DRAFT ADDENDUM (revised 9/25/15)

Southeast Watershed Alliance (SWA) – Model Stormwater Standards for NH's Coastal Watershed. NOTE: This draft Addendum has not been endorsed by SWA.

Based on experience implementing the adopted Southeast Watershed Alliance (SWA) Model Stormwater Standards for NH's Coastal Watershed, the UNH Stormwater Center and Rockingham Planning Commission recommend the following revised to the model. Note the recommended content immediately follows each of the bolded subheadings below.

Element A. Applicability Standards

Element A Applicability Standards, Section 2 states:

"All projects under review by the Planning Board of such magnitude as to require a stormwater permit from EPA Construction General Permit (CGP) program or NH Department of Environmental Services (NHDES) Alteration of Terrain (AOT) program shall comply with the standards of EPA and/or NHDES permits and this section, whereas the stricter standards shall apply."

Municipalities should be aware that the requirements of these model standards are in some instances more stringent than the EPA Construction General Permit program and/or NH Department of Environmental Services Alteration of Terrain program permits.

Element B. Threshold for Applicability of Stormwater Management Standards

Revised Text:

Section 1. These stormwater management standards apply to projects requiring Planning Board review and approval under the {insert references to applicable zoning or regulation here} that result in 5,000 square feet or greater of total site disturbance. For smaller projects that result in less than 5,000 square feet of total site disturbance the applicant may request a waiver of the full standards providing minimum protections and management are implemented as described in sections 2 and 3 below. For the purpose of these standards, disturbance is defined as any alteration of the land surface or permanent removal of vegetation or trees associated with a development or other activity.

Note: The UNH Stormwater Center has gathered data (based on development applications for the Town of Durham) indicating that a lower applicability (trigger) threshold captures a significantly greater

percentage of development projects and thus overall better stormwater management. This is particularly important for municipalities subject to the new water quality and stormwater treatment requirements under the EPA MS4 permit. Refer to the statistics for a range of threshold values in the table below.

TRIGGER THRESHOLD	PERCENT REGULATED
5,000 sf	80%
10,000 sf	60%
20,000 sf	50%
40,000 sf	30%

Element C. Best Management Practices

section 3.b. Low Impact Development

Revised Text:

3.b. Low Impact Development (LID) techniques such as raingardens, bioretention systems, tree box filters, and similar stormwater management landscaping techniques shall be incorporated into landscaped areas with the goals of protecting water quality, maintaining predevelopment site hydrology.

section 3.i. Drainage Analysis and Precipitation Data

Add New Text to this section or as a separate line item:

3.i. Drainage analyses shall include calculations comparing pre- and post-development stormwater runoff rates (cubic feet per second) and volumes (cubic feet) based on a 1-inch rainstorm, and the 2-year, 10-year, and 25-year 24-hour frequency storms. The sizing and design of stormwater management practices and drainage analyses shall utilize precipitation data from the Northeast Region Climate Center (http://precip.eas.cornell.edu) or the most recent precipitation atlas published by the National Oceanic and Atmospheric Administration (NOAA).

Element D. Applicability for Redevelopment

section 1. Redevelopment Criteria

Revised Text:

- 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.
- 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.
- 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 the following: Implement other LID techniques onsite to the maximum extent practicable to provide treatment for at least 50% of the entire site area

Recommend adding the following revised definition of Redevelopment to section 1 (revised from Glossary section)

Redevelopment (as applicable to this stormwater regulation): Any construction, alteration, or improvement that disturbs a total of 5,000 square feet or more of existing impervious area where the existing land use is commercial, industrial, institutional, governmental, recreational, or multifamily residential. Building demolition is included as an activity defined as "redevelopment", but building renovation is not. Similarly, removing of roadway materials down to the erodible soil surface is an activity defined as "redevelopment," but simply resurfacing of a roadway surface is not. Pavement excavation and

patching that is incidental to the primary project purpose, such as replacement of a collapsed storm drain, is not classified as redevelopment. In general, the requirements in this manual do not apply to projects or portions of projects when the total existing impervious area disturbed is less than 5,000 square feet. However, specific regulatory programs may impose additional requirements. Any creation of new impervious area over portions of the site that are currently pervious is required to comply fully with the requirements of this manual, with the exception of infill projects. Any redevelopment activity that results in improvements with no increase in impervious area shall be considered redevelopment activities under this regulation if capital cost of improvements in greater than 30% of the appraised property value.

section 2. Off-Site Mitigation

Revised Text:

- 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.
- b. Off-site mitigation shall be equivalent to no less than the total area of impervious cover NOT treated on-site.
- 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 onsite management for large storm events.

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