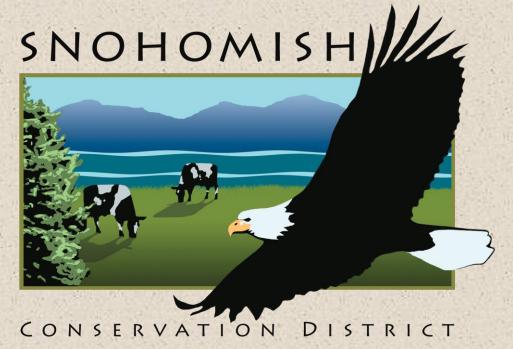
Stormwater The Problem & Solutions



Derek Hann P.E.

Civil Engineer (425) 377-7012 derek@snohomishcd.org

Snohomish Conservation District

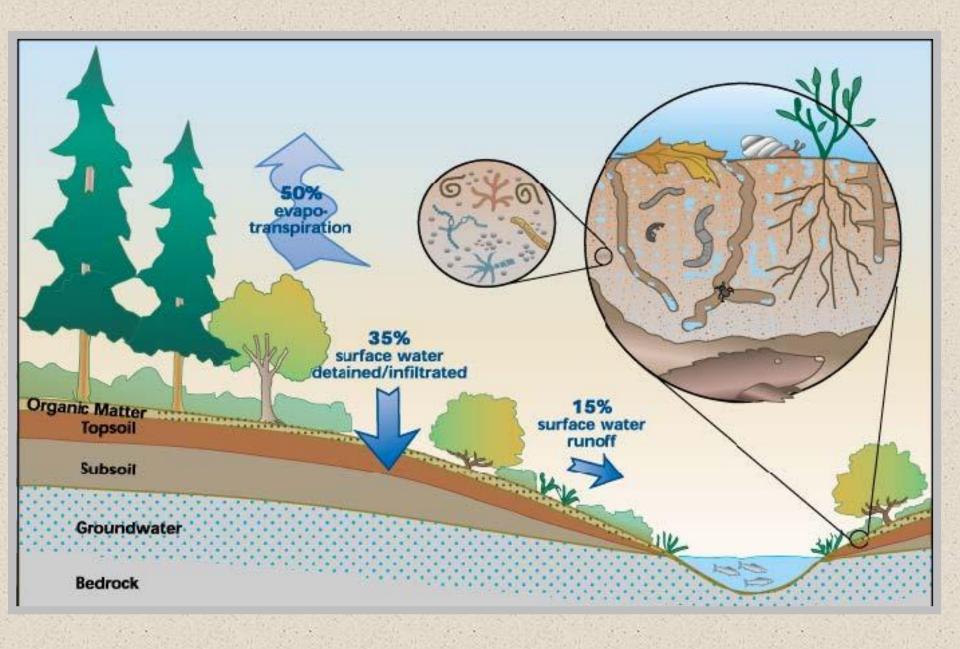
- Established in 1941 as the Soil Conservation Service
- State Government
- Property Tax funding of \$8 per parcel and \$0.08/acre. (2020)
- Significant additional grant funding
- Non-regulatory and 100% voluntary.

Services Provided

- Agricultural Support
- Habitat Restoration
- Education & Outreach
- Urban & Suburban Conservation
 - Stormwater Support

The Stormwater Problem



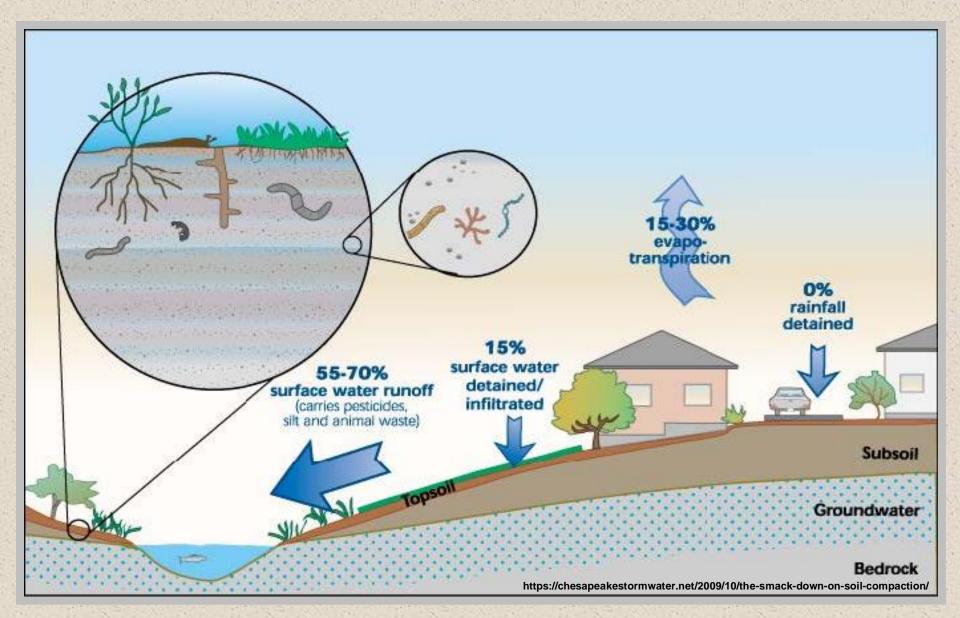


Pervious





Urban Watershed



Impervious

The Stormwater Problem















Detention & Infiltration

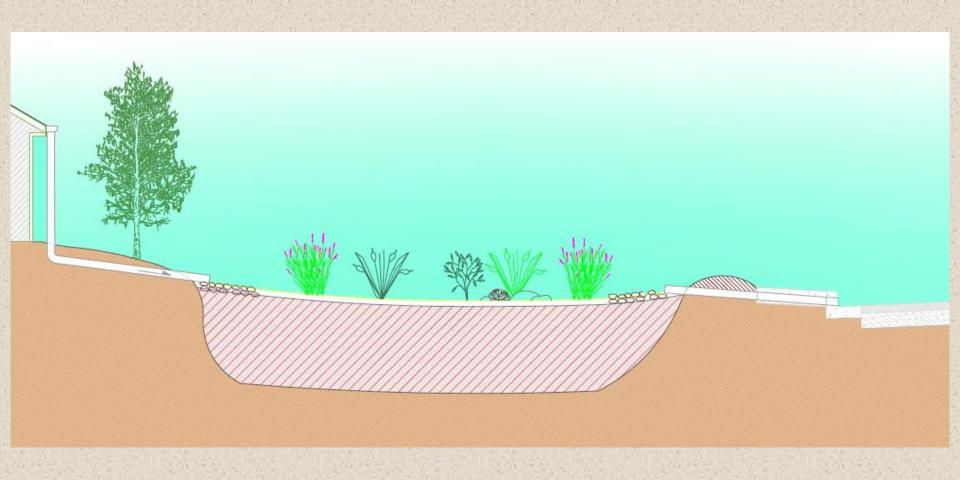


Stormwater Treatment

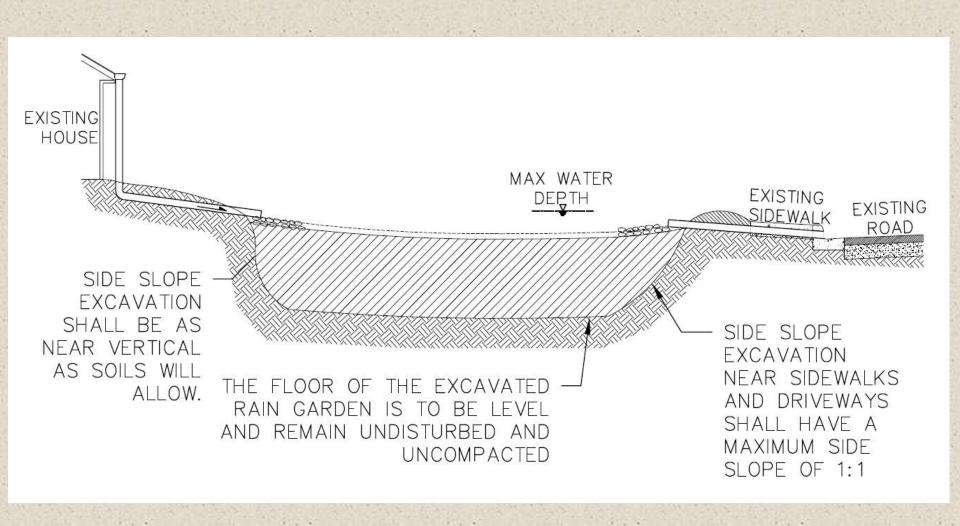




What is a Rain Garden

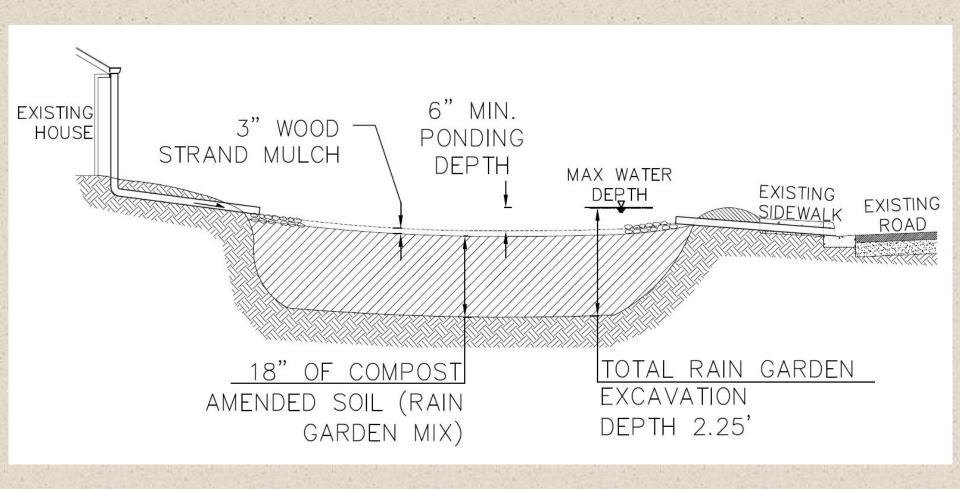


Rain Garden Excavation





Rain Garden Construction





Rain Garden Soil Mix

- Needs to be 18 inches deep
- Needs to be placed dry
- Minimal compaction during and after soil placement

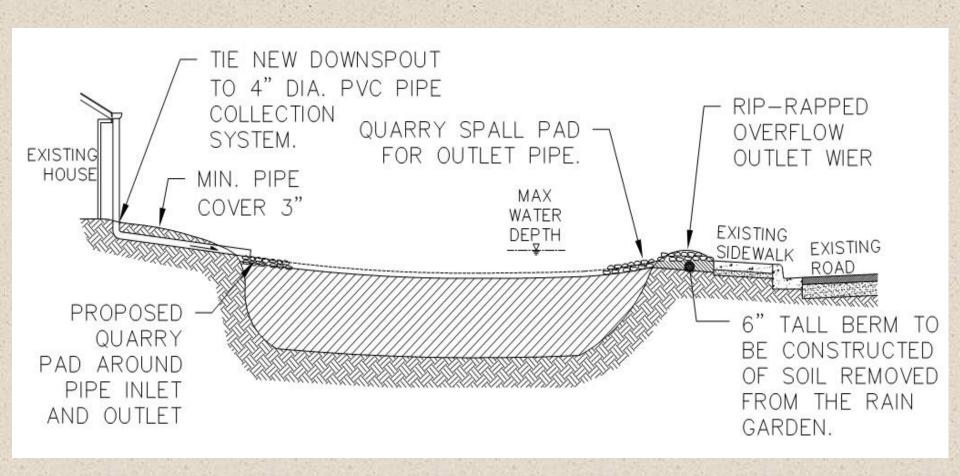


Mulch

- Woody and coarse
- Shredded
- Best product is called "Animal Friendly Hog Fuel"
- No Bark



Rain Garden Inlet/Outlet

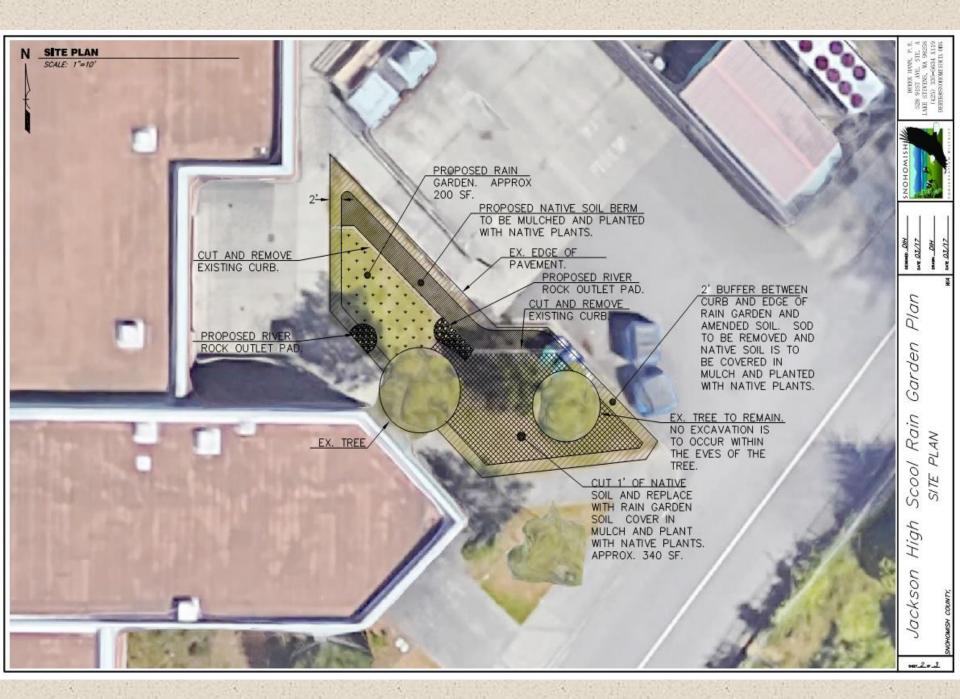


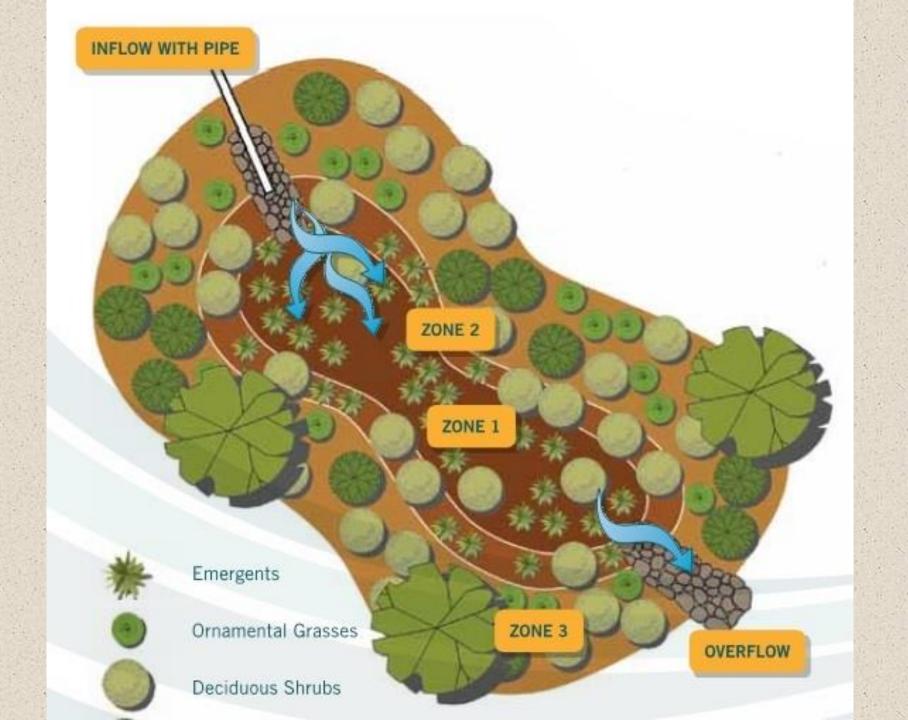


Offsets

- -10' from buildings
- -5' from utilities
- -2' from pavement
- -Outside of tree crowns







Rain Garden Planting Zones

- A Rain Garden has 3 zones
- Zone 1 Dimensions
 - 4' Wide minimum
- Zone 2 Dimensions
 - 1' wide minimum, 3' wide maximum
- Zone 3 Dimensions
 - 2' wide minimum, no maximum

Stormwater Harvesting















Guzzlers



IBC Totes







Rain Harvesting Tips

- Location is important
- Tightly covered barrels or tanks
- Every collection system needs:
 - 1. Barrels or tanks
 - 2. Downspout extender or adaptations
 - 3. Sturdy, level base
 - 4. Inlet with screen
 - 5. Spigot
 - 6. Overflow
 - 7. Clean out access

2 Most Common Questions

Isn't harvesting rainwater illegal?

Is water from my roof safe for vegetables?

Is Collected Rain Water Safe for?

Lawn and Landscaping

Edible plants

Livestock/Pets

Human Consumption



SUBSCRIBE

DONATE

HOME

ABOUT US

RESEARCH

NEWS

PRESS



Home » Research » Sustainable Living » Series » Stormwater Solutions: Curbing Toxic Runoff » A Green Light for Using Rain Barrel Water on Garden Edibles

A GREEN LIGHT FOR USING RAIN BARREL WATER ON GARDEN EDIBLES.

New research bolsters the case for roof runoff for irrigation—with some notes of caution.



Rain Barrel by Barb Howe used under CC BY 2.0

Sightline Institute's work is made possible by the generosity of people like vou!

Thanks to Nicholas Wagner for supporting a sustainable Northwest.











Author: Lisa Stiffler

(@lisa_stiffler) on January 7, 2015 at 6:30 am

This article is part of the series Stormwater Solutions: Curbing Toxic Runoff

Stay up to date on the Northwest's most important sustainability issues.

SUBSCRIBE



Terracing







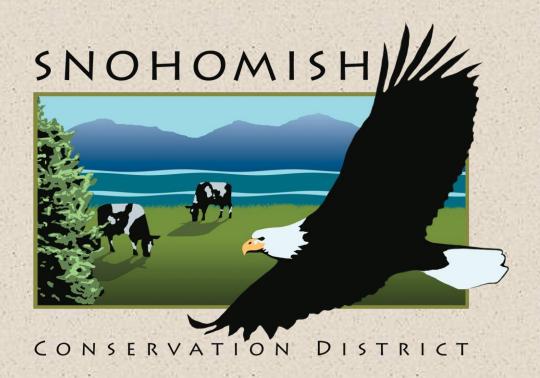








Questions?



Derek Hann P.E.

Design Engineer (425) 377-7012 derek@snohomishcd.org