

CHAPTER LI

STORM WATER MANAGEMENT AND EROSION CONTROL BY-LAW

It is hereby determined that:

Land development projects and other land use conversions, and their associated changes to land cover, permanently alter the hydrologic response of local watersheds and increase storm water runoff rates and volumes, which in turn increase flooding, stream channel erosion, and sediment transport and deposition, and decrease groundwater recharge;

Land development projects and other land use conversions also contribute to increased nonpoint source pollution and degradation of receiving waters;

The impacts of construction site/alteration and post-development storm water runoff quantity and quality can adversely affect public safety, public and private property, surface water drinking water supplies, groundwater resources, drinking water supplies, recreation, aquatic habitats, fish and other aquatic life, property values and other uses of lands and waters;

These adverse impacts can be controlled and minimized through the regulation of storm water runoff quantity and quality from construction site/alteration, new development and redevelopment, by the use of both structural and nonstructural Best Management Practices;

Localities in the Commonwealth of Massachusetts are required to comply with a number of both State and Federal laws, regulations and permits which require a locality to address the impacts of construction site/alteration runoff, post-development storm water runoff quality and nonpoint source pollution.

Therefore, the Town of Topsfield has established this storm water management bylaw to provide reasonable guidance for the regulation of construction site/alteration and post-development storm water runoff for the purpose of protecting local water resources from degradation. This bylaw regulates the construction site/alteration and post-construction storm water controls for both new and re-development projects.

It has been determined that it is in the public interest to regulate construction site/alteration and post-development storm water runoff discharges in order to control and minimize increases in storm water runoff rates and volumes, construction site/alteration and post-construction soil erosion and sedimentation, stream channel erosion, and nonpoint source pollution associated with post-development storm water runoff.

51-1 PURPOSES

a. The purposes of this Bylaw are to: 1) protect, maintain and enhance the public health, safety, environment and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased post-development storm water runoff and nonpoint source pollution associated with new development and redevelopment; 2) Protect, maintain, and enhance the public safety, environment and general welfare by establishing minimum standards and procedures to control runoff and prevent soil erosion and sedimentation resulting from construction/alteration and development.

b. It has been determined that proper management of construction site/alteration and post-development storm water runoff will minimize damage to public and private property and infrastructure, safeguard the public health, safety, environment and general welfare of the public, protect water and aquatic resources, and promote groundwater recharge to protect surface and groundwater drinking supplies. This Bylaw seeks to meet that purpose through the following objectives:

1. Establish decision-making processes surrounding land development activities that protect the integrity of the watershed and preserve the health of water resources;
 2. Require that new development, redevelopment and all land conversion activities maintain the after-development runoff characteristics as equal to or less than the pre-development runoff characteristics in order to reduce flooding, stream bank erosion, siltation, nonpoint source pollution, property damage, and to maintain the integrity of stream channels and aquatic habitats;
 3. Establish minimum construction/alteration and post-development storm water management standards and design criteria for the regulation and control of storm water runoff quantity and quality; Establish minimum design criteria for the protection of properties and aquatic resources downstream from land development and land conversion activities from damages due to increases in volume, velocity, frequency, duration, and peak flow rate of storm water runoff; Establish minimum design criteria for measures to minimize nonpoint source pollution from storm water runoff which would otherwise degrade water quality;
 4. Establish design and application criteria for the construction and use of structural storm water control facilities that can be used to meet the minimum construction/alteration and post-development storm water management standards;
 5. Encourage the use of nonstructural storm water management, storm water better site design practices or “low-impact development practices”, such as reducing impervious cover and the preservation of greenspace and other natural areas, to the maximum extent practicable; Coordinate site design plans, which include greenspace, with the Town’s greenspace protection plan;
 6. Establish provisions for the long-term responsibility for and maintenance of structural storm water control facilities and nonstructural storm water management practices to ensure that they continue to function as designed, are maintained, and pose no threat to public safety;
 7. Establish provisions to ensure there is an adequate funding mechanism, including surety, for the proper review, inspection and long-term maintenance of storm water facilities implemented as part of this Bylaw;
 8. Establish administrative procedures for the submission, review, approval or disapproval of storm water management plans, and for the inspection of approved active projects, and long-term follow up; Establish certain administrative procedures and fees for the submission, review, approval, or disapproval of storm water plans, and the inspection of approved projects.
- c. Nothing in this Bylaw is intended to replace the requirements of either, the Town of Topsfield Flood Plain Zoning Bylaw, the Town of Topsfield General Wetlands Protection Bylaw, or any other Bylaw that may be adopted by the Town of Topsfield. Any activity subject to the provisions of the above-cited Bylaws must comply with the specifications of each.

51-2 DEFINITIONS

The following definitions shall apply in the interpretation and implementation of this Bylaw. Additional definitions may be adopted by separate regulation:

ALTER: Any activity, which will measurably change the ability of a ground surface area to absorb water or will change existing surface drainage patterns. Alter may be similarly represented as “alteration of drainage characteristics,” and “conducting land disturbance activities.”

BEST MANAGEMENT PRACTICE (BMP): Structural, non-structural and managerial techniques that are recognized to be the most effective and practical means to prevent and/or reduce increases in storm water volumes and flows, reduce point source and nonpoint source pollution, and promote storm water quality and protection of the environment. “Structural” BMPs are devices that are engineered and constructed to provide temporary storage and treatment of storm water runoff. “Nonstructural” BMPs use natural measures to reduce pollution levels, do not require extensive construction efforts, and/or promote pollutant reduction by eliminating the pollutant source.

BETTER SITE DESIGN: Site design approaches and techniques that can reduce a site’s impact on the watershed through the use of nonstructural storm water management practices. Better site design includes conserving and protecting natural areas and green space, reducing impervious cover, and using natural features for storm water management.

HOTSPOT: Land uses or activities with higher potential pollutant loadings, such as auto salvage yards, auto fueling facilities, fleet storage yards, commercial parking lots with high intensity use, road salt storage areas, commercial nurseries and landscaping, outdoor storage and loading areas of hazardous substances, or marinas.

MASSACHUSETTS STORM WATER MANAGEMENT POLICY: The Policy issued by the Department of Environmental Protection, and as amended, that coordinates the requirements prescribed by state regulations promulgated under the authority of the Massachusetts Wetlands Protection Act G.L. c. 131 § 40 and Massachusetts Clean Waters Act G.L. c. 21, §. 23-56. The Policy addresses storm water impacts through implementation of performance standards to reduce or prevent pollutants from reaching water bodies and control the quantity of runoff from a site.

NEW DEVELOPMENT: Any construction or land disturbance of a parcel of land that is currently in a natural vegetated state and does not contain alteration by man-made activities.

NONPOINT SOURCE POLLUTION: Pollution from many diffuse sources caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into water resource areas.

PERSON: Any individual, group of individuals, association, partnership, corporation, company, business organization, trust, estate, the Commonwealth or political subdivision thereof to the extent subject to Town Bylaws, administrative agency, public or quasi-public corporation or body, the Town of *Topsfield*, and any other legal entity, its legal representatives, agents, or assigns.

PRE-DEVELOPMENT: The conditions that exist at the time that plans for the land development of a tract of land are submitted to the [*Planning Board*]. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time prior to the first plan submission shall establish pre-development conditions.

POST-DEVELOPMENT: The conditions that reasonably may be expected or anticipated to exist after completion of the land development activity on a specific site or tract of land. Post-development refers to the phase of a new development or redevelopment project after completion, and does not refer to the construction phase of a project.

RECHARGE: The replenishment of underground water reserves.

REDEVELOPMENT: Any construction, alteration, or improvement exceeding land disturbance of 7500 square feet, where the existing land has been subject to previous development.

SLOPE: The vertical rise divided by the horizontal distance and expressed as a fraction or percentage, e.g. one-fifth (1/5) or twenty (20) percent.”

STORM WATER AUTHORITY: The Town of Topsfield Planning Board or its authorized agent(s). The Topsfield Planning Board or its authorized agent(s) are responsible for coordinating the review, approval and permit process as defined in this Bylaw. Other Boards and/or departments of the Town of Topsfield, including (but not limited to) the Conservation Commission, Board of Health, and Highway Department, may participate in the review process as defined in the Stormwater Regulations adopted by the Planning Board.

STORM WATER MANAGEMENT PERMIT (SMP): A permit issued by the Planning Board, after review of an application, plans, calculations, and other supporting documents, which is designed to protect the environment of the Town from the deleterious affects of uncontrolled and untreated storm water runoff.

51-3 AUTHORITY

This Bylaw is adopted under authority granted by the Home Rule Amendment of the Massachusetts Constitution, the Home Rule statutes, and pursuant to the regulations of the federal Clean Water Act found at 40 CFR 122.34, and as authorized by the residents of the Town of Topsfield at Town Meeting, dated May 3, 2005.

51-4 ADMINISTRATION

- a. The Planning Board, shall administer, implement and enforce this Bylaw. Any powers granted to or duties imposed upon the Planning Board may be delegated in writing by the Planning Board to its employees or agents.
- b. Storm water Regulations. The Planning Board may adopt, and periodically amend, rules and regulations relating to the terms, conditions, definitions, enforcement, fees (including application, inspection, and/or consultant fees), procedures and administration of this Storm water Management Bylaw by majority vote of the Planning Board, after conducting a public hearing to receive comments on any proposed rules and regulations, or revisions thereto. Such hearing dates shall be advertised in a newspaper of general local circulation, at least fourteen (14) days prior to the hearing date. The Planning Board may promulgate rules and regulations to effectuate the purposes of this Bylaw. Failure by the Planning Board to promulgate such rules and regulations or a legal declaration of their invalidity by a court shall not act to suspend or invalidate the effect of this Bylaw.
- c. Storm water Management Manual. The Planning Board will utilize the policy, criteria and information including specifications and standards of the latest edition of the Massachusetts Storm water Management Policy, for execution of the provisions of this Bylaw. This Policy includes a list of acceptable storm water treatment practices, including the specific design criteria for each storm water practice. The Policy may be updated and expanded periodically, based on improvements in engineering, science, monitoring, and local maintenance experience. Unless specifically altered in the Storm water Regulations, storm water management practices that are designed, constructed, and maintained in accordance with these design and sizing criteria will be presumed to be protective of Massachusetts’s water quality standards.
- d. Actions by the Planning Board. The Planning Board may take any of the following actions as a result of an application for a Storm water Management Permit as more specifically defined as part of Storm water Regulations promulgated as a result of this Bylaw: Approval, Approval with Conditions, Disapproval, or Disapproval without Prejudice.
- e. Appeals of Action by the Planning Board. A decision of the Planning Board shall be final. A decision by the Planning Board made under this Bylaw shall be reviewable in the Court.

51-5 APPLICABILITY

a. This bylaw shall be applicable to all new development and redevelopment, including, but not limited to, site plan applications, grading applications, land use conversion applications, any activity that will result in an increased amount of storm water runoff or pollutants flowing from the a parcel of land, or any activity that will alter the drainage characteristics of a parcel of land, unless exempt pursuant to Section 51-5(b) of this Bylaw. An alteration, redevelopment, or conversion of land use to a hotspot such as, without limitation: auto salvage yards, auto fueling facilities, fleet storage yards, commercial parking lots with high intensity use, road salt storage areas, commercial nurseries and landscaping, outdoor storage and loading areas of hazardous substances, or marinas, shall require a Storm water Management Permit. All new development and redevelopment under the jurisdiction of this Bylaw as prescribed in this Bylaw shall be required to obtain a Stormwater Management Permit.

b. Exemptions

No person shall alter land within the Town of Topsfield without having obtained a Storm water Management Permit (SMP) for the property with the following exceptions:

1. Any activity that will alter an area less than 7500 square feet on existing or proposed slopes less than 15 %, or less than 25 % of a contiguous property on existing or proposed slopes less than 15%, whichever is less. This exception may not be applied for contiguous properties held in common ownership at the time of adoption of this Bylaw that may have been previously subdivided and/or are attributed to multiple separate owners.
2. Any activity that will alter an area of 4000 square feet or less on existing or proposed slopes steeper than 15 %. This exception may not be applied for contiguous properties held in common ownership at the time of adoption of this Bylaw that may have been previously subdivided and/or are attributed to multiple separate owners.
3. Normal maintenance and improvement of land in agricultural use as defined by the Wetlands Protection Act regulation 310 CMR 10.04 and MGL Chapter 40A Section 3;
4. Maintenance of existing landscaping, gardens or lawn areas associated with a single family dwelling; construction of patios, walkways, driveways less than the minimum square foot thresholds, swimming pools below the minimum square foot thresholds, or replacement of wells or septic systems on lots having an existing dwelling;
5. Repair or replacement of an existing roof of a single-family or multi-family dwelling;
6. The construction of any fence that will not alter existing terrain or drainage patterns;
7. Construction of utilities (gas, water, electric, telephone, etc.) other than drainage, which will not alter terrain, ground cover, or drainage patterns, the reconstruction of or resurfacing of any public way; the construction and associated grading of a street that has been approved by the Planning Board;
8. For the removal of earth products undertaken in connection with a sand, gravel or similar enterprise where such activity is allowed by zoning;
9. Emergency repairs to any utilities (gas, water, electric, telephone, etc.), stormwater management facility or practice that poses a threat to public health or safety, or as deemed necessary by the Planning Board;
10. Any work or projects for which all necessary approvals and permits have been issued before the effective date of this Bylaw;

11. Redevelopment projects are presumed to meet the specified storm water management requirements described in the Storm water Regulations of the Town of Topsfield if the total impervious cover is reduced by 40 % from existing conditions. Where site conditions prevent the reduction in impervious cover, storm water management practices shall be implemented to provide storm water controls for at least 40 % of the site's impervious area. When a combination of impervious area reduction and storm water management practice implementation is used for redevelopment projects, the combination of impervious area reduction and the area controlled by a storm water management practice shall equal or exceed 40 %.

51-6 PROCEDURES

Permit Procedures and Requirements shall be defined and included as part of any rules and regulations promulgated as permitted under Section 51-4 of this Bylaw.

51-7 ENFORCEMENT

The Planning Board or an authorized agent of the Planning Board shall enforce this Bylaw, regulations, orders, violation notices, and enforcement orders, and may pursue all civil and criminal remedies for such violations. Enforcement shall be further defined and included as part of any Storm water regulations promulgated as permitted under Section 51-4 of this Bylaw.

51-8 SEVERABILITY

The invalidity of any section, provision, paragraph, sentence, or clause of this Bylaw shall not invalidate any section, provision, paragraph, sentence, or clause thereof, nor shall it invalidate any permit or determination that previously has been issued.

(Art. 44, 5/3/2005, Effective August 30, 2005)