

SEATTLE GREEN INFRASTRUCTURE INNOVATION

CASE STUDY SERIES

Venema Creek Natural Drainage System

2015

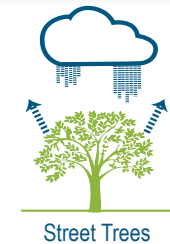
NW 120th Street to NW 122nd Street
3rd Ave. NW to Palatine Ave North



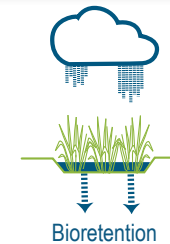
PERFORMANCE SNAPSHOT

- A series of bioretention cells treat polluted stormwater runoff from an 80-acre area before it enters the Venema Creek system.
- Underground injection control (UIC) wells help treated stormwater move through a layer of less permeable glacial till soil into well-draining soil below to reduce flow volumes to the creek.

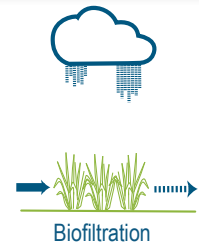
GREEN INFRASTRUCTURE TECHNOLOGY TYPES



Street Trees



Bioretention



Biofiltration

INNOVATION HIGHLIGHTS



Design Innovation

This project treats stormwater through a series of bioretention cells and diverts a portion of the treated flows to underground injection control (UIC) wells to achieve flow reduction to Venema Creek. This is one of Seattle's first projects which includes a UIC well built in combination with bioretention for water quality treatment and flow reduction.



Public Space

Adding 1,600 linear feet of new sidewalks, this project also calms traffic and adds colorful roadside plantings to the public realm.



PROJECT DETAILS

IMPERVIOUS SURFACE MANAGED	3,484,800 sq. ft.
DRIVER	Water quality treatment of polluted stormwater and flow reduction to Venema Creek
OWNER	Seattle Public Utilities
FUNDER	Seattle Public Utilities
GREEN INFRASTRUCTURE COST	\$7.5 million
PROJECT TEAM	Cascade Design Co., Osborn Consulting Inc., Mayfly Engineering, Pertee, Applied Pro. Services, Associated Earth Services, Gary Merlino Construction Co.
MAINTAINED BY	Seattle Public Utilities

MORE INFORMATION

<http://www.seattle.gov/util/EnvironmentConservation/Projects/VenemaCreek/index.htm>

