

Delridge Natural Drainage Systems (NDS) Project

Frequently Asked Questions

I. Project Overview and Background

Why is Seattle Public Utilities installing a natural drainage system (roadside raingarden) in my neighborhood?

Seattle's drainage and sewer system is a blend of combined, partially separated, and separated systems. Delridge is a neighborhood with a combined sewer system where the sewage and stormwater normally flow in one pipeline. When it rains, the volume of stormwater may exceed the capacity of the system, sometimes leading to sewage overflows to Longfellow Creek. These overflows not only spill sewage into our waterways, they also spill polluted stormwater runoff that flows off rooftops, streets, and other hard surfaces. The natural drainage system process, also known as roadside raingardens or green stormwater infrastructure, slows and filters polluted runoff every time it rains. Natural drainage systems can slow or reduce polluted runoff by capturing it and cleaning it before it harms our waterways.

Seattle Public Utilities (SPU) is planning to construct a natural drainage project along several blocks of 17th Avenue SW in the South Delridge neighborhood along the proposed neighborhood greenway. The goal of the neighborhood greenway is to promote safety and ease of use for people of all abilities to walk and bike by reducing car speeds, minimizing cut-thru traffic, and enhancing crossings for pedestrians and bikers. Together with the neighborhood greenway, the natural drainage systems will create a street that not only manages stormwater and reduces the amount of polluted runoff into Longfellow Creek, but also provides a safer and more comfortable experience for people and families of all ages.

What is the projected timeline for the project?

The project will be in the design phase through 2014 and into 2015. Construction is planned to begin in summer 2015, but you may see crews in the area throughout the project design phase.

What are the next steps?

Based on community input from October 2012 through November 2013 and cost considerations, SPU has selected sites for the natural drainage systems: 17th Avenue SW from SW Kenyon to Henderson Streets and portions of the intersecting cross streets. Please note that the project area is subject to change, depending on ongoing technical feasibility analyses. SPU will continue to work with project area residents on the selected streets and with the Seattle Neighborhood Greenways program to coordinate and finalize project design and construction.

Will I have an opportunity to discuss this project with City of Seattle representatives?

SPU will continue to gather input about the design and will be in your neighborhood conducting outreach to residents about the project throughout the year. There may be additional public meetings where residents will be able to ask questions more specific to the design and impact of project construction. Please check the project website for updates: www.seattle.gov/cso/delridge.

II. Project Design and Maintenance

How did the City decide where the natural drainage systems will be located?

The selection of the project site and locations of the natural drainage systems is based on the following criteria including (in no particular order):

- Estimated area of stormwater runoff that could be captured in the new system
- Community input
- Opportunity to overlap with other neighborhood goals, such as the Neighborhood Greenways
- Need for additional sewage overflow control and system resiliency
- Parking impacts
- Street slope
- Existing soil conditions
- Underground utility conflicts
- Project costs
- Additional community benefits

What was SPU's decision-making process in siting the natural drainage systems?

In winter 2014, Seattle Public Utilities went through an internal decision-making process, which considered community input, technical considerations, project performance goals, and overall cost-effectiveness of the Delridge NDS project. All of these considerations were evaluated by the project team and SPU management in approving a recommended alternative that met budgetary constraints as well as the environmental compliance needs of the project. The approved NDS project area for design work is 17th Avenue SW, between SW Kenyon and SW Henderson streets, including adjacent portions of east-west blocks. Please note that the project area is subject to change, depending on ongoing technical feasibility analyses. SPU will continue to gather community input about the design, including specific locations for the natural drainage systems, access points to homes, preferences for plants, and other design issues through 2014.

The drainage and wastewater that flows into the sewer system from 17th Avenue SW between SW Henderson and SW Barton lies within a different sewer basin than the blocks within the Delridge NDS project area. A nearby SPU project that is retrofitting an existing CSO storage facility will meet the overflow requirements for that basin without the need to install natural drainage systems along 17th Avenue SW between SW Henderson and SW Barton. Unfortunately, with a reduction in the size and cost of the project as well as a need to increase the overall performance for sewage overflowing into Longfellow Creek, this block was dropped from the natural drainage project area and natural drainage systems will not be installed there. This block remains part of the proposed neighborhood greenway project.

How will the City choose the plants and design for this project?

Seattle Public Utilities will select plants that help the natural drainage system do its job: clean stormwater and allow it to slowly seep into the ground. Plants will also need to be easy to maintain and be able to withstand wet winters and dry summers to thrive in the unique growing conditions of the natural drainage system. Plants native to the Northwest are typically best. The project's design team will choose shorter plants to ensure safety and visibility. The project team will also work closely with community members to create landscape designs that are attractive and reflect the character of the neighborhood.

What will happen to the existing trees in the right-of-way?

Roadside raingarden projects in the public right-of-way are likely to affect some trees. However, trees are also important to reducing stormwater and we will replace any trees removed. Trees removed will be replaced with young trees within the project area but not necessarily in the same locations as the removed trees. Some smaller or unhealthy trees may need to be replaced or transplanted. Licensed landscape architects conduct a full tree assessment on all blocks under consideration for GSI to determine which trees should be protected and which may be replaced or transplanted. It is a priority to protect trees during construction.

Who will be responsible for future maintenance of the project?

SPU is responsible for the future maintenance of the project including watering, weeding, and general upkeep to ensure the proper function of the natural drainage systems. SPU will also prune trees and shrubs as needed. Residents will not be asked to pay for or perform any maintenance.

III. Impacts to Residents

Will this project cause my basement to be flooded?

Natural drainage projects are designed to allow stormwater to slowly seep into the ground and away from basements, usually at depths lower than most basements. Extensive soil testing was conducted to find the best places for this.

Will this project cause me to lose parking space in front of my house?

SPU knows that parking and access from the street to the sidewalk is very important to residents. This project will affect some on-street parking, but there will be no changes to parking on private property and existing driveways will remain at their current locations. In September 2013, SPU conducted a parking study over multiple time periods during a weekday and weekend to estimate the number of on-street parking spaces available and utilization of that parking within the neighborhood. In addition, community feedback on parking preferences and traffic calming were collected through public meetings, walk and talks, and surveys and this feedback is considered in the design. Consistent with the feedback received, the concept design balances minimal parking losses with addition of curb bulbs to calm traffic. Anticipated parking losses and parking spaces on each block are provided in the concept designs and will be updated as design progresses.

My alley floods and is in poor shape. Why can't this project fix that?

The goal of this project is to keep stormwater out of the sewer system by redirecting it to the natural drainage system before it reaches the storm drains in the street. Drainage issues in the alley, while a recognized problem, are not able to be addressed within the budget and regulatory deadline for this project.

How long can I anticipate having construction in front of my home?

Construction is scheduled to begin during the summer of 2015. Typically, you can expect to see construction crews working in the area directly in front of your home between one to two months. Specific impacts in front of any single home will be intermittent as construction progresses.

IV. Environmental, Health, and Safety Impacts

Will there be standing water in the drainage areas? If so, how will safety of children and pets be ensured?

The natural drainage systems are designed to temporarily hold stormwater while it slowly seeps into the ground, and they are designed to drain within 24 hours of a storm. In most cases, they drain much more quickly, but it depends on how long the storm lasts and how close together the storms happen. These systems are designed with safety in mind and must comply with all state safety design requirements, including depth and the slope of the sides. We will provide places to safely cross from the street to the sidewalk.

Will I see water in the roadside raingardens?

During storms, roadside raingardens will temporarily hold up to 12 inches of water and then drain within 24 hours after the rain ends. When there are back-to-back storms or an unusually large storm, the water level in the roadside raingardens will rise and fall. This rising and falling water level is a sign that the roadside raingardens are functioning properly. If the rain is falling very hard, it may look like the roadside raingarden is not draining but it should empty within 24 hours of the storm passing.

What happens if the rain overflows the natural drainage system?

The natural drainage system is designed so that it will drain completely within 24 hours of the storm passing. In the event of a large storm there may be more stormwater than the natural drainage system can drain in a 24 hour period. In this case, any excess stormwater will flow outside the natural drainage system and into the storm drain in the street or the combined sewer system. There is a 24/7 hotline so residents can call to report a natural drainage system that is not draining or requires maintenance. It is the same number you use to report any drainage or sewer problem in your neighborhood: 206-386-1800.

I am disabled. How will this project affect my access to the sidewalk?

The project team will be working with residents on the selected streets to assess accessible crossing needs. Current designated ADA parking areas (areas with signage) will remain in accordance with City requirements.

Stay in touch

SPU is happy to answer questions and provide any information you need to be informed about this project and its impacts to you and your neighborhood.

Contact	Don Anderson, P.E. Project Manager (206) 233-1086 or donald.anderson@seattle.gov
Visit	www.seattle.gov/cso/Delridge
Subscribe	www.seattle.gov/lists/delridge_natural_drainage.htm

Need your information in another language?

For interpretation services, please call (206) 233-1086.

如需要口譯服務，請撥電話號碼 (206) 233-1086.

통역 서비스를 원하시면 (206) 233-1086으로 전화하세요.

Para servicios de interpretación por favor llame al (206) 233-1086.

Về dịch vụ phiên dịch xin gọi (206) 233-1086.

Para sa serbisyo ng tagapagpaliwanag, tumawag sa (206) 233-1086.