RAIN GARDENS: GARDENS WITH BENEFITS!

Whether we get our drinking water from groundwater or our creeks and rivers, rainwater keeps it all flowing. It makes sense (as well as cents) to capture, protect, and conserve rainwater as naturally as possible.

Rain comes from nature, but stormwater runoff is manmade. During a common rain or snow storm, our roofs, sidewalks, and driveways create thousands of gallons of runoff that cause flooding and soil erosion. Stormwater runoff also

carries pollution such as motor fluids, trash, lawn chemicals and bacteria into local waterways.

In southeastern Pennsylvania, southwestern New Jersey, and most of Delaware, creeks flow to the Delaware River and Bay. The health of these vitally important waterways depends upon how we conserve and protect water resources far upstream.



OTHER WAYS TO SLOW THE FLOW AND REDUCE STORMWATER POLLUTION

Grass-cycle

No need to chemically fertilize your lawn when you allow grass clippings to remain on the ground and compost naturally. Bonus — no raking required!

Use a rain barrel

They come in all shapes and sizes, and they help save money on your water bill! Water collected in rain barrels can be used to water gardens, potted plants, and wash down outdoor surfaces and vehicles!

Choose alternative pavements and pavers

Driveways, sidewalks, parking areas and pathways can be created with paving materials that allow water to soak through them and into the ground below.

Service your car and fuel with care Oils and other engine fluids are extremely toxic. Regular maintenance

extremely toxic. Regular maintenance of vehicles and being careful at the gas pump can prevent this pollution from leaking into our waterways.

■ Pick up the Poo

Pet waste is not a good natural fertilizer, but it is a great source of bacterial pollution when it gets washed into storm drains and local waterways. Flush it down the toilet or pick it up with a biodegradable bag and place it in the trashcan.

Keep litter off your sidewalks and streets

Trash in creeks and rivers gets there from someone throwing it on the ground. Rain carries it to the waterways. *Clean streets = clean streams!*

Choose less toxic products

Switching out toxic household cleaners, pesticides, etc. for more natural alternatives reduces household hazardous wastes and creates a healthier environment in and outside of your home.

Conserve energy

Turning down your thermostat in the winter, hanging laundry outside to dry, and using energy efficient light bulbs can help protect and conserve water because power production often requires water use.

Philadelphia Philadelphia Water Department

The **Partnership for the Delaware Estuary**, a National Estuary Program, leads science-based and collaborative efforts to improve the tidal Delaware River and Bay, which spans Delaware, New Jersey, and Pennsylvania.







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SOME RAIN GARDEN EXAMPLES:

Visit www.raingardensforthebays.org to learn more about rain garden installation and care, and view local garden photos.





RAIN GARDENS CAN:

- Reduce flooding in our communities.
- Filter pollution out of rainwater & melting snow.
- Protect and replenish drinking water supplies.
- Provide important food and shelter for wildlife.
- Replace wet areas with a lovely garden feature!

HOW TO MAKE A RAIN GARDEN

Shaped like a bowl, a rain garden captures water and soaks it into the ground — just as nature intended! A simple rain garden slows and reduces the runoff that flows from your property while providing a lovely landscape feature. You can turn a spot in your yard into a beautiful garden — with benefits!

In most yards, a rain garden can be easily installed with the following 7 steps:

Choose an area in your yard that gets water from your roof downspout or driveway runoff. Make sure the area is free of tree roots and at least 10 feet away from foundations and utilities. downhill flow of water

foundation

Martin Martine

Dig a 4" to 8" flat-bottomed bowl in a shape and size of your choice. Use the dirt to create a ridge on the downhill side to help collect more rainwater. Ponding water should soak into the ground within 2 days so as to not breed mosquitoes.

ANTRONIC

COMPOST

TOPSOIL

Check your soil to see if you have clay. Clay soils must be removed to create good drainage.

Loosen bottom soil up to 12" and mix in compost, sand and topsoil to create a loose, absorbent soil mixture.

(5)



Select native plants and shrubs (some drought tolerant, some water-loving) to plant in your rain garden. Local nursery staff can help with your selections.

> (6)Use natural (dye-free) mulch to avoid weed growth.

> > Water plants as needed in the first growing season. Once established, your rain garden will not need watering, mowing or fertilizing!

4"- 8" deep basin

mulch layer

roots help absorb water

2"- 6" ponding depth

overflow

ridae

12"- 24" deep absorbent soil mixture

existing soil/ground