

Dear Village of Lexington Residents,

Through our storm water program the Village of Lexington will periodically send information regarding things that we can do as a community to help keep the environment around our lakes and streams from having a negative impact. This mailing contains information to help guide you on things that you can do to help maintain a clean environment as we plan to do those spring yard maintenance tasks.

It's that time of year again when everyone starts to think about outdoor maintenance and the appearance of our yard. Whether it is planting flower gardens, jumpstarting our lawns with pesticides and fertilizers or just the normal raking up of dead leaves and vegetation I think all of us are planning on doing some type of spring yard work of one kind or another. But did you know that the way we go about doing some of these routine tasks, even though they may be a positive attribute to our own yard, could end up being very detrimental to the environment around us?

Lawn care and Landscaping

Maintaining a healthy looking lawn or garden can be an enjoyable and rewarding hobby. Surrounding your home with a beautiful landscape can enhance its value and provide an aesthetically pleasing environment. However, many products and practices involved in lawn maintenance and landscaping can have a negative impact on both surface water and ground water quality. By incorporating a few minor changes and increasing your understanding of lawn care, gardening, and landscaping, these activities can be conducted without harming our community's water resources. In fact, your lawn can actually help prevent soil erosion, as well as filter out pollutants that may runoff your roof or driveway. **How do yard care activities pollute water?**

Fertilizers – Applying fertilizers or nutrients in excessive amounts, shortly before rainstorms, or to close to areas of surface water, can damage aquatic ecosystems. When runoff containing fertilizers enter a waterway, the nutrients may cause algae blooms and growth of invasive weeds. The decay of these algae and aquatic plants can deplete the oxygen in water, suffocating fish and other marine life.

Pesticides – Insecticides, rodenticides, fungicides, and herbicides are collectively called pesticides. Applying pesticides in excessive amounts, or to close to areas of surface water, is dangerous to human health and aquatic life. Pesticides (and fertilizers) can migrate into groundwater creating health risks in drinking water supplies. Pesticides in surface water can be toxic to many aquatic insects, amphibians, fish, and plants.

Erosion – Exposed soils, especially on sloping ground, can quickly erode and be washed into surface water creating excessive sediment load for the water body. Excess sediment in lakes, rivers, and streams destroys fish and insect habitats by covering it, and by changing the temperatures and oxygen levels in the water. Also, the eroding of riparian areas (areas that border lakes, rivers, or streams) can undermine the foundations of nearby structures and homes.

Yard Wastes – Discarding leaves, grass, and branches in waterways can cause two problems: 1) as these wastes decompose, oxygen levels in the water are depleted, threatening the survival of fish and other aquatic life, and 2) nutrients are added to the water, often resulting in excessive growth of unwanted aquatic plants.

Best management practices and prevention techniques:

- Plant buffer strips of native vegetation between waterways and lawn/garden areas. Vegetation, especially native species, has an enormous potential for protecting waterways from a wide variety of pollutants. Buffer strips can filter out sediment, fertilizers, pesticides, and other pollutants before they reach areas of surface water. They can also prevent stream bank erosion, provide fish and aquatic wildlife habitat, stabilize stream banks, reduce water temperatures in streams and lakes, and protect buildings and homes.
- Have your soil tested to determine proper amounts of fertilizer needed for lawn and garden activities. Tests are available from your local MSU extension office.
- Apply fertilizers and pesticides away from waterways and surface waters.
- Read fertilizer and pesticide product labels carefully and follow directions to avoid over-application of these chemicals.
- Be sure that a rain event is not imminent shortly after the application of fertilizers and pesticides, so as to insure that these chemicals will not be washed away from the area.

- Keep fertilizers away from sidewalks and driveways where it may be washed into surface water or storm drains.
- Mulch grass clippings into the lawn to restore nutrients and diminish the need for chemical fertilizers.
- Dispose of yard wastes away from waterways, stream banks, and shorelines.
- Water lawns and gardens in the morning or evening when temperatures are cooler to maximize water absorption and retention.
- Use integrated pest management (IPM) to control pest populations without the excessive use of pesticides. An IPM program involves monitoring plants for signs of problems, determining acceptable levels of plant damage, then applying only the control strategies necessary, such as physical and biological controls. Keep in mind that most insects in your lawn are not harmful. In fact, some insects are actually beneficial. Contact your local Conservation District office for more information about IPM programs.
- Encourage animals to utilize your yard by landscaping for wildlife. Animals provide natural levels of pest control and add to the beauty of your land.
- Revegetate bare soils quickly to decrease erosion and soil losses. A quick cover can be supplied by planting annual rye grass.
- Substitute compost as a mulch and fertilizer for gardens and landscaping.
- When using commercial fertilizers use those with low amounts of nitrates and phosphates.
- Consider making your own pesticide by mixing 2 tablespoons of liquid soap with 1 quart of water and spray on plants. Contact your local extension office or conservation office for more tips on non toxic gardening and lawn care.

Please Remember.... Your contribution of fertilizers, pesticides, erosion, and yard wastes may seem small. However, when combined with your neighbors' activities, the effect is greatly magnified and often results in damaged or unhealthy aquatic ecosystems.

Sincerely, Christopher M. Heiden MS4 Project Manager

For more information on topics like this please visit:

www.michigan.gov/deq/0,1607,7-135-3313_3682_3714-118486--,00.html

<u>www.epa.gov/npdes/stormwater</u> <u>www.epa.gov/nps</u> <u>Michigan State University Extension Office 1-810-648-2515</u> <u>Sanilac County Conservation District Office 1-810-648-2116</u> Or call the Village of Lexington offices at: 1-810-359-8631 or 1-810-359-5901