

Proposed Stormwater Management & Regulations ARE YOU READY?

Stormwater II Regulations (SWII)

Following years of drafts and revisions, the Department of Environmental Protection is currently engaged in the final stages of the adoption and implementation of rules governing stormwater management in New Jersey (SWII). The rules are currently scheduled for adoption in early 2004. The SWII regulations will apply to all development that disturbs one or more acres of land or increases impervious surfaces by more than $\frac{1}{4}$ acre. The final form of the new regulations is pending.

This regulations establishes the general requirements for municipal and regional stormwater management plans and ordinances. This rule includes design and performance standards for stormwater management. These standards address erosion control, groundwater recharge, and stormwater runoff quantity and quality, and will have a significant impact on land development in New Jersey. Clearly, municipalities will also be assigned a variety of responsibilities consistent with, and as a direct result of, the new regulations. These additional responsibilities encompass educational programs to advise the public on issues ranging from the ways they can enhance the water quality of streams and rivers, to increased street sweeping and other housekeeping responsibilities. In addition, municipalities will be required to obtain permits to discharge stormwater from existing drainage systems.

Significant Changes In Current Stormwater Management Practices "The Only Constant Is Change"

Structural/Non-Structural Measures

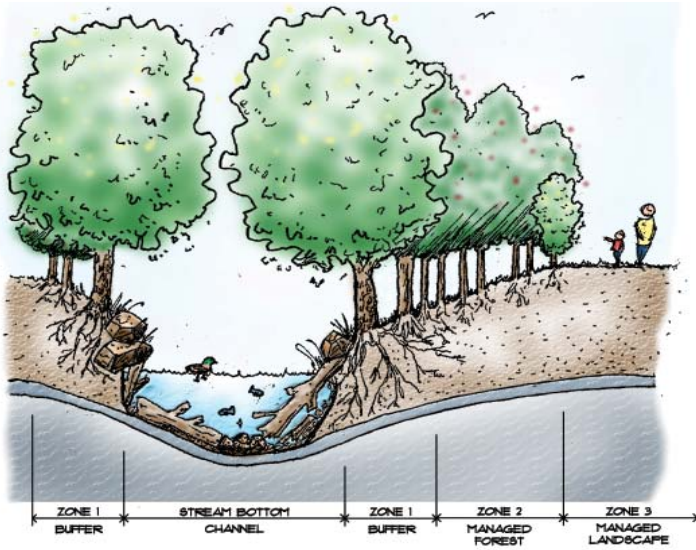
There are a number of significant changes to design and performance standards. The proposal requires that non-structural approaches to controlling stormwater be used prior to incorporating any structural controls. These non-structural measures include, among others, minimizing impervious cover, maximizing protection of natural drainage features and vegetation, minimizing reductions in the pre-construction time of concentration, minimizing land disturbance, use of low maintenance landscaping,



and minimizing soil compaction. According to the proposal, detailed guidance on structural and non-structural strategies will be included in the Best Management Practices (BMP) Manual developed by the NJDEP. The proposal requires that any land used as a non-structural/structural measure be dedicated to a government agency or encumbered by a conservation restriction filed with the county clerk. These restrictions are indicated to ensure that the structural/non-structural land use remains as planned in perpetuity. The maintenance of these uses must also be assigned to an agency capable of performing required maintenance in perpetuity.

Groundwater Recharge

The proposal includes a new requirement dealing with ground water. New development must either maintain 100 percent of the annual pre-construction groundwater recharge volume or infiltrate the increase in runoff volume from the two-year storm. Recharge is defined as the amount of water from precipitation that infiltrates into the ground and is not taken up by plants. This requirement does not apply in "urban redevelopment areas." As a result of this requirement, the geotechnical investigations for land development projects will be, far more extensive.



RIPARIAN FOREST BUFFER BY ZONE

Category 1 Waters – 300’ Buffer

Water quality is also addressed by a new provision dealing with Category One (C-1) waters. The C-1 designation requires that there be no measurable change to the water quality in the designated waterway. The proposal requires that these waterways, as well as any perennial or intermittent streams that are upstream, have special resource protection areas that consist of 300-foot buffers. The 300’ buffer area is measured from the top of bank on each side of the waterway. As the regulations are currently written, stormwater may flow through but may not be discharged into the buffer. In principle, this extended flow regime will reduce stormwater temperature prior to introduction into the waterway and further eliminate TSS and nutrient pollution.

The NJDEP will apply the new stormwater standards through the Flood Hazard Area Control Act Rules, Coastal Zone Management Rules, Freshwater Wetlands Protection Act Rules and the Dam Safety Standards. The NJDEP will incorporate by reference the new standards into the Residential Site Improvement Standards and apply the new standards as part of the Water Quality Planning Process. Additionally, municipalities will be required to adopt stormwater management ordinances that are consistent with the provision of the new standards.

Municipalities To Obtain Permits To Discharge Stormwater

The DEP is also proposing changes to the New Jersey Pollutant Discharge Elimination System. This proposal, the Municipal Stormwater Rule, is the second phase of a federally required permit program to control discharges of stormwater to surface waters. These rules require municipalities, certain highways, and public complexes to obtain permits for storm sewer system discharges.

Municipalities (MS4s) will be required to obtain Tier A or Tier B permits to implement the stormwater regulation program: 467 municipalities will require Tier A permits and 99 Tier B. Tier B includes 28 municipalities classified as fully or partially urbanized. The permit shall be applied for within 30 days (as of this writing) from the time

of receipt of the permit application package from the NJDEP. The permit will be accompanied by, among others, maps of the storm sewer system, including outfall locations.

- The Public Complex Permit regulates state agencies, federal agencies, and colleges primarily in Tier A municipalities.
- The Highway Permit regulates state highways, county roads, streets, bridges, and tunnels.

The permitting process requires the implementation of Statewide Basic Requirements (SBRs) on a time-constrained basis. A sampling of the SBRs and time constraints are as follows:

The permitting process requires that each municipality within a 2-year period implement the following Statewide Basic Requirements.

A. Stormwater Pollution Prevention Plan (SPP) (Tier A)

Content:

This plan describes the municipalities’ stormwater program and includes details on implementation of SBRs.

Time frame:

12 months from permit authorization.

B. Stormwater Management Plan (SMP)

Content:

The SMP will indicate the methods to be utilized to reduce concentration of suspended solids, nutrients, trash and debris, hydrocarbons, and other toxic pollutants from stormwater runoff.

Time frame:

12 months from permit authorization.

C. Stormwater Control Ordinance (SCO)

Content:

The SCO will prescribe the methods to be utilized to reduce concentration of suspended solids, nutrients, trash and debris, hydrocarbons, and other toxic pollutants from stormwater discharges.

Time frame:

12 months from adoption of Stormwater Management Plan.

TOTAL ELAPSED TIME: 2 YEARS

Regional Stormwater Management

The provisions of Chapter 8 have forceful references to regional stormwater management agencies. In all probability, these will be formed on a drainage basin basis.

Municipality/Regional Stormwater Management Agency May Grant Variances

A municipality may grant a variance or exemption from the design and performance standards for stormwater management measures set forth in its approved municipal stormwater management plan and stormwater control ordinance(s), provided the municipal plan includes a mitigation plan, and the municipality submits a written report to the county review agency and the DEP describing the variance or exemption and the proposed mitigation measures.

In order to grant a variance or exemption from the design and performance standards, the municipality shall include a mitigation plan that identifies what measures are necessary to offset the deficit created by granting the variance or exemption. The mitigation plan shall ensure that mitigation is completed within the drainage area and for the performance standard for which the variance or exemption was granted.



Stormwater Quality From Existing Development

The Phase II rules also require that municipalities address stormwater runoff from existing development. Municipalities must inventory all stormwater outfalls, identify any illicit discharges, and implement educational and operational programs to address stormwater runoff.

The law requires that municipalities develop appropriate land use ordinances to include a stormwater management plan and

stormwater control ordinances.

The Best Management Practices Manual

Land and development projects will have to employ means currently outlined in the BMP Manual. The manual suggests constructed wetlands, forested buffers, sand filters, wet ponds, extended detention ponds, infiltration structures, vegetated swale systems, rain gardens, and manufactured systems. In most cases, more than one measure will be needed. These BMPs are designed to remove TSS and nutrients (Nitrogen and Phosphates) commonly found in fertilizer from stormwater runoff. The BMP Manual developed by the NJDEP assigns various removal rates for each pollutant achieved by each BMP.

Total Maximum Daily Loads

The DEP, based on studies of various waterways, may also establish a maximum pollutant load that may be discharged into the receiving waterway from existing storm sewer systems. These pollutants may include fecal coliform, suspended solids, and nutrients. □

Want to Learn More?

PS&S has prepared materials on the proposed SWII regulations. These materials have been presented to various municipal and watershed groups.

For more information or to arrange an informal, complimentary presentation please contact:

Paul Passaro
(732) 560-9700 x319
ppassaro@psands.com

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CORPORATE HEADQUARTERS

67A Mountain Boulevard Extension
Warren, New Jersey 07059
Phone: (732) 560-9700
Fax: (732) 764-6667

Absecon, NJ
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