

## King County Green Grants Support Duwamish Area Projects

King County Green Grants provide funding to non-profit organizations, local governments, schools and tribes for projects to improve and protect air and water quality in the Duwamish watershed. Two recent projects in Highland Park and South Park implemented GSI for stormwater control.

## King County Works With the Community

King County works with the community to provide project information and identify potential impacts. Stay informed, stay involved as we share information through:

- Individual meetings with community groups, organizations and leaders
- Briefings to local community groups, agencies and jurisdictions
- Advisory committees
- Community meetings
- Project newsletters and fliers
- Project Web page
- News releases



*South Park Area Redevelopment Association rain garden project at the intersection of 12th Avenue South and South Southern Street.*

## For More Information Contact

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heidi.sowell@kingcounty.gov

**Project Website:** [www.kingcounty.gov](http://www.kingcounty.gov) and search "Brandon Michigan"

**CSO Program Website:** [www.kingcounty.gov](http://www.kingcounty.gov) and search "Combined Sewer Overflow Program"



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Alternative formats available

206-684-1280 TTY Relay: 711



### RainWise is available in Highland Park & South Park

The RainWise program provides rebates that cover a significant portion of the cost of installing cisterns and rain gardens on private property. RainWise supports CSO control by reducing the amount of stormwater entering the sewer system from roofs and yards. To learn more or see if you are eligible, visit [www.rainwise.seattle.gov](http://www.rainwise.seattle.gov)



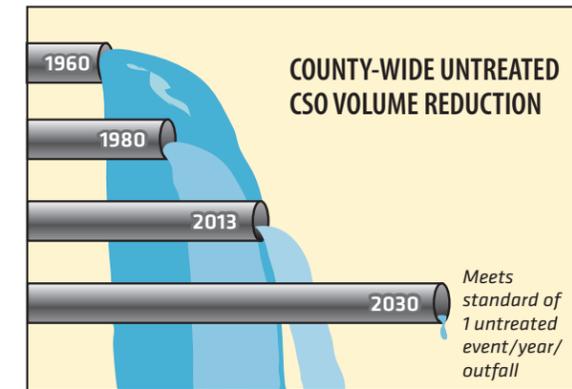
King County

# King County Source Control Projects in OUR DUWAMISH

## Protecting Our River

Over the next few years, King County will start work on several combined sewer overflow (CSO) projects to protect public health and water quality in the Lower Duwamish Waterway.

These new facilities will help lead to a healthier environment by controlling the overflows of untreated stormwater and sewage that currently discharge into the river during heavy rains.



## CSO CONTROL METHODS

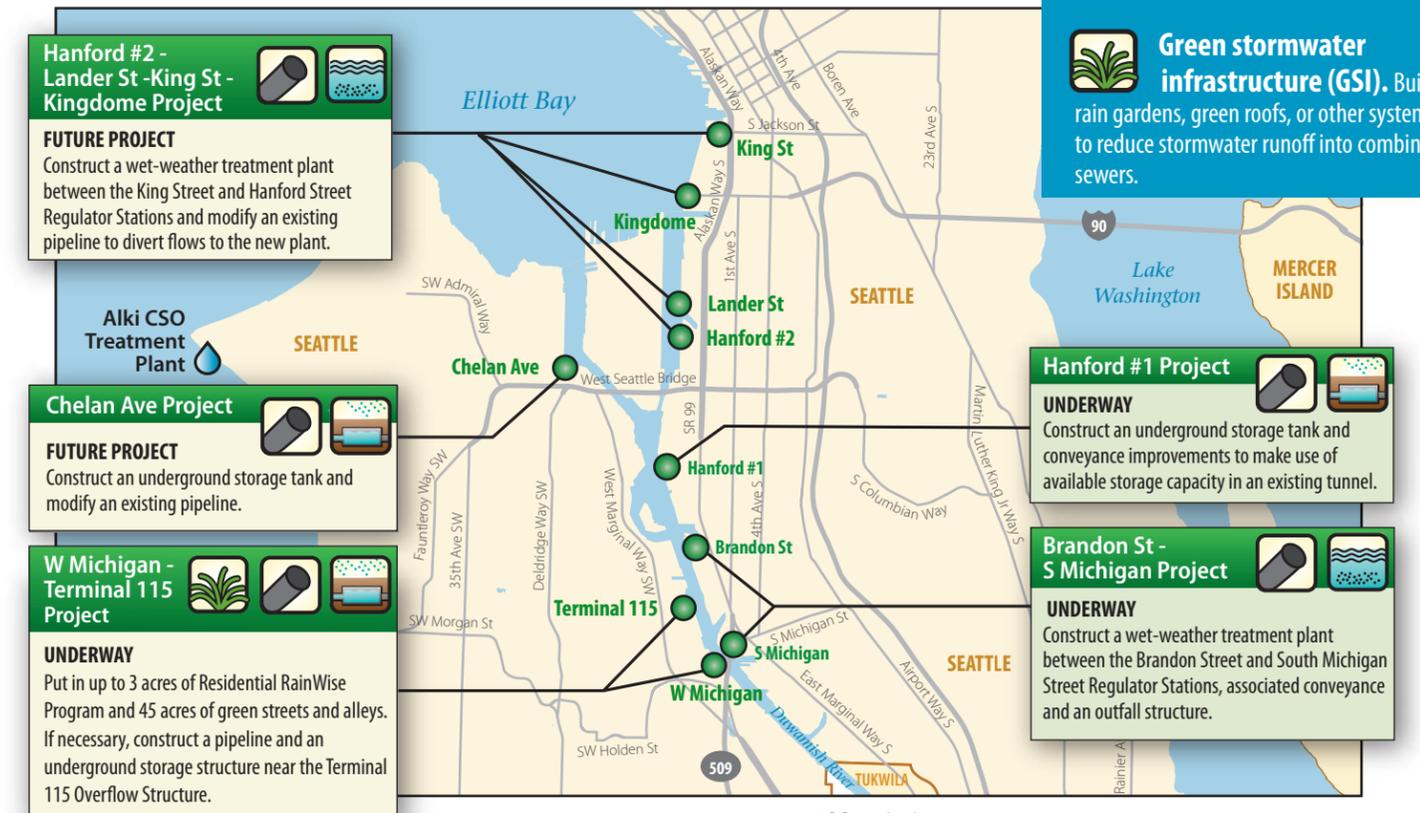
CSO control methods vary based on a number of factors, including City of Seattle CSO control needs, CSO volume, location, land availability and uses, technical feasibility and reliability, potential construction and environmental impacts, and costs.

**Storage.** Building underground tanks, tunnels, or pipes to store flows during heavy storms until capacity becomes available.

**CSO treatment.** Build plants to treat flows that are too large to store.

**Conveyance.** Build new pipelines or increase the size of existing pipelines.

**Green stormwater infrastructure (GSI).** Build rain gardens, green roofs, or other systems to reduce stormwater runoff into combined sewers.



COMBINED SEWER OVERFLOWS TO BE CONTROLLED

- CSO Treatment Plant/Facility
- King County CSO Outfall

### Abbreviations

- MG = million gallons
- MGD = million gallons/day
- CSO = combined sewer overflow

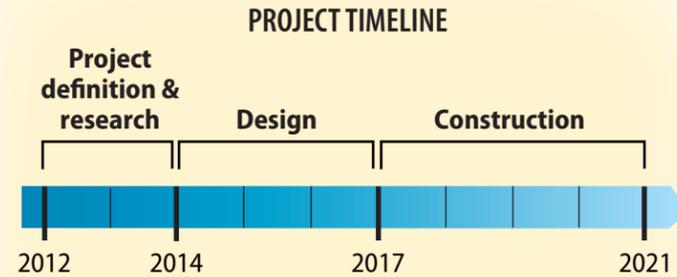


July 2013

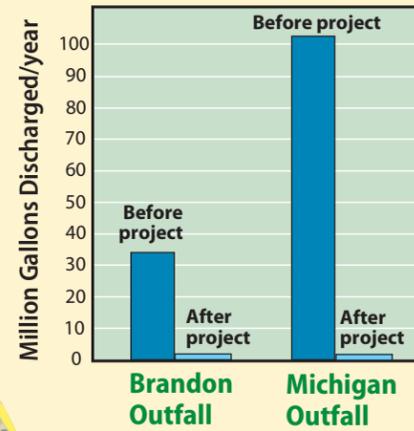
# Brandon/Michigan Source Control Project Under Way

## About the Project

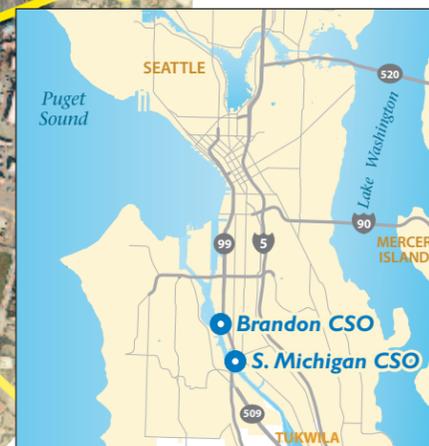
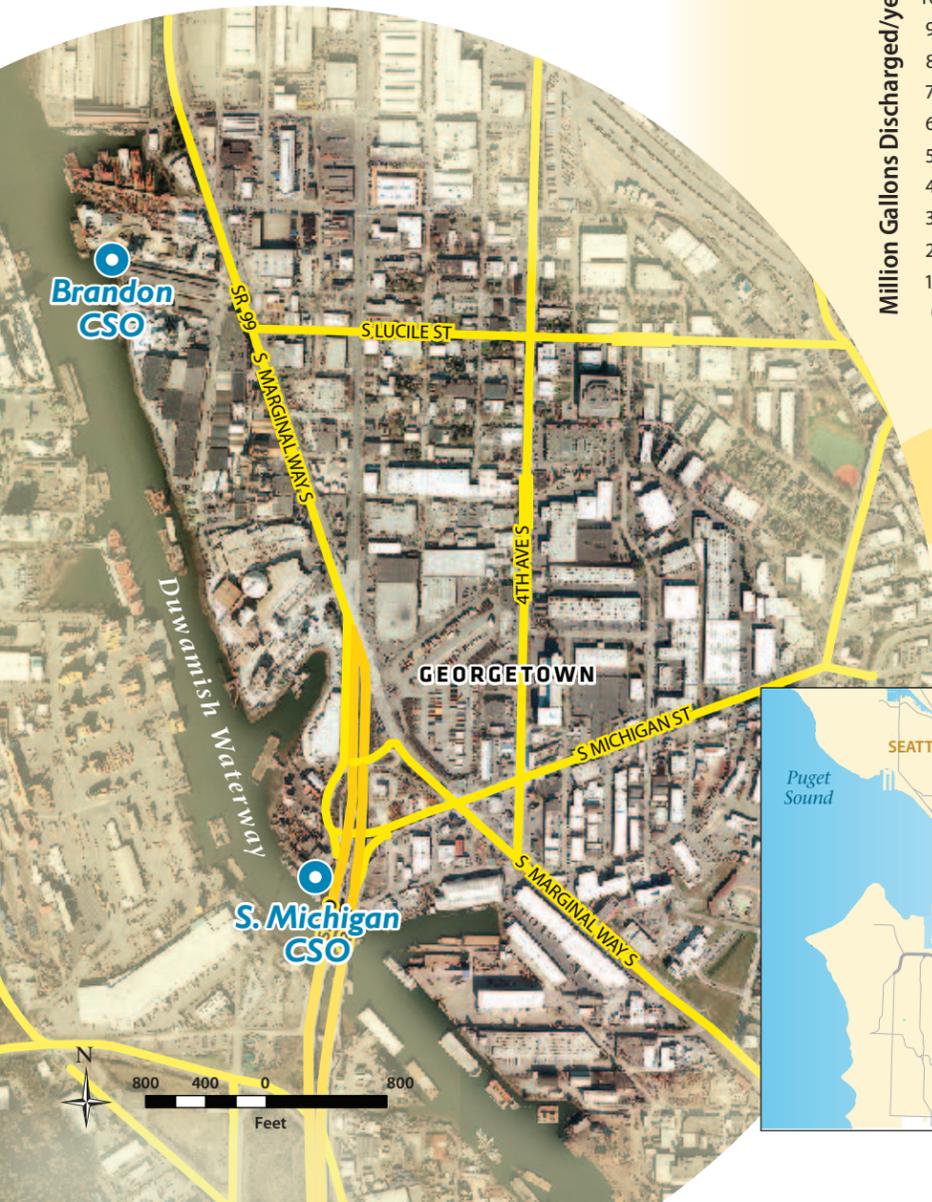
This project includes the construction of a wet-weather treatment facility between the Brandon Street and South Michigan Street Regulator Stations, related conveyance and a new outfall structure. When constructed the facility can treat up to 66 million gallons of combined rain and wastewater a day that would otherwise have discharged directly to the Duwamish without treatment during storm events.



UNTREATED CSO VOLUME REDUCTION



Brandon/Michigan Project will reduce untreated rain and wastewater currently entering the Duwamish Waterway at these outfalls by **97.7%**



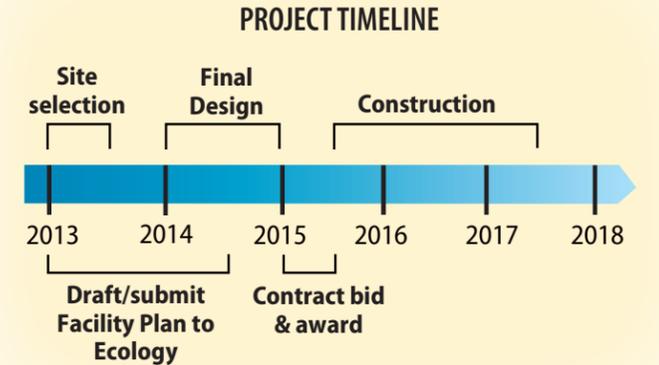
### APPROXIMATE SEARCH AREA FOR TREATMENT FACILITY SITE

Approximate boundary is intended for planning purposes only and does not represent all potential site locations that will be reviewed. Further study and evaluation will be completed prior to selection of any site.

# Other Nearby Projects

## Hanford #1

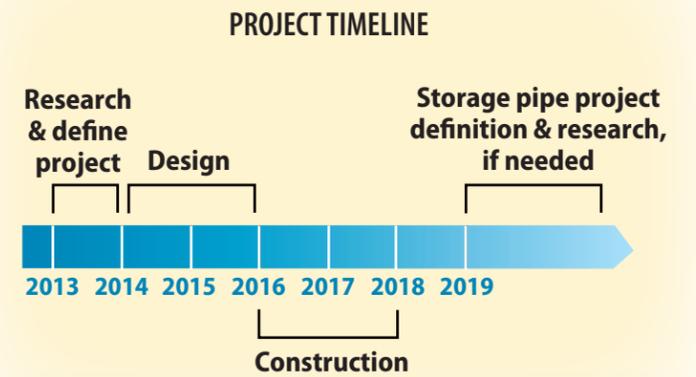
Two new facilities will be built to control overflows into the Duwamish River coming from the northern end of the drainage basin in the Mount Baker neighborhood. A new pipe will be installed near the intersection of Rainier Avenue and South Bayview Street to divert flows to an existing pipe with extra capacity. Remaining flows from this area will be routed to a 340,000 gallon storage tank further south, and then returned to the County wastewater system to be treated and discharged at the County's wastewater treatment plant in Magnolia.



## West Michigan-Terminal 115 Project

This project will explore the feasibility of controlling CSOs using Green Stormwater Infrastructure (GSI) or a combination of GSI and storage. GSI diverts stormwater from the sewer system and allows it to slowly soak into the ground using rain gardens, bioretention swales and permeable pavement. Two neighborhoods – South Park and Highland Park – have been identified for exploration based on their relatively flat streets, wide planter strips or roads, and soils data to determine where water soaks in.

If GSI is not feasible, a storage pipe option will be explored starting in 2019.



### What is a Combined Sewer Overflow (CSO)?

CSOs are untreated wastewater and stormwater that are relief points designed to protect people through releasing directly into water bodies during heavy rainstorms when sewers are full.

Since the 1970s, King County has successfully reduced volumes of untreated discharges and uncontrolled CSOs in area waterways by more than 90 percent. Planned projects will further reduce that to ensure an average of no more than one CSO event per year.

### How can I tell if a CSO is occurring near me?

For current information visit:

<http://www.kingcounty.gov/environment/wastewater/CSOstatus/Overview.aspx>

