

Stormwater management in the Pinelands

Proposal to amend CMP in response to DEP's recent stormwater rule
adoption

Pinelands Policy & Implementation Committee
September 25, 2020

Brief recap from May 29, 2020 P&I meeting

DEP recently amended its stormwater rules, effective March 2021

- Mandatory use of Green Infrastructure BMPs to manage stormwater close to source
- Treat stormwater runoff through infiltration into the subsoil
- Treat stormwater through filtration by vegetation or soil
- Storing stormwater runoff for reuse
- Goal is to create hydrologically functional landscapes to maintain or reproduce the natural hydrologic cycle for the developed area

Goals of CMP stormwater protection amendments

- harmonize CMP stormwater provisions with DEP's new stormwater management rule in a manner best suited for the Pinelands Area
- continue to strengthen and enhance stormwater management in the Pinelands Area while establishing reasonable requirements for home builders and developers
- minimize impacts of increased stormwater runoff due to climate change.

Proposed major changes to CMP

1. Require stormwater management for minor residential development and some minor non-residential development
2. Incorporate DEP provisions on waivers for meeting CMP stormwater management on-site (“exceptions”)
3. Add specific recharge standard for nitrogen removal

Areas where CMP will exceed DEP standards

Proposed additions:

1. Require stormwater management for minor residential development and some minor non-residential development
2. Additional conditions for off-site recharge of stormwater
3. Specific recharge standard for nitrogen removal

Current CMP:

1. 10-year storm recharge requirement
2. Prohibition on discharging stormwater to wetlands/streams
3. Special treatment of runoff from HPLA
4. Emphasis on soil testing and as-built certification

Overview – stormwater management requirements

- Minor residential development: require rain gardens, pervious pavement systems, dry wells, or any recharge GI accepted by DEP that will meet CMP requirement for groundwater recharge from new roof surfaces
- Minor non-residential development: require stormwater management if there's an increase in regulated motor vehicle surface

Minor residential development

Current CMP definition: division of land into < 5 lots/construction of < 5 dwelling units

Current CMP requirement: subject to CMP stormwater management requirements *only if development involves construction of new roads*

Proposed CMP change: add groundwater recharge requirement to reduce localized flooding and to maintain K/C aquifer levels – based only on *size of roof*.

(continued)

Minor residential development

Proposed CMP changes:

1. The storm volume (10-year storm) generated on the roof must be retained and infiltrated onsite through 1 or more of the following green infrastructure (GI) BMPs to be installed and maintained by applicant:
 - rain garden/small scale bioretention system
 - pervious pavement system
 - dry well
 - other GI measures that meet DEP requirement for groundwater recharge

2. Applicant required to:
 - conduct soil and permeability tests at site of infiltration of GI structure
 - provide engineering plan showing type and location of each green infrastructure and cross section drawing showing distance from high water table

Minor non-residential development

Current CMP definition for stormwater purposes: construction or expansion of any non-residential use or structure on a site less than 3 acres OR grading, clearing or disturbance of <5,000 square feet within any 5-year period

Current CMP stormwater requirement: not subject to CMP stormwater management requirements

Proposed CMP change: if development results in increase of **> 1,000 square feet of regulated motor vehicle surface** (defined in DEP rule) it will be subject to DEP's minimum design and performance standards to reduce post-construction load of total suspended solids (TSS) in stormwater runoff through infiltration.

Major residential development (no change)

Current CMP: division of land into 5 or more lots; any construction or expansion of any housing development of 5 or more dwelling units

Current CMP requirement: Major residential development subject to CMP stormwater requirements

Major non-residential development (no change)

Current CMP definition: construction or expansion of any non-residential use or structure on a site of more than 3 acres OR grading, clearing or disturbance of > 5,000 square feet within any 5-year period

Current CMP requirement: subject to CMP stormwater management requirements

Overview - exceptions (waivers)

for development that can't meet stormwater management requirements

- CMP currently authorizes municipality and Commission to grant waiver/exception for development that can't meet stormwater management requirements.
- Propose to adopt DEP's more-detailed provisions for granting waiver/exception for development that can't meet stormwater management requirements, with modifications.

Private major development
+
Public non-linear development

Current CMP: authorizes municipality and Commission to grant waiver/exception; guidance is very general.

Proposed CMP change: incorporate DEP variance rule (N.J.A.C. 7:8-4.6) for the granting of waiver/exceptions, which provide more guidance and detail than is currently in CMP, with some modifications.

- Waiver/exception would be granted only to the design/performance standard(s) that can't be met onsite. If the standard(s) can be met onsite, no exception would be granted.

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Conditions for granting exception:

- off-site stormwater management measures ("off-site mitigation") have to be located in the Pinelands Area and same HUC-14 watershed area as the major development.

(modifications to DEP variance rule):

- if no such mitigation site is available within the Pinelands Area, applicant can propose another site within same HUC-11 watershed as the major development, in the Pinelands, and in the same municipality as the major development
- proposed mitigation project has to be consistent with stormwater management plan certified by Commission unless the stormwater plan doesn't provide for mitigation for the circumstances at hand
- an exception from the CMP's recharge standards may be granted only if the total volume of stormwater infiltrated by a mitigation project equals or exceeds the volume required in the CMP. (Note: CMP required volumes for infiltration exceed DEP standards)

Public linear major development projects (e.g., roads)

Current CMP: authorizes Commission to grant exceptions.

Proposed CMP change: Incorporate DEP rule on waiver from strict compliance for public linear projects (but call it an "exception" to maintain consistency with CMP terms). Proposed changes provide more detail than is currently in CMP.

DEP rule: An applicant can get a waiver from strict compliance from the green infrastructure, groundwater recharge, stormwater runoff quantity, and stormwater runoff quality requirements for the enlargement of an existing public roadway or railroad if development meets certain conditions.

Stricter recharge standard for nitrogen removal

DEP rule:

Requires reduction of nutrients (nitrogen and phosphorous) from stormwater runoff to the maximum extent feasible.

Current CMP: same as DEP rule, through incorporation of rule.

Proposed CMP change:

Require reduction of total nitrogen load in stormwater runoff by a minimum of 65% from new development site, including permanent lawn and turf areas intended for active human use, lawns associated with a residence or other principal non-residential use.

Summary

Proposal will further enhance stormwater management in the Pinelands

- stormwater management for small-scale residential development through use of rain gardens, pervious pavement systems and dry wells that would not be required under DEP rule.
- stormwater management for small-scale non-residential development that would typically not be required under DEP rule
- specific standard for nitrogen reduction
- In most cases, CMP changes will result in a much larger amount of stormwater being retained and infiltrated than DEP stormwater rule requires.