

Help Keep Dover's Environment Clean

Having a clean environment is important. The quality of Dover's environment impacts the health of everyone in our community.

While the actions on one lawn, landscaped area or yard might contribute only small amounts of pollution, the combined effect of maintaining all green spaces in the City can have a serious effect on water quality. Likewise, while we may not see much improvement in our water quality from using best management practices in one area, the effect of using them on all green spaces throughout Dover can have a significant benefit on water quality in Silver Lake, the St. Jones River, and ultimately the Delaware Bay.

What are BMPs and Why do we Need Them?

BMPs are Best Management Practices for managing stormwater runoff to prevent pollutants from reaching our waterways and groundwater.

One of the most problematic pollutants in our water is excess nutrients, which lower oxygen levels in our waterways and can lead to fish kills. Landscaping and lawn care activities have the potential to greatly impact the level of nutrients in our waters. The following BMPs are designed to reduce the pollution while allowing Dover to continue its tradition of beautiful landscapes.

Remember the 4 R's of Fertilizer Use:

Right source
Right rate
Right time
Right place



For More Information:

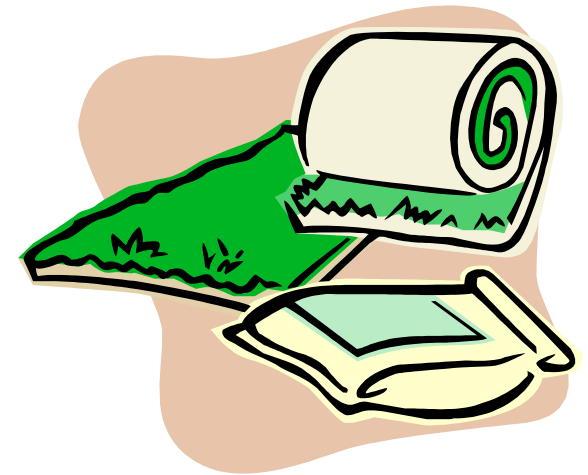
For more information on BMPs for lawn care and landscaping, contact the Nutrient Management Program at the Delaware Department of Agriculture at (302) 698-4558 or check out their publication at <http://dda.delaware.gov/nutrients/forms/BMPnonagforprinter.pdf>

For more information on planning issues, contact the Dover Planning Office at (302) 736-7196

City of Dover
P.O. Box 475
Dover, DE 19903

Landscaping and Lawn Care:

Best Management Practices to Protect Our Waterways



City of Dover
Delaware

Fertilizer BMPs

are effectively expressed are the **4 R's**: **R**ight source, **R**ight rate, **R**ight time and **R**ight place.

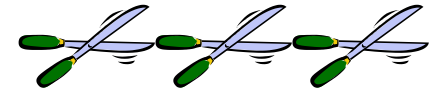
- Do not fertilize if a heavy rainfall is expected.
- Match the product to the situation. All fertilizers can cause pollution if allowed to escape the root zone, so avoid both leaching and surface runoff.
- Correct other deficiencies first. Soil pH, shade, overwatering or other stresses may be at fault; be sure fertilizer is the correct response before applying.
- The rate and timing of Nitrogen (N) fertilization depends on species, season, level of maintenance desired, source of the N applied and location.
- Limit Phosphorous (P) application to soils that require additional P based on soil or tissue testing.
- At lawn installation, amend the soil as needed with lime or organic matter. Limit N & P fertilization to one time 30 days after seeding/sodding.
- Always leave a 10-foot Ring of Responsibility near water bodies or impervious surfaces. Use deflector shields on broadcast or rotary spreader when applying fertilizer near water or sidewalks, driveways & streets.
- Sweep any fertilizer from impervious surfaces, such as driveways, streets and sidewalks, back into the vegetated area.
- Know the exact square footage of the area and make sure the spreader/application equipment is properly calibrated and set to deliver the correct amount of fertilizer.
- Become knowledgeable in soil sampling procedures and soil test interpretation.
- When fertilizing, irrigate with $\frac{1}{4}$ inch of water following fertilization to avoid the loss of N and increase uptake efficiency.

- Maintain a healthy, actively growing turfgrass to minimize the need for fertilizer and pesticide application.
- For environmental protection, there is no significant difference between liquid and dry applications of similar products. **The proper application of fertilizer is more important than the type of product.**



Irrigation BMPs

- Irrigation rates should not exceed the maximum ability of the soil to absorb and hold the water applied in any one application.
- The application of fertilizers, herbicides or other chemicals that need to be watered should coincide with an irrigation event.
- Use proper cultural practices (e.g. mowing) to promote healthy root development and reduce irrigation requirements.
- Visually observe site problems associated with irrigation (e.g. wet or dry spots, excessive weeds in specific locations) or system components (leaks, broken equipment) and report problems to the client and/or repair the problem.
- Group plants by similar water requirements.
- Irrigation controllers/timers should be reset seasonally to account for plant growth and climate conditions.
- Implement a preventive maintenance program for irrigation equipment.



Mowing BMPs

- Use the highest acceptable mowing height for grasses, typically $2\frac{1}{2}$ to 3 inches
- Do not remove more than $\frac{1}{3}$ of the foliage at one time.
- Do not direct clippings into bodies of water and remove any clippings that are blown onto impervious surfaces, such as driveways, streets and sidewalks.
- Do not remove clipping from the lawn. If clumping occurs, distribute clippings by re-mowing or lightly raking. If you must collect clippings, compost them.
- Practice grass recycling to return nutrients to the soil.



Pesticide BMPs

- Develop and implement a quality IPM (Integrated Pest Management) program.
- Train employees on pest identification and pesticide selection techniques.
- Choose the product most appropriate for the problem or pest.
- Mix only the quantity of pesticide needed, avoiding disposal problems and protecting non-targeted organisms (and saving money).
- Spot treat pests whenever possible.
- Read and follow all label directions.
- Make note of any groundwater advisories on the label.