

MODEL STORMWATER BYLAW
Duxbury, Marshfield, and Plymouth
December 31, 2004

Introduction

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 stormwater 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 post-development stormwater 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 stormwater runoff quantity and quality from 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 post-development stormwater runoff quality and nonpoint source pollution.

Therefore, the *[Stormwater Authority]* has established this stormwater management bylaw to provide reasonable guidance for the regulation of post-development stormwater runoff for the purpose of protecting local water resources from degradation. This bylaw regulates the post-construction stormwater controls for both new and re-development projects.

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

1.0 PURPOSE

- A) The purpose of this Bylaw is to 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 stormwater runoff and nonpoint source pollution associated with new development and redevelopment. It has been determined that proper management of post-development stormwater 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 post-development stormwater management standards and design criteria for the regulation and control of stormwater 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 stormwater runoff which would otherwise degrade water quality;
 4. Establish design and application criteria for the construction and use of structural stormwater control facilities that can be used to meet the minimum post-development stormwater management standards;
 5. Encourage the use of nonstructural stormwater management, stormwater 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 stormwater control facilities and nonstructural stormwater 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 stormwater facilities implemented as part of this Bylaw;
 8. Establish administrative procedures for the submission, review, approval or disapproval of stormwater 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 stormwater plans, and the inspection of approved projects.
- B) Nothing in this Bylaw is intended to replace the requirements of either, the Town of [_____] Flood Plain Zoning Bylaw, the Town of [_____] General Wetlands Protection Bylaw, or any other Bylaw that may be adopted by the Town of [_____]. Any activity subject to the provisions of the above-cited Bylaws must comply with the specifications of each.

2.0 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 stormwater volumes and flows, reduce point source and nonpoint source pollution, and promote stormwater quality and protection of the environment. "Structural" BMPs are devices that are engineered and constructed to provide temporary storage and treatment of stormwater 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 stormwater management practices. Better site design includes conserving and protecting natural areas and greenspace, reducing impervious cover, and using natural features for stormwater management.

GENERAL STORMWATER MANAGEMENT PERMIT (GSMP): A permit issued for an application that meets a set of pre-determined standards outlined in the Regulations to be adopted by the *[Stormwater Authority]* under Section 4 of this Bylaw. By meeting these pre-determined standards, the proposed project will be presumed to meet the requirements and intent of this Bylaw.

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 STORMWATER 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 stormwater 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 *[_____]*, 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 *[Stormwater Authority]*. 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 [5,000] square feet, where the existing land use is commercial, industrial, institutional, or multi-family residential.

STORMWATER AUTHORITY: the Town of [_____] [Planning Board, Conservation Commission, Board of Health, or other specifically authorized Dept. or entity the Town decides is appropriate to administer, implement and enforce this bylaw, OR its authorized agent(s)]. The [Stormwater Authority] is responsible for coordinating the review, approval and permit process as defined in this Bylaw. Other Boards and/or departments participate in the review process as defined in the Stormwater Regulations adopted by the [Boards, Commissions and/or Departments of the Town of _____].

STORMWATER CREDITS: A form of incentive for developers to promote conservation of natural and open space areas. Projects that comply with prescribed requirements are allowed reductions in stormwater management requirements when they use techniques to reduce stormwater runoff at the site.

STORMWATER MANAGEMENT PERMIT (SMP): A permit issued by the [Stormwater Authority], 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 stormwater runoff.

STORMWATER UTILITY: A special assessment district set up to generate funding specifically for stormwater management. Users within the district pay a stormwater fee, and the revenue thus generated directly supports maintenance and upgrade of existing storm drain systems; development of drainage plans, flood control measures, and water-quality programs; administrative costs; and sometimes construction of major capital improvements.

3.0 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 [_____] at Town Meeting, dated [_____].

4.0 ADMINISTRATION

- A) The [Stormwater Authority], shall administer, implement and enforce this Bylaw. Any powers granted to or duties imposed upon the [Stormwater Authority] may be delegated in writing by the [Stormwater Authority] to its employees or agents.
- B) Stormwater Regulations. The [Stormwater Authority] 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 Stormwater Management Bylaw by majority vote of the [Stormwater Authority], after conducting a public hearing to receive comments on any proposed revisions. Such hearing dates shall be advertised in a newspaper of general local circulation, at least seven (7) days prior to the hearing date. After public notice and public hearing, the [Stormwater Authority] may promulgate rules and regulations

to effectuate the purposes of this Bylaw. Failure by the *[Stormwater Authority]* 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) Stormwater Management Manual. The *[Stormwater Authority]* will utilize the policy, criteria and information including specifications and standards of the latest edition of the Massachusetts Stormwater Management Policy, *[or approved local equivalent]*, for execution of the provisions of this Bylaw. This Policy includes a list of acceptable stormwater treatment practices, including the specific design criteria for each stormwater 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 Stormwater Regulations, stormwater management practices that are designed, constructed, and maintained in accordance with these design and sizing criteria will be presumed to be protective of Massachusetts water quality standards.
- D) General Permit. The *[Stormwater Authority]* shall have the authority to develop a General Stormwater Management Permit (GSMP) for specific types of projects, such as, without limitation Construction of a *[Deck, Patio, Retaining Wall, Existing Driveway Expansion, Shed, Swimming Pool, Tennis or Basketball Court]*. Any such General Stormwater Management Permit Requirements shall be defined and included as part of any Stormwater Regulations promulgated as a result of this Bylaw.
- E) Actions by the *[Stormwater Authority]*. The *[Stormwater Authority]* may take any of the following actions as a result of an application for a Stormwater Management Permit as more specifically defined as part of Stormwater Regulations promulgated as a result of this Bylaw: Approval, Approval with Conditions, Disapproval, or Disapproval without Prejudice.
- F) Appeals of Action by the *[Stormwater Authority]*. A decision of the *[Stormwater Authority]* shall be final. Further relief of a decision by the *[Stormwater Authority]* made under this Bylaw shall be reviewable in the Superior Court in and action filed within *[60 days]* thereof, in accordance with M.G.L. Ch 49 § 4.
- F) Stormwater Credit System. The *[Stormwater Authority]* may adopt, through the Regulations authorized by this Stormwater Management Bylaw, a Stormwater Credit System. This credit system will allow applicants the option, if approved by the *[Stormwater Authority]*, to take credit for the use of stormwater better site design practices to reduce some of the requirements specified in the criteria section of the Regulations. Failure by the *[Stormwater Authority]* to promulgate such a credit system through its Regulations or a legal declaration of its invalidity by a court shall not act to suspend or invalidate the effect of this Bylaw.
- G) Stormwater Utility. The *[Stormwater Authority]* may adopt, through the Regulations authorized by this Stormwater Management Bylaw, a Stormwater Utility pursuant to M.G.L. Chapter 83 Section 16 and Chapter 40 Section 1A. The *[Stormwater Authority]* shall administer, implement and enforce this Utility. Failure by the *[Stormwater Authority]* to promulgate such a Stormwater Utility through its Regulations or a legal declaration of its invalidity by a court shall not act to suspend or invalidate the effect of this Bylaw.

5.0 APPLICABILITY

- A) This bylaw shall be applicable to all new development and redevelopment, including, but not limited to, site plan applications, subdivision applications, grading applications, land use conversion applications, any activity that will result in an increased amount of stormwater 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 5.B) of this Bylaw. 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 [_____] without having obtained a Stormwater Management Permit (SMP) for the property with the following exceptions:

1. Any activity that will disturb an area less than [5000] square feet or less than [25%] of a contiguous property, 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;

Another option could be based on impervious area such as "Any activity that will increase a contiguous impervious area of less than [5000] square feet.

2. 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.
3. Maintenance of existing landscaping, gardens or lawn areas associated with a single family dwelling;
4. Repair or replacement of an existing roof of a single-family dwelling;
5. The construction of any fence that will not alter existing terrain or drainage patterns;
6. Construction of utilities (gas, water, electric, telephone, etc.) other than drainage, which will not alter terrain, ground cover, or drainage patterns;
7. Emergency repairs to any stormwater management facility or practice that poses a threat to public health or safety, or as deemed necessary by the [Stormwater Authority];
8. Any work or projects for which all necessary approvals and permits have been issued before the effective date of this Bylaw;
9. Redevelopment projects are presumed to meet the specified stormwater management requirements described in the Stormwater Regulations of the Town of [_____] if the total impervious cover is reduced by [40%] from existing conditions. Where site conditions prevent the reduction in impervious cover, stormwater management practices shall be implemented to provide stormwater controls for at least [40%] of the site's impervious area. When a combination of impervious area reduction and stormwater management practice implementation is used for redevelopment projects, the combination of impervious area reduction and the area controlled by a stormwater management practice shall equal or exceed [40%].
10. 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 Stormwater Management Permit.

6.0 PROCEDURES

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

7.0 ENFORCEMENT

The *[Stormwater Authority]*, or an authorized agent of the *[Stormwater Authority]* 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 Stormwater regulations promulgated as permitted under Section 4 of this Bylaw.

8.0 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.