Improving Our Communities with Natural Drainage Systems (NDS)

South Thornton Natural Drainage System (NDS) | August 2020

What are they and why do we need them?

When it rains in Northeast Seattle, pollution from our streets runs into Thornton Creek untreated. Untreated runoff is not healthy for the Thornton Creek, the Salish Sea, or people. The good news is: there is something we can do.

Natural Drainage Systems (NDS) consist of shallow depressions in the roadway shoulder (the space between the street edge and the property line) are filled with deep-rooted plants and spongy soils that temporarily hold and clean polluted stormwater from streets. These features capture and clean pollutants before they can reach the Thornton Creek.

Seattle Public Utilities (SPU) is planning to build natural drainage systems in your neighborhood in 2022.

The 2016-2024 Natural Drainage Systems Program is a Seattle Public Utilities (SPU) multi-year capital improvement program focused on Longfellow, Piper’s, and Thornton Creek watersheds.

The South Thornton NDS Project is funded in part by the King County Flood Control District. The Natural Drainage Systems are maintained by SPU.

Community Benefits

Natural Drainage Systems (NDS) offer multiple benefits to local neighborhoods and ecosystems, including:

- Increased landscaping
- Lower risk of flooding
- Creation of habitat along our streets
- Healthier creek ecosystems
- Traffic calming
- More street trees

Site Selection

SPU completed the initial analysis and selected locations for NDS in the Thornton Creek Basin based on a variety of factors, including community input, recurring drainage and flooding issues, and existing soil conditions.

SPU selected four sites that are technically feasible for the project that are optimal for flood mitigation and drainage issues.
Anticipated Impacts to Residents

We will be coordinating with the nearby community throughout design and construction to make sure everyone knows the changes that will be made to the streets selected for NDS. We will coordinate on the below impacts with each impacted resident. At this time, we anticipate:

- **NDS improvements** may require some driveways to be restored to the City’s 10 foot width standard in the public right-of-way
- Some **gas lines, side sewers, and water utilities** will need to be adjusted during construction
- Some **mailboxes, fences, vegetation, and other structures** may need to be relocated due to sidewalk, road, and NDS improvements

**Project Timeline**

The South Thornton NDS Project has completed preliminary planning and field investigations. We are currently in the 30% Design Phase.

**PROJECT SCHEDULE**

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Public Involvement