Rain Gardens
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* Nourishing to our plants
* Cleansing
* Flood risk - property damage
* Get it off the property as quickly as possible
* Put it in a pipe and get it out to the ocean
A landscape element that is a vegetated depression, used to collect and improve water quality by reducing run-off, storing and filtering it and returning it to the soil.

What is a rain garden?
Wetlands and rain gardens serve a very strong ecological purpose.

Due to increased development and housing, many of these natural functions have disappeared causing a surplus of rainwater to manage within our environment.

In developed conditions, on average 30% more water flows directly into streams and rivers rather than absorbing and nourishing the soil on which it falls.
- Reduce local flooding potential
- Promote infiltration of water back into the ground (recharge aquifers)
- Filter pollutants such as oil, metals, road salt, pesticides etc. out of stormwater runoff
- Conserve water & create a beautiful landscape
- Reduce amount of polluted stormwater reaching our rivers and the ocean

*Reasons to slow, capture, infiltrate*
* As rainwater hits the ground, it has great potential to increase velocity and pick up pollutants in its path.
* Plant material will disburse the stormwater path and reduce the velocity
* Fewer pollutants will be picked up and carried along with the rainwater
* Excess stormwater is allowed to collect in the landscape depression
* Rather than flow in unwanted areas and cause damage, rainwater is contained is a lovely landscape feature
* Water will infiltrate into the ground and contribute to the groundwater systems and ecological functions as nature intended

* As water infiltrates into the soil it nourished surrounding plant life and pollutants are filtered out
* 1) Observe and map your site  
* 2) Determine best location for rain garden  
* 3) Assess the soil  
* 4) Determine size of the rain garden  
* 5) Construction (excavating, grading, berms)  
* 6) Planting (right plant, right place)  
* 7) Maintenance  

**Step by Step Process**
*Design example: Condo building*

- Saw cut and remove asphalt and road base.
- Cut/regrade roadway to east to accommodate proposed works.
- Refer to civil drawings regarding existing services in roadway.

200 depth 50–150# sieve rounded rock
Slope swale @ 2% to CB as shown in plan.

Existing undisturbed sub-grade

1.2m

Existing road profile

Native planting per sheet L2

76mm depth compost mulch

450 depth growing medium

Crisp lines

Section B–B Interceptor Swale

NTS
Design example: Parking Lot
NOTE:
1. CONTRACTOR TO COORDINATE WITH LANDSCAPE ARCHITECT ON INSTALLATION OF RAIN GARDEN.
3. REFER TO CIVIL ENGINEER DWGS. FOR MORE INFORMATION.

RAIN GARDEN SECTION
Scale: 1:20

Design Example: City Boulevard
* Determine proper location on property
  * Must be a low spot where water naturally drains

* Dig a test pit and determine soil type

* Determine size depending on expected water flow
  * Will you be tying your downspouts into the system?
  * Is the area currently saturated? (high water table?)
  * Does your soil have absorbent characteristics? (compacted?)
  * Should you build a depression or a berm?
* A single shovel of rich soil contains thousands of microorganisms that contribute to the nourishment of your plants as well as aid in filtering out pollutants from the stormwater.

* Air moves freely in the upper 8” of the soil and is renewed every hour so it’s important to ensure compact does not occur.

* Composted mulch will feed and enhance soil organisms, protect soil surface from sun rays, reduce sun evaporation and improve soil structure.
*Materials Needed*

- Spongy soil (living soil)
  - Peat Moss
  - Compost

- Shovels (sometimes an excavator) and a sunny afternoon

- Drain rock

- Drought and Water tolerant plants
  - Bergenia
  - Creek dogwood
  - Sedges
  - Camas

- Mulch
Now you are ready to dig!
✓ A good rain garden depends on the healthy function of plant life

✓ Stay on top of weeding

✓ Do pruning at appropriate times of the year

✓ Diligent maintenance will ensure the rain garden won’t become too much work in the long run

✓ Avoid using synthetic fertilizers or pesticides as they can harm the organisms in the soil
* Build healthier communities
  * Meet your neighbours
  * Natural area for wildlife such as songbirds and squirrels
* Build healthier watersheds
  * Keep pollutants out of streams, creeks and oceans
  * Build Stronger fish habitat
* Save time and money on your water bill
  * You can capture the water your divert and use for irrigation around the property
  * Increased moisture will improve the overall quality of soil on your property

* Overall benefits
Outdoor component: practice rain garden site selection

THANK YOU!

Easy Living Landscaping
because every drop counts