



North Thornton Natural Drainage Systems Frequently Asked Questions

Project Overview and Goals

Why is Seattle Public Utilities (SPU) bringing this project to my neighborhood?

More than 12 million pounds of pollution are carried into our bodies of water through stormwater runoff each year. Stormwater that falls on impervious surfaces in your neighborhood—like roofs, streets, and parking lots—can pick up harmful pollutants as it runs into Thornton Creek, which flows into Lake Washington and eventually into Puget Sound. The pollutants can harm fish, wildlife, and our ecosystems. SPU is working on a project that helps improve water quality, reduce drainage issues, and bring other community benefits to your neighborhood.

What are the project's goals?

This project is part of the Natural Drainage Systems (NDS) Partnering Program in [The Plan to Protect Seattle's Waterways](#), an initiative that aims to:

- Build natural drainage systems to reduce the amount of pollution in Thornton Creek and Lake Washington.
- Improve stormwater drainage where natural drainage system installation is feasible.
- Provide other community benefits, which can include traffic calming, new trees, and landscaping.

Project Selection

Why was my neighborhood selected?

Thornton Creek is one of the three watersheds identified for natural drainage system projects in The Plan to Protect Seattle's Waterways. SPU is also working on projects in the Longfellow and Pipers Creek watersheds.

The Thornton Creek watershed is divided into two project study areas (north and south) due to its size. The study area for the North Thornton Natural Drainage System project is north of NE 125th Street between Lake City Way NE to approximately I-5. Improvements within the project study area help remove pollutants from stormwater before it reaches Thornton Creek.

Which blocks were chosen for this project and why?

Toward the end of 2023, we completed our technical feasibility studies in the North Thornton Creek basin and found the following locations be compatible to move forward into design:

- Little Brook
 - 32nd Ave NE between NE 135th St and NE 137th St
- Olympic Hills
 - 25th Ave NE between NE 127th St and NE 130th St
 - NE 127th St between 25th Ave NE and 27th Ave NE
 - 27th Ave NE between NE 125th St and NE 127th St

Originally, SPU planned to include more blocks in this project. However, through our technical analysis, we discovered that installing natural drainage systems in the North Thornton Creek basin is challenging because of high groundwater elevation and underground utilities.

The groundwater elevation in this area is high because the four tributaries to Thornton Creek are very close to each other. Most of the blocks we eliminated during our feasibility studies are located in areas with especially high groundwater, which is not suitable for natural drainage systems.

In some areas, we also found conflicting underground utilities that are too high-risk or costly to move.

Finally, some of the blocks we studied would not be able to treat enough stormwater to be cost-effective. Due to these factors, we eliminated many blocks and ultimately chose the locations to move forward into design.

For natural drainage system projects in general, how does SPU decide which blocks to choose?

SPU picks project locations where we can provide the most water quality benefit. We also look for opportunities to work with other city departments and the community to address concerns and provide multiple benefits (for example, planned street or pedestrian improvements or reducing drainage system issues).

Other factors that inform which blocks are selected include:

- Location of nearby adverse conditions (steep slopes, high groundwater, or contaminated sites are usually not suitable for natural drainage systems)
- Potential impacts to existing trees
- Existing soil conditions
- Location and condition of existing utilities
- Community feedback
- Width of existing public right-of-way
- Presence of driveways (insufficient space availability for natural drainage systems)
- Existing parking conditions
- Cost of constructing, operating, and maintaining the project

When picking locations for natural drainage systems, SPU seeks to balance technical requirements, cost, and community needs.

Timeline

What is the timeline for this project? Why was there a delay?

In 2020, we examined conditions in the project area and conducted a community survey to inform early project planning. In 2021 and 2022, we continued technical analysis to understand where installing natural drainage systems would be most beneficial and feasible. In 2022, we gathered more community feedback through an online and paper survey about potential project locations (blocks) and additional opportunities for community benefits.

Our technical analysis took longer than expected and extended through 2023 due to challenges from high groundwater and utility conflicts. During our technical analysis, our project team evaluated more blocks than needed in order to identify the blocks that are most compatible for natural drainage systems. This analysis led us to eliminate many blocks we considered during earlier stages of the project and narrowed the project scope to the two locations we will move forward into design. In 2024 and 2025, we will engage with the community, complete the final design, and hire a contractor. We anticipate that construction will begin in 2026.

We will keep you informed of any significant changes to the project timeline moving forward.

Community Feedback

What input has SPU collected from the community so far?

Community involvement is important to us. We will consult with you during the project's planning, design, and construction phases. During the planning and early design phases, we administered online and mailed surveys to potential project sites and learned about specific concerns and interests from you and your neighbors. We will continue to reach out to community members in the project area to ask for feedback on our proposed design in 2024 and 2025. We will keep you informed using tools such as email, mailers, and the [project website](#).

How will SPU use community feedback?

We will incorporate community feedback into the final decisions as much as possible. Now that we have our final project locations selected, we will work with residents, business owners, and organizations on the selected blocks during the design and construction phases to coordinate their needs and mitigate construction impacts as much as possible.

How can I provide feedback during this phase of the project?

To share your input, please reach out to the Project Manager, Wan-Yee Kuo, at wan-yeeku@seattle.gov, or (206) 684-3957. You can also [sign up](#) to receive project updates.

Project Element and Impacts

What will natural drainage systems look like after they are built?

Natural drainage systems are built in the planting strip (the space between the edge of the street and the sidewalk) or roadway shoulder (the space between the edge of the street and the property line). The projects use a combination of different soil types and plants to create a “filter” that captures and breaks down pollutants washed off from roadways and parking areas.

Because each natural drainage system project is built with growing plants, the way that they look will change over time. They usually take three to five years to fully develop. The grasses, shrubs, and trees installed during construction will grow and change as the landscaping matures. In the first few years, the stormwater collected in the natural drainage system will be more visible. After the plants mature, the water will be less visible. The plants will also look different during different seasons of the year. Please visit the project webpage to see the growth stages of a natural drainage system over time.

How will the construction of the natural drainage systems affect existing trees?

Protecting trees is a priority. Whenever possible, the project team will minimize impacts to existing mature trees. In cases where trees are affected, we will replace each tree removed as required by codes and regulation. Where possible, new trees will be planted in the same location as the trees that were removed. However, in some cases, new trees will be planted in a different location.

We may need to remove some smaller trees, plants, and other landscaping if they are in the right-of-way and we cannot work around them. SPU will be in direct communication with property owners if there are plantings or other landscaping features that need to be removed in the public right-of-way adjacent to their property. If those property owners are interested in preserving plantings and other landscaping features that will be removed by the project, it will be their responsibility to relocate them onto their property before the start of construction.

Can I select the types of trees and plants being planted in front of my home?

The types of plants and trees chosen for the project have been carefully selected to ensure that the natural drainage systems will operate effectively. Due to the special functions of the plants, we typically do not have much flexibility to take requests for specific trees or plantings. However, we still welcome your comments in case we can incorporate your suggestions.

The project team is also working closely with the Seattle Department of Transportation’s (SDOT) Urban Forestry team and our internal experts to ensure that the plantings and trees provide maximum benefits for filtering water, controlling drainage, and enhancing the neighborhood’s greenspace.

How will this project affect street parking?

The completed project is likely to affect street parking at some locations within the project area. SPU knows that parking and access from the street to homes and properties are very important to community members. We will carefully consider the impacts to parking in every project location and will work with other departments, such as the Seattle Department of Transportation. We also assess the condition and availability of off-street parking nearby. As we further develop the project design, we will share more details about parking impacts.

Will my driveway be impacted by this project?

Some driveways will be temporarily and/or permanently impacted by the project per [Municipal Code 23.54.030](#). As we further develop the project design, SPU will be in touch with residents who will be affected by these permanent driveway impacts.

During construction, driveway access may be temporarily restricted. The project team will contact affected properties with more information on timing and duration of driveway impacts.

Are there any benefits to my community that come along with new drainage systems?

Yes! We are still working on the final design and listening to community feedback. Some of the project's benefits may include:

- Improved water quality
- Reduced localized flooding in some project locations
- Improved appearance and beautification of the planting strip and roadway shoulders, including new trees and plants
- Adding to Seattle's tree canopy
- Improved safety and traffic calming, such as the addition of curb bulbs and improvements to traffic circles
- Additional sidewalks

Will I have to relocate my fence, plantings, or sheds if they are within the public right-of-way?

When installing natural drainage systems, we often need to use the entire area between the existing road edge and the edge of the right-of-way (or the space between the road edge and the adjacent property) for project activities. The project team will reach out to properties with items in the right-of-way to advise which items need to be removed or relocated. If items in the right-of-way are not removed before construction begins, the contractor will remove the items and dispose of them as appropriate. When removing items in the right-of-way, the contractor may place some items, such as fences, decorative rocks, yard decorations, etc., on residents' properties if property owners provide SPU with a written request. However, any plants that are within the right-of-way will be removed and disposed of. We strongly encourage residents to remove items from the right-of-way prior to construction.

Will my street get a new sidewalk if my block is selected for a natural drainage system?

We understand that sidewalks are important to many community members. The project plans to replace sidewalks impacted by natural drainage system construction and build new sidewalks adjacent to natural drainage systems as required by codes, regulations, and permit conditions. In most cases, sidewalks will not be extended or improved beyond the limits of the natural drainage systems.

Will I see water in the natural drainage systems?

During storms, each drainage system 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 a larger storm, the water level will rise and fall, which is a sign that the drainage system is functioning properly.

Will the natural drainage system cause my basement to flood or create drainage problems around my house?

No, natural drainage systems are designed to carry stormwater straight into the ground or to the downstream drainage system, not toward yards or basements. If needed, an underground liner may be placed for extra protection.

Will the new drainage systems fix flooding problems?

This project's primary goal is to improve water quality in Thornton Creek. It is not designed or able to address system-wide flooding in the North Thornton Creek watershed. However, the natural drainage systems in the North Thornton area may address some small, localized flooding concerns. 32nd Ave NE has system-wide drainage capacity constraints that cannot be addressed by this project.

There are a lot of potholes on our neighborhood streets. Will this project fix them?

Fixing potholes is outside the scope of this project and funding restrictions. You can report potholes to the City of Seattle using [the Find It, Fix It app](#).

Will this project attract mosquitoes?

No, natural drainage systems will not attract mosquitoes. Mosquitoes need stagnant water (found in bird baths, old tires, dog water bowls, etc.). Natural drainage systems are designed to drain and keep water moving.

Will my children and pets be safe when the water is collected and stored here?

Natural drainage systems are designed with safety in mind. They will typically drain within 24 hours of the end of a storm, and, in most cases, even faster. For the health and functionality of the system, we ask that people and pets avoid entering the natural drainage systems.

Project Maintenance

Who is responsible for maintenance of the system?

SPU is responsible for all maintenance needs of the natural drainage systems, including watering, weeding, and general upkeep. SPU will also prune trees and shrubs within the natural drainage system as needed. You will not be asked to perform any maintenance. It is important for residents to stay out of the natural drainage system to maintain the function of the systems. Plants will mature over time and the mix of plants will likely change, but this won't affect the system's function.

As is typical for Seattle, property owners are responsible for maintaining portions of the planting strip, roadway shoulder, and grass-lined drainage ditches that are not part of the natural drainage system. You can learn more about maintenance responsibilities at: www.seattle.gov/transportation/projects-and-

What if it rains so much that the natural drainage system overflows?	The natural drainage systems are designed to completely drain within 24 hours of a storm passing. If there is more water than the system can hold at one time, you will see excess stormwater flow out of the system and into the nearest pipe, drainage ditch, or storm drain, similar to typical roadway drainage.
What happens if the site does not drain within 24 hours after a storm ends?	Seattle Public Utilities' Operation Response Center maintains a 24/7 hotline for people to call and report drainage issues. If you see a system that isn't draining properly or requires maintenance, please call (206) 386-1800.
Who do I reach out to if maintenance is needed?	If you see a completed project that isn't draining properly or requires maintenance, please call (206) 386-1800.
How will SPU keep trash and pollutants out of the natural drainage systems?	<p>SPU has several programs that help to reduce pollution and illegal dumping in neighborhoods throughout the city, including our Spill Response, Surface Water Pollution, RV Pump Out, Pollution Prevention, and Hygiene programs.</p> <p>SPU will work to remove any trash found in the natural drainage systems as part of our upkeep and maintenance of the systems. If you see a completed project that requires maintenance, please call: (206) 386-1800.</p>

If you need this information about the North Thornton Natural Drainage Systems project translated, please call (206) 684-3957.

Amharic

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Arabic

إذا كنت بحاجة إلى هذه المعلومات حول مشروع Thornton شمال Thornton لأنظمة الصرف الطبيعية مترجمة، فيرجى الاتصال ب (206) 684-3957.

Chinese Traditional

如果您需要 Thornton 溪北端支流自然排水系統項目信息的翻譯版本，請致電 (206) 684-3957。

Korean

North Thornton 자연 배수 시스템 프로젝트에 관한 번역된 정보가 필요한 경우, (206) 684-3957 로 전화하십시오.

Russian

Если вам нужен перевод информации о проекте Естественных дренажных систем северной части реки Thornton (North Thornton Natural Drainage Systems), пожалуйста, позвоните по телефону (206) 684-3957.

Somali

Haddii aad u baahan tahay macluumaadka ku saabsan Mashruuca Nidaamyada Biyo-mareenka Dabiiciga ah (Natural Drainage Systems) ee North Thornton oo la turjumay, fadlan wac (206) 684-3957.

Spanish

Si necesita la traducción de la información del proyecto del Sistema de drenaje natural de North Thornton, llame al (206) 684-3957

Tigrinya

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Vietnamese

Nếu quý vị cần hỗ trợ dịch thông tin về dự án Hệ Thống Thoát Nước Tự Nhiên North Thornton, xin vui lòng gọi (206) 684-3957

Questions? Contact

Wan-Yee Kuo Project Manager wan-yee.kuo@seattle.gov (206) 684-3957

Seattle Public Utilities

Learn more and sign up for project updates at: www.seattle.gov/utilities/NorthThorntonNDS