



2. A NATURAL LAWN

Reducing Your Use of Weed Killers and Fertilizers on Your Lawn

WHY ACT?

If you have a lawn, you may be using weed killers and fertilizers to keep it green and weed-free. Unfortunately, toxic chemicals in weed killers and fertilizers often wash off your lawn into local streams and ground water, eventually polluting our waterways and their tributaries. Fertilizer encourages algae growth, and when the algae die and decompose, the oxygen in the water is reduced. Pesticides, even in very small amounts, can harm or kill aquatic life. Exposure to chemicals has also been linked to human health problems. This water action will show you how to create a natural lawn and help protect the health of your family, wildlife, and our local resources.

WATER ACTION

- Get your soil tested and apply fertilizers only at the appropriate time in the right amounts.
- If you fertilize at all, use organic compost instead of chemical fertilizers. Fertilizers act as pollutants once they enter our waterways. You can either create your own compost, or purchase it from a garden supply center.
- Accept a few weeds, like clover, which can coexist nicely with your lawn. Hand pull the ugly ones before they seed, and leave the others alone.
- Overseed thin areas in the spring and fall to crowd out weeds. Just rake to expose the soil, spread the seed, and cover with 1/4 inch of compost or soil.

Note: To lessen the burden of maintaining a lawn and the toll it takes on the water supply and the pollutants going into the watershed, consider replacing all or part of your lawn with native trees, shrubs, ferns, wildflowers, and groundcover (see *Yard Makeover*, Action 12, pg. 25).

MATERIALS

Natural compost, soil, seeds, rake, and weed pulling tools

TIME

A couple of hours to pull weeds and fertilize with compost

BENEFITS

By “greening” your lawn, you prevent the pollution from weed killers and fertilizers from flowing into streams and rivers while making your lawn a natural place for you, your family and neighbors to enjoy.



10. A NO RAINER

Installing a Rain Barrel or Downspout Extension

WHY ACT?

Water running off your roof during a rainstorm can be part of the problem—or a resource you can put to good use! On many properties, rooftop rainwater drains onto yards with compacted clay soil or onto hard pavement. In either case, it eventually flows into storm drains and directly into our local streams. Reducing storm water runoff is the first step to reviving life in urban streams. This water action will show you how to divert and store rainwater runoff, so that you can help support aquatic life and reduce stream bank erosion. What's more, rainwater collection can help you save water for use in your yard, eliminate potential flooding in your basement, and reduce storm water management costs.

WATER ACTION

- Check your gutters and roof drains and remove any leaves or other debris that may block water flow. If leaf accumulation is a recurring problem, consider installing commercial gutter shields.
- If your roof drain downspouts discharge too close to the house, install extensions that carry the water at least six feet away from the foundation to a vegetated area of your yard. Use additional pieces of downspout or open gutters for the extensions. Place a splash block at the end of the extension to spread out the water as it runs onto your lawn. This reduces the potential for soil erosion.
- Consider installing a rain barrel at the end of your downspout to collect rainwater (see Resources for purchase and installation information).
- You can use the rainwater to water plants and shrubs between rainfalls or allow the water to dribble out slowly so your yard can soak it up and recharge the groundwater.

MATERIALS

Ladder, gloves, and eye protection to wear while cleaning gutters; cistern or rain barrel, connectors, hose for outflow





TIME

One to six hours, depending on gutter maintenance and size of cistern

RESOURCES

American Rainwater Catchment Systems Association: www.arcsa-usa.org

Urban Garden Center: www.urbangardencenter.com

Rainsaver USA: www.rainsaverusa.com

BENEFITS

You reduce the volume of stormwater entering our streams, while creating a source of water for your yard between rainfalls. In addition, since rooftop runoff is a major cause of wet or flooded basements, cisterns and rain barrels are often the most cost-effective way to keep water from entering your basement.





12. YARD MAKEOVER

Creating Water-friendly Landscaping

WHY ACT?

Before your home or subdivision was built, the forest and soil that existed there functioned as a giant sponge and filter. Rainfall was absorbed into the forest soil, and the rich organic layer filtered out any impurities in the water. A typical rainfall didn't result in runoff. The water just filtered into the soil and recharged groundwater.

A conventional housing development site, however, is covered with impervious surfaces that short-circuit Mother Nature's water filtering and recycling plan. The result is that a lot more water runs off into the streams. This increased volume of water erodes stream banks and sends sediment downstream. Moreover, that water tends to be full of pollutants ranging from excess fertilizers to motor oil and even heavy metals from car brake pads. The good news is that you can give your yard a "makeover" that will put the landscape back to work as a filter. A water-saving landscape can be beautiful and highly distinctive. It also provides habitat to local wildlife. Best of all, your yard makeover makes your community more livable by creating attractive green space!

WATER ACTION

- Develop a plan for creating a more natural landscape. It's done by planting native trees and other native plants that can survive well on the normal rainfall of our region. Your goal is to reduce the percentage of lawn in your yard.
- In creating your plan, seek advice about native plants from your municipal arborist, extension service agent, or the National Wildlife Federation, www.nwf.org. To provide a more diverse, natural topography, consider creating gradual depressions in the landscape that will allow small amounts of rainwater to sink into the ground (see *Catch It While You Can*, Action 11, pg. 24).
- To make the transition from lawn to a more water absorbent natural landscape, try this method, which works best if you start in the fall:
 - In the parts of your yard you wish to makeover, insert a shovel into the ground in a grid pattern every foot, pushing down and wiggling the shovel to loosen the earth. That soil will now be a sponge to absorb runoff and allow it to enter the ground.

- Place a single layer of newspaper over the lawn, and cover it with two inches of shredded leaf mulch (available from your municipal government).
- Determine where you walk in your yard, and lay down thick wood mulch for your paths.
- After a few months of leaf mulch decomposition, plant native trees, shrubs, ferns, wildflowers, and groundcover.

MATERIALS

Newspaper, shredded leaf mulch, wood mulch, native plants, gardening tools

TIME

Several hours to plan and considerable time and pleasure to create your new landscape (minus all the time you will save by not having to mow or maintain your lawn!)

BENEFITS

You'll keep a lot of rainwater from running down your street and into storm drains and streams. Further, you'll reduce up to 50% of your yearly water use, save the time and money spent keeping up a green lawn, and attract birds and butterflies to your new backyard habitat!

