

**DRAFT Proposed Stormwater Management Bylaw for
the Town of Brewster, Massachusetts**

This proposed Stormwater Management Bylaw was prepared by the Horsley Witten Group, Inc. for the Town of Brewster as part of Phase III of the town's Integrated Water Resource Management Plan (IWRMP). It was created as a means for the Town to: 1) comply with current and pending requirements of the NPDES Phase II Small MS4 Stormwater Program, which require administration of state stormwater management standards beyond the Wetlands Protection Act; 2) minimize the impact of polluted stormwater runoff on the Town's surface and groundwater resources from new development, and 3) capitalize on opportunities to improve water quality and recharge during redevelopment and repaving. Proposed accompanying Stormwater Management Regulations have also been prepared by HW for the Town as part of Phase III of the IWRMP.

Chapter 999, STORMWATER MANAGEMENT BYLAW

§ 999-1. Purpose

Construction and post-construction stormwater runoff may increase flooding, channel erosion, nonpoint source pollution, sedimentation, and decrease groundwater recharge. The purpose of this Bylaw is to establish minimum stormwater management requirements and procedures in order to minimize damage to public and private property and infrastructure; safeguard the public health, safety, environment and general welfare; protect aquatic resources and wildlife habitat; and conserve groundwater supplies. This Bylaw seeks to meet that purpose through the following objectives:

- A. Establish decision-making processes surrounding land development and redevelopment that protect the integrity of the watershed and preserve and/or restore the health of local water resources, such as Pleasant Bay, Cape Cod Bay, freshwater ponds, streams, and groundwater that is Brewster's sole source drinking water supply.
- B. Ensure that new development and other land alterations maintain pre-development runoff characteristics in order to prevent flooding, erosion, sedimentation, nonpoint source pollution, and property damage, and to maintain aquatic habitats.
- C. Take advantage of redevelopment and road repaving opportunities to improve stormwater management in existing areas.
- D. Promote the use of low impact development ("LID") approaches, such as reducing impervious cover, maintaining natural hydrology, preserving open space, and water conservation via rainwater reuse.
- E. Establish minimum construction and post-construction stormwater management standards and design criteria for the control of stormwater runoff quantity and quality and considering changing rainfall and groundwater levels associated with climate change.
- F. Ensure that soil erosion and sedimentation control measures during construction are incorporated into the site design process and are implemented and maintained throughout the duration of construction.
- G. Ensure the long-term function and safety of post-construction stormwater practices.

- 1 H. Establish administrative procedures for: the submission, review, and approval or
2 disapproval of stormwater management plans and erosion and sedimentation control
3 plans; the inspection of approved active projects; and long-term follow up.
- 4 I. Ensure compliance with requirements of the National Pollutant Discharge
5 Elimination System (NPDES) General Permit for Stormwater Discharges from Small
6 Municipal Separate Storm Sewer Systems (“MS4”s) and other applicable State and
7 Federal mandates.

8 *Objectives have been revised to reduce complexity and overlap per comments from CWPC.*

9 § 999-2. **Authority**

10 This Bylaw is adopted under authority granted by the Home Rule Amendment of the
11 Massachusetts Constitution, the Home Rule statutes, pursuant to the Regulations of the federal
12 Clean Water Act found at 40 CFR 122.34, and as authorized by the residents of the Town of
13 Brewster at the 2014 Special Town Meeting and as amended.

14 § 999-3. **Administration**

- 15 A. The Planning Board shall be the permit granting authority for this Bylaw. Any
16 powers granted to, or duties imposed upon, the Planning Board may be delegated in
17 writing by the Planning Board to any Town employee, board, commission, committee
18 or agent, hereby known as the “Reviewing Agent.”

19 *Will the Conservation Commission also administer the proposed stormwater regulations under*
20 *this Bylaw within wetland jurisdiction, or will Planning Board administer? If so, how does the*
21 *language here or process change?*

- 22 B. The Planning Board or its Reviewing Agent shall take any of the following actions as
23 a result of an application for a Stormwater Management Permit (“SMP”) as
24 specifically defined within the Stormwater Management Regulations promulgated as
25 a result of this Bylaw: Approval, Approval with Conditions, or Disapproval.
- 26 C. A decision of the Planning Board or its Reviewing Agent shall be final. Further relief
27 of a decision by the Planning Board or its Reviewing Agent made under this Bylaw
28 shall be reviewable in the Superior Court and action filed within 60 days thereof, in
29 accordance with M.G.L. Ch 249 § 4.

30 § 999-4. **Regulations**

- 31 A. The Planning Board may adopt, and periodically amend, Regulations relating to the
32 terms, conditions, definitions, enforcement, fees (including application, inspection,
33 and/or consultant fees), procedures and administration of this Stormwater
34 Management Bylaw by majority vote of the Planning Board, after conducting an
35 advertised public hearing to receive comments on any proposed revisions. Failure by
36 the Planning Board to promulgate such Regulations or a legal declaration of their
37 invalidity by a court shall not act to suspend or invalidate the effect of this Bylaw.
- 38 B. The Planning Board will utilize, at a minimum, the policy, criteria, and standards of
39 the Massachusetts Stormwater Management Standards (“MSWMS”) within the most
40 recent version of the MassDEP Stormwater Management Handbook for execution of
41 the provisions of this Bylaw, except where the Town of Brewster specifies more

1 stringent standards. Unless otherwise specified in the Town of Brewster Stormwater
2 Management Regulations, stormwater management practices that are designed,
3 constructed, and maintained in accordance with the MSWMS criteria will be
4 presumed to be protective of Massachusetts water quality standards.

5 § 999-5. **Applicability**

- 6 A. A SMP shall be obtained for all new development, redevelopment, and for any other
7 activity that may alter the quantity or quality of runoff flowing from a parcel of land
8 or entering the municipally-owned storm drain system unless exempt pursuant to 0 of
9 this Bylaw.

10 *The 2003 MS4 Permit requires stormwater management beyond projects within just wetlands*
11 *jurisdiction. In this Draft, all new development and redevelopment (see definitions), as well as*
12 *other activities that do not fit into the definition of development/redevelopment (e.g. land*
13 *clearing) are applicable on a town-wide basis. Another option discussed was limiting*
14 *applicability to properties within the MS4 boundary. The downside of that alternative is that it*
15 *does not necessarily align with the Town's water resource protection objectives and that it is*
16 *simpler to administer a single standard. There was also a discussion regarding using a*
17 *"change" in use or ownership to trigger stormwater requirements.*

18 B. Exemptions

- 19 1. Construction, renovation, or modification of a single or two-family dwelling and
20 associated accessory structures that will disturb less than 5,000 square feet of
21 land;

22 *Single-family residential (SFR) projects are currently exempted from the MSWMS and WPA,*
23 *however, other jurisdictions have found that these sites are important cumulatively and should*
24 *be managed. Various options and disturbance thresholds have been discussed including: 1)*
25 *exempting SFR except for those properties within 300 ft of a pond or within the contributing*
26 *drainage area to a pond; 2) raising the threshold to 10,000 square feet; or 3) only requiring*
27 *erosion and sediment control and reducing the post-construction requirements to something less*
28 *stringent than what would be required at a commercial site.*

29 *When considering SFR exemptions, a balance should be found between complexity,*
30 *administration capacity (e.g., is it too many properties, is it too difficult for homeowners to*
31 *implement, can we include a reference map so applicants know if they are in or out), and if you*
32 *are missing erosion control on smaller construction sites? If SFR are not exempted, should*
33 *compliance to the maximum extent practicable for some standards be allowed, or should specific*
34 *guidance for compliance (e.g., use dry wells and rain gardens to meet water quality and*
35 *recharge only) be provided. Rhode Island, for example, includes a separate set of compliance*
36 *criteria for SFR.*

37 *In this Draft, we left the SFR threshold at 5,000 sf and have assumed less stringent performance*
38 *standards will be applied (see Section 999-7).*

- 39 2. Any development or redevelopment other than single or two-family residential
40 that will disturb less than 2,500 square feet of land. This exemption shall not
41 apply to contiguous properties held in common ownership at the time of adoption
42 of this Bylaw and may not be applied to permit phased construction projects or
43 expansions that are not shown on the original SMP application;

1 *This is to ensure that multifamily and small commercial sites where generation of stormwater*
2 *pollutants can be high and opportunities to improve existing conditions are most prevalent are*
3 *captured.*

- 4 3. Normal maintenance and improvement of land in agricultural use as defined by
5 the Wetlands Protection Act regulation 310 CMR 10.04 and MGL Chapter 40A
6 Section 3 Zoning Act.
- 7 4. Emergency repairs to existing utilities;
- 8 5. Emergency repairs to existing roads or their drainage systems, or to any
9 stormwater management facility that poses a threat to public health or safety or as
10 deemed necessary by the Planning Board, Board of Health, Conservation
11 Commission, or Department of Public Works.
- 12 6. Any projects subject to review by the Planning Board and/or the Conservation
13 Commission for which all necessary approvals and permits have been issued
14 before the effective date of this Bylaw and/or applications have been filed with
15 the respective entities within ninety (90) days of the effective date of this Bylaw.

16 *Agriculture uses, emergency utility and road repair, and “grandfathering” are typical*
17 *exemptions.*

18 § 999-6. **Procedures**

19 Permit Procedures and Requirements shall be defined and included as part of any Regulations
20 promulgated under § 999-4 of this Bylaw.

21 § 999-7. **Performance Standards**

- 22 A. The Stormwater Management Standards shall be defined and included as part of any
23 Regulations promulgated under § 999-4 of this Bylaw.
- 24 B. Applicable activities involving single or two-family dwellings will be required to
25 fully meet erosion and sediment control standards, and to meet a simplified set of
26 post-construction performance standards.
- 27 C. Multi-family and non-residential projects will be required to meet erosion and
28 sediment control and post-construction stormwater standards to the full extent.

29 *This draft Bylaw assumes that new large SFR development and teardown/rebuilds will be*
30 *covered under the regulations. As such, these sites should meet construction standards, but may*
31 *not be required to provide flood control and some of the more intensive post-construction*
32 *requirements. The Regulations would specify what SFR needs to do, which may be limited to*
33 *infiltrating roof runoff with dry wells or rain gardens and keeping all runoff on site, and would*
34 *include a simplified checklist.*

36 § 999-8. **Waivers**

- 37 A. The Planning Board or its designated Reviewing Agent may in its discretion, and
38 after due consideration, decide to waive and exempt strict compliance with any
39 requirement of this Bylaw or the Regulations promulgated hereunder, where it makes
40 a written finding that such action is:

1. Allowed by federal, state and local statutes and/or regulations;
2. In the public interest; and
3. Consistent with the purpose and intent of this Bylaw under § 999-4.

B. Criteria for granting a waiver shall be defined and included as part of the Regulations promulgated under § 999-4 of this Bylaw.

Comment: Should waivers require a public hearing? Waivers under Site Plan Review do not.

§ 999-9. **Stormwater Mitigation**

Under certain circumstances where on-site options for stormwater mitigation are limited, or where off-site options provide better protection, the Planning Board or its Reviewing Agent may allow the applicant to contribute to the implementation of off-site stormwater mitigation. This may be allowed at the discretion of the Planning Board or its Reviewing Agent only where a net public benefit is clearly demonstrated and documented by meeting or exceeding the purpose and intent of this Bylaw.

§ 999-10. **Enforcement**

The Building Commissioner 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 Regulations promulgated under § 999-4 of this Bylaw.

The level of effort required to enforce proposed stormwater requirements should be considered. Some thought that additional man-power will be required; others thought it would be manageable under existing staffing since it will primarily be complaint driven with letters/violation notices. In reality, proper installation and maintenance of erosion and sediment control practices during construction and the long-term maintenance of any permanent drainage infrastructure and facilities will be the primary issues for enforcement.

§ 999-11. **Severability**

- A. The invalidity of any section or provision of this Bylaw shall not invalidate any other section or provision hereof.
- B. This Bylaw shall not interfere with or annul any other bylaw, rule, regulation or permit when the aforementioned specifically states that it is controlling. However, when any other bylaw, rule, regulation or permit does not specifically state that it is controlling, the Stormwater Management Bylaw, if more stringent, shall govern.

§ 999-12. **Definitions**

The following terms are defined for the purposes of this Bylaw:

ALTER: Any activity, which will measurably change the ability of a ground surface area to absorb water, increase polluted runoff, and/or change the existing surface drainage patterns. The term “alter” shall include “alteration,” “disturb” and “disturbance,” and “clearing.”

DISTURBANCE: Any activity that causes a change in the position or location of soil, vegetation, or other land surface.

1 IMPERVIOUS COVER: Any material or structure on or above the ground that prevents water
2 from infiltrating through the underlying soil. Impervious cover includes, without limitation,
3 paved parking lots, roads, sidewalks, driveways, patios, roof tops, and swimming pools. Gravel
4 and dirt surfaced roads and parking areas that can become compacted by vehicles and heavy
5 equipment are considered impervious. Permeable pavers and porous pavements designed to
6 prevent compaction are not considered impervious. The term “impervious cover” shall include
7 “impervious area” and “impervious surface.”

8 Concern has been raised regarding the inclusion of gravel or unpaved surfaces in the definition
9 of impervious and whether this will cause undue confusion since unpaved surfaces have been
10 promoted in Town.

11 INFILTRATION: The act of conveying surface water into the ground to permit groundwater
12 recharge and the reduction of surface runoff from a project site.

13 LOW IMPACT DEVELOPMENT (LID): An approach to land development design and
14 stormwater management that attempts to mimic the natural hydrology of the site by avoiding,
15 reducing and mitigating impacts with natural, non-structural and structural measures.

16 MASSACHUSETTS STORMWATER MANAGEMENT STANDARDS (MSWMS): The latest
17 version as may be amended of the Stormwater Management Standards and accompanying
18 Stormwater Handbook issued by the Massachusetts Department of Environmental Protection
19 pursuant to authority under the Wetlands Protection Act, M.G.L. c. 131, § 40, and the
20 Massachusetts Clean Waters Act, M.G.L. c. 21, §§26-53. The Stormwater Management
21 Standards are incorporated in the Wetlands Protection Act Regulations, 310 CMR 10.05(6)(k)
22 and the Water Quality Certification Regulations, 314 CMR 9.06(6)(a).

23 MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) or MUNICIPAL STORM
24 DRAIN SYSTEM: The system of conveyances designed or used for collecting or conveying
25 stormwater, including any road with a drainage system, street, gutter, curb, inlet, piped storm
26 drain, pumping facility, retention or detention basin, natural or man-made or *altered* drainage
27 channel, reservoir, and other drainage structure that together comprise the storm drainage system
28 owned or operated by the Town of Brewster.

29 NEW DEVELOPMENT: Any construction or land disturbance on a lot, or portion of a lot, that is
30 currently in a vegetated state.

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

35 PRE-DEVELOPMENT: The conditions that exist prior to the proposed development. Where
36 phased development or plan approval occurs (e.g., preliminary grading, roads, and utilities, etc.),
37 the existing conditions at the time prior to the first plan submission shall establish pre-
38 development conditions.

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

1 RECHARGE: The replenishment of groundwater reserves.

2 RECORD DRAWING: Drawings that completely record and document applicable aspects and
3 features of the conditions of a project following construction using Stormwater Management
4 Plans derived from a Stormwater Management Permit.

5 REDEVELOPMENT: Any construction, alteration, improvement, repaving, or resurfacing on a
6 site that contains impervious cover, provided the activity does not increase net impervious cover.

7 RUNOFF: Rainfall or snowmelt water flowing over the ground surface or other surface (e.g.,
8 rooftop).

9 SITE: The entire parcel of land being developed or redeveloped.

10 STORMWATER MANAGEMENT PRACTICE: Engineered structures and non-structural (e.g.,
11 site design, vegetation) measures used to control discharge volumes, manage peak flow rates,
12 filter, infiltrate, reuse, or prevent pollutants from coming into contact with stormwater.

13 STORMWATER MANAGEMENT PERMIT (SMP): A permit issued by the Planning Board,
14 after review of an application, plans, calculations, and other supporting documents, which is
15 designed to protect the environment of the Town from the deleterious effects of uncontrolled and
16 untreated stormwater runoff.

17 Terms not defined shall be construed according to their customary and usual meaning, unless the
18 context indicates a special or technical meaning. Words used in the present tense include the
19 future; words in the singular number include the plural and words in the plural number include
20 the singular; and the word "shall" is mandatory and not directory. Additional definitions may be
21 adopted by separate regulation.