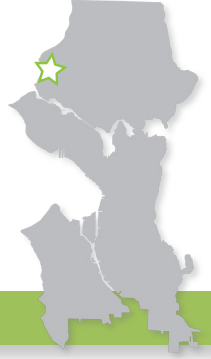
SEATTLE GREEN INFRASTRUCTURE INNOVATION

CASE STUDY SERIES

Ballard Natural Drainage Systems Project I — 2010

28th Ave. NW from NW 65th Street to NW 73rd Street
30th Ave. NW from NW 80th Street to Loyal Way NW
31st Ave. NW from NW 75th Street to NW 77th Street



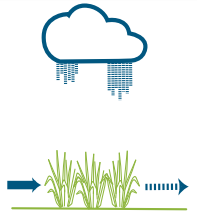
PERFORMANCE SNAPSHOT

- This was a pilot project to assess the effectiveness of bioretention for reducing combined sewer overflow (CSO) control volume needed for an uncontrolled basin.
- Monitoring of those cells with underdrains showed a 50% annual volume loss through infiltration, even with poorly draining soils.

GREEN INFRASTRUCTURE TECHNOLOGY TYPES

Street Trees

Bioretention



Biofiltration

INNOVATION HIGHLIGHTS

Design Innovation

Increases cell capacity through modified existing planter strips and constructed curb bulbs. Some cells provide infiltration into the native soil after filtering through the bioretention soil Others have underdrains which provide stormwater detention and volume loss through infiltration.

Public Space

Provides accessible green space for residents and works to calm traffic.

PROJECT DETAILS

IMPERVIOUS SURFACE MANAGED	60,984 sq. ft.
DRIVER	Reduce the combined sewer overflow (CSO) storage volume required for the Ballard CSO Basin
OWNER	Seattle Public Utilities
FUNDER	Seattle Public Utilities
GREEN INFRASTRUCTURE COST	$3,350,000
PROJECT TEAM	Seattle Public Utilities, Paul Brothers
MAINTAINED BY	Seattle Public Utilities

MORE INFORMATION

http://www.seattle.gov/util/EnvironmentConservation/Projects/BallardNaturalDrainage/index.htm

Seattle