

Snohomish Conservation District's mission is to work cooperatively with others to promote and encourage conservation and responsible use of natural resources.

SCD's Community Conservation Program

Stacy Aleksich

Community Conservation Program Manager

"Local Solutions to Local Problems"



Status of LID (in Washington)

- LID requirements and updated development codes
 - Phase I – by June 30, 2015
 - Most Phase II have until December 31, 2016
 - Some are appealing this portion of new permit
- WSU Puyallup Research Center
- Jurisdiction specific requirements
 - Manuals and specifications
- “Bioretention” vs. “Rain Garden”
 - >2000 sf of new or replaced impervious area = bioretention
 - <2000 sf new or replaced (or retrofit) can be rain garden



Community Conservation Program

- Workshops & Outreach Materials
 - Natural Yard Care
 - Rain Garden Tours
 - Build-your-own Rain Barrel
 - Training for Professionals
- Technical Assistance & Cost Share
- Demonstration projects
 - Rain Gardens
 - Sustainable Landscaping



“Local Solutions to Local Problems”



Stillaguamish LID Remediation Project



Washington Department of Ecology funded Education & Outreach Program in the Stillaguamish Basin.

Employing Community Based Marketing strategies to raise awareness and interest in LID retrofits on private property.



Community-based Marketing

- Phone survey
- Develop new branding and messaging
- Targeted Outreach
 - Demonstration Projects
 - Workshops
 - Open House
- www.betterground.org





Early Results & Lessons Learned

- Word questions carefully – half said they had rain garden
- General public is not interested in, or motivated by “saving Puget Sound” or “protecting water quality”
- Targeted outreach was not as successful as traditional
- New messaging needs more testing
- Demographics seem to play a large role in level of interest
- Media challenges – getting positive press
- Difficult to reach beyond the “choir”



Conclusions

- More work to do in getting general public excited about LID retrofits on their property.
- Need to research barriers and motivators.





North Everett Rain Garden Pilot Project

Problem: Neighborhood and basement flooding in Combined Sewer area

Solutions: Separate and increase capacity of system, and offer LID solutions to affected neighbors



“Local Solutions to Local Problems”



North Everett Rain Garden Pilot Project

SELECTING THE SITES

- Mailer
- Door knocking
- Neighborhood Meeting
- Application Process
- City wide Rain Garden Design Workshop





North Everett Rain Garden Pilot Project

SITE ANALYSIS

- SCD preliminary site investigation to narrow list
- Geotech for selected sites
(AESI – Associated Earth Sciences, Inc.)
 - Vashon Lodgement Till, Vashon Recessional Lacustrine Sediments, and Vashon Advance Outwash
 - Infiltration rates:
 - Perched groundwater/groundwater seepage
 - One location (outwash) = 1.9 inches per hour
- Challenging elevations



North Everett Rain Garden Pilot Project DESIGN & CONSTRUCTION

- (1) Infiltrating rain garden
- (1) Seasonal bog garden
- (2) Rain gardens with
Underground Injection
Control (UIC) Wells and
under drains
- (2) Rain Gardens with
under drains
- (1) Terraced Rain Garden
with under drain





Seasonal Bog Garden



Building a Terraced Rain Garden



Under Drain System (slotted pipe, specialized aggregate)

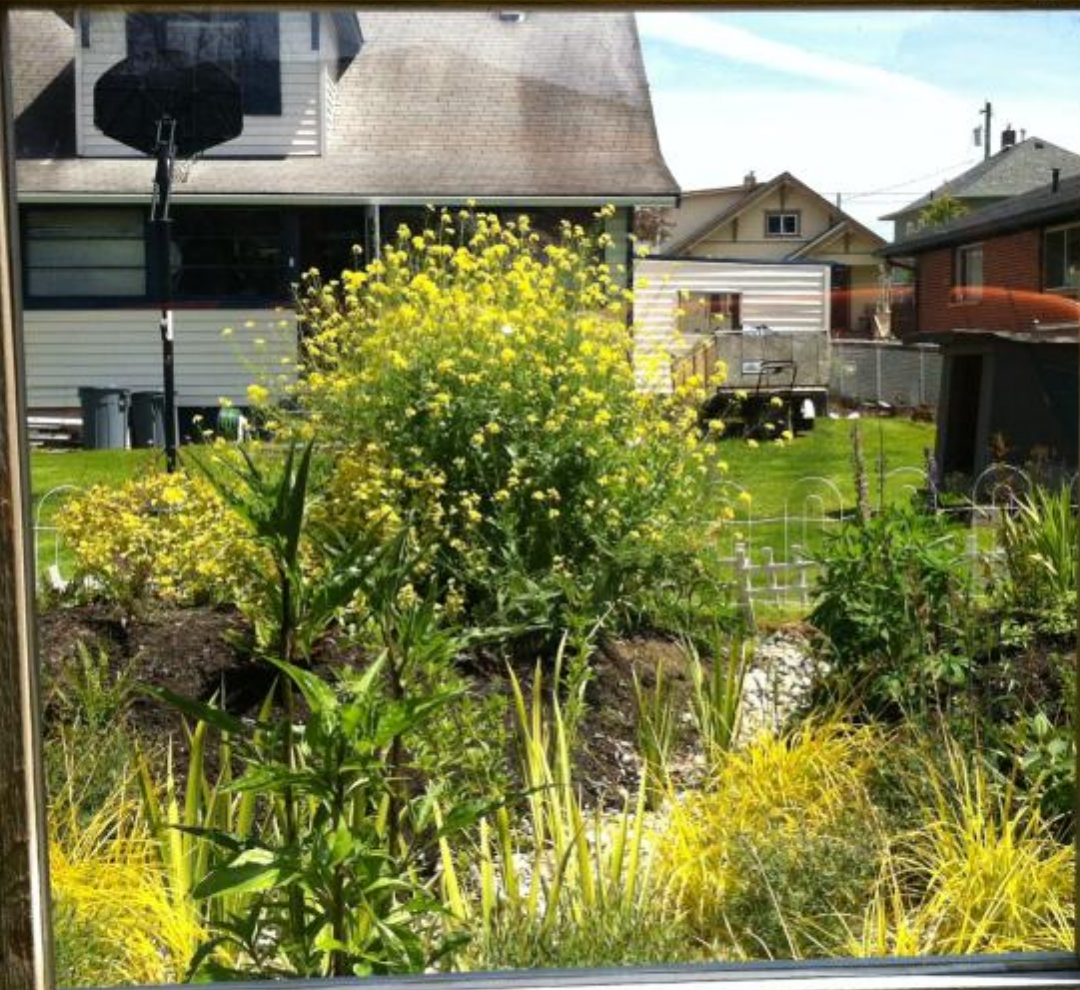




Underground Injection Control (UIC) Wells









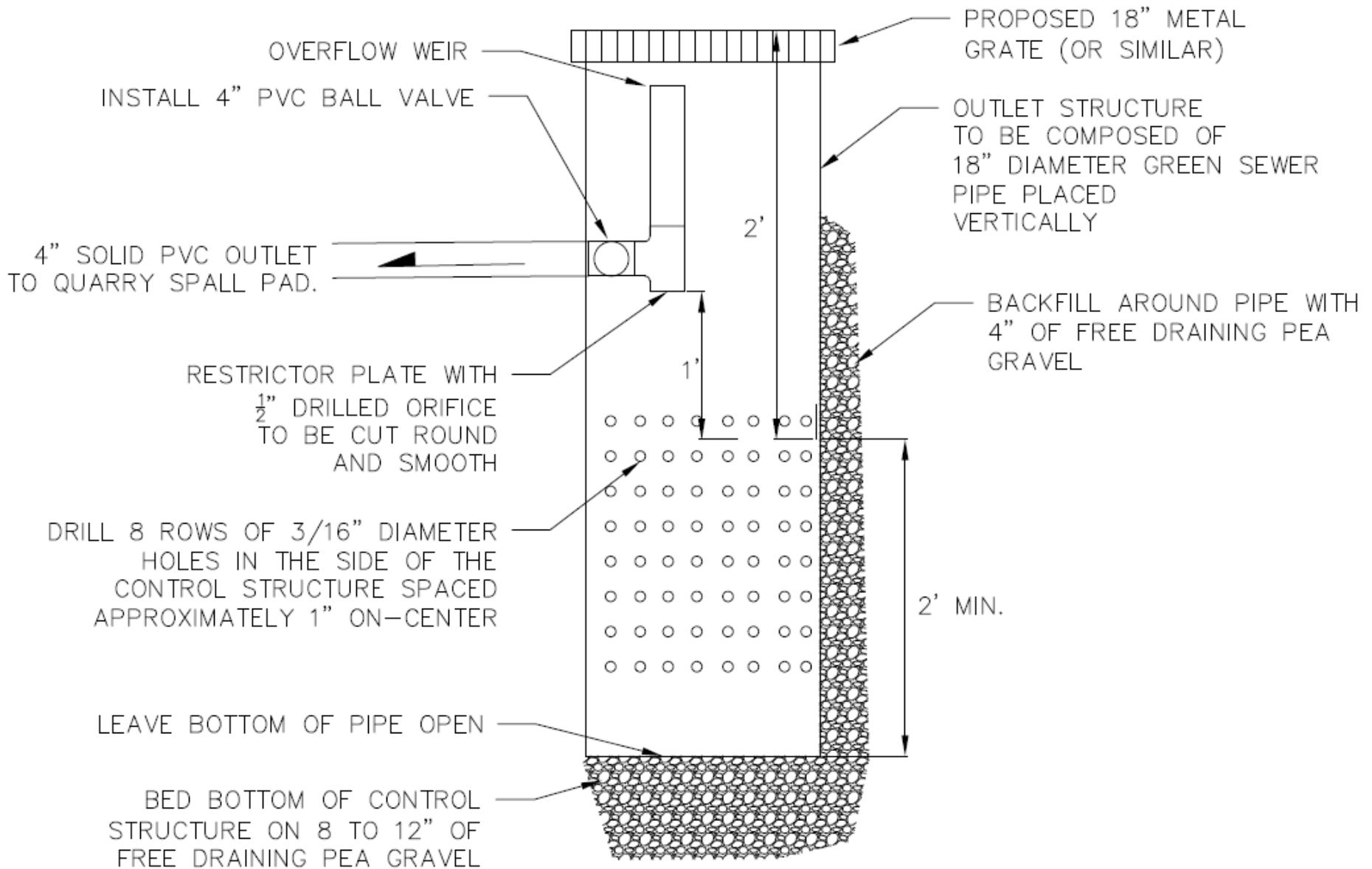
North Everett Rain Garden Pilot Project

LESSONS LEARNED

- All gardens performing better than expected
- Some biofouling on UIC, still working well
- Infiltration data collection
- Community building and other neighborhood improvements
- Spring and Fall tours



Vertical Under Drain Design





So, how do you pay for this program??

- Special Assessment
- Interlocal Agreements with cities
- Grant funds
- Partnerships





Stacy Aleksich

Snohomish Conservation District

stacy@snohomishcd.org

425-335-5634, ext. 112