Commentary/ Editorial For Immediate Release Date: April 9, 2017

Contact: Corrina Parnapy District Manager Winooski Natural Resources Conservation District www.winooskinrcd.org info@winooskinrcd.org 802-778-3178

RE: "GREEN" Lawn Care

The snow is melting, weather is warming and it is once again time to think about our yards. There is nothing like a barefoot walk through a soft lawn. The mixture of clover, grasses and low growing beneficial plants are not only pleasing to the eye, but lend to conservation practices that improve water quality protection.

In the Lake Champlain watershed there is an increasing concern from excessive nutrients flowing off of lawns, impervious surfaces and farmland, thus impacting our aquatic ecosystems. Since 2012 in Vermont, homeowners should be following the no Phosphorus rule when fertilizing lawns, unless a professional soil test has been conducted on the soil determining that it is needed and/or the lawn is just being established.

Grasses, like other plants need nutrients provided within the soils to grow. These nutrients can be provided by implementing Lawn Care Best Management Practices. Recent surveys of soils within Vermont lawns indicate that most lawns do not need any additional fertilizers. There is a tendency when applying fertilizers, to think more is better. This results in excessive nutrients flowing off of the land and into local bodies of water. Since P should not be in fertilizers applied, I will focus on the impacts of Nitrogen.

Excessive nutrients that enter our waterways feed algae. When the algae then "blooms" it can shift the pH of the water, decrease oxygen levels, cover fish breeding habitat, clog intake pipes, cause taste and odor issues, discourage recreation, lower property values and when bacteria feed on dead algae, cause fish kills from decreased oxygen levels. The nitrogen in fertilizers can actually trigger a toxic harmful algal bloom in certain species of cyanobacteria (blue-green algae).

When the excessive nitrogen enters groundwater it can cause methemoglobinemia (aka, Blue Baby Syndrome) in the elderly and the young. Symptoms include: gastrointestinal swelling, diarrhea, and protein digestion problems.

Excessive nitrogen can actually damage sensitive native plant species, and alter the soil chemical composition allowing for invasive species to take hold. Excessive nitrogen can cause the depletion of calcium, phosphorus and magnesium in the soil. With the issues of fertilizers, what can we do to maintain our lawns and still protect our natural resources?

Lawn Care Best Management Practices; practices that you can implement to have a healthy, sustainable lawn.

- Water your lawn in the morning, water deeply and infrequently. Grasses will go dormant and survive times of drought. There are species of grasses that don't need frequent watering.
- Reduce the size of your lawn. Add a beautiful native or naturalized garden that will attract butterflies, birds and pollinators.
- Leave clover in the lawn. Clover adds nitrogen to the soil naturally.
- Mow only when there is rain in the short-term forecast. Maintain the grass height between 3-4 inches. Never cut off more than 1/3 of the blade and keep your mower blade sharp.
- Leave grass clippings on the lawn. Grass clippings add back nutrients naturally. Never pile clippings near a body of water or push them into a storm-drain.
- Maintain a buffer of native species along waterways. It is recommended to have a 50 ft buffer along streams and a 100 ft buffer along lakes.
- If fertilization is needed, do so only in the fall. Spring rains will wash the nutrients into our waterways.
- Use species of grass that are acclimated to our climate zone. Many of the mixes that are sold require regular watering, mowing, and fertilizers. There are mixes of species sold that surprisingly cost less and require limited maintenance.

There are many practices and projects that you can implement on your own property that will bring enjoyment and protect of our natural resources. To learn more about Urban Conservation Initiatives and Urban & Community Agricultural Initiatives, please visit the WNRCD website at: www.winooskinrcd.org

The Winooski Natural Resources Conservation District is one of 14 conservation districts throughout Vermont. It encompasses all of Chittenden and Washington County as well as parts of Orange County (Orange, Williamstown and Washington). The district relies on grants and individual donations to complete its conservation work. The WNRCD focuses its resources on completing conservation projects within the areas of agricultural assistance, forestland enhancement, urban conservation and watershed stewardship.

###