

MS4
Program Update

And Closing
Comments

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NJDEP Division of Water Quality
SWMDR Training Module 4
September 3, 2020

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Introduction

Topics

- Rule Amendments
- MS4 Permit Renewals
- Permit Overview
- NJDEP Assistance/Guidance
- MS4 Audit Program
- BMP Manual Updates

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**Amendments to
Stormwater Management Rules**

- March 2, 2020: Adoption of Rules
 - One year delayed operative date, effective 3-2-2021
 - Current rules are in effect until 3-1-2021
 - Same timeframe municipalities have to update ordinances in accordance with MS4 permits

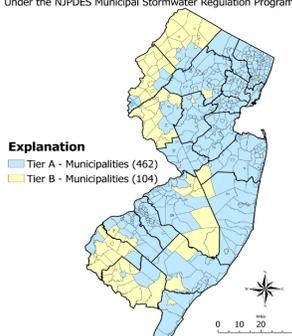
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MS4 Permit Universe – Tier A & B

Permittees

- Tier A Municipalities (462)
 - urbanized or along or near the coast
- Tier B Municipalities (104)
 - rural and non-coastal
- Permits Renewed 2018

Municipal Tier Assignments 2009
Under the NJPDES Municipal Stormwater Regulation Program



Explanation

- Tier A - Municipalities (462)
- Tier B - Municipalities (104)

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MS4 Permit Universe – Public Complex

Public Complex Permittees

- Sixty-Nine Permittees (69)
 - Colleges
 - Universities
 - Hospitals
 - Prisons
- Permit Renewed 2019



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MS4 Permit Universe – Highway Agencies

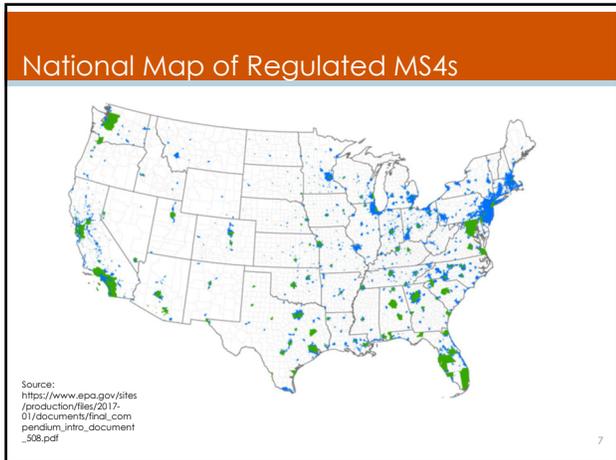
Highway Agencies

- Thirty-Three Permittees (33)
 - Counties
 - 3 NJDOT (North, Central, South)
 - Transportation Agencies
 - Turnpike
 - Parkway
 - Bridge Commissions
- Permit Renewed
 - 1/1/2020



MS4 Permits:
https://www.nj.gov/dep/dwa/msrp_home.htm

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Public Education and Outreach

Involve Public in Reducing Pollutants in Stormwater

- Implement Public Education Program
- Increased annual points from 10 to 12
- Maintain Documents
- Certify Annually



Now Allows For:

- Updated activities (social media, web pages, etc.)
- More Opportunities Available to Align with Current Municipal Activities

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Post Construction Runoff Control

Review of Stormwater Management Designs for Major Development

- Local Review to Ensure consistency with NJ Stormwater Rules
 - Quantity, Quality, GW Recharge
- Utilize Attachment D Checklist to ensure compliance with Design and Performance requirements under the Stormwater Rules
- Maintain Records and Certify Annually
- Updated BMP Manual for easier comprehension and understanding of design requirements
- Updated Training videos on Stormwater BMPs
- **FREE** DEP training for local review of stormwater designs ("Engineers training")

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PP/GH-Training Requirements

Employee Training

- Specific to the Employee's Job Title and Duties
- Within Three (3) Months of Commencement of Duties
- Every Two (2) Years Thereafter
- Maintain Records and Certify Annually
- More Specific/Targeted
- DEP Training Materials Posted On-line



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PP/GH-Training Requirements

Stormwater Management Design Review

- Required Training for Stormwater Management Design Reviewers
 - (e.g. Municipal Engineers)
- Training Required Every Five Years
- Register/DEP Maintains Records
- FREE NJDEP Training – Twice per Year



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PP/GH-Training Requirements

Board & Council Member Training (Tier A & B)

- Required Training by All Board and Council Members
- Overview of Stormwater Permit Requirements
- "Asking the Right Questions"
- Maintain Records and Certify Annually
- FREE On-line Class (45 minutes)



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Mapping, Illicit Discharge and Scouring

Localized Stream Scouring

- Develop, Update, Implement a Program
- Inspect Every Outfall Once Per 5 Years (Tier A & B)/Annually (R11)
- Mapping App
- Document Inspections
 - Location
 - IF Scouring
 - Repairs Prioritized
 - Repairs Scheduled



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Mapping, Illicit Discharge and Scouring

Illicit Discharge Detection and Elimination

- Develop, Update, Implement, and Enforce Ongoing Program
- Inspect Every Outfall Once Per 5 Years (Annually for R11)
- Mapping App
- Document Inspections
 - Location
 - Illicit Connection Inspection Report Form



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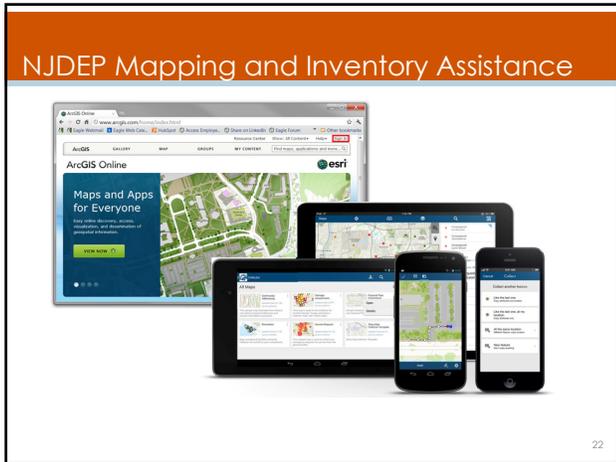
Other Control Measures – Maintenance

Maintenance of Stormwater BMPs (e.g. basins, MTDs, GI, etc.)

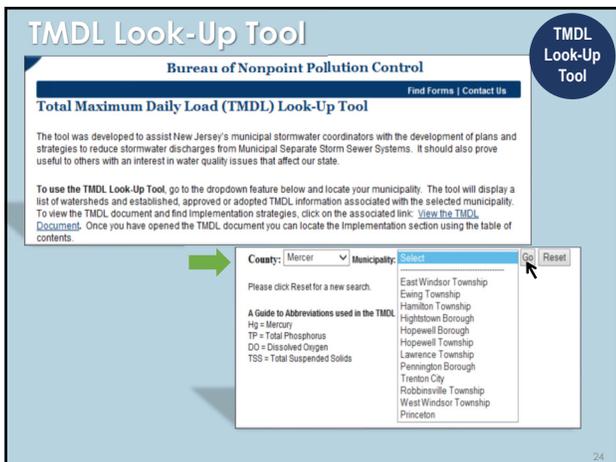
- Maintain all publicly owned stormwater BMPs
- Ensure maintenance of all privately owned BMPs built after 1984
 - Location
 - Illicit Connection Inspection Report Form
- Inspection and Maintain per maintenance Plan to Ensure proper function and operation
 - Maintain a Log
 - Location Information
 - Date
 - Findings
 - Maintenance Performed
- Prioritize Repairs



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Posted at: www.nj.gov/dep/dwq/msrp_home.htm

TMDL Look-Up Tool

Total Maximum Daily Load (TMDL) Information for Selected Municipalities:

Applicable Stream TMDL(s)

- Total Maximum Daily Loads for Fecal Coliform to Address 28 Streams in the Northwest Water Region
Fecal Coliform - 2003 : Assunpink Creek, Shabakunk Creek, Little Shabakunk ; [View the TMDL Document](#)
- Total Maximum Daily Loads for Fecal Coliform to Address 48 Streams in the Raritan Water Region
Fecal Coliform - 2003 : Quak Run ; [View the TMDL Document](#)
- Total Maximum Daily Loads for Fecal Coliform to Address 48 Streams in the Raritan Water Region
Fecal Coliform - 2003 : Stone Brook ; [View the TMDL Document](#)
- Total Maximum Daily Load for Mercury Impairments Based on Concentration in Fish Tissue Caused Mainly by Air Deposition to Address 122 HUC 14s Statewide
Mercury - 2010 (Storm Water/Nonpoint Source Runoff) ; [View the TMDL Document](#)

Applicable Lake TMDL(s)

None

Applicable Shellfish TMDL(s)

None

Amendment to the Atlantic, Cape May, Lower Delaware, Lower Raritan-Middlesex, Mercer, Monmouth, Northeast, Ocean, Sussex, Tri-County, Upper Delaware and Upper Raritan Water Quality Management Plans

Total Maximum Daily Load for Mercury Impairments Based on Concentration in Fish Tissue Caused Mainly by Air Deposition to Address 122 HUC 14s Statewide

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New/Updated BMP Chapters

BMP Manual

- Bioretention Systems
- Standard Constructed Wetlands
- Dry Wells
- Extended Detention Basins
- Infiltration Basins
- MTDs
- Pervious Paving Systems
- Blue Roofs

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NJ BMP Manual Updates

BMP Manual

Comment Period Closed 5/1/20

- Chapter 5 – Stormwater Mgmt Quantity and Quality Standards and Computations
- Chapter 12 – Soil Testing Criteria

Recently Posted Final Updates

- Chapter 13 – Groundwater Table Hydraulic Impact Assessments for Infiltration BMPs
- Appendix D – Model Municipal SCO

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NJ BMP Manual Updates, cont'd BMP Manual

Edits in Progress

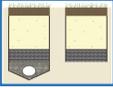
- Chapter 3 – Munic. and Regional SW Mgmt Planning
- Chapter 4 – Stormwater Pollutant Removal Criteria
- Chapter 9 – GI BMPs
- Chapter 10 – GI BMPs with Waiver
- Chapter 11 – Non-GI BMPs

BMP Manual: https://www.njstormwater.org/bmp_manual2.htm



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New/Updated BMP Chapters (cont'd.) BMP Manual



Sand Filters



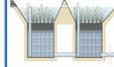
Vegetative Filter Strips



Wet Ponds



Grass Swales

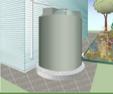


Subsurface Gravel Wetlands

Newest...



Rain Garden



Cistern



Green Roofs

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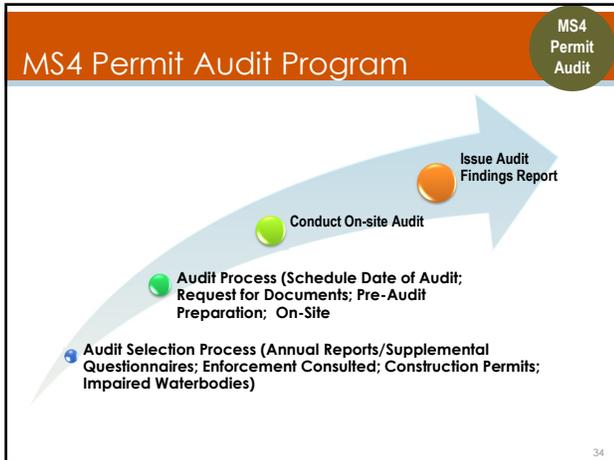
9.4 EXTENDED DETENTION BASINS BMP Manual

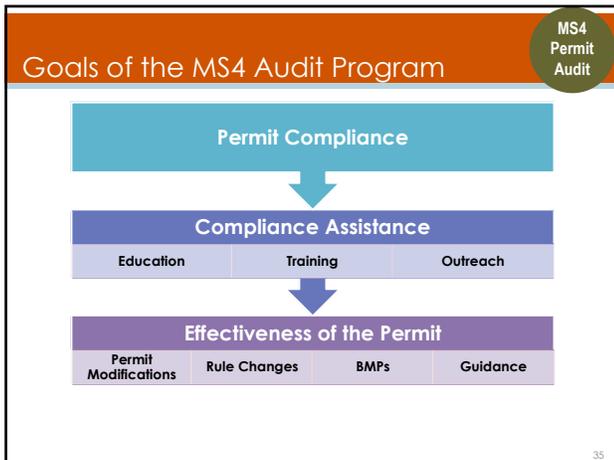
An extended detention basin is a stormwater management facility that temporarily stores and attenuates stormwater runoff. In addition, extended detention basins provide pollutant treatment for runoff from the Water Quality Design Storm through settling. When designed in accordance with this chapter, the total suspended solids (TSS) removal rate is 40 - 60%, depending on the duration of runoff detention.

N.J.A.C. 7:8 Stormwater Management Rules - Design and Performance Standards	
 Nonstructural Strategies	Not Allowed
 Water Quantity	Yes, when designed for the 2-, 10- and 100-year design storms
 Groundwater Recharge	Not Allowed
 Water Quality	40 - 60% TSS Removal, depending on duration of detention

Water Quality Mechanisms and Corresponding Criteria	
Settling	
Minimum Detention Time for Calculation of TSS Removal Rate	12 hours
Maximum Detention Time for Calculation of TSS Removal Rate	24 hours

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- ### MS4 Audit Selection
- Advance Notice and Coordination
 - Minimum 30 days notice
 - www.nj.gov/dep/dwq/tier_a_guidance_other.htm
 - Solicitation of Project Plans
 - On-site Discussion and Review
 - 1 or 2 Days
 - Stormwater Coordinator/Twp. Engineer, etc.
 - Areas of Focus
 - MS4 Permit Conditions - SBRs, Ordinances, etc.
 - Post Construction Requirements under NJAC 7:8
- A small 'MS4 Permit Audit' logo is in the top right corner of the slide.

Moving Forward

- Ongoing MS4 Stormwater Audits
- Outreach Activities
 - Mapping App
 - Engineers Training
- Appendix A = Permit Summary Table
- Tools Are the Key
 - Training
 - Updated BMPs
 - GI Guidance Document
 - Inspection/Field Manual Templates
 - Mapping



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Important Links

NJDEP Stormwater Web Page

- <http://www.nj.gov/dep/dwa/fd.htm>
 - BMP Manual
 - Stormwater Training
 - TMDL Look-up Tool
 - Maintenance Guidance
 - MS4 Permit Documents
 - Mapping and Inventory
 - Educational Resources
- MTDs
 - <https://www.njstormwater.org/treatment.html>
- Tools Are the Key
 - http://www.nj.gov/dep/dwa/msrp_home.htm

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Important Reminders

Course Survey

- Will be emailed within the next two weeks
 - Complete and Send Back
- Survey Required for Course Certificate of Completion
 - No Survey = No Certificate
- Provide Copy of Certificate to Stormwater Program Coordinator
- Complete this Course Every Five Years
- Handouts Available on the NJDEP Webpage
 - <https://www.njstormwater.org/training.htm>

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Questions?

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