"We are killing the lakes and wetlands in our neighborhood. Each of us, with our seemingly harmless everyday yard work, has a small part in it, but together the effects are becoming very significant."

Jim Perry

ur neighborhood lakes and wetlands form an interconnected ecoH.T. Morse Professor of Water Quality Head, Dept. of Fisheries, Wildlife and Conservation Biology University of Minnesota

system that, because of the cumulative effects of such things as grass clippings, leaves and fertilizer, is in danger. As organic materials (grass, leaves, etc.) reach the water, they decay, releasing phosphorous into the system. Additional phosphorous from fertilizers and pesticides also enter via storm water runoff. This excess phosphorous fuels an explosive growth of algae which forms a green scum on top of the water. This layer blocks sunlight. With no light, there is no photosynthesis and underwater plants can't grow. Then, as all of this algae dies and decays, it uses up oxygen. With depleted oxygen, fish and other underwater creatures can't exist.

The chain of events that links your vardwork to the death of a local lake



clippings reach water Decaying

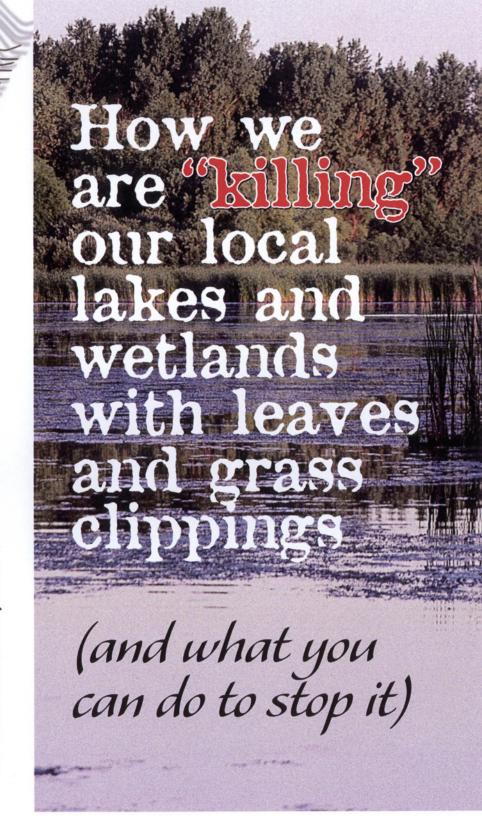
matter releases phosphorous

Phosphorous

Algae blocks light, depletes

Depleted oxygen;

-Washington Metro



Six things you can do to help save our local lakes and wetlands!



7. Mulch or compost your grass clippings

Keep your grass clippings off of hard surfaces (sidewalks, driveways, streets) from which they can be washed away, ultimately ending up in our waters. Mulching your grass reduces the need for fertilizer because, as the grass clippings break down, nutrients are released into your lawn. And, less fertilizer on your lawn means less fertilizer in the water. If you don't want to mulch, compost your grass clippings.

Also, don't cut your grass lower than 3 inches in the summer. Slightly longer grass will stay greener, reducing the need for watering. And, *less watering means less runoff*.

2. Mulch or compost your leaves

Because they blow away, leaves can be an even bigger problem than grass clippings. Mulch or compost the leaves in your yard as soon as they fall and as often as possible. This minimizes the chance that they will reach our water Also, regularly clean leaves



that they will reach our waters. Stop leaves before they blow or wash away into our waters where they can choke out life

from your gutters so they can't be washed away with the rain.

Mulching leaves, like grass, adds nutrients to your lawn, reducing the need for fertilizer. Don't rake leaves into the street for street sweeper pickup.

3. Use zero-phosphorous fertilizer

If you must fertilize, do not use a fertilizer that contains phosphorous. Remember, it's phosphorous that accelerates algae growth in our lakes and wetlands. Consider this - one pound of phosphorous in runoff can result in 500 pounds of algae growth! Soils in the Metro area are already phosphorous-rich. Our lawns do not need additional phosphorous to look green and healthy.

Make sure to keep any excess fertilizer off of hard surfaces - sweep the fertilizer from sidewalks, driveways and streets so it won't run off into our waters.



Look for a
"0" in the middle
(phosphorous)
number on the bag.

4. Reduce storm water runoff from your property

Runoff is excess water that washes the grass clippings, leaves, fertilizer and other "pollutants" from lawns, sidewalks and driveways, carrying them into our water system. To reduce runoff, <u>direct downspouts onto your lawn</u> not onto hard surfaces. Also, use rain barrels to collect rain water for watering plants. Additionally, <u>reduce the "hard surfaces" on your property</u>. Finally, you can <u>create "rain gardens"</u> - collection areas that are planted with native, moisture-loving vegetation.

Every bit of runoff counts. The cumulative effect of unchecked runoff is flooding which allows water to reach and carry off additional pollutants that otherwise wouldn't end up in our lakes and wetlands.

Reducing runoff reduces the opportunity for "pollutants" to be carried into our water system

5. Use native plants; remove invasive, non-native plants

Landscaping with native plants (e.g. little blue stem, blazing star, dogwood) improves our local ecosystem. Native plants are adapted to our environment and climate and are tolerant of both drought and tough winters. This *drought tolerance means no need for excessive watering* and, therefore, less runoff. Native plants are also adapted to our soils and, thus, *don't need fertilizers or pesticides*. This means less maintenance for you. And, because native plants have deeper root systems (which create more air space in the soil), they accommodate water infiltration which, in turn, reduces runoff.

Finally, native plants also provide better habitat for wildlife.

Removing invasive, non-native plants is the other side of this equation. Non-native plants such as buckthorn, Siberian elm, reed canary grass, amur maple, purple loosestrife and birdsfoot trefoil crowd out and destroy native plants, reducing native plant diversity to the detriment of our ecosystem.



Blazing star is a native plant it's a profuse bloomer which attracts lots of butterflies. Reed canary grass, on the other hand, is an invasive, non-native plant. It's considered Minnesota's "aquatic crab grass."

O. Properly dispose of household hazardous waste

Do not pour old gasoline onto the street or wash paint brushes at the end of your driveway. Where do these pollutants end up? In our lakes and wetlands!

Properly dispose of household hazardous wastes. Whether gasoline, paint, pesticides, antifreeze, motor oil, or the like, <u>dispose of them at your county waste site</u>. Their effect on our waters can be devastating!

Household

For more information, visit www.rwmwd.org

Household pollutants have a devastating effect on our environment. Bring these wastes to your county waste site.

Ramsey County (651)633-3279 Washington County (651)430-6655