July: Plant flowering plants; attract beneficial predators

• Plants of all kinds help reduce stormwater runoff from residential properties. Their roots absorb water and break up and aerate the soil as they grow.

• Flowering native perennials will attract beneficial predators and pollinator birds, butterflies, and other insects. Perennials also develop extensive root systems to hold and

enrich the soil. Monitor plants for pests and control them with environmentally friendly applications or use plain water to avoid



contaminating water runoff with chemicals that endanger streams.

August: Redirect roof runoff; install pervious surfaces

• Consider landscape modifications to help your yard retain excess rainwater and prevent runoff. Redirect all downspouts which drain onto paved surfaces and storm sewers to flow into a rain barrel, rain garden, mulched bed or grassy area, located



downgrade from your house. Attend a rain barrel workshop hosted by your municipality, Master Gardeners, or local watershed association.

• Minimize impervious surfaces such as asphalt and concrete on walks, patios, and driveways on your property. Replace them with gravel or pervious blocks or pavers that allow rain and excess water runoff to soak into the soil.

Fall Tips

September: Renovate or overseed your lawn; use slow-release fertilizer

• Labor Day signals the best time of year to renovate your lawn. Core aerate, then overseed a closely mowed lawn with a fine fescue grass seed mixture and spread a slow-acting, organic fertilizer. Fine fescues require less fertilizer and water. Slow-release fertilizers are less water soluble and therefore less polluting to streams. Less compacted soils absorb more rainwater.

October: Plant trees in your yard and community

• Fall is the best time for planting most trees and shrubs. The more trees and shrubs on your property, the more stormwater is controlled in your community. Consider volunteering to plant trees in your community with your tree commission, watershed association, or other conservation organization.



• Leave faded blossoms on perennials to mature into seedheads to support birds and other wildlife over the winter.

• Spread lime if the soil test indicates soil is too acidic for turf grass.

November: Harvest fallen leaves

• Start a compost pile with fallen leaves. Mix in non-meat kitchen scraps or other "green"

organic matter. Compost can be used next year to condition your soil so that it can absorb more rain water. Purchase a compost bin and attend a composting workshop hosted by your County Solid Waste Authority, Master Gardeners, or Pennsylvania Resources Council. Mow last, light leaf fall with a mulching mower and leave the fragments in the lawn as mulch for grass plants.

• Fertilize late fall with a slow-release, organic fertilizer to encourage root development, which will create a healthier, more resilient lawn next year.



December: Winterize rain barrel; relax

• Take a well-earned break from yard work. Disconnect hoses from your rain barrel and store hoses to avoid damage from freezing. As the wintry mix of snow and rain events come along, monitor the melt runoff and see where more improvements might be made next year to keep the water on the property. Your neighbors will thank you and your community will benefit from reduced flooding, safer water, cleaner streams and a healthier environment.

Sources: PA DEP publication "It's OK to Let it Lay," Penn State Extension, and Philadelphia Water Dept. This brochure was created by CRC Watersheds Association for its MS4 stormwater municipal partners.

Chester-Ridley-Crum Watersheds Association

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Register to receive notices of upcoming programs at www.crcwatersheds.org



Monthly Stormwater Planner for Residents

of Chester and Delaware Counties



Homeowners Key to **Community Stormwater** Management

Here are several simple, familiar year-round yard care practices that encourage the absorption of rainfall and water runoff into the soil in residential landscapes. These actions benefit your community by preventing flooding, soil erosion, and polluted runoff that threaten our streams, drinking water, and ecosystems.

Seasonal Tips for Year-Round Yard Care

Mid to Late Winter Tips

January: Use safe de-icers; avoid lawn compaction

• Avoid or minimize using rock salt as a deicer on walks and driveways to prevent polluted runoff from snow and ice melt. Shovel snow and spread sand. Substitute or mix in calcium magnesium acetate, magnesium chloride, or nonchloride de-icing products, which are less harmful to streams.

• Evaluate conversion of a corner of your property to native warm season grasses. Their extensive roots of 3 to 7 feet deep enrich the soil and

Panicum virgatum 'Shenandoah' absorb many times the amount of rainwater than turf grass.

• When possible, stay off your lawn when it is covered with ice or snow to avoid compaction of grass plants.

February: Test your soil

• Healthy soil grows healthy turf which can absorb more rain water. Purchase a soil test kit from Penn State and submit soil samples from your lawn to determine the nutrients that may be lacking.

Go to http://www.aasl.psu.edu

Video: http://www.youtube.com/watch?v=gCbO5a5JZpk

• Cut down stalks of ornamental and native warm season grasses left over the winter for bird habitat.

Spring Tips

March: Plant a large stature tree

• Trees and shrubs help control excess water in the vard. Their foliage and surfaces reduce bark runoff and erosion by intercepting rainfall, and their roots absorb rainfall. Their leaf canopies also reduce the force of rain hitting the soil, preventing erosion. Where possible,

plant a tall growing broad-leaf tree such as an oak, maple, or black gum. Large trees are great stormwater control. At maturity they intercept over 1,000 gallons of rainwater each year. Avoid pruning tree crowns to allow full canopies to develop.

April: Leave grass clippings; mulch properly

• Cut grass at 2½ to 3 inches tall. Mow often enough so that clippings are not longer than one-third (1/3) of the grass blade, so they can decompose easily into the soil.

• Excess nitrogen and phosphorus from lawn fertilization is frequently a pollutant to streams, fostering the growth of algae

which deplete oxygen levels, harming fish. Spare your stream by avoiding spring fertilization, and leave your grass clippings on your lawn instead. Grass



• Mulched beds trap and infiltrate more rainwater than lawn or bare soil. Spread out any excess mulch away from trees and shrubs, making sure the tree's "flare" is exposed, and allowing it to decompose. Top off with a thin layer of fresh mulch, making sure the mulch is no deeper than 3" and does not touch the tree bark. Never spread fresh woodchips around trees or shrubs; their decomposition will harm plants.



roots of trees

Spread mulch to a diameter of at least 3 feet

Proper mulching can help keep a tree healthy. (Sarah Cox, Purdue University)

May: Replace some turf with mulched beds, a rain garden, or pocket meadow

• Create new areas in the yard that will absorb roof water from downspouts, runoff from paved areas, and puddles in compacted soil areas. Start a flower or vegetable patch, build a bog or rain garden, or establish a pocket meadow, to absorb rainwater. Mulch all bare soil in planted beds and under trees and shrubs with composted leaf mulch from your municipal leaf composting operation.

• Learn more from downloading CRC's rain garden brochure:

http://www.crcwatersheds.org/resources/view/96

Check out Swarthmore College's Sustainability web site:

http://www.scottarboretum.org/Sustainability/ourpractices.html



Summer Tips

June: Raise mower height; judiciously control weeds and pests

• Raise your mower height to 3 inches for summer months. Taller grass grows deeper roots, shades and protects the soil, is less prone to disease, pests, and weeds, and captures more excess rainwater on the property.

• Late May or early June is a good time to spread biological controls on your lawn or

garden, such as beneficial nematodes to control Japanese beetle grubs. Avoid use of chemical pesticides and herbicides if possible, they damage



beneficial insects and soil structures. If weed problems develop, spot treat specific weed patches rather than treating the entire lawn or garden.

• Leave a minimum of a 3 foot unmowed edge along streams, ponds, and drainage channels.