Post-Construction Ordinance Narrative

**Important Note: The information in this document is based on the 2012 Southeast Watershed Alliance Post Construction Stormwater Management Standards (SWA Model Standards) document formally known as the Southeast Watershed Alliance Model Stormwater Standards for Coastal Watershed Communities.**

**Introduction:**

The purpose of this document is to allow New Hampshire MS4 permittees to perform an informal self-audit of its municipal regulations/ordinances to confirm that they meet the requirements in Sections 2.3.6.a and 2.3.6.a.i of the New Hampshire MS4 Permit. This document will help to identify changes that need to be made to the municipal regulations/ordinances to ensure that they fully meet the requirements in Sections 2.3.6.a and 2.3.6.a.i. The requirement in Section 2.3.6.a.i states that “The permittee shall develop or modify, as appropriate, an ordinance or other regulatory mechanism within three (3) years of the effective date of the permit to be at least as stringent as Section 4 Element C and Element D of the Southeast Watershed Alliance’s Model Stormwater Standards for Coastal Watershed Communities (SWA Model Standards).” The information found within this document is based off the 2012 SWA Model Standards document.

The Seacoast Stormwater Coalition is providing the following checklist to aid communities in ensuring that their stormwater regulations meet MS4 compliance.  Section 2.3.6.a.i requires that the program be “at least as stringent as Section 4 Element C and Element D of the Southeast Watershed Alliance’s Model Stormwater Standards”.

Please note that Elements C and D have many requirements included in the model ordinance, all of which are included here. However, based on our understanding of the goals of the MS4 permit, we believe that some of the language (shown in *blue and italicized text*) may be up to the municipality to include but should not be considered a requirement for MS4 permit compliance.

The Seacoast Stormwater Coalition notes that the MS4 requirements and the NHDES Stormwater Manual (and thus NHDES Alteration of Terrain) requirements have different sizing and removal rate criteria.  For now, we recommend that communities continue with which ever criteria is currently referenced and make an update in the future once the NHDES Stormwater Manual is revised to include performance curves.

**General:**

* 2.3.6.a – Program captures projects that disturb more than 1 acre and discharge to an MS4:

**Best Management Practices:**

* **2.3.6.a.i** – Pollutant removal for Stormwater BMP shall be evaluated consistent with Attachment 3 to Appendix F. or other EPA Region 1 tool. If federal tools do not address the planned or installed BMP than State approved guidance may be used.*(We recognize that many communities reference the NHDES Stormwater Manual, which is being updated, therefore we don’t recommend any changes to sizing or pollutant reduction calculations be made until the updated manual is complete)*
* **SWA C.1** - All proposed stormwater practices and measures shall be installed and maintained in accordance with manufacturers’ specifications and performance specifications in the NH Stormwater Management Manual Volume 2.*(We recognize that many communities reference the NHDES Stormwater Manual, which is being updated, therefore we don’t recommend any changes to sizing or pollutant reduction calculations be made until the updated manual is complete)*

**Water Quality Protection:**

* **SWA C.2.a.**– No person shall discharge substances such that they contaminate ground water or surface water.*(This regulation may sit in the permittees Health Code or Sewer Ordinance etc.)*
* **SWA C.2.b.**– All storage facilities for fuel, chemicals, etc. shall meet NHDES regulations.*(This regulation may sit in the permittees Health Code or Sewer Ordinance etc.)*

**Stormwater Management for New Development:**

* **SWA C.3.a.**– *Existing surface waters shall be protected by a minimum buffer as specified in the Zoning Regulation and BMP’s shall not be located in that buffer.**(This only applies if communities have a buffer. We recommend that it be up to each community to determine if a buffer is wanted and what can be in that buffer)*
* **SWA C.3.a.**– *Alternatives to stream and wetland crossings shall be avoided.**(This is a State reg as well and is redundant to put in local regs. Also, Federal wetland regs are substantially less stringent than state regs, so best to lean on state regs.)*
* **SWA C.3.b.**– LID must be used to the maximum extent practicable.
* **SWA C.3. c.**– All stormwater treatment areas shall be planted with native plantings appropriate to the conditions.
* **SWA C.3.d.** – All areas that receive rainfall runoff must be designed to drain within 72 hours for vector control.
* **SWA C.3.e.** – Salt storage areas shall be covered and the load/offloading areas shall be designated and maintained in accordance with NHDES published guidelines such that no untreated discharge to receiving waters results.
* **SWA C.3.e.** – Snow storage areas shall be located in accordance with NHDES published guidance such that no direct untreated discharges to receiving waters are possible from the storage site.
* **SWA C.3.f.** – *Runoff shall be directed into recessed vegetated and landscape areas designed for treatment and/or filtration to the MEP to minimize Effective Impervious Cover (EIC) and reduce the need for irrigation systems.*
* **SWA C.3.g** – *All newly generated stormwater, whether from new development or expansion of existing development (redevelopment), shall be treated on the development site. (Why not offsite?)*
* **SWA C.3.g.** – Runoff shall not discharge to a surface water bodies or wetlands in excess of volumes discharged under existing conditions.
* **SWA C.3.h.** – Runoff from impervious surfaces shall be treated to achieve 80% TSS and at least 50% removal of total nitrogen and total phosphorus using appropriate treatment measures, as specified in the NH Stormwater Manual… **or other equivalent means.** *(We recognize that many communities reference the NHDES Stormwater Manual, which is being updated, therefore we don’t recommend any changes to sizing or pollutant reduction calculations be made until the updated manual is complete)*
* **SWA C.3.i.** – Measures shall be taken to control post-development peak rate in the 2, 10, and 25 year storm events.
* **SWA C.3.i.** – *Measures shall be taken to recharge volume according to the following ratios of HSG type versus infiltration rate multiplier: HSG-A: 1.0; HSG-B: 0.75; HGG-C: 0.4; HSG-D: 0.15. For sites where infiltration is limited or not practicable, the applicant must demonstrate that the project will not create or contribute to water quality impairment. Infiltration structures shall be in locations with the highest permeability on site.**(Meeting volume reductions should be enough, this may be redundant)*
* **SWA C.3.j.** – *The physical, biological and chemical integrity of the receiving waters shall not be degraded by the stormwater runoff from the development site.* *(PER NHDES – these regulations mean you are not causing or contributing or “degrading” runoff)*
* **SWA C.3.k.** – The design of the stormwater drainage system shall provide for the disposal of stormwater without flooding or functional impairment to streets, adjacent properties, downstream properties, soils, or vegetation.
* **SWA C.3.l.** – The design of the stormwater management system shall take into account upstream and upgradient runoff that flows into, over, or through the site to be developed or redeveloped, and provide for this contribution of runoff.
* **SWA C.3.m.** – *Appropriate erosion and sediment control measures shall be installed prior to any soil disturbance, the area of disturbance shall be kept to a minimum, and any sediment in runoff shall be retained within the project area. Wetland areas and surface waters shall be protected from sediment. Disturbed soil areas shall be either temporarily or permanently stabilized consistent with the NHDES Stormwater Manual Volume 3 guidelines. In areas where final grading has not occurred, temporary stabilization measures should be in place within 7 days for exposed soil areas within 100 feet of a surface water body or wetland and no more than fourteen (14) days for all other areas. Permanent stabilization should be in place no more than 3 days following the completion of final grading of exposed soil areas.* *(This is covered in MCM #4 Construction Site Stormwater Runoff Controls)*
* **SWA C.3.n.** – *All temporary control measures shall be removed after final site stabilization. Trapped sediment and other disturbed soil areas resulting from the removal of temporary measures shall be permanently stabilized prior to removal of temporary control measures. (This is covered in MCM #4 Construction Site Stormwater Runoff Control)*
* **SWA C.3.o.** – *Every effort shall be made to use pervious parking surfaces as an alternative to impervious asphalt or concrete for general and overflow parking areas. Pervious pavement shall be appropriately sited and designed for traffic and vehicle loading conditions. (Any BMP should be allowed so long as target reductions are met – pavement reductions are covered in the ordinance review that we did in Year 4, so no need to include this language if you don’t want to)*
* **SWA C.3.p.** – *Whenever practicable, native site vegetation shall be retained, protected, or supplemented. Any stripping of vegetation shall be done in a manner that minimizes soil erosion. (This is covered in MCM #4 Construction Site Stormwater Runoff Control)*
* **SWA D.1.a.** – *In order to determine the stormwater requirements for redevelopment projects, the percentage of the site covered by existing impervious areas must be calculated. Stormwater requirements for redevelopment will vary based upon the amount of site surface area that is covered by existing impervious surfaces.* *(This is a note rather than a regulation)*
* **SWA D.1.b.** – For sites meeting the definition of a redevelopment project and having less than 40% existing impervious surface coverage, the stormwater management requirements will be the same as other new development projects with the important distinction that the applicant can meet those requirements either on-site or at an approved off-site location. The applicant must satisfactorily demonstrate that impervious area reduction, LID strategies and BMPs have been implemented on-site to the maximum extent practicable.
* **SWA D.1.c.** – For sites meeting the definition of a redevelopment project and having more than 40% existing impervious surface coverage, stormwater shall be managed for water quality in accordance with one or more of the following techniques, listed in order of preference:

1. Implement measures onsite that result in disconnection or treatment of at least 30% of the existing impervious cover as well as 50% of the additional proposed impervious surfaces and pavement areas through the application of filtration media; or
2. Implement other LID techniques onsite to the maximum extent practicable to provide treatment for at least 50% of the entire site area

* **SWA D.2.a** – In cases where the applicant demonstrates, to the satisfaction of the planning board, that on-site treatment has been implemented to the maximum extent possible or is not feasible, off-site mitigation will be an acceptable alternative if implemented within the same subwatershed, within the project’s drainage area or within the drainage area of the receiving water body. To comply with local watershed objectives the mitigation site would be preferably situated in the same subwatershed as the development and impact/benefit the same receiving water.
* **SWA D.2.b** – Off-site mitigation shall be equivalent to no less than the total area of impervious cover NOT treated on-site.
* **SWA D.2.c** – An approved off-site location must be identified, the specific management measures identified, and an implementation schedule developed in accordance with planning board review. The applicant must also demonstrate that there is no downstream drainage or flooding impacts as a result of not providing on-site management for large storm events.

**As-Built:**

* **2.3.6.b.**– Permittee shall require the submission of as-built drawings within a specified time frame, within 2 years, from completion of construction projects…

**Operations and Maintenance:**

* **2.3.6.b.**– New-development/redevelopment shall have procedures to ensure adequate long-term operation and maintenance of stormwater management practices.