Rain Gardens Support Biodiversity

Rain Gardens are for Salmon

- Filtration of pollutants creates healthier aquatic habit for salmon and other species.
- 'Timed release' of stormwater reduces drought and reduces large flood events that cause erosion and bury spawning habitat.

Rain Gardens are for Pollinators

The use of native plants in rain gardens **attracts native pollinators** and creates rich habitat for insects, birds, and other wildlife.

Native Plants to use in your Rain Garden:

Native plants have adapted to our soils and weather conditions.

- Halenium
- Slew Sedge
- Siam Swave
- Slimleaf onion
- Tufted Hairgrass Casacara
- Native Buttercup Lupine
- Canada Goldenrod
- Dagger Leafed Thrush
- Fragrant Popcorn Flower
- Hendersons Checkermallow



Visit Satin Flower Nurseries for native plant starts and for consultation on the best plants for your rain garden.

Common Camas

• Hard Hack

• Dogwood

• Rosehips

WHY RAIN GARDENS?



Impervious surfaces

like parking lots, roads, and rooftops block water's natural passage into the ground.

As a result, urban creeks are:

HOT

Water **temperatures are higher** as the earth's natural water cooling systems are lost.

FAST

Water doesn't infiltrate into the ground to be stored and slowly released over time, instead it **moves quickly across the landscape** causing **floods** and summer **drought**

TOXIC

Water picks up **contaminants** as it flows over impervious surfaces.

The Solution

Rain Gardens are designed to catch stormwater from impervious surfaces, temporarily store it and allow cooling, filtration, evaporation and slow-release of stormwater water into the ground.

Peninsula Stream's Rain Gardens for Headwaters Project and Friend's of Bowker Creek's 1000 Rain Gardens Project aim to build community capacity and awareness for Rain Gardens.

D TD Friends of the Environment Foundation PACIFIC SALMON FOUNDATION

imate Change Canada

Environnement et Changement climatique Canada To Learn more and get involved: www.peninsulastreams.ca peninsulastreams@gmail.com bowkercreek.org/1000-rain-gardens/

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Rain Gardens

A Rain Gardenis. A Rain Gardenis. A Rain Gardenis. Flood Mitigation Habitat Creation Pollution Buffer High Impact, Low Cost.

HOW TO START A **RAIN GARDEN**

STEP 1:. FIND A SITE. SIZE IT RIGHT.

Site selection: Find low lying areas. Observe where water naturally flows and pools when it rains.

Proximity to catchment area. Build next to impervious catchment area.

Water inflow and outflow. Determine where water will enter and where excess water will drain. Pro tip: use an existing stormwater drain for emergency outflow. **Soil Type** influences the rate water flows through it.

Test soil. Dig 6" deep hole, fill with water, note how long it takes for hole to drain. Clay soils drain slow and may need larger garden:catchment area ratios or sand added to soil for better drainage.

Size considerations:

-Garden surface area depends on impervious surface catchment size and the amount of local rainfall. Consult local municipality for size guidance.

-Densely-planted shallow gardens infiltrate more water than deep ones reaching the water table.

STEP 2:. ALL ON BOARD? Call Before you Dig! 1-800-474-6886

-Consult your local municipality and bylaws. -Talk with community and great way to educate and bring people together.

neighbours. Rain gardens are a

Define edges. Use strong edges so garden looks intentional Mulch bare soil to reduce soil compaction and weeds. Use woodchips, leaves, needles and twigs, not bark mulch. Add structure. Anchor garden with boulders, large woody debris and gravel where water would cause erosion. Don't use landscape fabric or overuse rock

Create drop-off at water intake to allow leeway for sediment buildup



STEP 3: DESIGN

Plant effectively : -Lots of plants! The less bare soil the better.

-Evergreen plants are good for year-round structure and beauty.

-Plant as many trees as possible

-Good understory plants are: non-spreaders, clumpers, thigh-high or shorter, structural (no need for staking), not thorny Avoid rhizomatous plants

STEP 4: **BUILD**

Excavate & backfill ~3/4 full of excavated material and compost. Create contours & meanders to slow water & maximize retention and absorption Plant!

STEP 5:. ADVERTISE. OBSERVE, ENJOY AND MAINTAIN

Advertise rain garden function with signage Observe garden in the rain to see how things are working. Make sure water is flowing and meandering through the garden instead of bee-lining to the emergency overflow drain. Make adjustments as needed.

Enjoy- watch garden become more beautiful over time as plants grow and roots & soil biota open new porosities for water absorption.



Mulch regularly. No bare soil! Mulch improves water absorption by reducing soil compaction.

Check regularly to ensure no build-up (leaf litter, sediment, weeds, trash) is blocking the flow of water into/ through the rain garden.

Selectively prune (rather than shear) to limit garden maintenance, promote habitat and maintain natural aesthetic.

Maintain tidy edges to allow natural look in garden's interior. Let the garden evolve!

Thank you

streamkeepers.ca for sharing tips and tricks!