

Barton Combined Sewer Overflow (CSO) Control Project

Fall 2012 Project Update

Revised design targets fewer streets and voluntary incentive program

Based on community input and technical and environmental review,

King County has refined designs for the Barton CSO (Combined Sewer Overflow) Control project. This newsletter provides an update on the project and new opportunities for West Seattle residents to get involved. In this newsletter, you will find:

- Project history
- Design evolution
- RainWise Program announcement

LEARN MORE at our INFORMATIONAL OPEN HOUSE!

When: Saturday, October 13
from 10 a.m. to noon

Where: Westside School,
7740 34th Avenue S.W.

The team invites you to join us to discuss:

- Design refinements since the June block meetings.
- Updated design on individual blocks.
- Plantings proposed for the bioretention swales.
- Maintenance approach for the bioretention swales.
- RainWise.

Kids activities!
Kids of all
ages welcome!

How the community informed project design

Since block designs were shared with the community in March, King County staff have organized 24 block meetings, updated neighborhood community associations twice, talked with hundreds of residents and taken more than 250 comments and specific requests into consideration. The community's opinions and feedback have shaped the project's design.

Community concerns:

Parking, access, and preservation of existing tree canopy

The design updates reduce the number and size of curb bulbs and lessen the impact to on-street parking. By constructing a few small curb bulbs, King County is able to reduce the total number of bioretention swales and preserve more trees. To minimize the impact on street parking, the remaining curb bulbs have been shortened, and no curb bulb extends the entire frontage of any property. Access across the bioretention swales is in line with home paths wherever possible.



Roadside Rain Garden with curb bulb. Photo courtesy of Seattle Public Utilities



RainWise

During outreach for the Barton CSO Control project, King County heard high interest in the RainWise program, a voluntary incentives-based program for controlling stormwater pollution. King County is launching RainWise basin-wide (see map) starting in January 2013. Participation in RainWise (18 percent of homes basin-wide) will allow King County to reduce the overall number of streets with bioretention swales. **Learn more about RainWise at www.rainwise.seattle.gov.**

This voluntary approach allows swales in the public right-of-way to be phased—build some, implement RainWise, and monitor to see if more CSO control is needed.

For more information contact Kristine Cramer
at 206-263-3184 or kristine.cramer@kingcounty.gov

What is the Barton CSO Control Project?

Under normal conditions, sewage and stormwater from the Sunrise Heights and Westwood neighborhoods drain into a combined sewer pipe that flows through the pump station near the Fauntleroy Ferry Terminal and is piped all the way to the West Point Treatment Plant in Magnolia. During heavy rains, however, the combination of stormwater and sewage can exceed the capacity of the Barton Pump Station and overflow into Puget Sound. These overflows are called Combined Sewer Overflows, or CSOs.

To control CSOs and comply with Washington State Department of Ecology regulations of reducing CSOs to no more than one per year at the Barton Pump Station, King County will construct and maintain bioretention swales, areas of planted vegetation and specially amended soils, in the public right-of-way between the sidewalk and the curb that will divert street runoff away from the combined sewer pipe.

Bioretention swales were selected as the preferred option for CSO control for several reasons.

They work with natural processes that recharge groundwater and preserve baseflow in streams; they divert stormwater from the sewer system, thereby reducing the energy resources and chemicals necessary for water treatment, storage tanks, or new operating facilities; and they increase plants and trees, which absorb carbon dioxide and create a more walking and biking friendly environment. Sunrise Heights and Westwood are ideal locations for bioretention swales due to the high connectivity to the combined sewer system, (45 percent contribution to combined sewer system comes from this neighborhood) relatively flat topography, wide planter strips, and good underlying soils for deep infiltration. King County will be responsible for maintenance of the bioretention swales in the street.

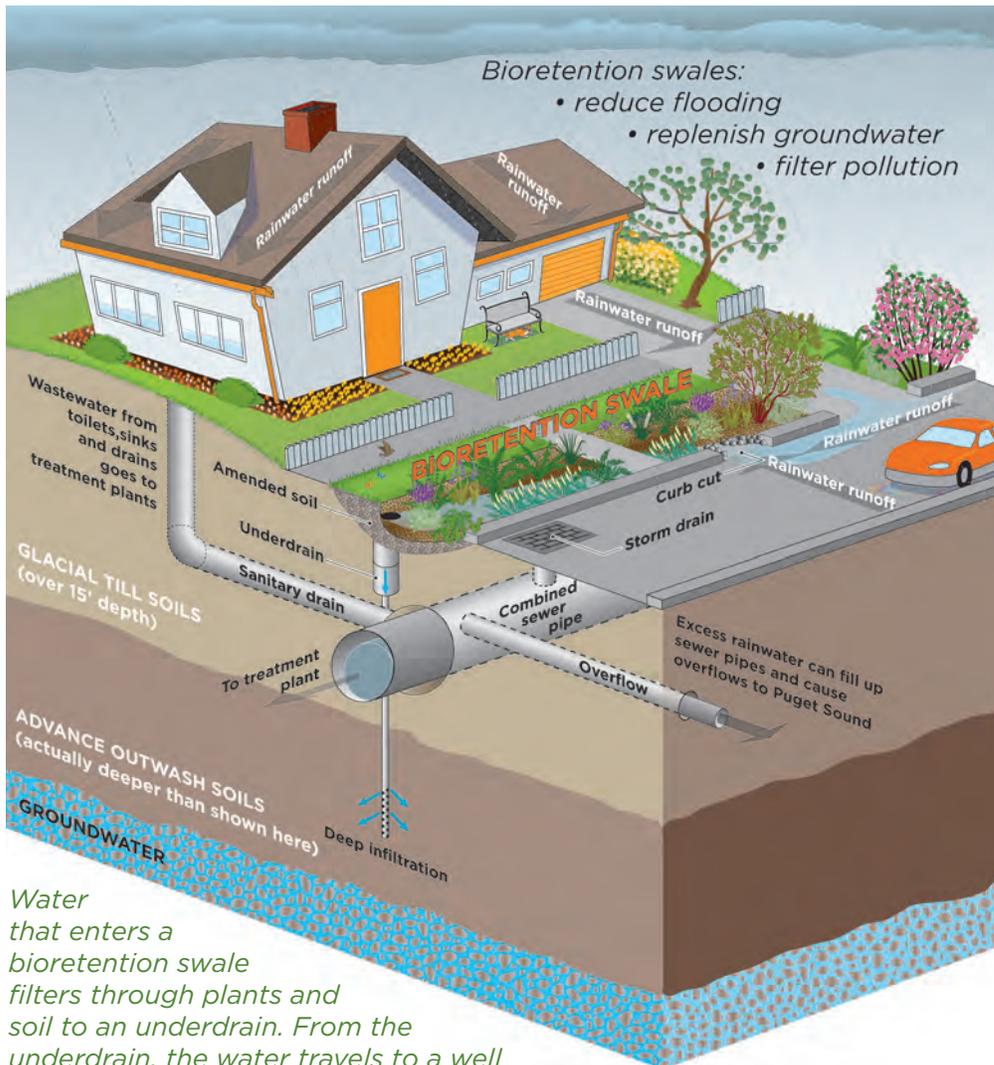
King County is partnering with Seattle Public Utilities to offer the voluntary incentive program, RainWise, to increase the amount of stormwater captured on private property and reduce the amount needed to be captured from street.

The RainWise program provides rebates that cover up to 100 percent of the cost for cisterns and rain gardens to properties in combined sewer overflow basin.

Rain gardens and cisterns help solve the problem by:

- keeping stormwater out of the sewer system
- reducing pollution
- protecting our waterways.

RainWise in conjunction with bioretention swales in the right-of-way will allow us to meet our CSO control target.



Water that enters a bioretention swale filters through plants and soil to an underdrain. From the underdrain, the water travels to a well that carries it deep underground, away from basements and crawl spaces, for gradual return to the local aquifer.

Bioretention swales help control sewer overflows and prevent polluted rainwater from entering Puget Sound—the number one source of pollution to Puget Sound.

Moving from 31 to 19 blocks

The latest design refinement reduces the number of blocks slated for bioretention swales from 31 to 19.

The project team selected the current 19 blocks based on multiple criteria, including:

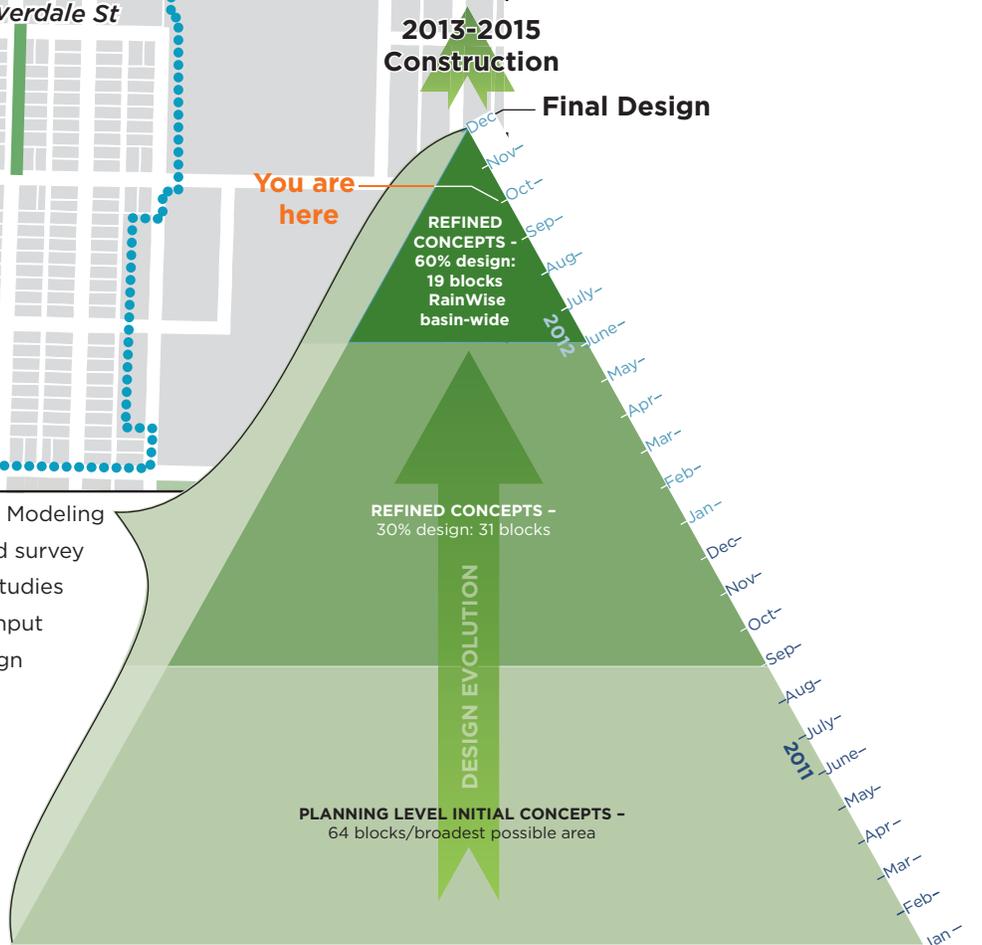
- estimated area of stormwater runoff that could be captured in the street
- potential impact to existing trees
- existing soil conditions
- risk of disrupting utilities
- community input and project construction costs.

If you are on a street selected for bioretention swales, watch for a letter with more information on the specific factors that led to your street's selection.



Barton CSO Control project streets proposed for bioretention swales, October 2012.

- Modeling
- Land survey
- Geotechnical studies
- Community input
- Refine design



The Barton CSO Control Project has evolved through an iterative process of field studies and community input.



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Barton CSO Control Project Fall 2012 Project Update

King County's Barton Combined Sewer Overflow (CSO) Control project reduces the number of blocks for bioretention swales and implements voluntary RainWise program.

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 206-684-1280 (voice) or 711 (TTY)



Visit the project Web page at www.kingcounty.gov and search for "Barton CSO."
 Or contact Kristine Cramer at 206-263-3184 or kristine.cramer@kingcounty.gov

For more information:

- Letter to residents of 19 selected blocks with design details
- Informational Open House October 13 at Westside School - see inside for details
- November design and landscaping workshop

What's next:

