

Appendix 3.6: Nitrogen Control Bylaw for Fertilizers

- Conservation Commission Nitrogen Control Standard

New Standard Conditions on Nitrogen Control adopted by vote of the Conservation Commission
on 2/7/2018

1. Applicant is put on notice of the requirement to adhere to the performance standards set forth in the Town's Nitrogen Control Bylaw (Chapter 237 of the Code of Falmouth; full text available at <https://ecode360.com/27443489>), which applies to all areas throughout the Town of Falmouth. These performance standards stipulate that: (1) the application of nitrogen is prohibited between October 16 and April 14; (2) residents/property owners may not allow nitrogen to be applied to any impervious surface on their property, including parking lot, driveway, roadway, sidewalk, or ice; and must immediately and completely remove and contain any nitrogen that may be applied, spilled, or deposited, whether intentionally or accidentally, on any impervious surface; (3) residents/property owners may not apply nitrogen directly to any surface before or during a heavy rain event; and (4) the application of nitrogen is at all times prohibited within 100 feet of Resource Areas as defined in Falmouth's Wetlands Regulations FWR 10.02(1)(a) through (d) (<https://ecode360.com/12120136>), namely: any bank, freshwater wetland, coastal wetland, beach, dune, flat, marsh, swamp, wet meadow, bog, or vernal pool; any creek, estuary, stream, pond, or lake; the ocean; and land under water bodies.

2. Further, the application of nitrogen is at all times prohibited within 100 feet of the following additional areas under Conservation Commission jurisdiction: land subject to tidal action; land subject to flooding or inundation by groundwater or surface water; land subject to coastal storm flowage; land subject to flooding; lands and waters within the Black Beach Great Sippewissett Marsh District of Critical Planning Concern; and lands and waters within the Waquoit Bay Area of Critical Environmental Concern.

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- Nitrogen Control Bylaw

Chapter 237

NITROGEN CONTROL

GENERAL REFERENCES

Watershed protection — See Ch. 227.

Zoning — See Ch. 240.

Wetlands protection — See Ch. 235.

Wetlands Regulations — See Ch. FWR.

§ 237-1. Purpose.

A Town bylaw to conserve resources and protect our environment by regulating the outdoor application of nitrogen in order to reduce the overall amount of excess nitrogen entering the Town's Resource Areas as defined in the Wetlands Protection Bylaw (Chapter 235; Section 2) and regulations. Reducing excess nitrogen helps protect and improve the water quality of Falmouth's valuable estuaries.

§ 237-2. Applicability.

This bylaw shall apply to and regulate any and all applications of nitrogen through fertilizer within the Town of Falmouth.

§ 237-3. Definitions.

AGRICULTURE — Includes farming in all its branches, generally as the cultivation and tillage of the soil, dairying, the production, cultivation, growing and harvesting of any agricultural, floricultural, viticultural or horticultural commodities, and shell fishing, including preparations and delivery to storage or to market or to carriers for transportation to market.

FERTILIZER — A substance that enriches the soil with elements essential for plant growth, such as nitrogen, phosphorus, potassium or other substances; fertilizer does not include those nutrients that are normally excluded from fertilizer such as chemicals that are part of dolomite, limestone, or lime.

IMPERVIOUS SURFACE — Means a surface that has been compacted or covered with a layer of material so that it is highly resistant to infiltration by water.

NITROGEN — Means an element essential to plant growth. For the purposes of the bylaw, nitrogen may be available as slow-release, controlled-release, timed-release, slowly available, or water insoluble nitrogen, which means nitrogen in a form that delays its availability for plant uptake and use after application and is not rapidly available to turf and other plants; and/or quick-release, water-soluble nitrogen which means nitrogen in a form that does not delay its availability for turf and other plant uptake and is rapidly available for turf and other plant uptake and use after application.

TURF — Means grass-covered soil held together by the roots of the grass, also known as "sod" or "lawn."

§ 237-4. Performance standards.

All application of nitrogen shall comply with the following standards:

- A. The application of nitrogen is prohibited between October 16 and April 14 unless specifically designated by the Town Department of Natural Resources or the Board of Selectmen.
- B. No person shall cause nitrogen to apply to, or otherwise be deposited to any impervious surface including parking lot, driveway, roadway, sidewalk or ice. Any fertilizer applied, spilled, and/or deposited on any impervious surface, either intentionally or accidentally, must be immediately and completely removed and contained and either legally applied to turf or any other legal site or returned to an appropriate container.
- C. No person shall apply nitrogen directly before or during a heavy rain event.
- D. The application of nitrogen is prohibited within 100 feet of Resource Areas as defined in Falmouth's Wetlands Regulations FWR 10.02(1)(a) through (d).

§ 237-5. Exemptions.

The following activities shall be exempt from § 237-4:

- A. Application of nitrogen for agriculture and horticulture uses.
- B. Application of fertilizer to golf courses, except that any application of nitrogen on greens or fairways within Resource Areas referenced in § 237-4D shall comply with the recommendations set forth in § 237-6, and shall use 85% or higher slow-release, water-insoluble nitrogen, in organic or inorganic form.
- C. Application of nitrogen to gardens, including vegetable and flower, trees, shrubs and indoor applications including greenhouses.
- D. Application of nitrogen for the establishment of new vegetation in the first growing season, or repairing of turf in the first growing season, after substantial damage.
- E. Yard waste compost or other similar materials that are primarily organic in nature and are applied to improve the physical condition of the soil.

§ 237-6. Recommendations.

The Town of Falmouth strongly recommends that nitrogen should be applied to turf and other plants at the lowest rate necessary. Any single application

of nitrogen should not exceed 0.5 pounds of nitrogen per 1,000 square feet, and the annual aggregate total application of nitrogen should not exceed 1.0 pounds per 1,000 square feet. The application of any nitrogen should be of an organic, slow-release, water-insoluble form.

§ 237-7. Enforcement authority.

The enforcement authority shall be the Director of Natural Resources or his designees.

§ 237-8. Severability clause.

Should any section, part or provision of this bylaw be deemed invalid or unconstitutional, such decision shall not affect the validity of the remaining terms of this bylaw as a whole or any part thereof, other than the section, part or provision held invalid or unconstitutional.

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- Nitrogen Control Bylaw Letters



**MARINE & ENVIRONMENTAL SERVICES
TOWN OF FALMOUTH**
180 SCRANTON AVENUE, FALMOUTH, MA 02540
TEL: (508) 457-2550 • FAX: (508) 457-2525
TOWN MARINA TEL: (508) 457-2551

April 13, 2015

Dear Falmouth Homeowner:

You are receiving this letter because all or part of your property is within 100' of a coastal pond.

The Town of Falmouth is home to more than fifteen major coastal ponds. From Waquoit Bay to Little Pond to Megansett Harbor, these estuaries define our community. And, they are in serious decline. Too much nitrogen going through the groundwater into these water bodies is causing algae blooms, fish kills, and habitat degradation.

Individual cesspools and septic systems are the largest single cause of this decline. But the second largest controllable nitrogen source impacting our estuaries is the **fertilizer used on lawns**. That is why Falmouth has enacted the Nitrogen Control Bylaw, Chapter 237 of the town code. The full text of the Nitrogen Control Bylaw (Chapter 237 of the Town Code) can be found online at: <http://ecode360.com/27443489>.

If you fertilize your lawn, or hire a landscaper to do so, this bylaw applies to you. If any portion of your property comes to **within 100 feet of a protected resource area** listed in Falmouth Wetlands Regulations 10.02 (1) (a-d) including any: bank, freshwater wetland, coastal wetland, beach, dune, flat, marsh, swamp, wet meadow, bog, vernal pool, reservoir, creek, estuary, stream, pond, lake, the ocean or land under water bodies, **the Bylaw bans ANY fertilizing in these areas.** The Department of Marine and Environmental Services is charged with enforcing this bylaw, but voluntary citizen cooperation will be the key to its success.

The Bylaw applies to nitrogen used to fertilize grass only. The Bylaw does not apply to fertilizer used on your flower and vegetable garden, greenhouse, houseplants, farm, or orchard. The Bylaw also does not apply to the establishment or repair of turf (after substantial damage) in its first growing season.

The Bylaw **bans fertilizing any part** of your lawn between **October 16th and April 14th**, or directly before or during a heavy rain event. Don't spill fertilizer on paved surfaces and quickly clean it up if you do.

The Bylaw recommends that if you fertilize lawns not covered by the 100' prohibition, ***fertilize sparingly!*** The Bylaw encourages use of materials such as yard waste, compost or other similar materials that are primarily organic in nature to improve the physical condition of your soil.

Thank you for your cooperation in improving the quality of Falmouth's waters.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregg Fraser".

Gregg Fraser, Director, Marine and Environmental Services

DETAILS ON HOW TO GROW A HEALTHY LAWN WITHOUT FERTILIZER

TEST YOUR SOIL - Your soil pH should be 6.5 to 7.0. Below that, add lime. The Master Gardeners (508-375-6690) offer soil testing clinics in spring. For more information on growing lawns without using fertilizers and pesticides, contact your local landscape contractor or garden supply house, Northeast Organic Farmers Association 978-355-2853, Master Gardeners, and search the Internet.

ENRICH YOUR SOIL - Grass grows best with 6" of topsoil. You can slowly build the depth of your topsoil by spreading a thin layer, 1/4" or less, of loam in spring or compost in fall on top of your grass. Loam containing an equal blend of silt, sand and clay works best on the Cape. Use compost from your own compost pile or from a reliable commercial source to minimize impurities. If you add nutrients to your lawn, you also can enrich soils by using organic fertilizers that contain organisms to promote soil conditioning through healthy biological activity.

USE CAPE-TYPE GRASS SEED - The best grasses for Falmouth are blends of mostly fine or tall fescues mixed with some perennial ryegrass. Compared with Bluegrass, **blends require minimal fertilizer and water**, are drought tolerant, and resist surface-feeding insects. Blends also are less susceptible to disease. If your lawn is mostly bluegrass, or has bare spots, add fescue and rye grass seed over the existing lawn. **Overseed with these blends for a thick lawn.**

MOW HIGH, RECYCLE CLIPPINGS - **Grass should be cut to about 3" long** to help retain moisture and choke out weeds. Re-sharpen blades at least once a year as dull blades tear grass. Leave clippings on the lawn – scientific studies show that clippings contain up to half the nitrogen that lawns need. Recycled clippings do not promote thatch; instead, they break down and disappear.

WATER DEEPLY – Many native landscapes do not require any water. Established lawns require only 1" of water per week, including rainfall. Watering once a week in early morning promotes deeper roots and drought resistance. Use a rain gauge or use a 1" tall can for the season to monitor rainfall. Remember to obey any water restrictions in effect.

MAINTENANCE PRACTICES - Proper de-thatching with penetrating metal blades, tines or prongs, aeration, and spring over seeding together with the practices above develop a thick grass cover in which weeds and pests do not thrive. You will probably be able to pull weeds by hand or spot treat weeds and occasional pest infestations with an organic spray.

AND NOW, WHAT ABOUT FERTILIZER - If you follow the practices above, your lawn will require little or no extra nitrogen from commercial fertilizers. If you feel you really have to use some fertilizer, within the rules of the Nitrogen Control Bylaw, use the right kind of fertilizer, at the right times of year, and in the right amounts. **REMEMBER: Don't fertilize any lawn located within 100' of wetlands - specifically the Resource Areas as defined in Falmouth's Wetlands Regulations, FWR 10.02 (1)(a - d).**

- Right Kind: It takes time for grasses to absorb nitrogen, so avoid water soluble nitrogen, and especially sprays. Instead, use granular or organic slow-release nitrogen formulations. Buy straight fertilizer – avoid combination products ("weed & feed") that spread chemicals across your entire lawn. If you need a weed killer, try gluten meal, a natural byproduct of corn processing.
- Right Amounts: When you fertilize your lawn, the Town of Falmouth strongly recommends that you apply nitrogen at the **lowest rate necessary**. A single application should not exceed 0.5 pounds of nitrogen per 1,000 square feet. Your total annual application should not exceed 1.0 pounds of nitrogen per 1,000 square feet.
- Right times of year: Fertilize only when the grass is growing vigorously: spring (after April 14th) and fall (before October 16th). Never fertilize in summer when grass is dormant or growing slowly. This just feeds the weeds! If you fertilize only once, do it in the fall to promote root growth for long term health.

BUYING AND APPLYING FERTILIZER - Use only as much of the bag as your lawn size needs. The label on the bag will tell you how to set your spreader for the correct rate. Ask for help if you have trouble reading the instructions on the bag!

GROW NATIVE SHRUBS - Plant low maintenance, native shrubs and plants to reduce lawn area. Contact either the Master Gardeners at 508-375-6690: the Cape Cod Conservation District at 508-771-8757 or WBNERR at 508-457-0495 for suggested plant materials.



TOWN of FALMOUTH

DIVISION OF MARINE AND ENVIRONMENTAL SERVICES
180 SCRANTON AVE, FALMOUTH, MASSACHUSETTS 02540
TELEPHONE (508) 457-2550
FAX (508) 457-2525



GREGG FRAZER
DIRECTOR/HARBORMASTER

You are receiving this letter because you may have customers whose property is within 100' of a coastal pond.

Falmouth has a Fertilizer Bylaw that PROHIBITS the use of fertilizer on lawns **within 100 feet of a protected resource area** listed in Falmouth Wetlands Regulations 10.02 (1) (a-d) including any: bank, freshwater wetland, coastal wetland, beach, dune, flat, marsh, swamp, wet meadow, bog, vernal pool, reservoir, creek, estuary, stream, pond, lake, the ocean or land under water bodies. The **Town Bylaw bans ANY fertilizing in these areas.** The Department of Marine and Environmental Services is charged with enforcing this bylaw, but voluntary citizen cooperation will be the key to its success.

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