The background of the slide is a close-up photograph of water with numerous concentric ripples, suggesting raindrops falling into a pool. The water is a deep blue color, and the ripples create a textured, dynamic pattern across the entire frame.

NJDEP Renewal of the Tier A and B MS4 NJPDES Permits

Presentation at:

2018 National Stormwater Roundtable

February 21, 2018

TOPICS

- New Jersey MS4 Background
- Overview of MS4 Renewal Permits
 - Outreach
 - Timeframes
 - Tools and Assistance
- Going Forward



MS4 PERMIT UNIVERSE

Permittees

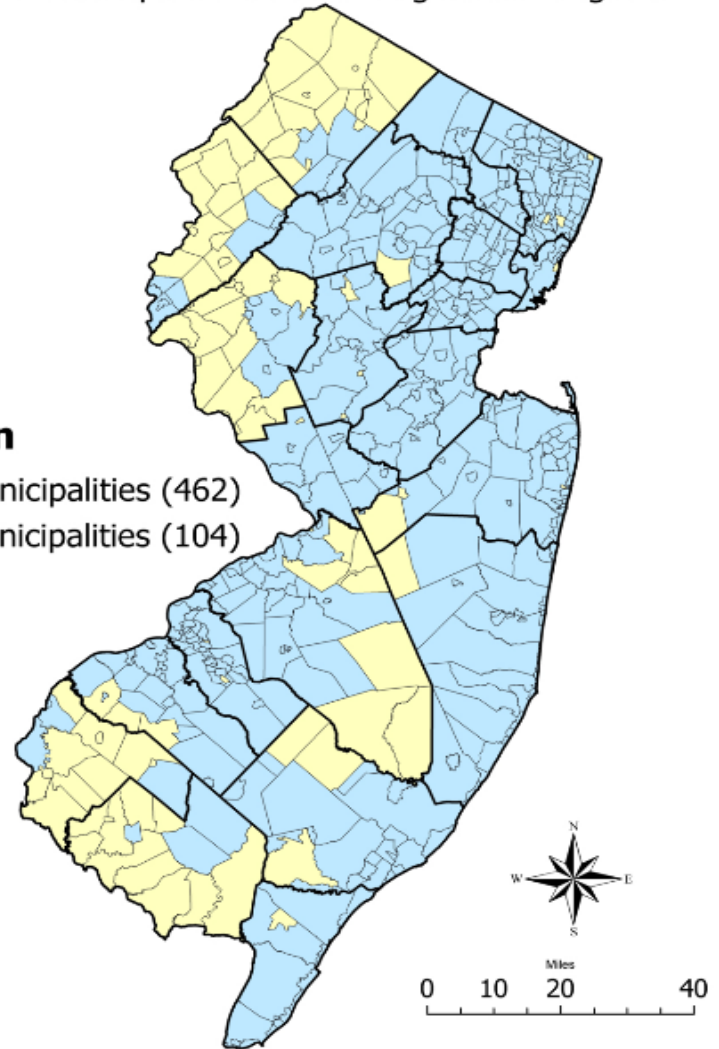
- **Tier A Municipalities (462)**
(urbanized or along or near the coast)
- **Tier B Municipalities (104)**
(rural and non-coastal)
- **MS4 Permits**
 - 2004 Initial Issuance
 - 2009 Renewal
 - 2018 Renewal

Municipal Tier Assignments 2009

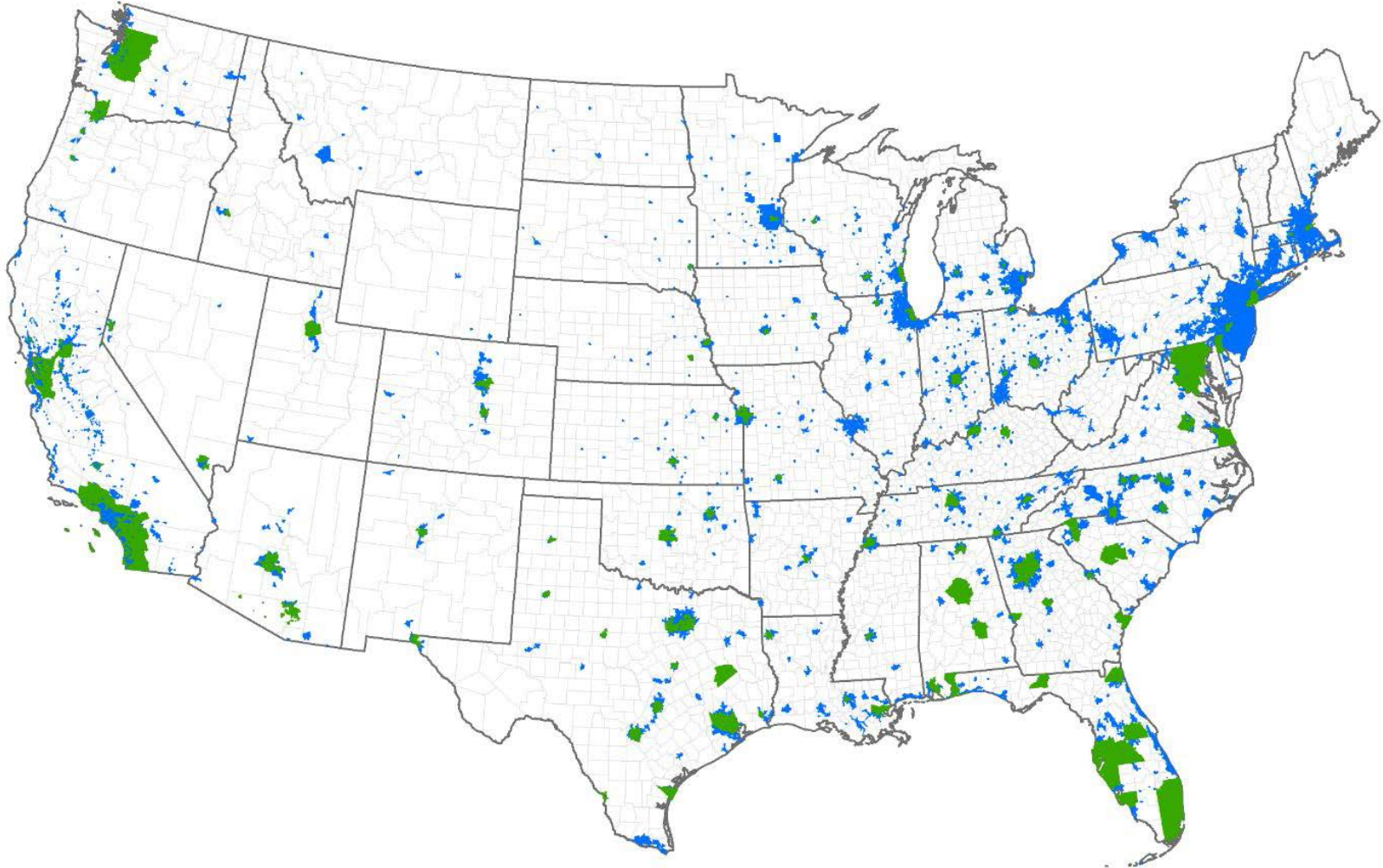
Under the NJPDES Municipal Stormwater Regulation Program

Explanation

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



National Map of Regulated MS4s



Source: https://www.epa.gov/sites/production/files/2017-01/documents/final_compendium_intro_document_508.pdf

PERMIT DEVELOPMENT

- Permits Expired February 28, 2014
- Feb 2014 through 2015 – Development & Outreach
- Extensive Outreach with Various Stakeholders:
 - Select Municipalities
 - NJ Mosquito Control Commission
 - NJ Department of Agriculture
 - Freehold Soil Conservation District
 - County GIS personnel
 - Environmental Groups
- EPA Region 2
- NJDEP Regional Enforcement offices
- DAG Review and Consultation
- Three Regional Municipal Outreach Sessions
 - Significant changes being considered for the permit (179 municipalities represented)
- League of Municipalities - Nov 2014

PERMIT OUTREACH - Pre-Draft

- Pre-Draft Permits Issued On:
 - Tier A - February 8, 2016
 - Tier B - March 11, 2016
- Staff conducted 28 outreach meetings
 - February - June, 2016
- Invitations sent to all municipalities
 - 230 municipalities from all counties were represented
- Local Partners (SCDs/counties) spoke at every session
- SRF Financing and other DEP assistance

PRE-DRAFT PERMIT

additional outreach sessions

Organization	Meeting Dates
League of Municipalities	2/8/16, 4/5/16 (webinar)
Clean Water Council	2/9/16, 4/12/16 (hearing)
US EPA Region 2	3/3/16, 7/27/16
Stonybrook Millstone Watershed Association	3/24/16
Environmental Groups	4/1/16
NJ Society of Municipal Engineers	4/6/16
NJ Association of Counties	5/19/16
Bergen County Mayor's breakfast	4/12/2016
Whippany River Watershed Action Committee	5/4/16

Categorized Comments

(written and outreach sessions)

Category	No. of Comments
Annual Report	2
Attachment A	1
Attachment D	3
Board Council Training	17
Comment Process	2
Community Rating System	2
Compliance & Enforcement	1
Ensuring O&M Private	24
Funding	17
Inventory & Mapping	84
Municipal Maintenance	4
O&M Public	4
Ordinances	4
Other Permits	5
Outreach & Education	4
Permit	3
Permit Fee	3
Pinelands	2
Post Construction	31
Regulations	1
Snow Policy	3
StormwaterCoordinator	5
TierAssignment	5

TMDL	22
Training	32
Transparency	2
Workshop	4
Inventory & Maintenance	33
Notes and Definitions	8
Outfall Pipe, Illicit & Scouring	11
Local Public Education and Outreach	14
Municipal Maintenance Yards	5
General Requirements: Discharge Categories	12
Community Wide Measures & Ordinances	7
Cost of Compliance	3
Combined Sewer Systems	6
Fact Sheet	9
Permit Overview	4
Public Involvement and Participation	2
Stormwater Pollution Prevention Plan	2
General	13
Clear, Specific Measurable	4
TOTAL	420

ISSUANCE OF DRAFT & FINAL PERMITS

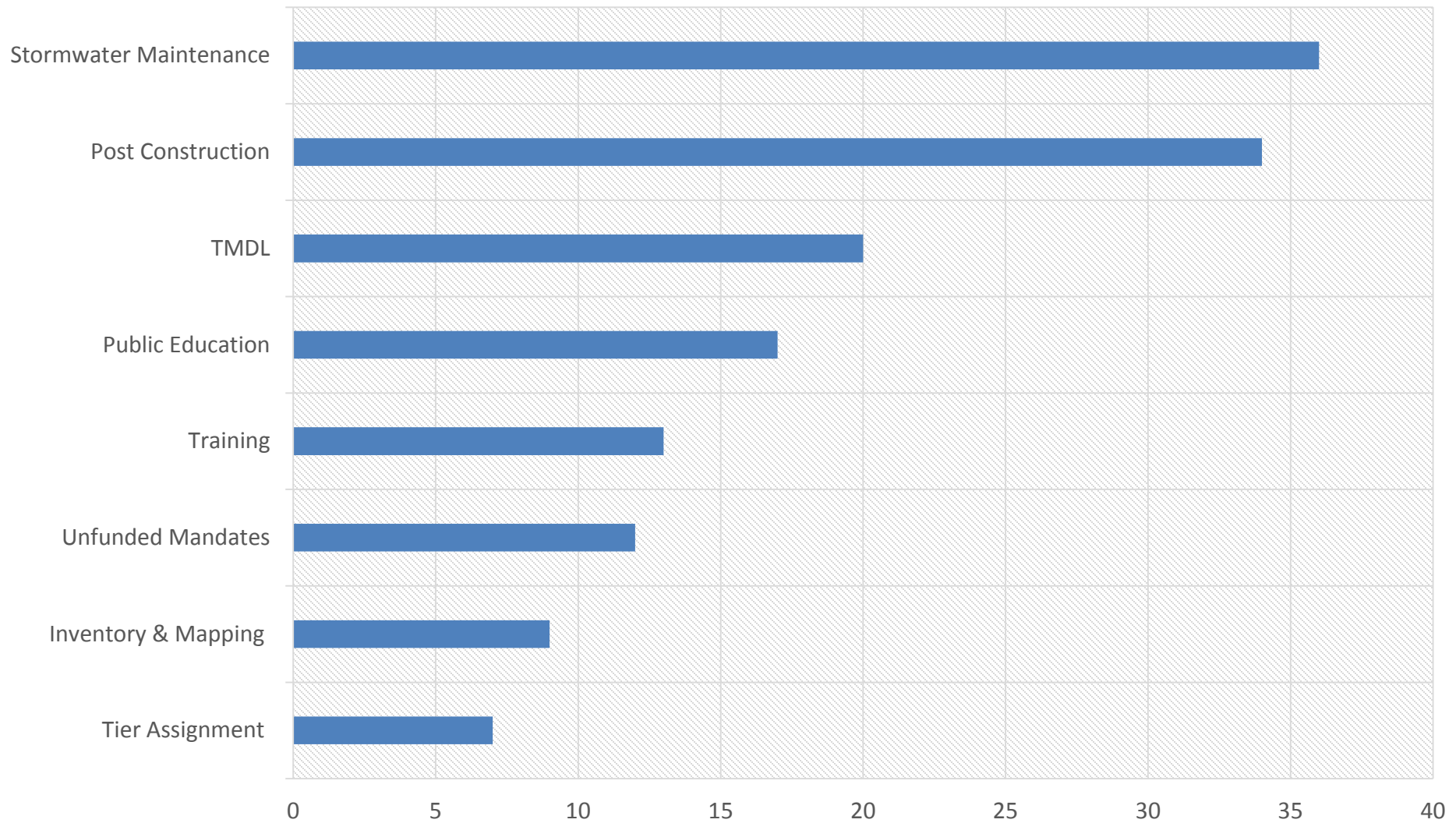
- MS4 Drafts issued February 15, 2017
 - Public Hearing held March 22, 2017
- Final Permits issued November 9, 2017
 - Individual Authorizations email mid-Dec.
 - Effective Date January 1, 2018

SUMMARY OF COMMENTS

- 33 COMMENTERS and 1 PUBLIC HEARING
 - 16 INDIVIDUALS
 - 9 MUNICIPALITIES (<2%)
 - 8 GOVERNMENT OR ORGANIZATION GROUPS (EPA, COUNTY, NRDC, NJSME, etc.)
- 234 COMMENTS (RTC 211 pages)



MOST COMMON COMMENTS



PUBLIC INVOLVEMENT AND PARTICIPATION

Comply with Local and State Public Notice Requirements

- Provide SPPP upon Request
- Post SPPP on Web Site
- Post Municipal Stormwater Management Plan and Ordinances to Web Site
- Maintain Records to Demonstrate Compliance
- Certify Annually

Timeframe in Renewal Permit:

- Post to Web EDPA +90 days
- ~April 1, 2018

Clear, Specific, Measurable? ✓



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

Assistance:

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

Timeframe in Renewal Permit:

- EDPA

Clear, Specific, Measurable? ✓



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

Assistance:

- 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”)
- GI Rules being Developed

Timeframe in Renewal Permit:

- EDPA

Clear, Specific, Measurable? ✓



Attachment D – Major Development Stormwater Summary

General Information			
1. Project Name:			
2. Municipality:	County:	Block(s):	Lot(s):
3. Site Location (State Plane Coordinates – NAD83):		E:	N:
4. Date of Final Approval for Construction by Municipality: Date of Certificate of Occupancy:			
5. Project Type (circle all that apply): Residential Commercial Industrial Other (please specify) _____			
6. Soil Conservation District Project Number:			
7. Did project require NJDEP Land Use Permit? Yes No Land Use Permit #:			
8. Did project require the use of any mitigation measures? Yes No If yes, which standard was mitigated?			

Project Information

Site Design Specifications	
1. Area of Disturbance (acres):	Area of Proposed Impervious (acres):
2. List all Hydrologic Soil Groups:	
3. Please Identify the Amount of Each Best Management Practices (BMPs) Utilized in Design Below: Bioretention Systems _____ Constructed Wetlands _____ Dry Wells _____ Extended Detention Basins _____ Infiltration Basins _____ Combination Infiltration/Detention Basins _____ Manufactured Treatment Devices _____ Pervious Paving Systems _____ Sand Filters _____ Vegetative Filter Strips _____ Wet Ponds _____ Grass Swales _____ Subsurface Gravel Wetlands _____ Other _____	

Site Information & Other BMPs Used

Storm Event Information	
Storm Event: Rainfall (inches and duration)	2 yr.: _____ 10 yr.: _____ 100 yr.: _____ WQ DS: _____
Runoff Computation Method (circle one): NRCS: Dimensionless Unit Hydrograph NRCS: Delmarva Unit Hydrograph Rational Modified Rational Other: _____	

Basin Specifications (answer all that apply) *If more than one basin, attach multiple sheets*	
1. Type of Basin:	Surface/Subsurface (circle one)
2. Owner (circle one): Public Private: If so, Name: _____ Phone number: _____	
3. Basin Construction Completion Date:	
4. Drain Down Time (hr.):	
5. Design Soil Permeability (in./hr.):	
6. Seasonal High Water Table Depth from Bottom of Basin (ft.):	Date Obtained:
7. Groundwater Recharge Methodology (circle one): 2 Year Difference NJGRS Other NA	
8. Groundwater Mounding Analysis (circle one): Yes No If, Yes Methodology Used:	
9. Maintenance Plan Submitted: Yes No Is the Basin Deed Restricted: Yes No	





Basin only Information

Comments: _____

9.4 EXTENDED DETENTION BASINS



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

POLLUTION PREVENTION/GOOD HOUSEKEEPING

Community Wide Ordinances and Measures

- Retains Six Existing Ordinance Requirements
- Catch Basin Inspection and Cleaning
 - At least every Five Years
 - Focus on Problematic Areas
- Street Sweeping
 - Miles swept & tons collected
- Maintain Records and Certify Annually

Assistance:

- Less Prescriptive
- Discretion to Municipality to Prioritize

Timeframe in Renewal Permit:

- EDPA



POLLUTION PREVENTION/GOOD HOUSEKEEPING

Municipal Maintenance Yards and Ancillary Operations

- Expanded List to Cover Common Activities at MMY
 - Aggregate Materials and Construction Debris Storage
 - Street Sweepings, Catch Basin Clean Out Material
 - Yard Trimmings & Wood Waste Management
- Containment of Vehicle Wash water
 - Maintain Logs
 - Annual Engineers Inspection & Certification
 - Storage Tank Use & Pump Out Log
 - Integrity Testing every 3 Years
 - Attachment E of the Permit
- Maintain Records & Certify Annually

Timeframe in Renewal Permit:

- EDPA + 12 months for new BMPs



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

Assistance:

- More Specific/Targeted
- Schedule to Implement (12 months)
- DEP Training Materials Posted Online

Timeframe in Renewal Permit:

- EDPA + 12 months



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

Assistance:

- Schedule to Implement (12 months)
- FREE NJDEP Training – twice per year

Timeframe in Renewal Permit:

- EDPA + 12 months



TRAINING REQUIREMENTS

Board & Council Member Training

- Required Training by All Board and Council Members
- Overview of Stormwater Permit Requirements
- “Asking the Right Questions”
- Maintain Records and Certify Annually

Assistance:

- Schedule to Implement (6 months)
- FREE On-line Class (45 minutes)

Timeframe in Renewal Permit:

- Current Members w/in EDPA + 6 months
- New Members w/in 6 months
- Once per Term Thereafter

Clear, Specific, Measurable? ✓



MAPPING, ILLICIT DISCHARGE, AND SCOURING

Outfall Pipe Mapping

- Outfall Location and Receiving Water Body
- Include Map in the SPPP (EDPA +12 months)
- Update by End of Each Calendar Year
- Provide to the NJDEP EDPA + 12 months
- Submit Electronically by 12/21/2020

Assistance:

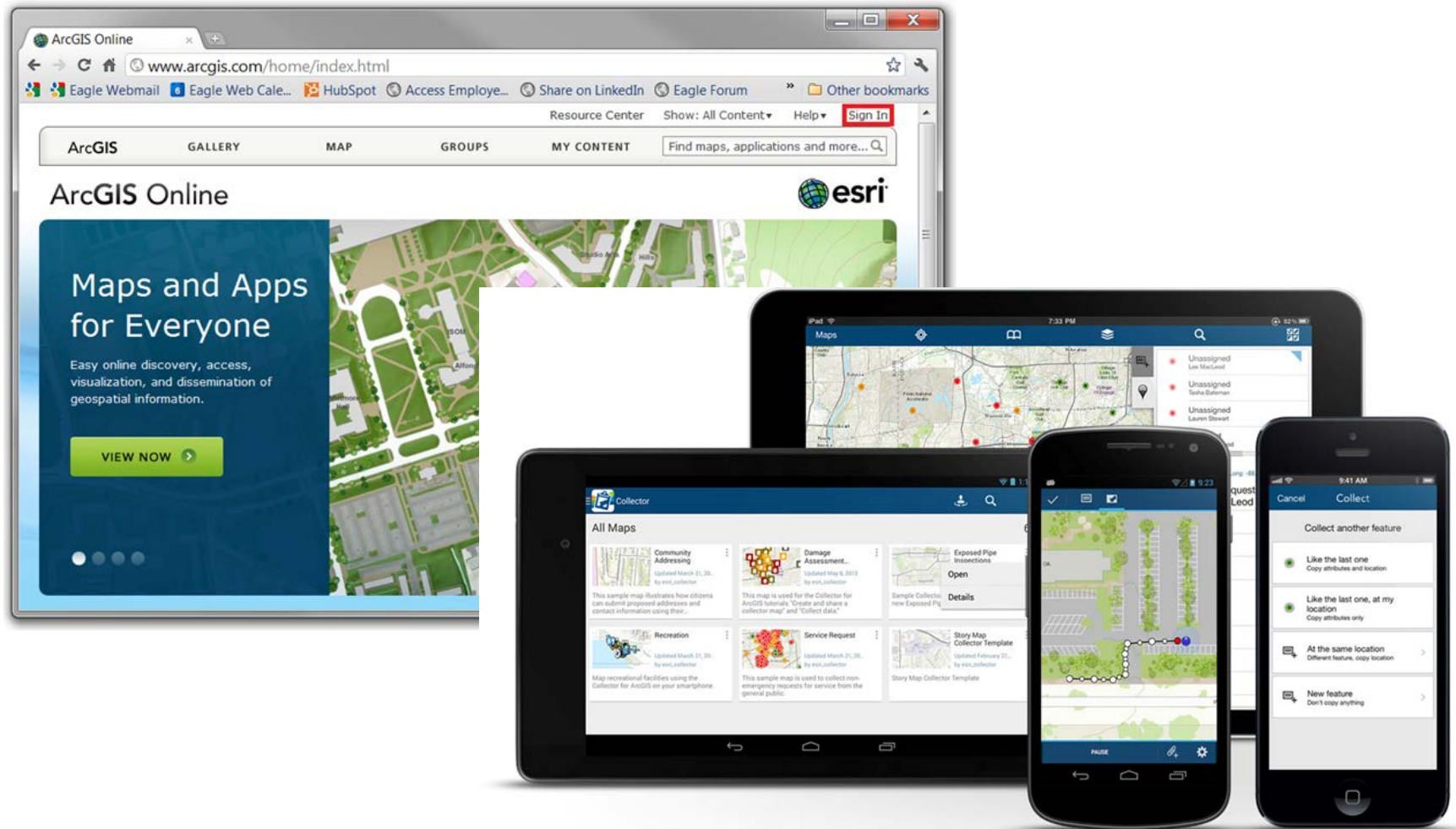
- Schedule to Implement (12 months)
- Mapping App and License FREE

Timeframe in Renewal Permit:

- EDPA + 12 months to Submit Map



NJDEP MAPPING and INVENTORY ASSISTANCE



NJDEP MAPPING AND INVENTORY ASSISTANCE

Mapping App - Feature Classes

- Outfall Pipe
 - Stormwater Management Basin
 - Subsurface Infiltration/Detention System
 - MTDs
 - Green Infrastructure
 - Storm Drain Inlet
-
- All Drop Down Menus
 - Smart Phone/Tablet/GIS
 - Multiple Collection Methodologies
 - Guidance Pending
 - In Person Training and Assistance



MAPPING, ILLICIT DISCHARGE, AND SCOURING

Localized Stream Scouring

- Develop, Update, Implement a Program
- Inspect Every Outfall Once Per 5 Years
- Document Inspections
 - Location
 - IF Scouring
 - Repairs Prioritized
 - Repairs Scheduled

Assistance:

- Mapping App
- Schedule to Implement
 - Update SPPP & Map Submission

Timeframe in Renewal Permit:

- EDPA + 12 months



MAPPING, ILLICIT DISCHARGE, AND SCOURING (cont'd)

Illicit Discharge Detection and Elimination

- Develop, Update, Implement, and Enforce Ongoing Program
- Inspect Every Outfall Once Per 5 Years
- Document Inspections
 - Location
 - Illicit Connection Inspection Report Form

Assistance:

- Mapping App

Timeframe in Renewal Permit:

- EDPA

Clear, Specific, Measurable? ✓



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
- Inspection and Maintain per maintenance Plan to Ensure proper function and operation
 - Maintain a Log
 - Location Information
 - Date
 - Findings
 - Maintenance Performed
- Prioritize Repairs



MAINTENANCE (cont'd)

Assistance:

- Mapping Application and License
- Extensive new O & M checklist and guidance posted on-line
- Town-wide Land Use GP for basin maintenance
- Letter from Department to support municipality gaining information about and access to private stormwater facilities

Timeframe in Renewal Permit:

- EDPA

Clear, Specific, Measurable? ✓



TMDL

Incorporation of TMDL information into SPPP

- Identify impaired waterways in municipality
- Identify and develop strategies to address sources of pollutants
- Update SPPP annually to include optional measures
- Prioritize stormwater facility maintenance & repairs

Assistance:

- TMDL look-up tool posted on-line
- Summarized strategies already posted
- Schedule to implement

Timeframe in Renewal Permit:

- EDPA + 12 months

Clear, Specific, Measurable? ✓



TMDL Look-Up Tool

Bureau of Nonpoint Pollution Control

[Find Forms](#) | [Contact Us](#)

Total Maximum Daily Load (TMDL) Look-Up Tool

The tool was developed to assist New Jersey's municipal stormwater coordinators with the development of plans and strategies to reduce stormwater discharges from Municipal Separate Storm Sewer Systems. It should also prove useful to others with an interest in water quality issues that affect our state.

To use the TMDL Look-Up Tool, go to the dropdown feature below and locate your municipality. The tool will display a list of watersheds and established, approved or adopted TMDL information associated with the selected municipality. To view the TMDL document and find Implementation strategies, click on the associated link: [View the TMDL Document](#). Once you have opened the TMDL document you can locate the Implementation section using the table of contents.

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

County:

Municipality:

Select
East Windsor Township
Ewing Township
Hamilton Township
Hightstown Borough
Hopewell Borough
Hopewell Township
Lawrence Township
Pennington Borough
Trenton City
Robbinsville Township
West Windsor Township
Princeton

Go

Reset

Please click Reset for a new search.

A Guide to Abbreviations used in the TMDL

Hg = Mercury

TP = Total Phosphorus

DO = Dissolved Oxygen

TSS = Total Suspended Solids

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

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 : Duck Pond Run : [View the TMDL Document](#)
- Total Maximum Daily Loads for Fecal Coliform to Address 48 Streams in the Raritan Water Region
Fecal Coliform - 2003 : Stony 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 : Stony Bk(Province Line Rd to 74d46m dam) : [View the TMDL Document](#)

Applicable Lake TMDL(s)

None

Applicable Shellfish TMDL(s)

None

Posted at

www.nj.gov/dep/dwq/msrp_home.htm

MOVING FORWARD

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



Measurable Goals for Statewide Basic Requirements and Other Conditions of this Permit for Existing Permittees				
Summary of Minimum Standard (See Part IV for specific permit requirements)	Permit Cite	Measurable Goal (See Part IV for specific permit requirements)	Implementation Schedule	New Requirement?
Public Involvement and Participation Including Public Notice				
Provide for public notice under the Open Public Meetings Act, statutory procedures for enactment of ordinances, and Municipal Land Use Law when providing for public participation in the development and implementation of a stormwater program, and maintain records necessary to demonstrate compliance.	IV.B.1.a & d	Certify in each annual report that all public notice requirements have been met and relevant records kept. Reference in the SPPP the location of associated municipal records.	EDPA	No
Provide the current SPPP to the public upon request.	IV.B.1.b.i	Certify in each annual report that the SPPP was made available to the public.	EDPA	No
Post the current SPPP on the municipality's website.	IV.B.1.b.ii	Certify in each annual report that the SPPP has been posted on the municipality's website (to the extent required by Part IV.F.1.f) and that the posted SPPP is current.	EDPA + 90 days	Yes
Post the current Municipal Stormwater Management Plan (MSWMP) and related ordinances on the municipality's website.	IV.B.1.b.iii	Certify in each annual report that the MSWMP and related ordinances have been posted on the municipality's website and that the posted documents are current.	EDPA + 90 days	Yes
Local Public Education and Outreach				
Implementation of a Public Education and Outreach Program by conducting activities that total a minimum of 12 points on an annual basis.	IV.B.2.a	Certify in each annual report that the minimum point value has been met and report point totals in the Annual Report. Maintain records of materials and activities from Attachment B, including dates of activities and any other relevant documentation (e.g. brochures, pictures, sign-in sheets, press clippings).	EDPA	Modified
Label storm drain inlets, maintain the legibility of those labels, and replace labels that are missing or not legible along sidewalks that are adjacent to municipal streets; and within plazas, parking areas or maintenance yards operated by the municipality.	IV.B.2.b	Certify in each annual report that storm drains have been properly labeled and/or maintained. Records tracking storm drain inlet label status shall be kept with the SPPP.	EDPA	No

IMPORTANT LINKS

- NJDEP Stormwater Web Page
 - <http://www.nj.gov/dep/dwq/fd.htm>
 - BMP Manual
 - Stormwater Training
 - TMDL Lookup Tool
 - Maintenance Guidance
 - MS4 Permit Documents
- MS4 Permits
 - http://www.nj.gov/dep/dwq/msrp_home.htm

Thank you!

Jim Murphy, Chief
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New Jersey Dept. of Environmental Protection
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609-633-7021