sewer overflows
 - Georgetown Wet Weather Treatment Station
- Preparing for population increase by adding capacity to pipelines and pump stations
 - North Mercer/Enatai Interceptor Upgrade
 - Coal Creek Interceptor Upgrade

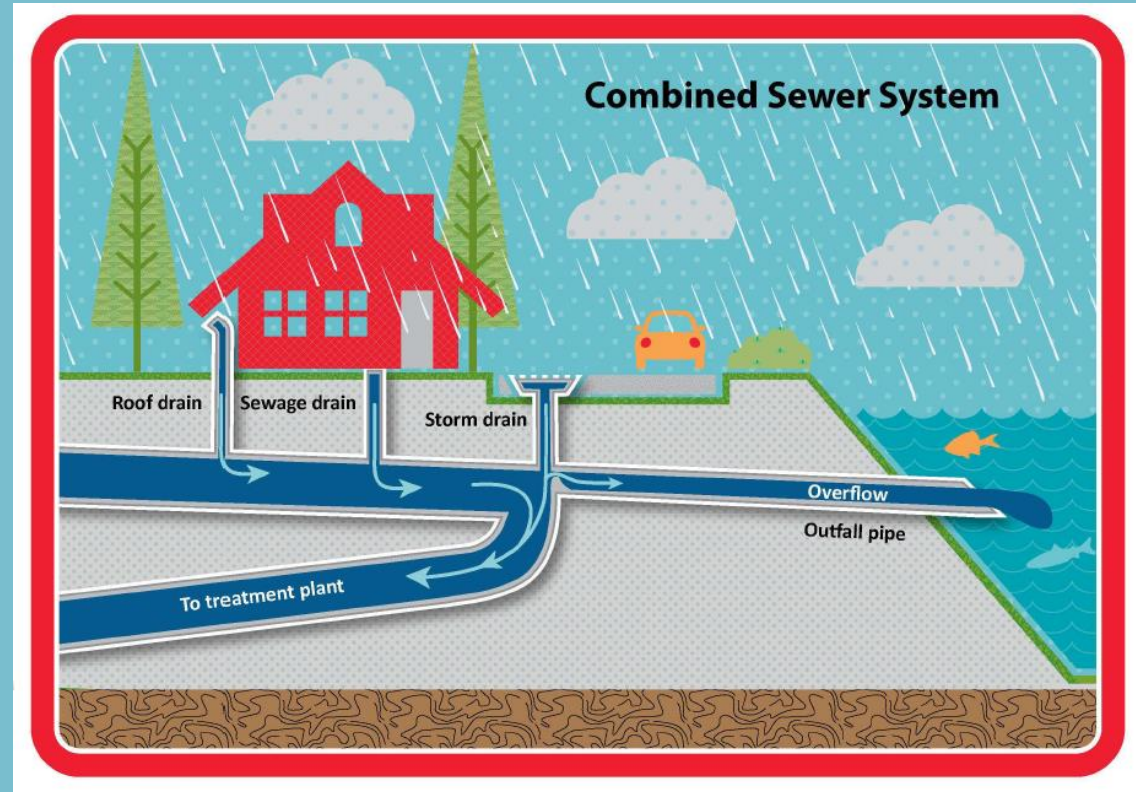


King County

Department of
Natural Resources and Parks
Wastewater Treatment Division

Project Overview - Georgetown Wet Weather Treatment Station

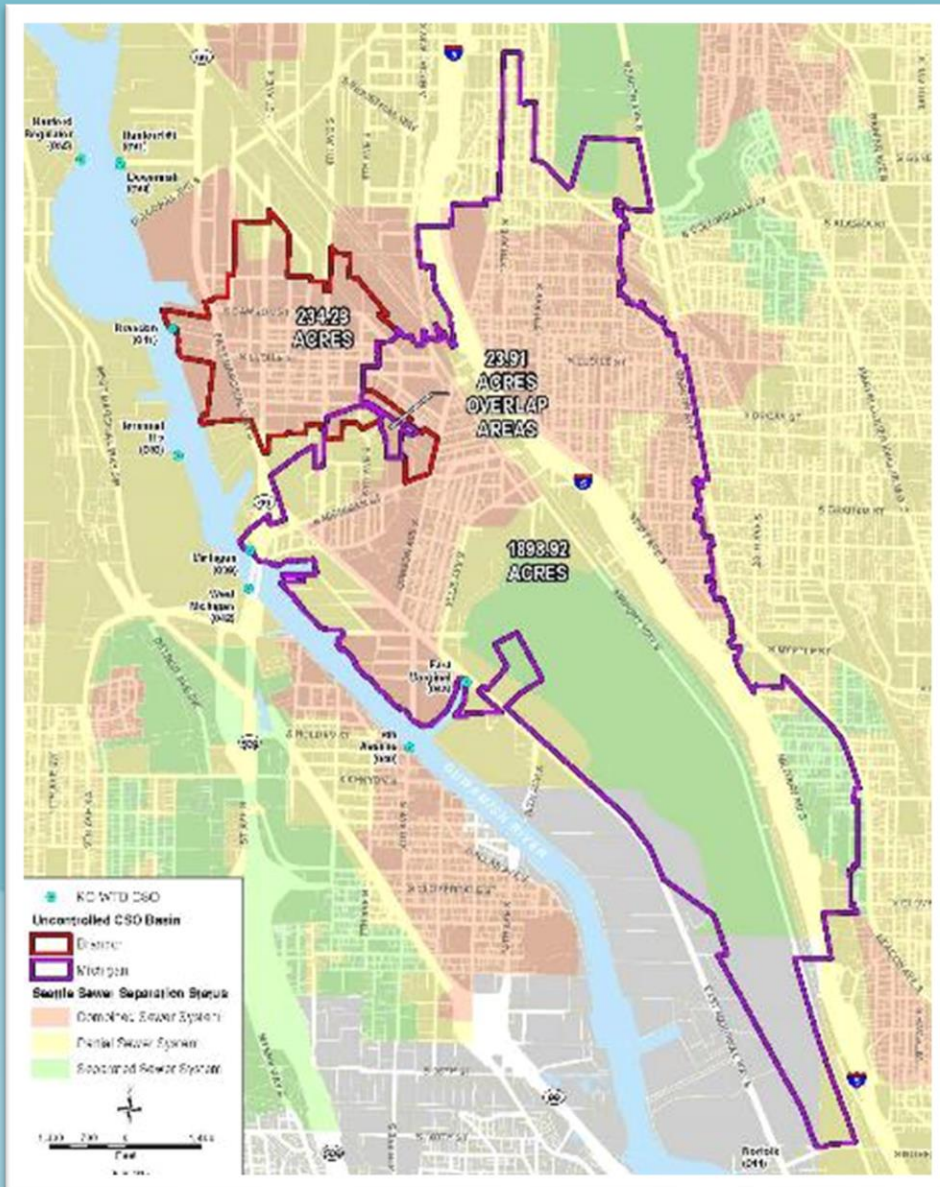
- Problem:
Combined sewer overflow (CSO) into the Duwamish River
- Solution: Treat CSOs before discharge to Duwamish River



King County

Department of
Natural Resources and Parks
Wastewater Treatment Division

Location - Drainage Basin



Brandon Street CSO
Basin - 234 acres

Michigan Street CSO
Basin - 1,899 acres



King County

Department of
Natural Resources and Parks
Wastewater Treatment Division

Station Layout



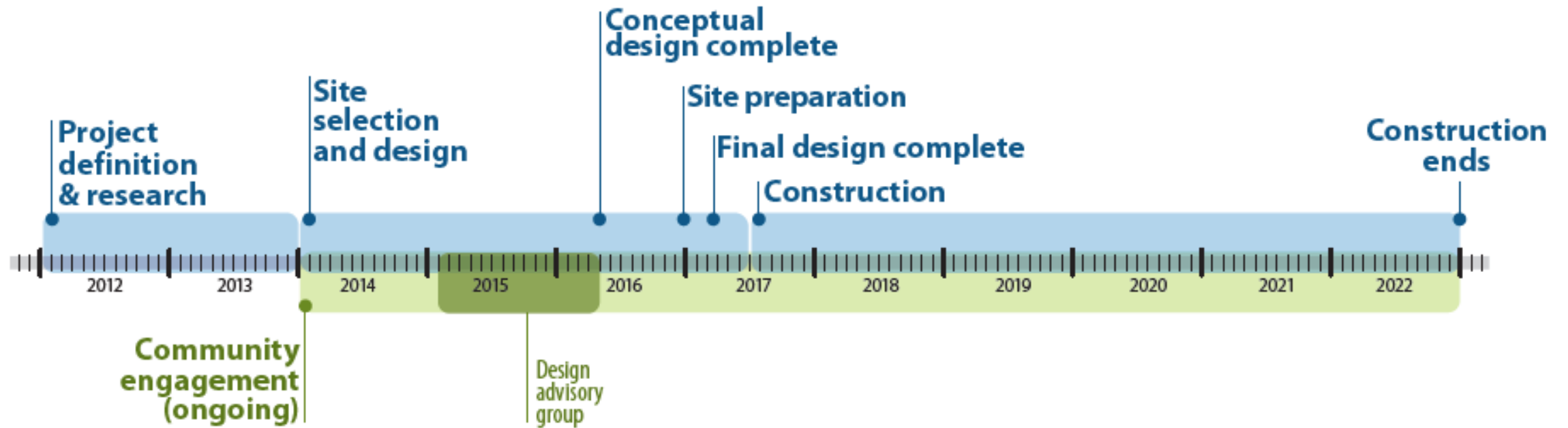
Facility will be able to treat up to 70 million gallons of combined rain and wastewater per day



King County

Department of
Natural Resources and Parks
Wastewater Treatment Division

Project Schedule



King County

Department of
Natural Resources and Parks
Wastewater Treatment Division

Upcoming Activities

- Construction nearly 90 percent complete
- Estimated Total Project Cost = \$275 million
- System testing begins in Q4 2021
- Team provides notifications through e-mail and project website regarding construction status and lane or sidewalk closures
- Substantial Completion of Construction before December 31, 2022



King County

Department of
Natural Resources and Parks
Wastewater Treatment Division

Georgetown Wet Weather Treatment Station



King County

Department of
Natural Resources and Parks
Wastewater Treatment Division

Georgetown Wet Weather Treatment Station



King County

Department of
Natural Resources and Parks
Wastewater Treatment Division

North Mercer/Enatai Interceptor Upgrade

Convey existing and future flows, improve operational flexibility and reliability.

Increase capacity from 9 million gallons per day (mgd) to 10.5 mgd by upgrading pumping equipment, replace force mains and gravity pipe, and rehabilitate existing pipe.

Schedule: Construction 2022-2025

Estimated Total Project Cost:\$150 million



King County

Department of
Natural Resources and Parks
Wastewater Treatment Division

North Mercer/Enatai Interceptor Upgrade



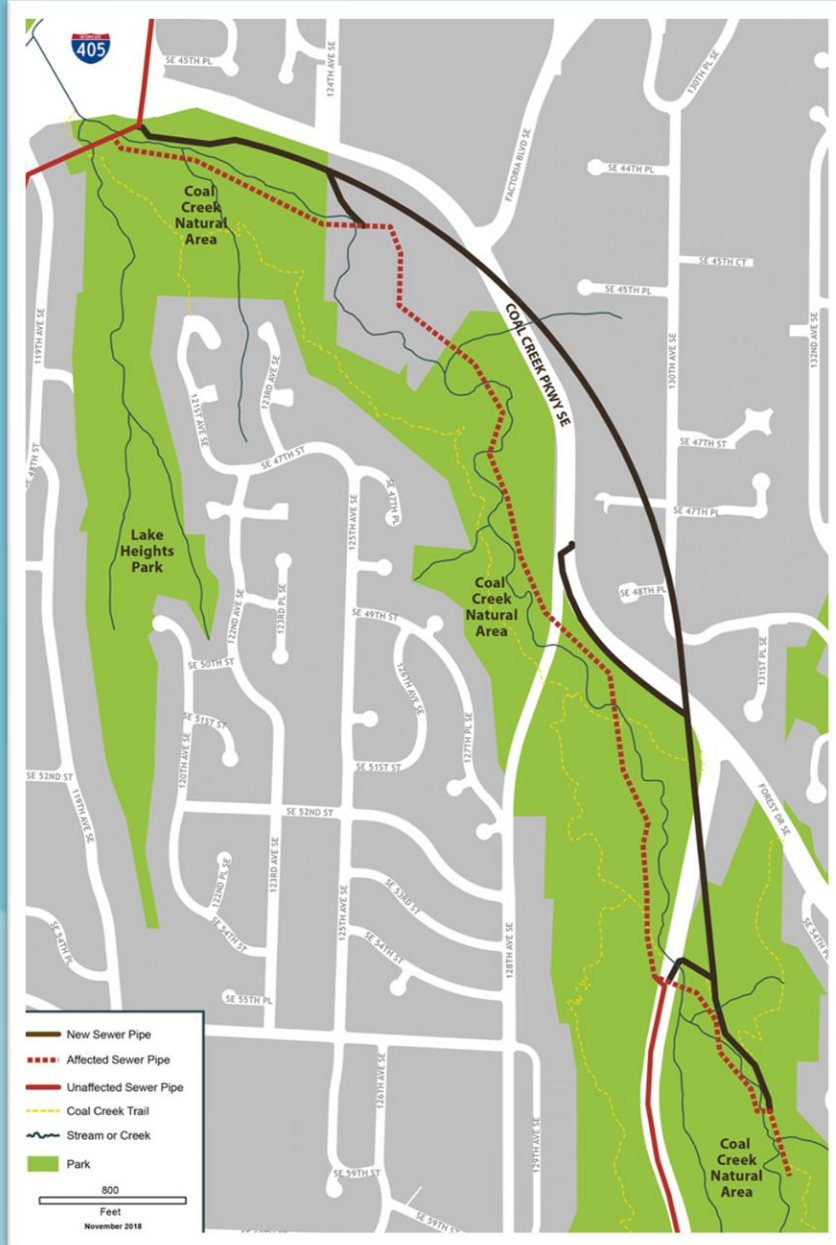
North Mercer/Enatai Interceptor Upgrade



King County

Department of
Natural Resources and Parks
Wastewater Treatment Division

Coal Creek Interceptor Upgrade



Increase conveyance capacity of the Coal Creek Interceptor from 7-10 mgd to 11-19 mgd (flow depends on location).

The downstream half of the trunk is 7,100 lineal feet, ranging in diameter from 15 to 21 inches. The upgraded sewer will provide capacity thru 2060.

Status: 90 percent design is almost complete.

Construction to begin in 2023.

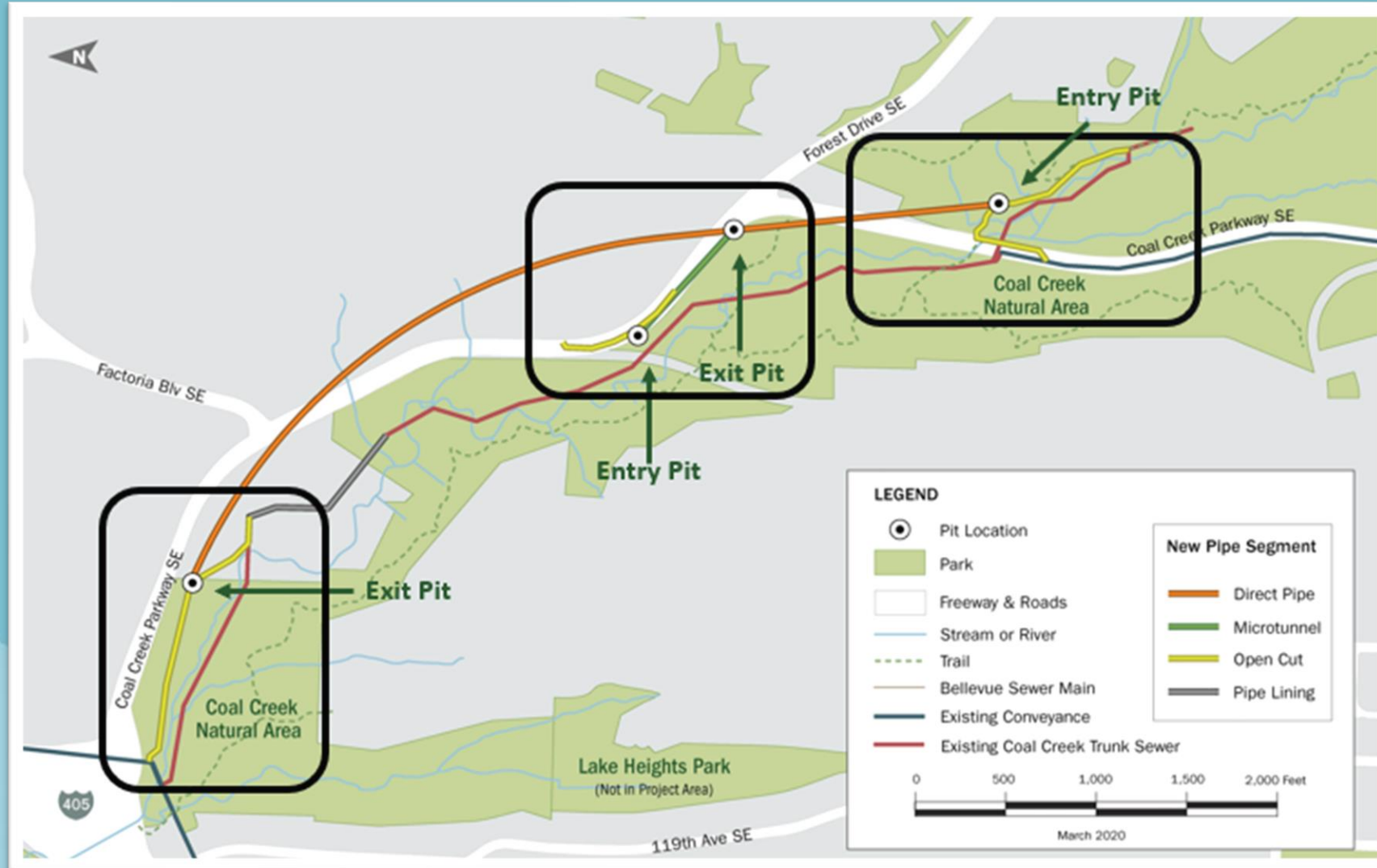
Estimated Total Project Cost: \$121 million.



King County

Department of
Natural Resources and Parks
Wastewater Treatment Division

Coal Creek Interceptor Upgrade



King County

Department of
Natural Resources and Parks
Wastewater Treatment Division

Schedule



King County

Department of
Natural Resources and Parks
Wastewater Treatment Division

Coal Creek Interceptor Upgrade



King County

Department of
Natural Resources and Parks
Wastewater Treatment Division

Coal Creek Interceptor Upgrade

Moves much of the active pipe away from Coal Creek, where it is at risk from floods and bank erosion.



2007 (above)
2015 (left)

Questions/Contact



Stan Hummel - Capital Projects Managing Supervisor
Stan.Hummel@kingcounty.gov 206-263-9457



King County
Department of
Natural Resources and Parks
Wastewater Treatment Division