

SUBDIVISION OF LAND

158 Attachment 12

Township of Moorestown

Mitigation Plan

[Added 9-11-2017 by Ord. No. 13-2017]

This mitigation plan is provided for any proposed development that is granted a variance or exemption from the stormwater management design and performance standards. Presented is a hierarchy of options.

Moorestown Township has opted to consider mitigation projects in accordance with the NJDEP's "Guidance for the Development of Municipal Mitigation Plans" document, dated February 2006.

As identified in NJDEP's Mitigation Plan Guidance Document, municipalities may:

- 1) Identify a pool of specific mitigation projects that could be selected by an applicant to offset the effect of a requested waiver/exemption or to address an existing stormwater problem; or
- 2) Choose to provide a process through which an applicant has the flexibility and responsibility to identify an appropriate mitigation project and a location to implement the mitigation project to offset the deficit that would be created by the grant of a waiver/exemption or to address a stormwater based impairment.

Moorestown has opted to provide a mitigation plan using BOTH (specific and applicant-identified mitigation project) options.

It must be stressed that requested exceptions will be granted only at the discretion of the Township. In addition, the issuance of a waiver(s) granted by NJDEP under a Land Use permit does not automatically waive the requirement for mitigation to be performed under a municipal review.

A. Specific (Township-identified) Mitigation Project Criteria

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1. The mitigation project must be implemented within the same drainage area, as defined by the HUC14s, as the proposed development. The project must provide additional groundwater recharge benefits, or provide protection of previously developed property from stormwater runoff. The developer must also ensure long-term maintenance for the project, including those maintenance requirements under Chapters 8 and 9 of the NJDEP Stormwater Best Management Practices Manual.
 - a. The applicant may select one project from the following list to compensate for not meeting the requirements of the performance standards. More detailed information can be obtained from the Township Engineer.

HUC 02040202100030
North Branch Pennsauken Creek

Groundwater Recharge

- Retrofit existing detention basin to provide additional annual groundwater recharge.
- Replace impervious parking lot with permeable paving to provide additional groundwater recharge.

Water Quality

- Retrofit existing stormwater management facility to provide removal of 80% of total suspended solids from the parking lot runoff.
- Retrofit existing parking area to provide removal of total suspended solids. The retrofit BMP must be installed underground and may not reduce number of parking spaces.
- Enhance vegetative buffer within the “stream corridor.”
- Purchase of easements along the “stream corridor.”

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- Removal of invasive plant species within riparian corridors, targeted wetland areas and stream corridors and replant with native species.

Water Quantity

- If an applicant cannot meet the water quantity reductions required on-site, the additional water quantity reduction should be provided within the same watershed or subwatershed (HUC14) to meet the required total amount of the water quantity reduction. This can be done in several ways. The flood storage area along a waterway can be increased, new best management practices can be implemented to control previously uncontrolled runoff or an existing stormwater structure can be retrofitted to decrease the volume and peak of runoff.

HUC 02040202090020

Pompeston Creek

- Combat erosion caused by the Pompeston Creek on MEND property at 39/47 Beech Street.

Groundwater Recharge

- Retrofit existing detention basin to provide additional annual groundwater recharge.
- Replace impervious parking lot with permeable paving to provide additional groundwater recharge.

Water Quality

- Retrofit existing stormwater management facility to provide removal of 80% of total suspended solids from the parking lot runoff.

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- Retrofit existing parking area to provide removal of total suspended solids. The retrofit BMP must be installed underground and may not reduce number of parking spaces.
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HUC02040202090010

Swede Run

Groundwater Recharge

- Retrofit existing detention basin to provide additional annual groundwater recharge.
- Replace impervious parking lot with permeable paving to provide additional groundwater recharge.

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Water Quality

- Retrofit existing stormwater management facility to provide removal of 80% of total suspended solids from the parking lot runoff.
- Retrofit existing parking area to provide removal of total suspended solids. The retrofit BMP must be installed underground and may not reduce number of parking spaces.
- Enhance vegetative buffer within the “stream corridor.”
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HUC 02040202080040
Kendles Run

Groundwater Recharge

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- Retrofit existing detention basin to provide additional annual groundwater recharge.
- Replace impervious parking lot with permeable paving to provide additional groundwater recharge.

Water Quality

- Retrofit existing stormwater management facility to provide removal of 80% of total suspended solids from the parking lot runoff.
- Retrofit existing parking area to provide removal of total suspended solids. The retrofit BMP must be installed underground and may not reduce number of parking spaces.
- Enhance vegetative buffer within the stream corridor.
- Purchase of easements along the “stream corridor.”
- Removal of invasive plant species within riparian corridors, targeted wetland areas and stream corridors and replant with native species.

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HUC 02040202080020

Rancocas Creek

Groundwater Recharge

- Retrofit existing detention basin to provide additional annual groundwater recharge.
- Replace impervious parking lot with permeable paving to provide additional groundwater recharge.

Water Quality

- Retrofit existing stormwater management facility to provide removal of 80% of total suspended solids from the parking lot runoff.
- Retrofit existing parking area to provide removal of total suspended solids. The retrofit BMP must be installed underground and may not reduce number of parking spaces.
- Enhance vegetative buffer within the “stream corridor.”
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an existing stormwater structure can be retrofitted to decrease the volume and peak of runoff.

HUC 02040202080010
Parkers Creek

Groundwater Recharge

- Retrofit existing detention basin to provide additional annual groundwater recharge.
- Replace impervious parking lot with permeable paving to provide additional groundwater recharge.

Water Quality

- Retrofit existing stormwater management facility to provide removal of 80% of total suspended solids from the parking lot runoff.
- Retrofit existing parking area to provide removal of total suspended solids. The retrofit BMP must be installed underground and may not reduce number of parking spaces.
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HUC 02040202100020
Strawbridge Lake

Groundwater Recharge

- Retrofit existing detention basin to provide additional annual groundwater recharge.
- Replace impervious parking lot with permeable paving to provide additional groundwater recharge.

Water Quality

- Retrofit existing stormwater management facility to provide removal of 80% of total suspended solids from the parking lot runoff.
- Retrofit existing parking area to provide removal of total suspended solids. The retrofit BMP must be installed underground and may not reduce number of parking spaces.
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2. If a suitable site cannot be located in the same drainage area as the proposed development, as discussed in Option 1, the mitigation project may provide mitigation that is not equivalent to the impacts for which the variance or exemption is sought, but addresses the same issue. For example, a variance given for meeting the 80% TSS requirement would result in an alternate project that addresses water quality impacts due to fecal impairment. A list of specific projects that can be used to address the mitigation option is below.

Water Quality

- Re-establish a vegetative buffer (minimum fifty-foot wide) as a goose control measure and to filter stormwater runoff.
- Provide goose management measures, including public education at a local park.

In consideration of any mitigation project identified above, the Applicant shall provide the Township all necessary environmental information and data sufficient to address sensitive receptors associated with the project, as outlined in NJDEP regulations, and as outlined in the Applicant-Identified Mitigation Project requirements addressed below.

B. General (Applicant-Identified) Mitigation Project Criteria.

In order to select an appropriate mitigation project to respond to a requested waiver/exemption requires, an assessment of the impact that would result from the requested deviation from full compliance with the standard(s) in the drainage area affected by the proposed project is required. For example, a waiver for stormwater quantity requirements

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must focus on the impacts of increased runoff on flooding, considering both quantity and location. Stormwater quality mitigation must aim to prevent an increase in pollutant load to the waterbodies that would be affected by the waiver/exemption. Ground water recharge mitigation must seek to maintain the base-flow and aquifer recharge in the area that would be affected by the waiver/exemption. For the purpose of this discussion, the term “sensitive receptor” is used to refer to a specific area or feature that would be sensitive to the impact assessed above.

Selection of an appropriate mitigation project for a requested waiver/exemption must adhere to the following requirements:

1. The project must be within the same area that would contribute to the receptor impacted by the project. Note that depending on the specific performance standard waived, the sensitive receptor and/or the contributory area to that receptor may be different. If there are no specific sensitive receptors that would be impacted as the result of the grant of the waiver/exemption, then the location of the mitigation project can be located anywhere within the municipality, and should be selected to provide the most benefit relative to an existing stormwater problem in the same category (quality, quantity or recharge).
2. Legal authorization must be obtained to construct the project at the location selected. This includes the maintenance and any access needs for the project in the future.
3. The project should be close to the location of the original project, and if possible, be located upstream at a similar distance from the identified sensitive receptor. This distance should not be based on actual location, but on a similar hydraulic distance to the sensitive receptor. For example, if the project for which a waiver is obtained discharges to a tributary, but the closest location discharges to the main branch, it may be more beneficial to identify a location discharging to the same tributary.
4. For ease of administration, if sensitive receptors are addressed, it is preferable to have one location that

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- addresses any and all of the performance standards waived, rather than one location for each performance standard.
5. It must be demonstrated that implementation of the mitigation project will result in no adverse impacts to other properties.
 6. Mitigation projects that address stormwater runoff quantity can provide storage for proposed increases in runoff volume, as opposed to a direct peak flow reduction.

All necessary information to support a specific waiver request(s) must be provided by the Developer(s) for consideration by the Township, in accordance with applicable NJDEP and/or Township requirements, and as outlined in NJDEP's "Guidance for the Development of Municipal Mitigation Plans" document, dated February 2006.

At the Township's discretion, a developer may be permitted to fund analyses to identify potential mitigation projects that could be used to address deficits in complying with each of the performance standards. However, the funding option shall only be allowed where the project requesting the waiver will have no measurable impact with respect to flooding, erosion, water quality degradation, etc. The funding option may also be appropriate in situations where the size of an individual project requesting a waiver/exemption is small, or the degree of deficit in complying with the design and performance standard(s) is small. Or, where the project requiring mitigation is for one individual single family home, given authority constraints, a financial contribution may be a preferred option.

Finally, the following information will be obtained and provided by the Developer of an approved waiver for the Township to comply with its annual NJDEP MS4 permitting requirements (i.e., required for all Township-approved mitigation projects):

1. Impact from noncompliance. Provide a table quantifying what would be required for the project to achieve the standards, the extent to which this value will be achieved on site and the extent to which the value must be mitigated off site.

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2. Narrative and supporting information regarding the need for the waiver, including:
 - The waiver cannot be due to a condition created by the applicant. If the applicant can comply with the Stormwater Management rules through a reduction in the scope of the project, the applicant has created the condition and a waiver cannot be issued. Demonstrate that the need for a waiver is not created by the applicant.
 - Provide a discussion and supporting documentation of the site conditions peculiar to the subject property that prevent the construction of a stormwater management facility that would achieve full compliance with the design and performance standards. Site conditions may include soil type, the presence of karst geology, acid soils, a high groundwater table, unique conditions that would create an unsafe design, as well as conditions that may provide a detrimental impact to public health, safety and welfare.
 - Demonstration that the grant of the requested waiver/exemption would not result in an adverse impact that would not be compensated for by offsite mitigation.
3. Identify the sensitive receptor(s) related to the performance standard from which a waiver is sought. Demonstrate that the mitigation site contributes to the same sensitive receptor.
4. Provide the design details of the mitigation project. This includes, but is not limited to, drawings, calculations, and other information needed to evaluate the mitigation project.

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5. List the party or parties responsible for the construction and the maintenance of the mitigation project.
Documentation must be provided to demonstrate that the responsible party is aware of, has authority to, and accepts the responsibility for construction and maintenance. Under no circumstance shall the responsible party be an individual single-family homeowner. Selection of a project location that is under municipal authority avoids the need to obtain authority from a third party for the construction and future maintenance of the project.
6. Include a maintenance plan that addresses the maintenance criteria at N.J.A.C. 7:8-5.8. In addition, if the maintenance responsibility is being transferred to the municipality or another entity, the entity responsible for the cost of the maintenance must be identified. The municipality may provide the option for the applicant to convey the mitigation project to the municipality, if the applicant provides for the cost of maintenance in perpetuity.
7. Obtain any and all necessary local, State or other applicable permits for the mitigation measure or project.
Permits must be obtained prior to the municipal approval of the project for which mitigation is being provided.
8. Demonstrate that the construction of the mitigation project coincides with the construction of the proposed project. A Certificate of Occupancy or final approval by the municipality for the project requiring mitigation cannot be issued until the mitigation project or measure receives final approval. Any mitigation project proposed by the municipality to offset the stormwater impacts of that municipality's own project must be completed within six months of the completion of the municipal project, in order to remain in compliance with their NJPDES General Permit.

C. Stream Corridor Protection Plan (Optional)

It should be noted that there are no Special Water Resource Protection Areas designated Category One (N.J.A.C. 7:9B) or upstream perennial or

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intermittent streams of said waters within Moorestown. If such water bodies are found or designated at a later date, future major development within 300 feet of said waters will be regulated in accordance with N.J.A.C 7:8-5.5(h) as outlined in the model stormwater ordinance. However, it should further be noted that the Township recognizes the value of riparian Buffers in minimizing Non-Point Source (NPS) discharges into local waterways. As recommended in this MSWMP, riparian buffers of future developments may be considered by the Township on a case-by-case basis as well.