

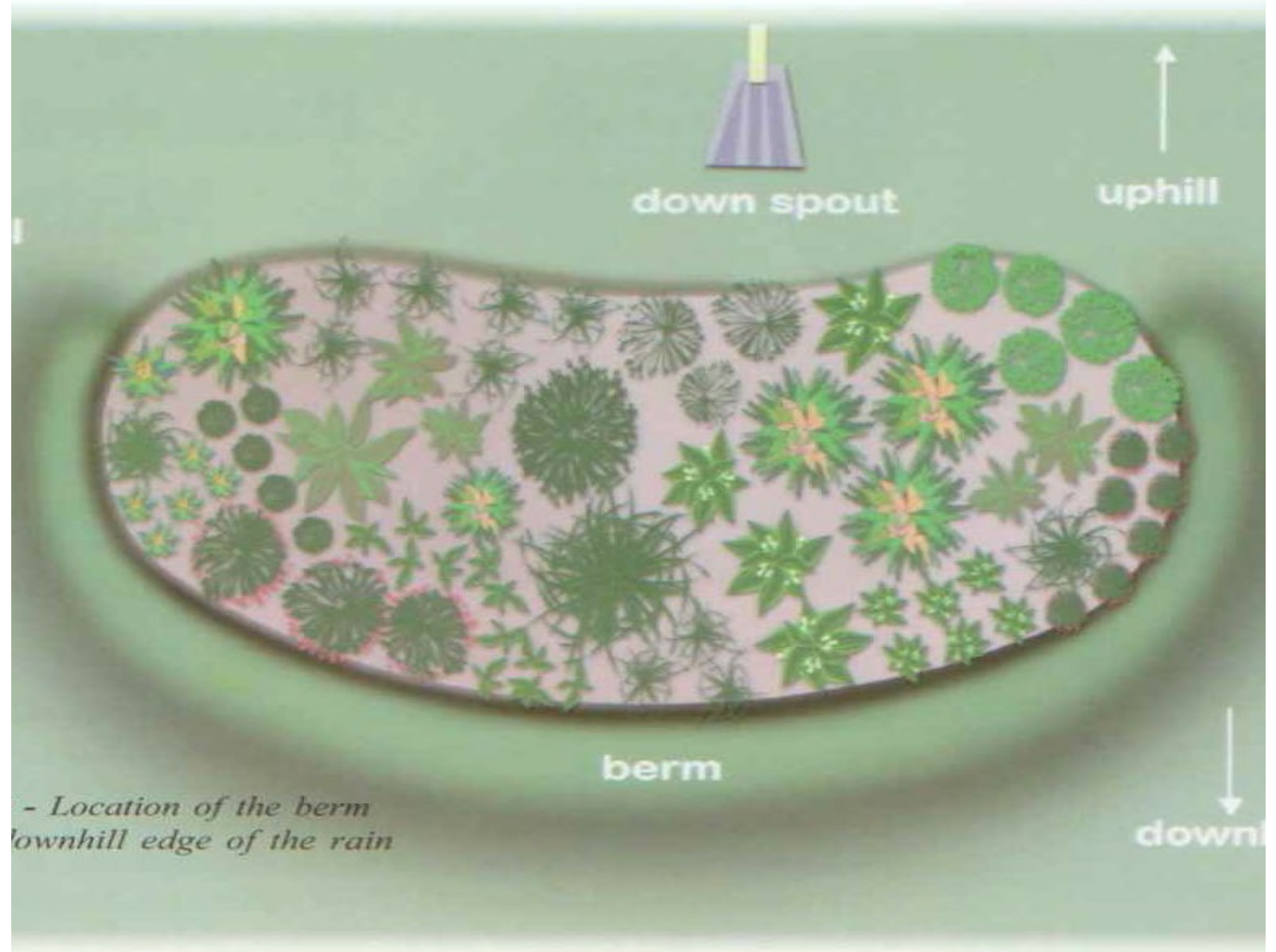
# Rain Gardens & Ponds

Tools to control rainfall runoff: Rain Gardens and Wet Ponds

# Rain Garden

- A rain Garden is
  - A 6" to 8" depressed garden
  - Perpendicular to the slope of the land
  - Filled with soil having high organic content to absorb water
  - Planted with vegetation that thrives in moist environments
  - Sized to handle the rain runoff from a typical storm from a roof or impermeable surface.
- A rain garden will slow the accumulated runoff downslope.
- Reference:

[https://www.uvm.edu/seagrant/sites/default/files/uploads/publication/VTRainGardenManual\\_Full.pdf](https://www.uvm.edu/seagrant/sites/default/files/uploads/publication/VTRainGardenManual_Full.pdf)



## Rain Garden Location Guide

- If capturing roof runoff, place the garden about 10 feet away from the building to prevent potential water seepage into the basement.
- Do not place a rain garden over a septic tank or leach field.
- Do not place a rain garden near a drinking water well.
- Call Dig Safe® at 1-888-DIG-SAFE at least three days before digging to avoid underground pipes and utilities.
- Check for any private wiring or underground utilities such as driveway lights and sheds with electricity.
- Select a gently sloped area if possible to make installation easier.
- Do not place the rain garden in a naturally wet area; a sign of poor drainage.
- Avoid disturbing tree roots. Trees may be injured by digging and may not tolerate the additional soil moisture.

## Wet Ponds For Storage

- Wet Ponds have a permanent pool of water and have the capacity to temporarily store stormwater runoff and release it at a controlled rate; provide flood control; and provide water quality treatment. Properly sized and maintained, wet ponds can achieve high rates of removal for a number of urban pollutants, including sediment and the pollutants associated with sediment, such as trace metals, hydrocarbons, biological oxygen demand (BOD) , nutrients, and pesticides. They also provide some treatment of dissolved nutrients, through biological processes.
- **Sizing:** Wet ponds must detain, above the permanent pool, a runoff volume equal to 1.0 inch times the subcatchment's impervious area plus 0.4 inch times the landscaped developed area to be released over a 24 to 48 hour period
- **Siting:** The wet pond should be suitable to prevent seepage, environmental impact or posing a hazard to downstream property or life. Practically, the pond should be lined with an impermeable layer such as clay or a membrane. An overflow discharge should be provided.
- **Reference:** <https://www.maine.gov/dep/land/stormwater/stormwaterbmps/vol3/chapter4.pdf>

