GARDENING TO PROTECT OUR WATER

- ❀ SLOW WATER DOWN
- ❀ USE NATIVE PLANTS
- ❀ COMPOST

GARDENING: how can something so rewarding be good for the environment? The way you garden and landscape your property can reduce the demand on your well for irrigation, prevent soil erosion, and protect water quality.

Consider what happens on your land

Landscape design begins with drainage, or how water flows on your property. Look for sheet flow during or after a storm. Does water run down your driveway into the road? Is water causing a gully to develop on or near your property? These are signs that intervention is needed. Ask yourself a few more questions: Is storm water funneled off the roof into one area? Is it traveling across impermeable surfaces, such as patios, paths, or driveways? Does your land have a significant slope? While grass will slow water down, during an intense storm, runoff can flow across a lawn.

Here are several ways to slow storm water down, safely keep it on your property while it infiltrates the soil over a period of one to two days, and reduce the need to irrigate your lawn and garden:

- ❀ Incorporate permeable surfaces into your landscape plans by using crushed stone, slate installed on stone dust, grass steps, or pebble mosaics, or gravel grass, a combination of plants over layers of gravel and sandy soils that serves as a parking area
- ❀ Grade to direct water away from the home and into simple swales
- ❀ Use rock walls or rock gardens to tame a slope
- ❀ Create a dry rock stream, an idea burrowed from Japan, that can collect water when it rains and look beautiful when it is dry
- ❀ Consider catching roof runoff in a rain barrel and use the water for the garden

One of the most effective ways you as an individual homeowner can protect our town's natural water resources is to keep rainwater on your property. By slowing down runoff, your need for water is reduced and the water can be filtered and cleaned naturally by soils.

GOOD GARDENING PRACTICES CONTRIBUTE TO GOOD WATER QUALITY

Gardening is not only a rewarding pastime: how you garden affects the health of the local environment and sustainability of the planet. The landscape you create can add to your property value, aesthetically blend with the beauty of our community, and protect water quality.

Use Plants to Slow Water Down

There are several ways to put plants to work on your property, from simple to complex. One way to change the landscape is to ***reduce the size of the lawn*** (and requisite lawn maintenance activities!) by planting more ground covers, a meadow, or shrub border.

Some landscape features, ***rain gardens or vernal ponds,*** serve as water retention areas. A rain garden is a shallow depression, sometimes underlain with porous materials or a perforated pipe, planted with plants that can survive wet and dry periods. The water that collects in a rain garden filters into the ground within a day or two, before mosquitoes can breed. A vernal pond is one that fills with water in the spring or fall, but dries up during the summer. Especially when planted with native plants, rain gardens and vernal ponds provide habitat for birds and butterflies.

Another way to landscape and slow down runoff is by planting a vegetative buffer around streams and ponds. Also called ***riparian buffers,*** the plants slow the runoff down, decrease the overall volume of water, filter pollution, trap sediments, and decrease erosion. Vegetative buffers also discourage geese.

Water only when needed. During the growing season, our lawns, perennials, and vegetable gardens need one inch of rain per week. Instead of relying on automatic sprinklers, check the rain gauge (available at hardware stores and garden centers) and water as needed. An infrequent soaking is better then shallow watering because it encourages deep root growth. Watering in the early morning with drip irrigation (ranging from inexpensive soaker hoses to elaborate computerized systems) is most effective.

Fertilizing, Mulching, Composting

Before applying fertilizers, ***test your soil,*** or request your landscaper to test it. Rather than needing fertilizers, you may need to correct the pH so nutrients are available to the plants. Add only the nutrients (nitrogen, phosphorous, or potassium) that are recommended, and only during the growing season. Plants only use what they need; excess fertilizers are carried by storm water into the surface water. Use slow-release fertilizers. Soil testing information is available from Cornell Cooperative Extension of Westchester County, 26 Legion Drive, Valhalla, NY 10595, 914-285-4640, *http://www.cce.cornell.edu/westchester*

The best fertilizer is free: ***compost.*** The easiest way to make compost is to make a pile of grass clippings and dried leaves and leave it alone for two or three years. They will decompose. You can speed up the process by shredding the leaves first; shredded leaves take a year to decompose. Aerating the pile by turning it or tumbling it can shorten the process to a few weeks or months. Keep animal products, weeds that have gone to seed, and diseased plants out of the cold compost pile and you will be happy with the results. To speed up the process, investigate the science of hot composting.

Mulch is a layer of organic matter placed around the plants in a garden. Mulch adds nutrients as it decomposes, prevents weed growth, conserves soil moisture, and has other benefits. Compost can serve as mulch. You can also use your own tree leaves and pine needles by chipping them or allowing them to break down slightly before spreading. By using a mulching lawn mower, you can leave grass clippings to naturally fertilize the lawn. Avoid blowing the natural blanket of leaves around mature trees.

As part of our town's efforts to cut down on materials going to a landfill, mulch and wood chips can be delivered to your property. When available, mulch can be purchased for $20/yard in minimum orders of 6 yards for $120. The mulch can be delivered to your home on Friday mornings between 8:00 AM and 10:00 AM. The Town Clerk's office handles all purchases of mulch. Residents must be home at delivery time to direct the location of a drop-off. Wood chips are free. Six yards can be loaded into your truck for $30 or delivered to your home in 6-yard lots for $30. Call the Town House at 914-764-5511 for more information.

Lawns and Plant Choices

A few words about ***lawns: Fescue to the Rescue!*** Perennial fescue grasses require less water and fertilizer, are drought and shade tolerant, and stay green throughout the summer. Fescues have high salt tolerance and can be cut at a higher mowing level. Consider using a blend of tall fescues or fine leaf fescues. Reduce the cost of lawn care by cutting the grass to a height of 1½ to 3 inches and allowing the clippings to remain. The higher cut encourages longer roots, retains water, and discourages weeds. If a lawn is mowed regularly, the clippings do not clump on the lawn and will break down in three to four weeks. Leaving the clippings can reduce the fertilizer needed by fifty percent. By utilizing the clippings, two applications of slow-release fertilizer are usually sufficient.

Finally, gardening wisdom dictates ***"Right plant, right place."*** Before purchasing a plant and bringing it home, evaluate the site for light and moisture and select a plant that requires those conditions. Read the plant label carefully. Plants growing in the 'right place' are less stressed, less prone to diseases and pests, and more likely to flourish. Selecting native plants, or indigenous species that have evolved over thousands of years in the same habitat in which it is currently found, maintains our regional landscape and supports the wildlife—from butterflies to turtles— that make it home. Native plants are best adapted to survive our soils and climate. Including native plants in your garden and landscape strengthens a natural system that has been weakened by human development.

Native Plants for Rain Gardens, Vernal Ponds, and Riparian Buffers

Herbaceous Plants

- Blue Flag Iris *(Iris versicolor)**
- Cardinal flower *(Lobelia cardinalis)*
- Swamp milkweed *(Asclepias incarnata)**
- Joe-Pye weed *(Eupatorium fistulosum)*
- New York Aster *(Symphyotrichum novae-angliae or Aster novi-belgii)**
- New York Ironweed *(Vernonia noveborascensis)*
- Boneset *(Eupatorium perfoliatum)**
- Sensitive fern *(Onoclea sensibilis)**
- Cinnamon fern *(Osmunda cinnamonea)**
- Little Blue stem *(Schizachyrium scoparium)*
- Switch grass *(Panicum virgatum)**
- Awl-fruited sedge *(Carex stipata)**
- Black-eyed Susan *(Rudbeckia birta)*

Shrubs and Small Trees

- Sweet Fern *(Comptonia peregrina)*
- Northern Bayberry *(Morella pensylvanica, formerly Myrica)**
- Winterberry *(Ilex verticillata)**
- Red twig dogwood *(Cornus stolonifera)*
- Red chokeberry *(Aronia arbutifolia)*
- Spicebush *(Lindera benzoin)*
- Summersweet or Sweet Pepperbush *(Clethra alnifolia)**
- Shadbush or Serviceberry *(Amerlanchier canadensis)*

A Sampling of Native Plants for the Garden

- Wild blue indigo *(Baptisia australia)**
- Bee balm *(Monarda didyma)**
- Garden phlox *(Phlox paniculata)*
- Canada lily *(Lilium canadense)*
- Larkspur *(Delphinium exaltatum)**
- Foam flower *(Tiarella cordifolia)**
- Butterflyweed *(Asclepias tuberosa)**
- Turtlehead *(Chelone glabra)**
- Purple coneflower *(Echinacea purpurea)*
- Helen's flower *(Helenium autumnale)**
- Missouri evening primrose *(Oenothera macrocarpa)**
- Coreopsis *(Coreopsis lanceolata and C. verticillata)**
- Obedient plant *(Physotegia virginiana)**
- Culver's root *(Veronicastrum virginicum)*
- Wild ginger *(Asarum canadensis)*
- Shooting star *(Dodecatheon meadia)*
- Mayapple *(Podophyllum peltatum)*
- Bloodroot (*Sanguinaria canadensis*)
- Trillium (*Trillium cernuum, T. erectum, T. grandiflorum*)
- Wild Geranium (*Geranium maculatum*)

** Deer-resistant*

Please check the Conservation Board's page on the town's web site for additional information and resources on this and other topics at:

http://www.townofpoundridge.com/boardsandcommissions/conservation-board