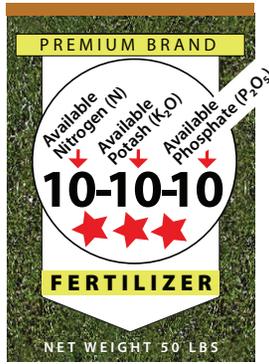


## these 6 simple tips.

ends up on driveway or road surfaces as the excess will most likely end up in the street drains that may lead to surface waters.

### 5. When caring for your lawn:

- ✓ Cut the grass no shorter than 3 inches using a sharp mower blade.
- ✓ Leave grass clippings on the lawn; this adds nitrogen reducing the need for additional fertilizer.
- ✓ Water deeply but infrequently to encourage deep roots.
- ✓ Add compost to help retain moisture.



### 6. If using a lawn company make sure they are trained and certified.

- ✓ Have them test your soil, and use a minimum 20% slow release nitrogen fertilizer. If desired, send a soil sample to the University of Massachusetts Soil & Plant Nutrient Testing Laboratory (low cost). They can be reached by phone (413) 545-2311, email [soiltest@umass.edu](mailto:soiltest@umass.edu) or at their website <http://soiltest.umass.edu/>
- ✓ Make sure they do not apply fertilizer between mid-November to mid-April.
- ✓ Make sure that they observe the phosphorus restriction and maintain a 100 foot fertilizer-free zone around water bodies and wetlands.

## Comprehensive Wastewater Management Planning for



# Dennis

Prepared by the Dennis Wastewater Implementation Committee in conjunction with CDM Smith, Inc.

*For more information go to:  
[www.town.dennis.ma.us](http://www.town.dennis.ma.us)  
(consider making  
fertilizer specific information  
available on WIC page)*



**CORRECT  
FERTILIZER  
USE  
PROTECTS  
OUR WATER  
QUALITY**

*Information  
for homeowners  
regarding lawn care and  
fertilizer use*

## Help us protect it with . . .

**Title 5 septic systems and lawn fertilizers are two of the main sources of nitrogen and phosphorus found in Cape water ecosystems.**

- 1. Maintain a buffer zone between your lawn and the pond.** A buffer serves as a protective barrier by slowing the rate that water runs into a source. It filters and utilizes some of the pollutants and sediments that serve to feed algae growth.
- 2. If using a buffer,** do not allow vehicular traffic in this zone, limit foot traffic and leave undergrowth and leaf litter undisturbed. Consider using native species as vegetation, such as, **Sweet Pepperbush, Highbush Blueberry,** and **Swamp Azalea** for shrubs. **Red Maple, Oak,** and **Willow** are some native tree species. Native groundcovers such as **Ferns** and **Pachysandra** are also a good choice.
- 3. Reduce the area** kept as lawn and consider using natural or organic alternatives for fertilizers and outdoor chemicals whenever possible. In addition consider using grasses that require less water and fertilizer such as: **Harmony Grass** and **Micro-clover.**
- 4. When fertilizing lawn areas** use fertilizer without phosphorus unless you are starting a new lawn and then use the minimum necessary. Choose your fertilizer based on the NPK (nitrogen, phosphorus, potassium) needed for your lawn. Never fertilize just before a heavy rain is forecast. Keep fertilizer away from surface water. Clean up any fertilizer that

## The Issue

Kettle ponds are freshwater bodies that were formed by glaciers 12,000 years ago. In the towns of Eastham, Orleans, Brewster and Dennis alone there are more than 100 ponds.

Because these ponds are used year round by residents and visitors, it is important to protect these resources. In addition, Cape Cod is a sole source aquifer. This means that all of our drinking water comes from lenses of freshwater held by sand and gravel beneath the land. Kettle ponds are a view into those lenses. When kettle ponds are polluted, typically by too much phosphorus, the Cape suffers.

Saltwater estuaries also need protecting. These areas are important to our fisheries, shellfish interests, and our tourist economy but are typically impacted by too much nitrogen.

Nitrogen and phosphorus contamination impacts both of these areas. They serve as "food" for suspended algae. When too much food enters the water, algal growth increases. The algae blocks sunlight from entering the water depleting the water of oxygen causing death to aquatic life.

*Cape Cod is a  
wonderland of  
natural beauty.*



*We can protect it  
or destroy it.*

## Comprehensive Wastewater Management Planning for Dennis

*There are  
more than  
100 ponds  
in these four  
Cape Cod  
communities*



### SOURCES OF NITROGEN

