Lawn and Garden Care

Problem
Herbicides, pesticides and chemical fertilizers leach into our waterways and change water chemistry. They add nutrients that cause algal growth and harm streamlife from plants to insects, amphibians, birds, fish and mammals. People don’t like the look and odor of polluted water, either!

Solution
Use non-toxic recipes and methods to help reduce excess chemicals and nutrients in our local streams, wetlands and rivers.

General Tips

Plant natives
Use native plants, trees and shrubs in your yard. They’ve adapted to the area and need less water and maintenance. Native plants available at most local garden centers include:

Shrubs
• Snowberry (Symphoricarpos albus, S. mollis)
• Red Huckleberry (Vaccinium parvifolium)
• Oregon Grape (Mahonia nervosa)
• Sword Fern (Polystichum munitum)

Wildflowers
• Columbine (Aquilegia formosa)
• Aster (Aster chilensis ssp. Hallii, A. subspicatus)
• Lupine (Lupinus latifolius, L. polyphyllus)

Visit cleanwaterservices.org/gonative to find the right plant for your yard.

Pull weeds and remove invasives
Pull weeds when they first appear to keep them from spreading. This saves time and energy, and reduces the use of chemicals.

Watch soil pH
Use a simple test kit to check the pH of your soil. Ideal pH reduces the need to fertilize and helps plants absorb the nutrients they need. Test kits are available at most local hardware stores.

Water just enough
Water about one inch per week for a healthy lawn. Over watering your lawn encourages shallow root growth, promotes weeds and washes essential nutrients from the soil. The best time to water is early morning.

Park that gas mower!
A gas-powered lawn mower can pollute as much as a car. Modern push mowers are less expensive to own, operate and maintain. They’re much better for the environment, and provide good exercise. Or, use plants and grasses that need less mowing.

Grass cycle
Leave grass clippings on your lawn to reduce the need for fertilizer and water. Grass clippings decompose quickly returning valuable nutrients to the soil and reduce the amount of runoff from your yard that enters local rivers and streams.

Use homemade pest control and fertilizer
Make your own less-toxic pest control and fertilizers. Here are some simple recipes made with easy-to-find ingredients.

Insect control for flowers
For flowers, including roses, to prevent insect infestations:
• 5 drops liquid dish soap
• 5 drops chewing tobacco juice*
• 2 drops antiseptic mouthwash
Add this mixture to one quart of water and spray onto foliage.

* To make chewing tobacco juice, place ½ cup of chewing tobacco in an old pantyhose stocking and soak it in one gallon of water until the mixture is dark brown.

Soil Amendment for planting Flower Gardens
Following the risk of frost, amend planting bed soil with the following mixture and plant both annual and perennial flower seedlings. Mix all the ingredients into a 5-gallon bucket full of fish emulsion and water. Mix contents into rows or beds as soil is being planted.

• 2 cups gypsum
• 1 cup chopped lime
• 1 cup wood ash
• 1 cup wood ash

cleanwaterservices.org/partnersforcleanwater
Choosing “alternative” home and yard care methods is easy, affordable and better for our streams, wetlands, and rivers. They cost less and are less work, too! As water runs downhill, it picks up pollutants such as oil, grease, pesticides, fertilizers and pet feces. These wash into waterways and impact water quality. Home and yard care doesn’t have to harm the water. You’ll find tips and recipes in this brochure that are “less toxic” to streams, wetlands and rivers.

**Roof Treatments**

**Problem**
Chemicals that kill roof moss and lichen typically contain copper, zinc and iron sulfate metals that eventually wash into water.

**Solution**
Use alternatives to chemical treatment to help protect our water.

**Prevention**
- Keep debris and leaves off the roof. They hold moisture, promoting fungal growth and damage.
- Non-organic roofing materials (metal, etc.) resist moss growth.
- Reduce shade near roof and trim branches to deter moss growth.

If treatment is needed
- Use products that are less-toxic and designed to protect the environment (see Metro’s Grow Smart guide).
- Use minimal concentrations as recommended on the product label.
- Disconnect downspouts from gutters when applying liquid treatments. The runoff will filter through the soil and break down, instead of going to the nearest stream.
- Treat roofs only in dry weather to allow treatment to soak into the roof.
- Before you hire a roof treatment professional, ask what they use and how they handle runoff.
- After treatment, monitor the runoff. Reconnect the downspouts after at least 3 rainfalls, or when there is no visible chemical residue or sheen.

**Pressure Washing**

**Problem**
When yard debris washes into streams and wetlands, the excess decaying material can reduce the dissolved oxygen needed by aquatic life. Leaves and yard debris can also clog drainage and cause flooding.

**Solution**
Make your cleaning activities more stream friendly by using the following tips:
- Sweep sidewalks and driveways, and put the sweepings in the garbage to keep pollutants and litter out of waterways.
- Water pressure alone often removes the dirt and grime.
- Before you pressure wash, figure out how to keep paint flakes, grease and other pollutants from washing into storm drains, ditches or waterways. Collect and properly dispose of these pollutants, especially outdoor paint which might contain lead that is poisonous to plants, animals and children.

**Vehicle Washing**

- Use automatic car washes that recycle water and properly dispose of detergents.
- If you wash your car at home, park it on grass to allow pollutants to filter through the soil.

**Composting**

**Problem**
When yard debris washes into streams and wetlands, the excess decaying material can reduce the dissolved oxygen needed by aquatic life. Leaves and yard debris can also clog drainage and cause flooding.

**Solution**
Compost yard debris and kitchen scraps into organic fertilizer. All you need is a few minutes a week and three square feet of yard. Use the following tips to turn a mountain into a molehill.

- Composting receptacles or “machines” are easy to use and maintain. They contain odors and speed up the decomposition process. For a list of vendors, call Metro at (503) 234-3000.
- Keep your compost pile on level ground to hold materials in place and keep out animal scavengers.
- Keep fresh composting away from creeks or wetlands to prevent nutrients and bacteria from leaching into the water.
- For quick composting with minimal odor, start with a mixture of browns (dried up plant material) and greens (kitchen scraps and grass).
- A good starting recipe includes:
  - 3 parts dry leaves (browns)
  - 2 parts fresh garden weeds and grass clippings
  - 1 part food scraps (greens)
  - 2 parts water (or beer) added periodically
- Never put meat scraps or bones in compost. (They produce odors and attract scavengers.)
- Store kitchen scraps in the freezer to prevent odors and save trips to the compost pile.
- Add eggshells, paper, coffee grounds and filters to enrich your compost.
- Put all yard debris in the compost pile. Break up large materials for faster decomposition.