2015-032 TO SEE IF THE TOWN COUNCIL WILL AMEND THE GENERAL ORDINANCES BY ADDING A NEW CHAPTER 78 ON FERTILIZER, NITROGEN AND PHOSPHOROUS CONTROL

ORDERED: That the General Ordinances of the Code of the Town of Barnstable shall be amended by adding the following new Chapter 78 which will serve as the Town’s Implementing Regulations pursuant to the Fertilizer Management District of Critical Planning Concern designation, Barnstable County Ordinance 13-07.

"CHAPTER 78
FERTILIZER NITROGEN AND PHOSPHOROUS CONTROL

§78-1. Purposes and Intent

A. Excessive nutrient enrichment of the region’s ground waters and surface waters may have significant public health ramifications, including direct detrimental effects on drinking water sources by increased concentrations of nitrates that can violate Safe Drinking Water Standards, and have negative impacts to economic, environmental and recreational resources and values in the Town and region.

B. The Town has significant glacially deposited sandy soils that are subject to rapid water infiltration, percolation, and leaching of nutrients.

C. This Ordinance incorporates by reference the University of Massachusetts Extension’s Turf Management Best Management Practices. These practices, if followed, are deemed to protect the public health, safety and welfare and aid in achieving compliance with the Total Maximum Daily Loads (TMDL) for the Town’s water resources prescribed by the Commonwealth of Massachusetts while allowing reasonable use of fertilizers for the enhancement and maintenance of turf quality.

§78-2. Applicability

A. This Ordinance provides for a reduction of nitrogen and phosphorus entering the Town’s waters and wetlands by means of an organized system of education, certification, standardization and regulation of practice. This Ordinance is not intended to eliminate the use of fertilizer.

B. This Ordinance adopts the Best Management Practices as the normal operating procedures for turf management but not plants other than turf.
§78-3. Authority

This Ordinance is adopted as Implementing Regulations pursuant to and as authorized by the Fertilizer Management District of Critical Planning Concern designation, Barnstable County Ordinance 13-07, and by Section 9 of Chapter 262 of the Acts of 2012.

§78-4. Definitions

For the purposes of this Ordinance, the following words shall have the following meanings unless the context clearly indicates a different meaning:

“Agriculture/Agricultural Use” means farming in all of its branches including the cultivation and tillage of the soil, the production, cultivation, growing, and harvesting of any agricultural, floricultural or horticultural commodities, including but not limited to cranberries.

“Barnstable” is the Town and all of its waters.

“Best Management Practices” (BMP), means a sequence of activities designed to limit a nonpoint pollution source. For the purposes of this Ordinance and pursuant to §78-5A of this Ordinance, BMP means the edition of “Best Management Practices for Soil and Nutrient Management in Turf Systems,” prepared by University of Massachusetts Extension, Center for Agriculture, Turf Program in effect on September 18, 2014.

“Certified Fertilizer Applicator” means an Applicator certified in the manner prescribed hereunder to apply fertilizer and manage turf in conformance with the BMP.

“Combination Products,” sometimes known as “Weed and Feed,” means any product that, in combination with fertilizer, contains pre- or post-emergence herbicides, insecticides other pesticides or plant growth regulators.

“Compost” is the biologically stable humus-like material derived from composting, or the aerobic, thermophilic decomposition of, organic matter, which is used as a fertility source for turf.

“Fertilizer Applicator” means any person who applies fertilizer to turf and soils.

“Fertilizer” means a substance that enriches turf with elements essential for plant growth, such as nitrogen, phosphorus, or other substances; fertilizer hereunder does not include dolomite, limestone, or lime, grass clippings, or compost/ compost tea. “Fertilize, fertilizing, or fertilization” means the act of applying fertilizer to turf.
“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, except for compacted areas on athletic fields such as clay or baseball infields, intensely trafficked turf and the like.

“Landscape professional” means a person, either as a sole proprietor or as part of a company, who, in exchange for money, goods, services, or other consideration, performs landscaping services. A Landscape professional can include turf management staff at a private golf course operation or other private entity.

“Landscaping” means, for purposes of this Ordinance, establishment (including by sod, seeding, or transplanting), renovation, maintenance, management or fertilization of turf.

“Municipal applicator” means a public employee of a city, town, the county, or the state or federal government (or an employee of a department of and within such public entity) who fertilizes and manages turf located on property owned or controlled by a town, the county, the state or federal government (including publicly owned golf courses and athletic fields) within the scope of their official public employment responsibilities.

“Non-Certified Fertilizer Applicator” means an Applicator who is not certified in the manner prescribed hereunder to manage turf and apply fertilizer in conformance with the BMP.

“Nutrient” means any of the following 17 elements needed for growth of a plant; the three (3) non-mineral elements: carbon, hydrogen, and oxygen; the six (6) macronutrients: nitrogen, phosphorus, potassium, calcium, magnesium, and sulfur; and the eight (8) micronutrients: boron, copper, iron, chloride, manganese, molybdenum, nickel and zinc.

“Nutrient management” means the systematic control of the application and availability of nutrients to plants in order to minimize nutrient loss and to maintain the productivity of the soil.

“Readily available nitrogen” means any water-soluble nitrogen (WSN) that is readily available to turf after application.

“Slow-release, controlled-release, timed-release, or slowly soluble/available nitrogen” means nitrogen in a form that delays its availability for uptake and use after application, and is not rapidly available to turf.

“Soil” means the upper-most layer of the earth’s surface, comprised of mineral and organic matter, which can host biological communities.

“Soil test” means a technical analysis of soil conducted by a soil testing laboratory that uses standards recommended by and in agreement with the University of Massachusetts Amherst Extension Program BMP, including a Modified Morgan soil testing procedure and extractable nutrient values.
"Turf" means grass-covered soil held together by the roots of the grass, also known as "sod" or "lawn."

"Waters" or "Water-bodies" include, but are not limited to, streams, including intermittent streams, creeks, rivers, freshwater and tidal wetlands, ponds, lakes, marine waters, canals, lagoons, and estuaries within the Town, including without limitation all waters defined in Massachusetts General Laws Chapter 131, Section 40 and Town Wetland Ordinance or Regulations with the exception of the following: coastal and inland banks, beaches, coastal dunes, dune fields, and lands subject to coastal storm flowage, inland or coastal flooding or inundation, or within 100 feet of the hundred-year storm line.

§78-5. STANDARDS OF PERFORMANCE

A. Best Management Practices

The Best Management Practices ("BMP"), as defined herein, shall be applied to the standards of performance.

B. Performance Standards for Non-Certified Fertilizer Applicators

Fertilizer Applicators who do not hold Fertilizer Certification issued in accordance with §78-6B of this Ordinance shall comply with the following standards for fertilizer applications to turf:

1. Non-Certified Fertilizer Applicators shall not apply fertilizer during or immediately prior to heavy rainfall, such as but not limited to thunderstorms, hurricanes, or northeastern storms, or when the soil is saturated due to intense or extended rainfall;

2. Non-Certified Fertilizer Applicators shall not apply fertilizer or compost between November 12 and the following March 31;

3. Non-Certified Fertilizer Applicators shall not apply, spill, or deposit fertilizer on any impervious surface and fail to remove the applied, spilled, or deposited fertilizer immediately (and in which case the Applicator shall then either contain, dispose of legally or apply the fertilizer as allowed), and shall not apply, spill or deposit fertilizer in a manner that allows fertilizer to enter into storm drains;

4. Unless the Town's existing Laws and Regulations, including its Wetland Ordinance or Regulations, contain a stricter standard or other enforcement or approval mechanism such as through the Town's Conservation Commission, which shall control, Non-Certified Fertilizer Applicators shall not apply fertilizer closer than 100 feet to any water-body, or within the Zone I of a public drinking water well unless permission is obtained through the enforcement authority set out in §78-6D(1) herein allowing such activity;
(5) A Non-Certified Fertilizer Applicator shall not apply fertilizer that contains phosphorus, unless a soil test taken not more than three years before the proposed fertilizer application indicates that additional phosphorus is needed for growth of that turf, or unless establishing new turf or re-establishing or repairing turf after substantial damage or land disturbance, in which case the application shall be in compliance with the BMP;

(6) A single application of fertilizer that contains nitrogen shall not exceed 1.0 pounds of actual nitrogen per thousand square feet, shall consist of at least 20% slow-release nitrogen fertilizer\(^1\) and the annual rate shall not exceed 3.2 pounds of actual nitrogen per thousand square feet. Single applications shall be done at intervals of no less than four weeks until the annual maximum is reached;

(7) The fertilizer application requirements of this §78-5B shall apply with the same limitations to Combination Products, i.e. amount of nitrogen applied, vicinity of water bodies, etc;

(8) Non-Certified Fertilizer Applicators shall not deposit grass clippings, leaves, or any other vegetative debris into or within 50 feet of water-bodies, retention and detention areas, drainage ditches or storm water drains, or onto impervious surfaces such as, but not limited to, roadways and sidewalks, except during scheduled clean-up programs.

C. Performance Standards for Certified Fertilizer Applicators

Certified Fertilizer Applicators shall be exempt from the requirements set forth in §78-5B of this Ordinance, provided that they shall manage turf and apply fertilizer to turf in accordance with the BMP. The burden shall be on the Certified Fertilizer Applicator, if and as required, to show that he/she is applying fertilizer in accordance with the BMP.

D. Exemptions. The following activities shall be exempt from this Ordinance:

(1) Application of fertilizer as a fertility source for Agriculture and Agricultural Use.

(2) Application of fertilizer as a fertility source to home gardens, landscape ornamentals, shrubs, trees bushes, vegetables, fruit and container plants.

§78-6. EDUCATION, CERTIFICATION, ENFORCEMENT, AND PENALTIES

A. Fertilizer/Turf Management Education

Fertilizer education may consist of, but is not limited to, collaboration with retailers to post in-store information on town fertilizer regulations, the BMP and Fertilizer Certification requirements; mailings and flyers for the general public concerning town fertilizer regulations, the BMP and Fertilizer Certification requirements; and outreach to Landscape professionals and Municipal Applicators concerning fertilizer-related laws, the BMP and Fertilizer Certification requirements. The Town may rely on Cape Cod Cooperative Extension to assist in maintaining a program of fertilizer and turf management education that is based on the BMP.

\(^{1}\) Note: this represents the minimum percentage: use of higher SRN content is generally preferable, especially on sandy root zones, during stress and pre-stress periods, and when there are fewer annual applications of nitrogen made to a lawn.
B. Fertilizer Certification

(1) The Town may seek the assistance of the Cape Cod Cooperative Extension to establish application requirements for and the process required to obtain Fertilizer Certification and renewals thereof, including evidence that the applicant is proficient in the BMP. Any Non Certified Fertilizer Applicator may then apply to the Town or Cape Cod Cooperative Extension, as the case may be, for Fertilizer Certification as a Certified Fertilizer Applicator.

(2) Notwithstanding the requirement for a proficiency assessment set out in §78-6B(1) above, Municipal applicators or Landscape professionals who meet the following criteria shall be presumed to be proficient in the BMP and may become Certified Fertilizer Applicators without the need for an additional proficiency assessment:

(a) Current Massachusetts Pesticide Commercial Applicator License (category 00) or Commercial Applicator License with Turf Certification (category 37) or Commercial Applicator License with Shade Tree & Ornamentals Certification (category 36), with evidence of participation in a recognized continuing education program for turf management within the past year, or

(b) Active membership in the Cape Cod Landscapers Association, the Golf Course Superintendents Association of Cape Cod, Massachusetts Association of Lawn Care Professionals (MALCP) or a substantially similar organization and any one of the following:

(i) Associate’s Degree or higher in Turf Management, or closely related field, with evidence of participation in a recognized continuing education program for turf management within the past year;

(ii) Current Massachusetts Certified Landscape Professional (MCLP) certification or current Massachusetts Certified Arborist (MCA) certification, or substantially similar professional certification with emphasis on turf management, with evidence of participation in a recognized continuing education program for turf management within the past year;

(iii) Certificate of Completion from the University of Massachusetts Extension Green School (Turf or Landscape sections) or the University of Massachusetts Winter School for Turf Managers, or a horticultural certificate from Cape Cod Community College, or substantially similar professional certification with emphasis on turf management, with evidence of participation in a recognized continuing education program for turf management within the past year.

(3) The Town may seek the assistance of the Cape Cod Cooperative Extension to help develop or administer an assessment to determine an Applicator’s proficiency of the BMP and to assist with or
administer a Fertilizer Certification process, which if administered by Extension, may be a county-wide process.

(4) Municipal applicators or Landscape professionals who are Non-Certified Fertilizer Applicators may nonetheless apply fertilizer and manage turf pursuant to the standards for Certified Fertilizer Applicators set out in §78-5C of this Regulation so long as they fertilize and manage turf under the direct supervision of a manager or supervisor who has attained Fertilizer Certification hereunder. “Direct supervision” shall mean the instruction and control by such manager or supervisor who is responsible for fertilizer applications made and that person making them, and who is either physically present at the time and place the fertilizer is applied, or if not physically present, is available if and when needed.

(5) All Certified Fertilizer Applicators shall ensure that a copy of the official documentation of said Fertilizer Certification is readily available when and at the location fertilizer is being applied, and shall provide such Certification when requested to do so by an officer or agent of the enforcement authority set out in §78-6D(1) herein.

(6) All Certified Fertilizer Applicators who apply plant nutrients shall maintain records for 3 years of each application made. The following information shall be recorded, when applicable:

(a) Name of applicator;
(b) Date of application;
(c) Address or location description of the application site;
(d) Type and amount of nutrients applied;
(e) Size of the area being treated;
(f) Representative nutrient value or values (e.g. soil tests);
(g) Plant nutrient analysis of product used;
(h) Method and rate of application;
(i) Total amount used;
(j) An original or legible copy of the label of the plant nutrient; and
(k) The implementation of all activities or protocols recommended or required by the nutrient management plan, if applicable.

(7) The records required under this §78-6B shall be made available for inspection by the Town’s Director of Public Health.

C. Retailer Requirements

Any retailer who sells, or offers for sale, phosphorus containing fertilizer shall:

(1) Display the product separately from non-phosphorus plant nutrients;

(2) Post in a location where phosphorus containing fertilizer is displayed a clearly visible sign, provided by the Town, at least 8 ½” x 11” in dimension, which reads as follows: “PHOSPHORUS RUNOFF POSES A THREAT TO WATER QUALITY. THEREFORE, UNDER GL Ch. 128 sec. 65A, PHOSPHORUS CONTAINING FERTILIZER MAY ONLY BE APPLIED TO LAWN OR NON-AGRICULTURAL TURF WHEN (i) a soil test indicates that additional phosphorus is needed for the growth of that lawn or non-
agricultural turf; or (ii) it is used for newly established lawn or non-agricultural turf during the first growing season.”

(3) Post education materials on proper soil testing and use of fertilizers. in a prominent location where fertilizer is being sold.

D. Enforcement

(1) Enforcement Authority

This Ordinance shall be enforced by the Town’s Board of Health, through its Director of Public Health, provided however, the Town’s Conservation Commission shall enforce the provisions of §78-5B(4) and (8).

(2) For First and Second Offense within a Twelve Month Period

After the first year from the effective date of this ordinance, whoever violates any provision of this Regulation by committing a first or second offense may be penalized as follows:

a) First Offense a written WARNING shall be issued;

b) Second Offense within a twelve (12) month period, either by attending an education program under §78.6A or by obtaining a certification under §78.6B

(3) Non-Criminal Disposition

After the first year from the effective date of this ordinance, whoever violates any provision of this Regulation three or more times in a twelve month period may be penalized by a noncriminal disposition process as provided in G.L. c.40, §21D and the Town’s non-criminal disposition ordinance. If noncriminal disposition is elected, then any person who violates any provision of this Regulation shall be subject to a penalty of not more than $300 for each violation.

(4) Other Remedies

The Town’s Board of Health, through its Director of Public Health, or the Town’s Conservation Commission for violations of §78-5B(4) and (8).may enforce this Ordinance or enjoin violations thereof through any lawful process, and the election of one remedy by the Town’s Director of Public Health and the Conservation Commission shall not preclude enforcement through any other lawful means.

§78-7. SEVERABILITY CLAUSE

Should any section, part or provision of this Ordinance be deemed invalid by a court of competent jurisdiction, such decision shall not affect the validity of the remaining terms of this Regulation as a whole or any part thereof, other than the section, part or provision held invalid, which shall remain in full force and effect.
§78-8. AMENDMENTS

A. No amendment to this Regulation shall be adopted until such time as the Town Council shall hold a public hearing thereon, notice of the time, place and subject matter of which, sufficient for identification, shall be given by publishing in a newspaper of general circulation in the Town once in each of two successive weeks, the first publication to be not less than fourteen days prior to the date set for such hearing. No such amendment shall be effective unless the proposed amendment has been approved by the Town Council.

B. Amendments shall also be subject to the procedures set out in Sections 10 and 11 of the Cape Cod Commission Act, Chapter 716 of the Acts of 1989, as amended. Specifically, amendments must also be consistent with the Fertilizer Management District of Critical Planning Concern designation, Barnstable County Ordinance 13-07 and the Guidelines for Implementing Regulations set out therein, including the requirement for consistency with the BMP.

§78-9. EFFECTIVE DATE

The effective date of this Ordinance shall be the date the Fertilizer Certification process outlined in §78-6B herein is implemented and in effect.

SPONSORS: Town Council President, Jessica Rapp Grassetti, Town Council Vice President, Ann Canedy, Councilor Frederick Chirigotis and Councilor Debra Dagwan at the request of the Citizen Advisory Committee.

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