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## Yard Trimmings in Waterways

Something as simple as grass clippings can cause big problems for waterways. Clippings and leaves are often blown and swept into streets. They wash down storm drains, ultimately reaching lakes and rivers, elevating nutrient levels, decreasing the oxygen content and killing fish. Leaves and grass on the surface of the water also block sunlight from reaching underwater vegetation, killing an important food source for fish.

Instead of blowing clippings away from lawns, you can rake yard clippings over lawns, and they naturally fertilize. Or give cuttings a new life. Most large cities accept yard waste at their recycling facilities and turn it into mulch. You can take the same recycling approach. Collect yard waste and turn it into compost or mulch. You can then use the new product on other lawns and save money.

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## Yard Trimmings Tips and Tidbits

- Grass clippings don't cause thatch. Overfertilizing, infrequent mowing and improper watering cause thatch.
- By "grass-cycling" – that is mulching, recycling or composting grass clippings – you can reduce each lawn's yard waste by 20 to 40 percent.
- Leaving grass clippings on the lawn can generate up to 25 percent of the lawn's fertilizer needs.
- You can make a positive environmental impact and reduce flooding by keeping yard trimmings out of streets, storm drains and landfills.

## Fertilizers

Many folks follow the old but misguided adage that "if a little is good, a lot is even better." That's a particularly dangerous philosophy when you consider lawn fertilizer's harmful effect on water quality. Nutrients in the fertilizer can degrade the state's lakes and rivers, so it's important to reduce fertilizer runoff from yards.

The bottom line is that using too much fertilizer is wasteful. Do your homework to measure the soil fertility you're working with and calculate the amount of fertilizer needed. Use only that amount. It will save you money, produce better results for the lawn and cause less harm to the environment.

## Fertilizer Tips and Tidbits

- Before applying fertilizer, determine the amount needed for the space. The average do-it-yourselfer applies two to four times more fertilizer than needed. Calculate the land area to determine how much fertilizer to spread, and follow the label instructions on the product.
- Have your soil tested to see which nutrients it needs and which it does not. Most lawn and garden centers have easy-to-use test kits for purchase.
- Check the watering instructions. Avoid applying fertilizer when a heavy rain is forecast. Determine whether the label instructs you to apply the product to wet or dry grass. Doing so prevents burnt foliage and allows the material to settle in, reducing the chance for runoff.

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## Lawn Watering

Runoff pollution is not only generated by rain. You can create the same effects of runoff with a garden hose or sprinkler. Any time we use water on lawns, the potential exists to send pollutant-toting water to storm drains and waterways.

In some urban areas, up to 30 percent of the average household's water use is used for lawn care. Following some basic best management practices will help maintain lush green lawns, protect water quality and water resources, and result in lower water bills.

### Lawn Watering Tips and Tidbits

- Be consistent with your watering routine. Unless you plan to do so all season, don't water fescue, bluegrass or ryegrass lawns. Light or infrequent watering weakens grass.
- Water lawns early in the morning or late in the afternoon. Less water will be lost to evaporation than when watering under the hot midday sun.
- In general, lawns need only about 1 inch of water per week, including rainfall. Use a rain gauge to measure the amount of rain received, and water only when nature hasn't provided the inch.
- Don't run sprinkler systems if it's raining. Periodically check systems that you manage on a timer to ensure they're not working during storms. This prevents you from wasting water, overwatering lawns and potentially causing lawn treatment chemicals to leach or run off.
- Water only lawns – not driveways, siding, sidewalks, streets or other impervious surfaces.
- Properly maintain irrigation systems. Check for leaks, and make sure the sprinkler heads are working properly.

*Feel free to use this information,  
but please credit the North Dakota  
Department of Environmental Quality.*

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- Use low-phosphorus or phosphate-free fertilizers.
- Use slow-release fertilizers that leach less and work longer.
- Grass clippings, compost and organic mulch provide the same nutrients as fertilizer products.
- Avoid applying fertilizer near storm drains, streets, sidewalks, driveways, ditches or within 50 feet of lakes and streams.

## Pesticides

Pesticides are chemical and biological products or poisons designed to kill or prevent weeds, insects, fungus and rodents. The term "pesticide" includes herbicides, fungicides, insecticides and rodenticides. When packaged for household use, these products are more commonly referred to as bug spray and weed killer. Pesticides run off lawns, just like fertilizers. Much of the advice for fertilizer use holds true for pesticide use.

Toxic chemicals from pesticide runoff contaminate waterways. Runoff volumes increase as products are overused, applied improperly or applied when grass is dormant. According to recent estimates, homeowners and lawn care companies together apply as much as 70 million pounds of the active ingredients in pesticides to lawns each year.

Tolerating a certain level of weeds and pests could go a long way toward protecting water quality and saving money.

### Pesticides Tips and Tidbits

- Before applying an insecticide or fungicide to a turf area, be sure that an insect or disease is indeed causing the apparent damage. Consider whether the damage is severe enough to warrant using a pesticide.
- A little elbow grease can go a long way toward removing weeds and preventing water pollution.
- Follow the directions exactly as stated on the container label. The label provides information on how to apply the product and properly dispose of the container.
- Depending on the soil type, add ¼ to ½ inch of water to areas after applying pesticides, but be mindful that overwatering causes runoff and chemical leaching.
- Use the least toxic chemical possible.
- Avoid applying pesticides near storm drains, streets, driveways, ditches or within 50 feet of lakes and streams.



**Remember,  
“We can’t all live upstream.”**