

## BENEFITS AND IMPACTS

### BENEFITS of these systems include:

- Improves groundwater recharge and creek flow during dry months
- Slows traffic
- Increases pedestrian safety
- Adds green space

Anticipated impacts from this project include:

### ACCESS

To accommodate the natural drainage systems, the roadway will be realigned in certain sections. Access to existing driveways and alleys will be maintained, as will mail delivery.

### NEW LANDSCAPING

SPU will work closely with you in the selection of plants for the natural drainage system adjacent to your property. You will be able to talk with project landscape architects and select from several landscape and tree palettes being assembled by SPU.

### PARKING

Roadway surfaces will be replaced, and on-street parking, while reconfigured, will be provided on the paved surface.

### MAINTENANCE

SPU will maintain the landscaping in the natural drainage systems to ensure proper storm drainage function. As with all landscaping features within a public right-of-way, should you desire to perform additional maintenance to meet your individual aesthetic standards SPU welcomes this extra stewardship.

### CONSTRUCTION

Over the next year, SPU will work with you to understand your needs during construction and minimize potential impacts on you and your property.

### ADDITIONAL BENEFITS

- Improved street appearance that includes:
  - 1600' of new high quality sidewalks;
  - Quality repaved road surface;
  - A roadway designed to calm traffic
  - Driveway width within the public right-of-way brought up to City standards; and
  - New landscaping that will contribute to better air and water quality

## PROJECT OVERVIEW

The **Venema Natural Drainage System** (NDS) project will reconstruct five blocks of roadway in your neighborhood to include natural drainage systems and planting improvements in the area. Venema Creek is a tributary of Piper's Creek and collects stormwater from over 80 acres in the Venema Basin.

The NDS project will improve the existing flow, character and pattern of infiltration of this stormwater. That will begin to restore the natural hydrological cycle, improve salmon habitat and reduce the negative impacts of urbanization on Piper's Creek and ultimately, the Puget Sound.

This project is expected to reduce the average annual volume of stormwater runoff into Venema Creek and significantly slow the flow of stormwater while improving the water quality.



**LOWER SLOWER CLEANER**  
stormwater runoff

<http://www.seattle.gov/util/VenemaCreek>

for questions related to project, please contact  
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# PROJECT

## BACKGROUND

Located in an area historically known for stormwater problems and sewer backups, The Venema NDS is a part of Seattle Public Utilities (SPU) Green Stormwater Infrastructure Program. Aiming to develop a project that reduces stormwater runoff and benefits the neighborhood, SPU has been working with residents for several years to understand issues and concerns.

In early 2013, design alternatives were developed following extensive technical analysis and community input. SPU is moving forward with a deep infiltration well alternative that will allow stormwater to be channeled into outwash soil after being filtered through roadside natural drainage systems.



# What is the problem and how is it being

## SOLVED?

Stormwater runoff collects pollutants and builds in volume and speed as it runs down roads, ditches and culverts toward the creek. This causes potential impacts to downstream residents and the creek.

To reduce further property damage and improve water quality, the City has constructed several successful natural drainage projects, of which the Venema Natural Drainage System will now be a part.

## PROJECT AREA

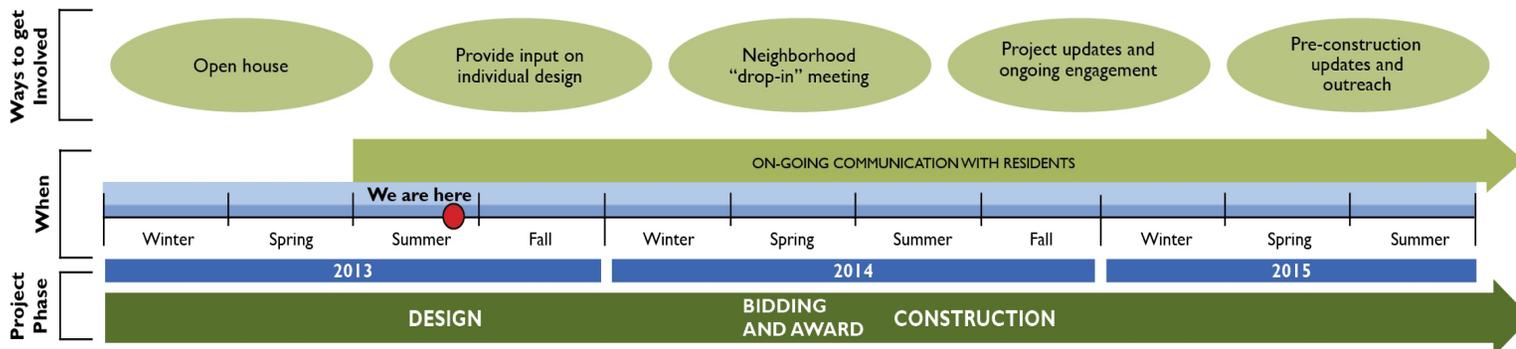


## How were your blocks selected?

In 2013, SPU determined the most technically promising project area for natural drainage systems (see map on right). These blocks were selected after considering a number of factors, including:

- Soil and hydrogeological studies
- Flow patterns in the Venema Creek basin
- Suitable locations for deep infiltration wells
- Traffic patterns
- The potential to disconnect roof drains from the sanitary sewer

## How long will this project take?



Throughout the project design and construction, SPU will be working with residents on an individual basis to determine planting and mitigation concerns. Please see the timeline (left) for opportunities to work with SPU on your individual concerns.