

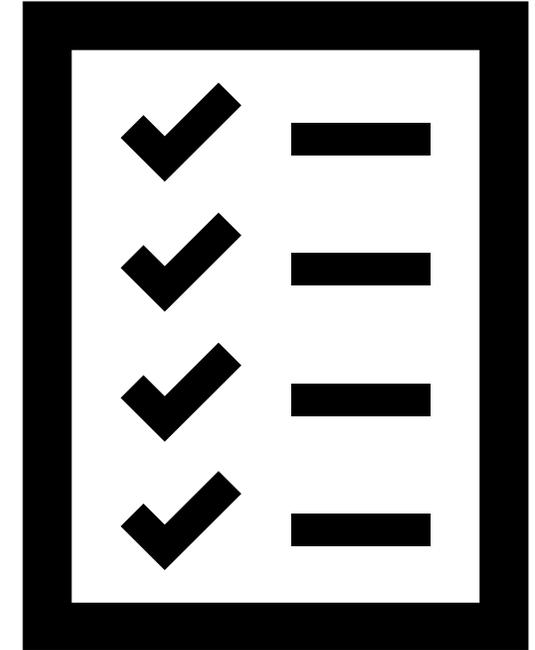
MS₄ Tier A Permit Renewal and Tier B Reassignments

Pinelands Municipal Council Meeting
September 27, 2022



Overview of The Tier A Renewal Permit

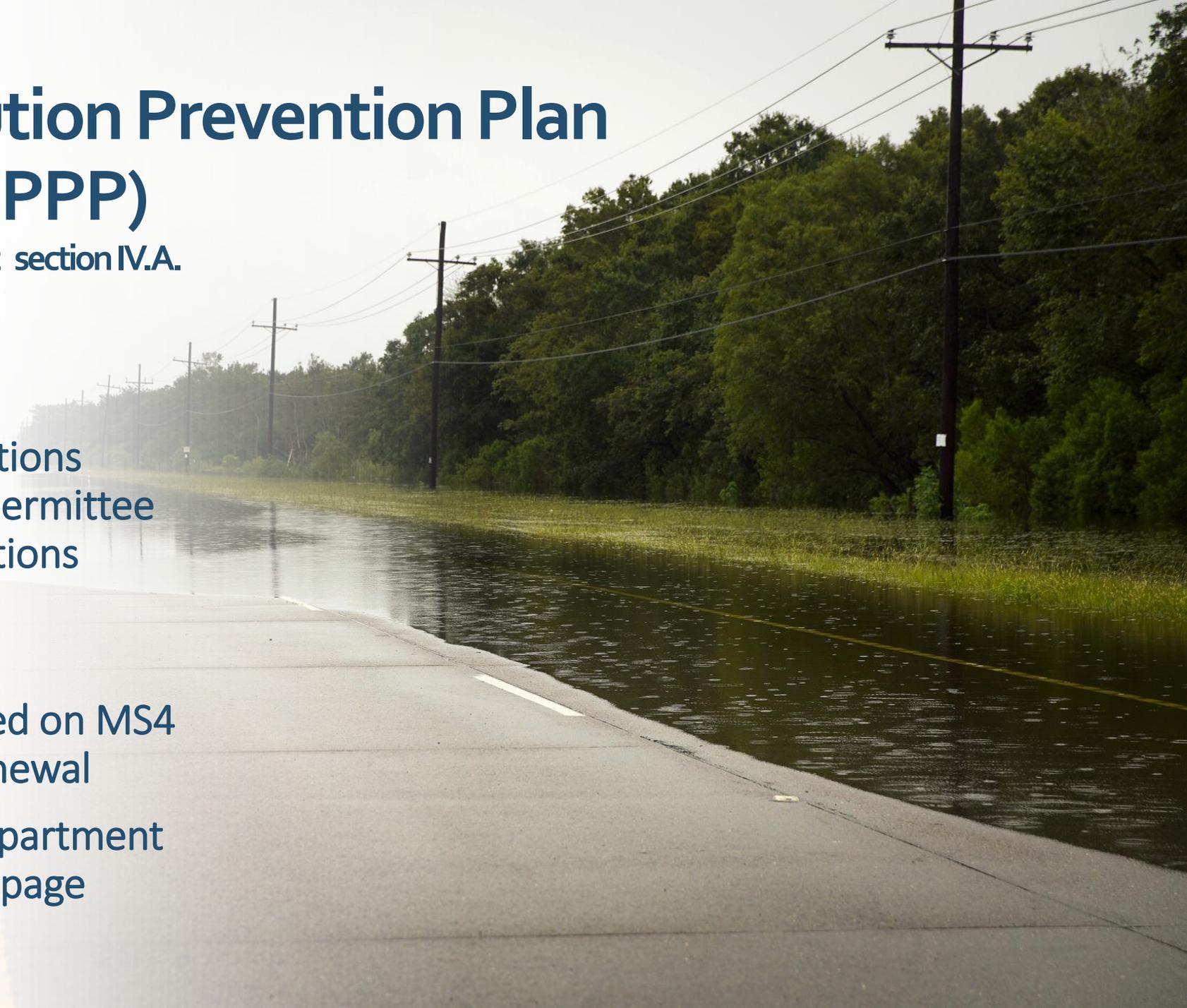
(2023 Renewal)



Stormwater Pollution Prevention Plan (SPPP)

Permit section IV.A.

- ❖ Essentially a stormwater operations handbook to reflect what the permittee does to meet the permit conditions
 - ❖ Must be kept current
 - ❖ Include town specifics
- ❖ Fillable template will be updated on MS4 webpage to reflect the final renewal
- ❖ Submit electronically to the Department and post on dedicated SW webpage





Municipal Stormwater Webpage

Permit section IV.B.2.

- ❖ Dedicated SW webpage for materials required to be posted
- ❖ HTML template is available from the Department
- ❖ Materials required to be posted:
 - ❖ Stormwater Pollution Prevention Plan
 - ❖ Municipal Stormwater Management Plan
 - ❖ Stormwater Control Ordinance
 - ❖ Community Wide Ordinances
 - ❖ MS4 Outfall Map
 - ❖ MS4 Infrastructure Map
 - ❖ Watershed Improvement Plan

Post Construction Stormwater Management in New Development and Redevelopment

Permit section IV.E. and IV.F.8.

- ❖ SW design reviewers must attend FREE NJDEP training every 5 years
- ❖ Check www.njstormwater.org/training.htm to verify that your SWM design reviewer(s) has attended training within the last 5 years
 - If not, send email to stormwatermanager@dep.nj.gov for information about upcoming courses
- ❖ The Department will email you if/when there is training for rule amendments
- ❖ The same person cannot design AND approve their own SWM designs

Community Wide Ordinances, etc

Permit section IV.F.1.

- ❖ Pet Waste
- ❖ Wildlife Feeding
- ❖ Litter Control
- ❖ Improper Disposal of Waste
- ❖ Yard Waste
- ❖ Private Storm Drain Inlet Retrofitting
- ❖ Prohibition of Illicit Connections
- ❖ Stormwater Control Ordinance
- ❖ Privately-owned Salt Storage
- ❖ Tree Removal/Replacement



Picture taken in August 2021



Street Sweeping

Permit section IV.F.2.a.i. and ii.

- ❖ Sweep paved asphalt and concrete roads (not required for dirt, gravel, or tar and chip roads)
 - ❖ We will clarify this in final renewal permit
- ❖ Triannual Sweeping – Every 4 months, sweep segments of municipal roads that have storm drain inlets that discharge to surface water
- ❖ Annual Sweeping – Every year, sweep segments of paved municipal roads that do NOT have storm drain inlets that discharge to surface water

Storm Drain Inlets

Permit section IV.F.2.a.iii., iv., and v.



- ❖ Label inlets that do not have permanent wording cast into the structure
- ❖ Retrofit ALL municipal storm drain inlets to prevent solids and floatables from entering the MS4
 - Apply a bolt-on plate to curb openings or replace old storm drain inlets with DOT bicycle safe grates
- ❖ Installation of new storm drains that discharge to surface water must include a catch basin or other BMP designed for solids collection

Herbicide Application Management

Permit section IV.F.2.a.vi.

- ❖ Prohibit unnecessary spraying of herbicides (e.g., medians, inlets)
- ❖ Avoid de-vegetation that may result in erosion caused by stormwater



Excess Deicing Material Management

Permit section IV.f.2.a.vii.

- ❖ Remove piles of excess salt and deicing materials that have been deposited during spreading operations on all municipal roads and parking areas
- ❖ Remove within 72 hours after the end of storm events, conditions permitting



Roadside Vegetative Waste Management

Permit section IV.F.2.a.viii.

- ❖ Proper pickup, handling, storage, and disposal of wood waste and yard trimmings (grass clippings) generated during municipal work activities
- ❖ Goal is to keep materials out of the MS4





Roadside Erosion Control Program

Permit section IV.F.2.a.ix.

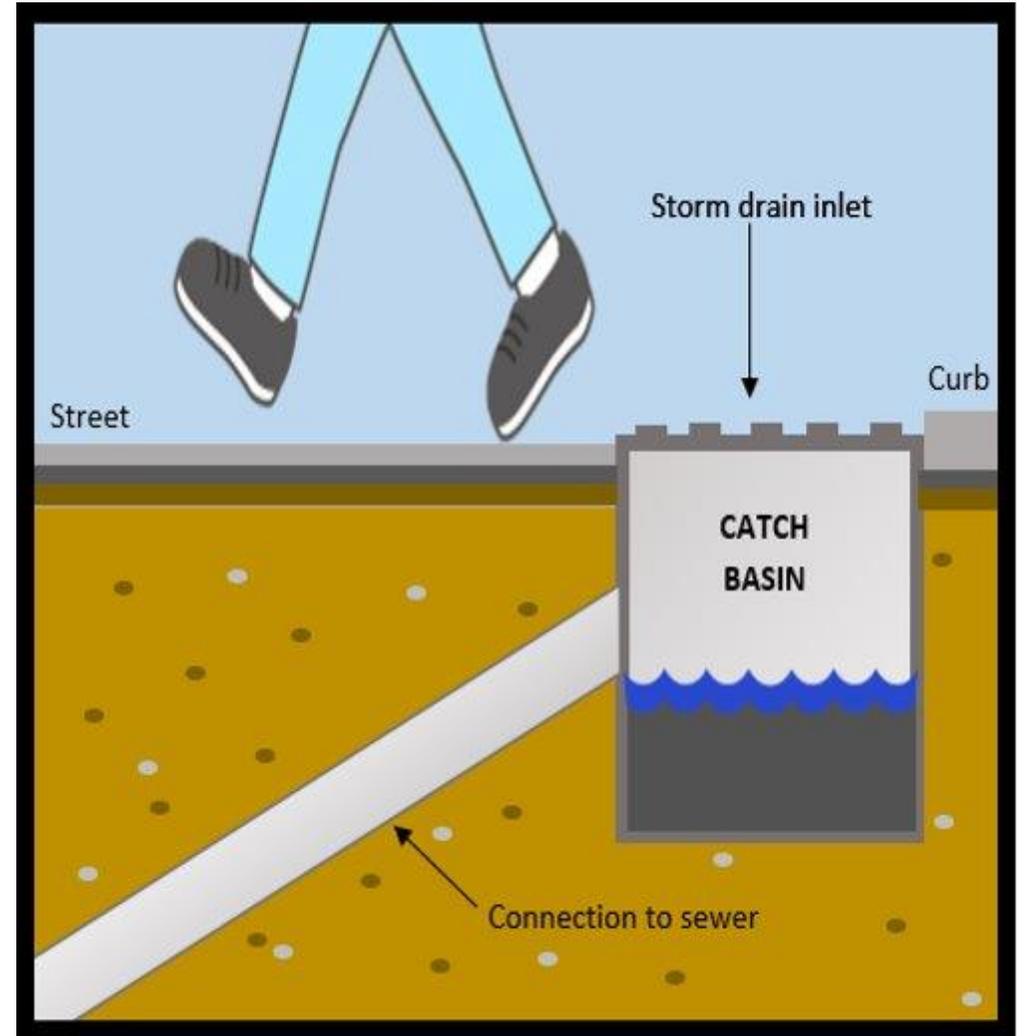
- ❖ Inspect municipal roads for stability
 - ❖ Check for evidence of stormwater causing erosion of shoulders, embankments, ditches, and soils along roads
 - ❖ may cause sedimentation of receiving waters
 - ❖ Can be done in tandem with other municipal inspections

- ❖ Repair problems within 90 days of discovery

Storm Drain Inlets & Catch Basins

Permit section IV.F.3.a.i. - iv.

- Storm Drain Inlets
 - Inspect ALL every year
- Catch Basins
 - Up to 1,000 municipal catch basins, inspect ALL every year
 - 1,000+ catch basins, inspect 1,000 or 20% of the total (whichever is more) every year on rotation





MS₄ Conveyance Inspection & Cleaning

Permit section IV.F.3.a.v.

- ❖ Identify all stormwater conveyance features, e.g., ditches and pipes
- ❖ Inspect, clean, and maintain as needed

Stormwater Infrastructure Inspection

Permit section IV.F.3.a.vi - x.

- ❖ Identify any MS4 infrastructure that does not already have a specific permit condition, e.g., stormwater management basins
- ❖ Inspect at least 4x annually and after rainstorms exceeding 1", clean and maintain as needed



Stormwater Facilities Not Owned or Operated by the Municipality

Permit section IV.F.4.

- ❖ Ensure that SWF not owned or operated by the permittee are inspected/maintained by the owner
- ❖ Owners must perform annual inspections
- ❖ Maintenance = structural repairs and removal of solid and floatable materials: trash, litter, excess leaves, branches, excess growth, etc.



BMPs at Maintenance Yards & Ancillary Operations

Permit section IV.F.5.

- ❖ Monthly site inspections
- ❖ Outdoor inventory of potential pollutants
- ❖ Container labels
- ❖ Spill kits
- ❖ 2° containment around bulk liquid containers
- ❖ SW discharge from 2° containment
- ❖ Fueling operations
- ❖ Vehicle/equipment maintenance/repair
- ❖ Wash wastewater containment
- ❖ Salt and Other Solid Deicers
- ❖ Aggregate Materials, Wood Chips, and Finished Leaf Compost (no processing)
- ❖ Cold Patch Asphalt
- ❖ Street Sweeping & Storm Sewer Clean-out Materials*
- ❖ Construction & Demolition Waste, Wood Waste, and Yard Trimmings
- ❖ Scrap Tires
- ❖ Inoperable Vehicles/Equipment
- ❖ Outdoor Refuse Containers & Dumpsters



Employee Training

Permit section IV.F.6. through 9.

- ❖ Stormwater Program Coordinator Training
 - ❖ Attend NJDEP training every 5 years (each permit cycle)
- ❖ Municipal Employees
 - ❖ Annual training on SPPP, BMPs, ordinances, etc.
- ❖ Municipal Board and Governing Body Members
 - ❖ Watch one of six stormwater management training videos each term
- ❖ Stormwater Management Design Reviewers
 - ❖ Attend NJDEP training every 5 years
 - ❖ Attend NJDEP training on SWM rule amendment training as directed

MS4 Mapping

Permit section IV.G.1.

- ❖ Create a map of all MS4 infrastructure
- ❖ Submit to NJDEP electronically as a georeferenced shapefile, geodatabase, or AutoCAD file with non-applicable data stripped out
 - If DEP Mapping Application is used, data submittal is automatic
 - https://www.nj.gov/dep/dwq/msrp_map_aid.htm
- ❖ Post on dedicated stormwater webpage





MS₄ Outfall Inspection:

Stream Scouring

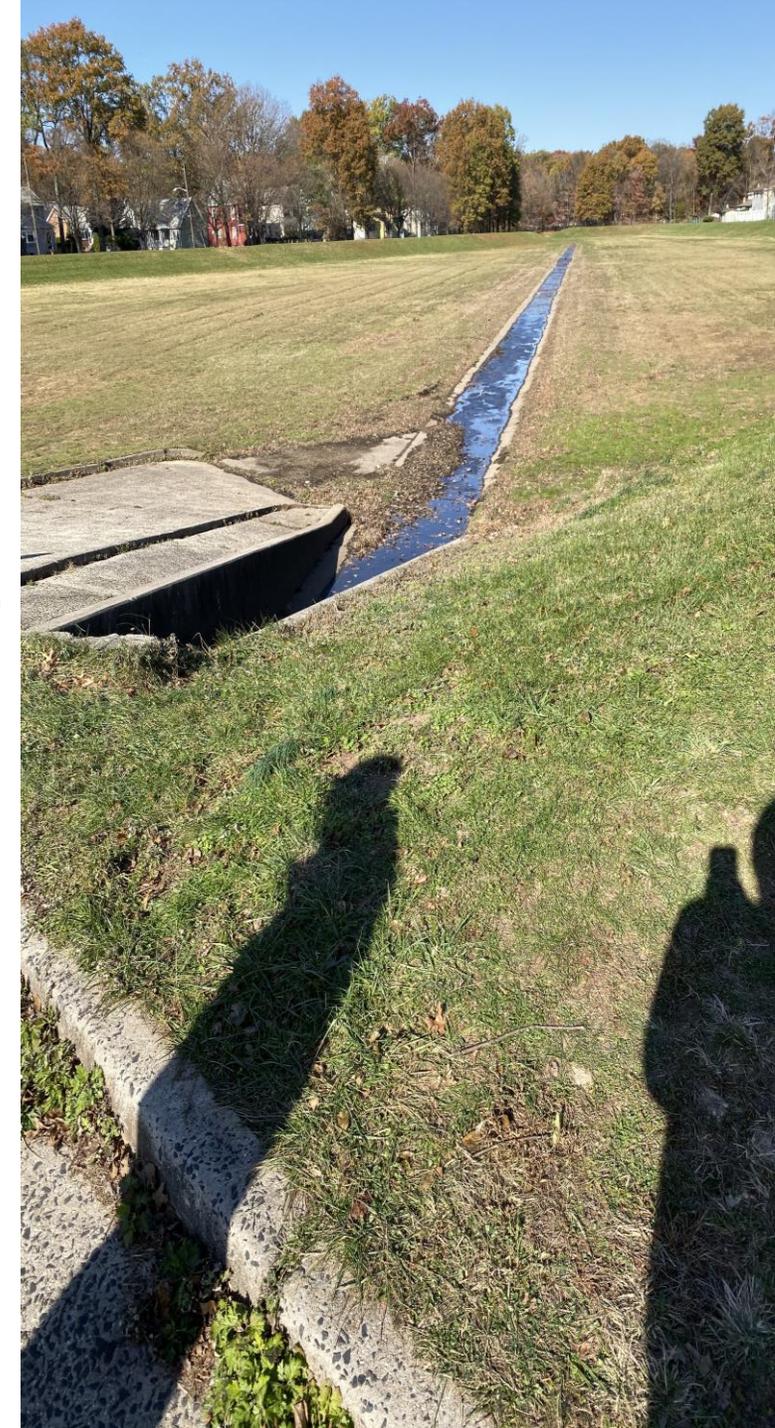
Permit section IV.G.2.

- ❖ **Inspect all MS₄ outfalls at least once every 5 years**
 - ❖ Up to 100 municipal outfalls, inspect ALL every year
 - ❖ 100+ municipal outfalls, inspect 100 or 20% of the total (whichever is more) every year on rotation
- ❖ **Inspect new/newly identified outfalls w/in 30 days**
- ❖ **Investigate complaints and reports of scouring within 30 days and remediate within 12 months**

MS4 Outfall Inspection: Illicit Discharge Detection and Elimination

Permit section IV.G.2.

- ❖ Inspect MS4 outfalls at least once every 5 years
 - ❖ Up to 100 municipal outfalls, inspect ALL every year
 - ❖ 100+ municipal outfalls, inspect 100 or 20% of the total (whichever is more) every year on rotation
- ❖ Inspect new or newly identified outfalls within 30 days
- ❖ Investigate dry weather flows within 30 days
- ❖ Remediate within 12 months OR request an extension from the Department by month 11





Watershed Improvement Plan

Permit section IV.H.

- ❖ Improve water quality by reducing MS4 contribution of pollutants to waterbodies with listed impairments and TMDLs
- ❖ Reduce/eliminate flooding with priority given based on human health and safety, environmental impacts, and frequency of occurrence
- ❖ Develop plan with input from residents, businesses, neighboring towns, other dischargers

Watershed Improvement Plan

Permit section IV.H.

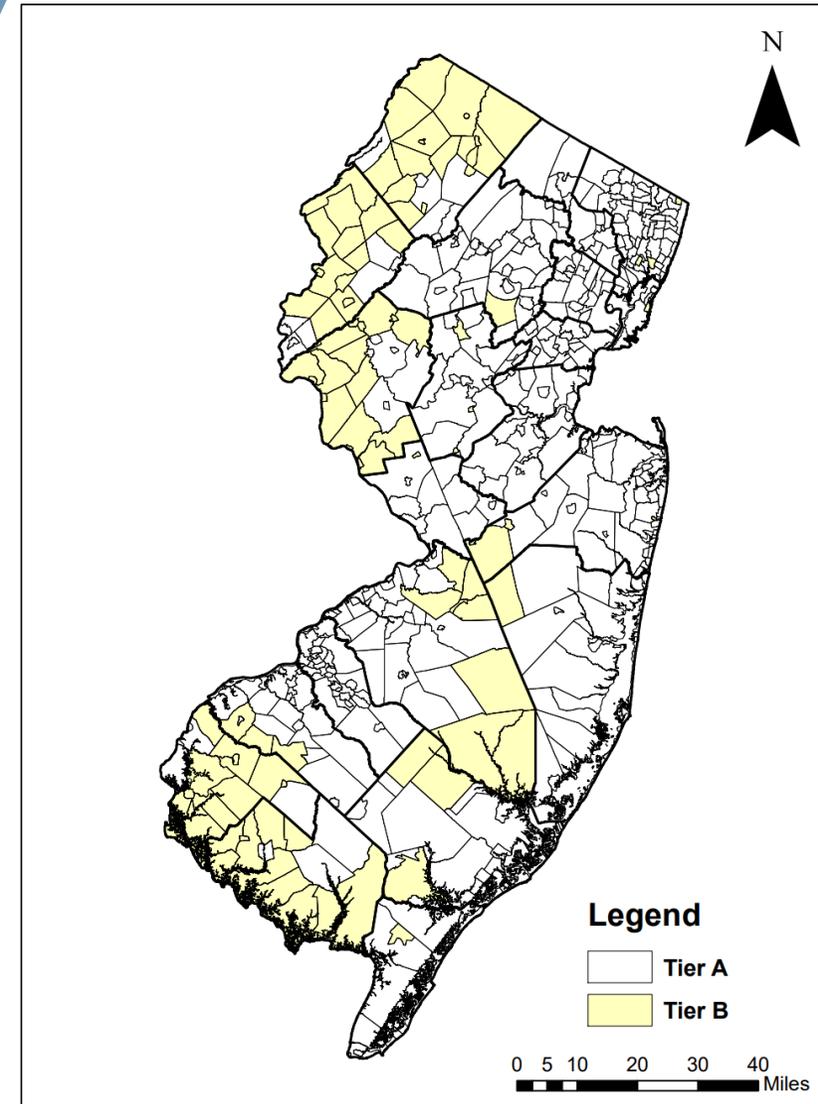
- ❖ Phase 1 – Prepare and submit the Watershed Inventory Report; conduct outreach
 - ❖ Summarize/map required information, some is available from the Department's GIS database
- ❖ Phase 2 – Prepare and submit the Watershed Assessment Report; conduct outreach
 - ❖ Assess potential projects with estimates of the reduction in pollutant loading & funding need
 - ❖ Solicit public comments by posting the Watershed Assessment Report with a 60-day public comment period
- ❖ Phase 3 – Prepare and submit the Watershed Improvement Plan Report; conduct outreach
 - ❖ Summarize proposed projects with improvement expected, comments received, costs, coordination with other regulatory programs, and implementation schedule





- ❖ Recordkeeping (section IV.J.)
 - ❖ Retain copies of related records for at least 5 years & make available upon request
- ❖ Annual Report (section IV.K.)
 - ❖ Submit online by May 1st every year
 - ❖ Attach Supplemental Questionnaire
 - ❖ Attach current Stormwater Pollution Prevention Plan
 - ❖ Attach Illicit Discharge Detection and Elimination Reports (if applicable)
- ❖ Attachment A –
 - ❖ listing of activities & points for Public Education & Outreach
- ❖ Attachment B –
 - ❖ design standards for Storm Drain Inlets

Tier B Reassignments



Municipal Separate Storm Sewer System (MS₄)

- The MS₄ permitting program is required by both federal and state regulations
 - to address water quality, as well as flooding concerns related to poor design and improper maintenance
 - The Tier A permit is equivalent to the Federal small MS₄ permit
 - The Tier B permit is a NJ state-only permit and can not incorporate water quality related requirements
- Prior to reassignment, there were 101 Tier B municipalities
- Discharges of common stormwater related pollutants to waters with Total Maximum Daily Loads (TMDLs), and/or impairments of water quality standards or designated uses
- Other water quality concerns include Harmful Algal Blooms (aka HABs), discharging pollutants to sensitive waters

MS4 Re-evaluation Requirements

40 CFR 123.35
&

N.J.A.C. 7:14A-24 & 25

- The Federal regulations require states to periodically re-evaluate their MS4 permitting designations
- During the renewal of the 2018 Tier A permit, EPA inquired as to when we would conduct this reevaluation
- Subsequently, the EPA has notified the Department that our program is not compliant with Federal requirements as we have not reevaluated the designations and instructed us to remedy the situation
- The Federal and State rules require states to review population, water quality and other relevant factors related to the MS4 discharges:
 - Is there potential to result in exceedances of water quality standards, including impairments of water quality standards/designated uses
 - Are there discharges into waters with TMDLs
 - Are there other significant water quality impacts, including habitat and biological impacts (e.g. HABs)
 - Are there discharges to sensitive waters

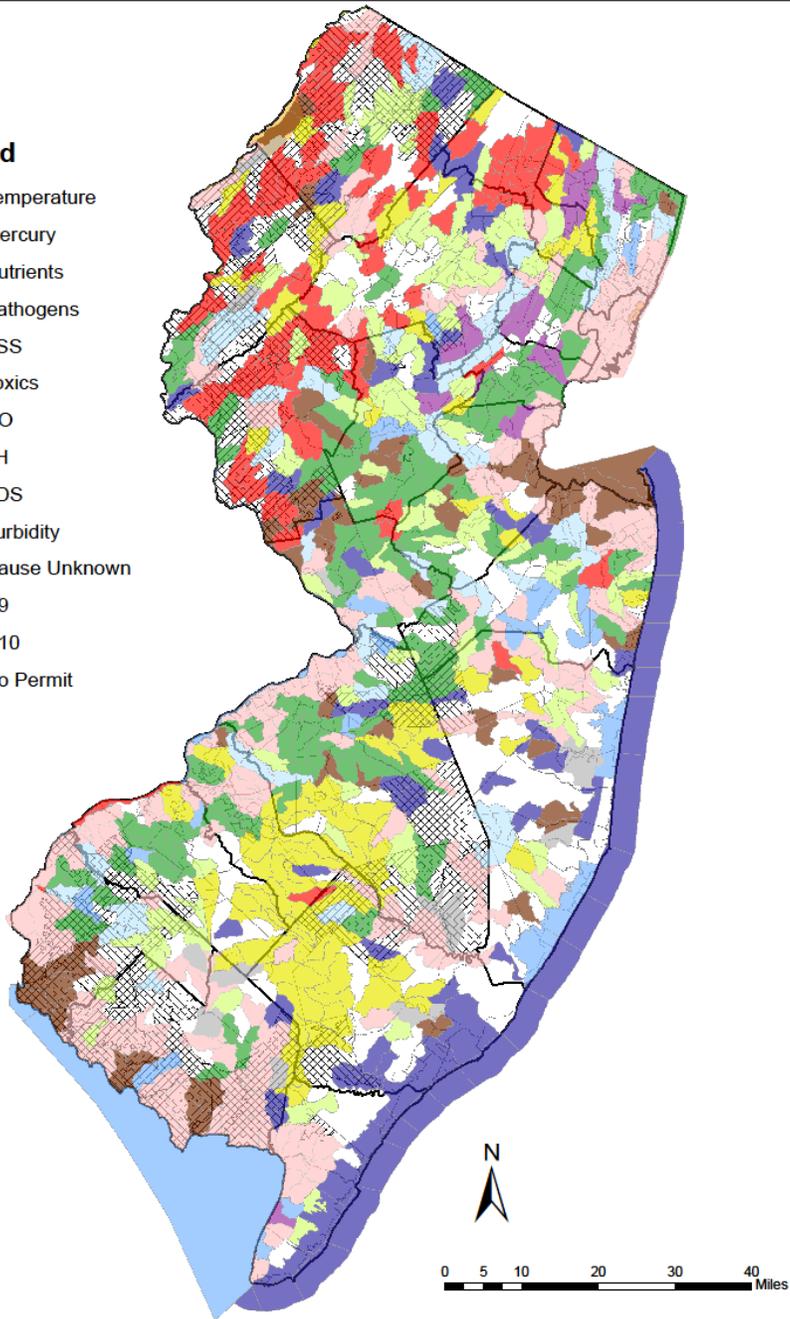
Review of Water Quality & Population Information

- **All former Tier Bs towns have receiving waters within or bordering their towns with water quality impairments and/or TMDLs**
 - 82 towns also have sensitive receiving waters with classifications of FW1, PL, Category 1, Trout Production, and/or Trout Maintenance
 - Some also have or have had HABs occur in their receiving waters
- **11 former Tier B towns have the additional reason for being reassigned to Tier A because their populations increased to >1000 in the urbanized area as per the 2010 Census**
 - Allamuchy, Chesterfield, Elk, Elmer, Hoboken (CSO), Hopewell, Lambertville, Ridgefield Park (CSO), Upper Freehold, Woodbine, Woolwich
 - There may be a few more towns based on 2020 Census populations values if/when that is finalized

Impaired Waters

Legend

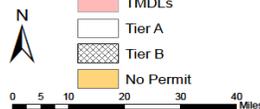
- Temperature
- Mercury
- Nutrients
- Pathogens
- TSS
- Toxics
- DO
- pH
- TDS
- Turbidity
- Cause Unknown
- R9
- R10
- No Permit



TMDLs & Impairments

Legend

- Impaired Waters
- TMDLs
- Tier A
- Tier B
- No Permit

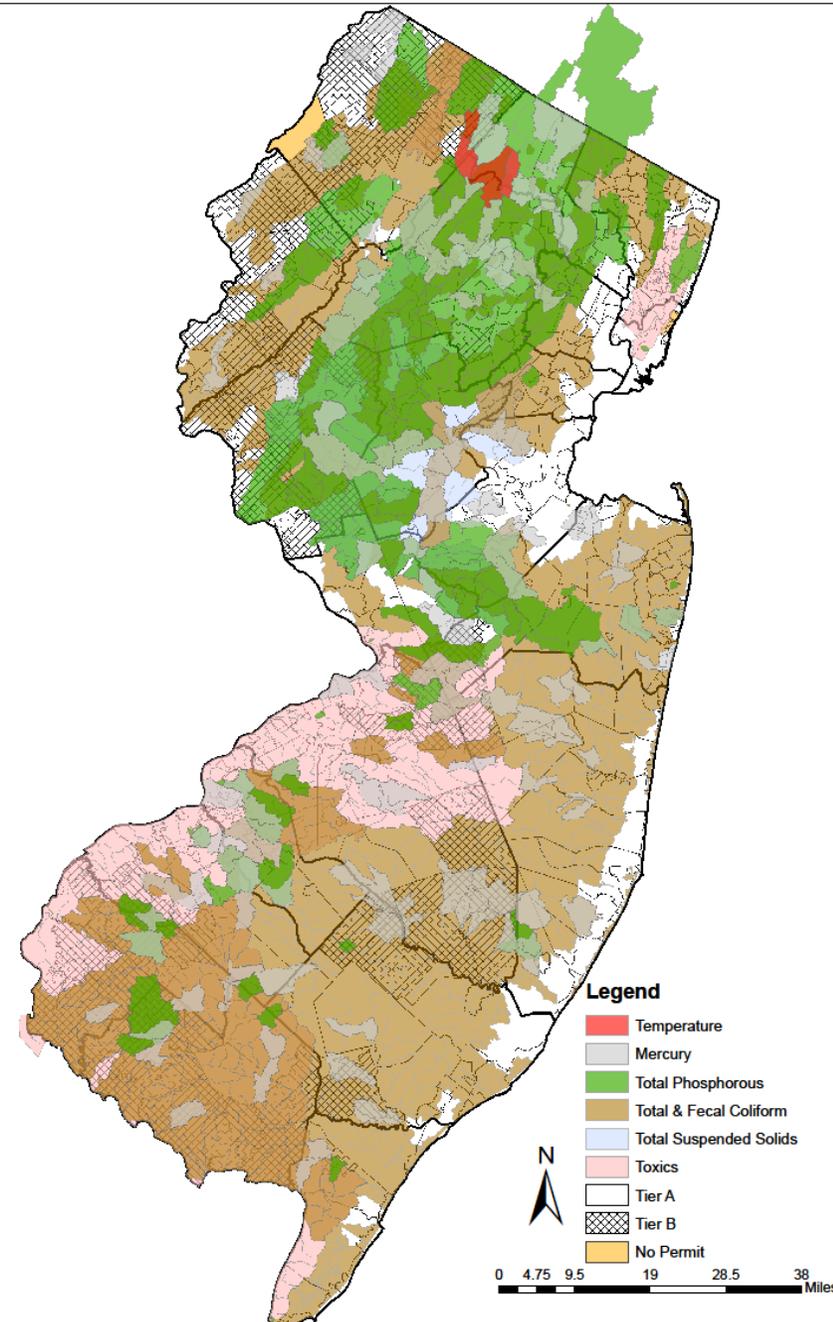


Every Tier B town has at least 1 impairment or TMDL for stormwater related pollutants

New Jersey TMDLs

Legend

- Temperature
- Mercury
- Total Phosphorous
- Total & Fecal Coliform
- Total Suspended Solids
- Toxics
- Tier A
- Tier B
- No Permit

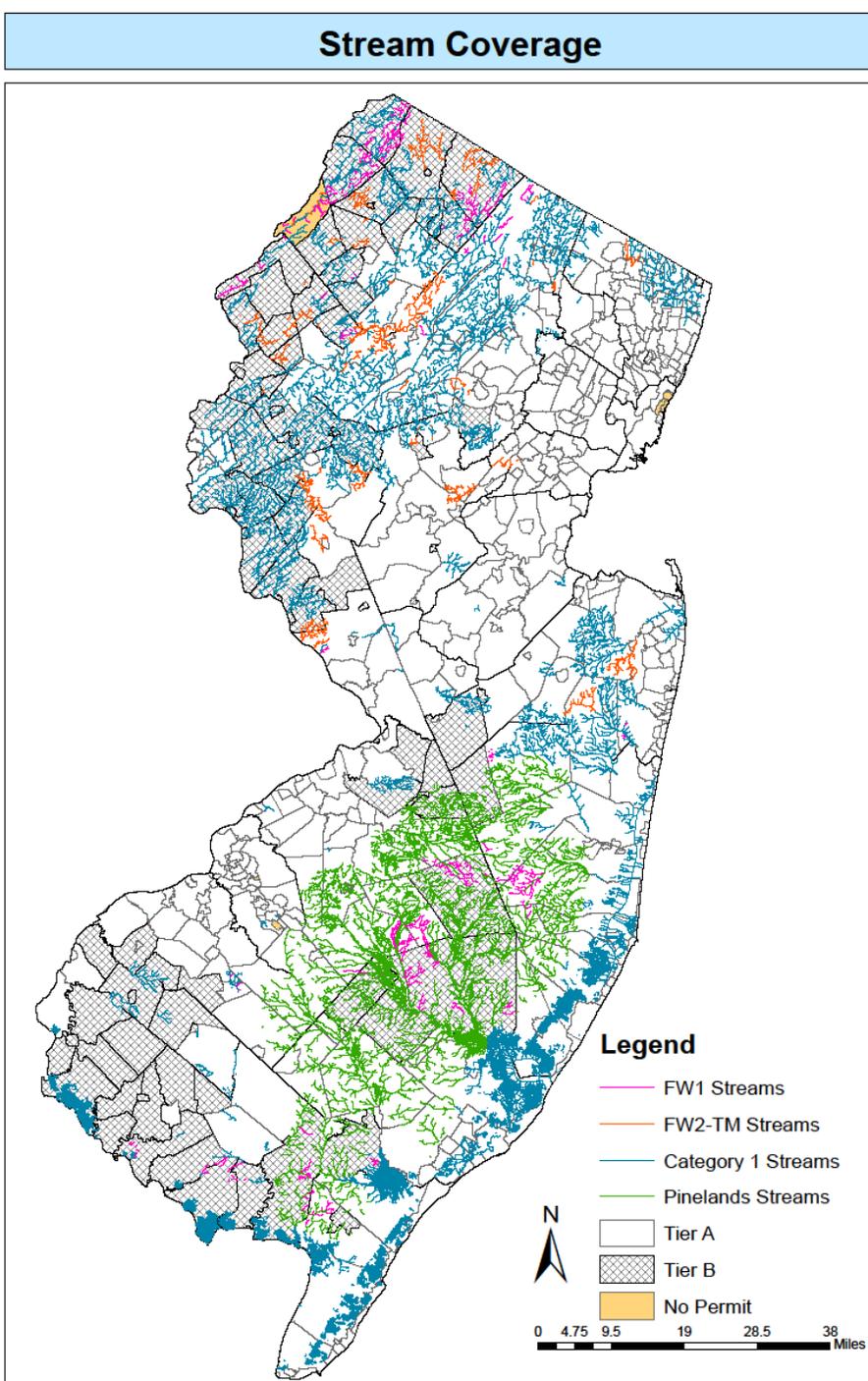


Sensitive Waters

N.J.A.C. 7:9B

FreshWater₁
Pinelands

Category 1
Trout Production (C1)
Trout Maintenance



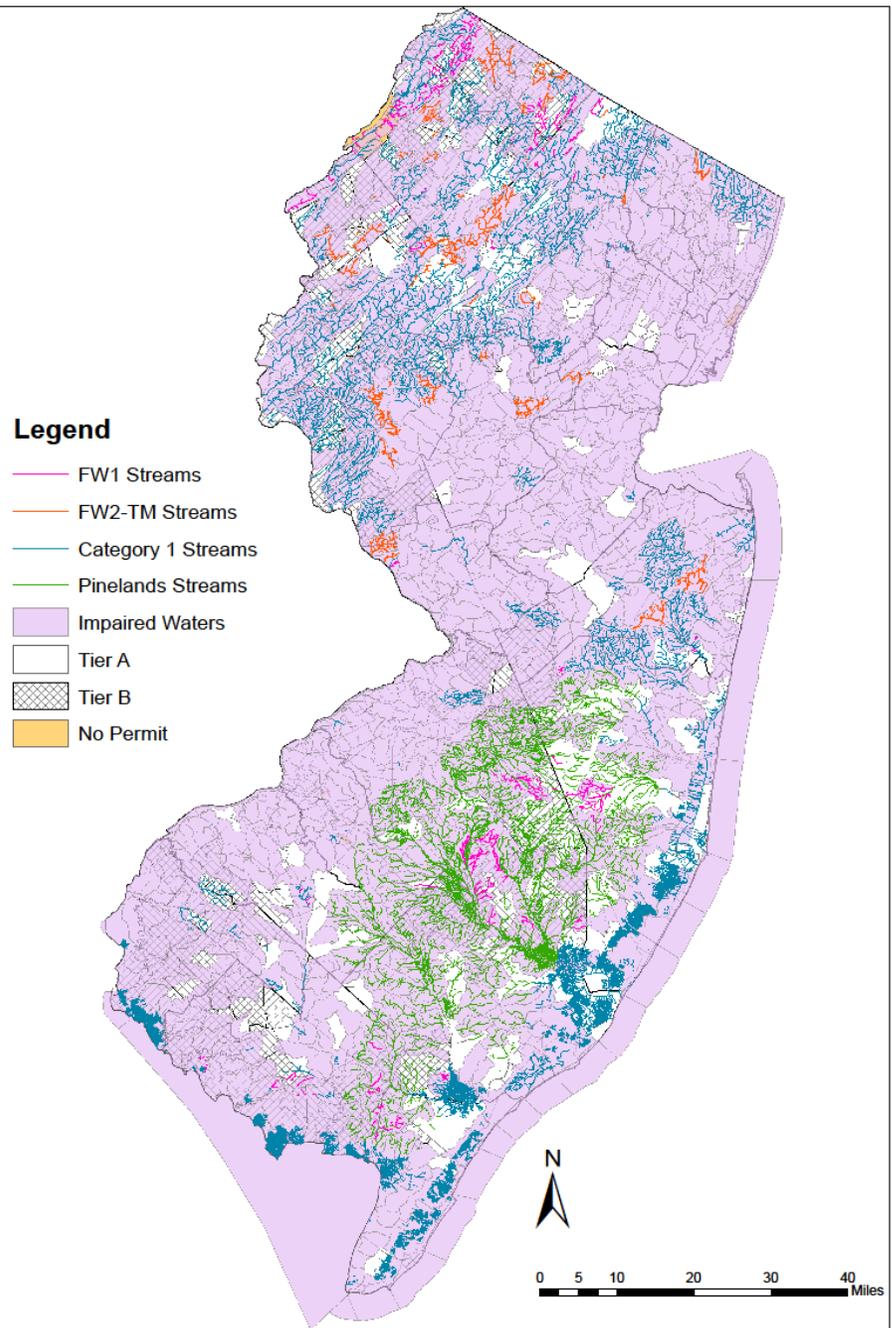
The FW1 and Pinelands waters are our Outstanding National Resource Waters

Sensitive Waters

New Jersey Surface Water
Quality Standards
N.J.A.C. 7:9B

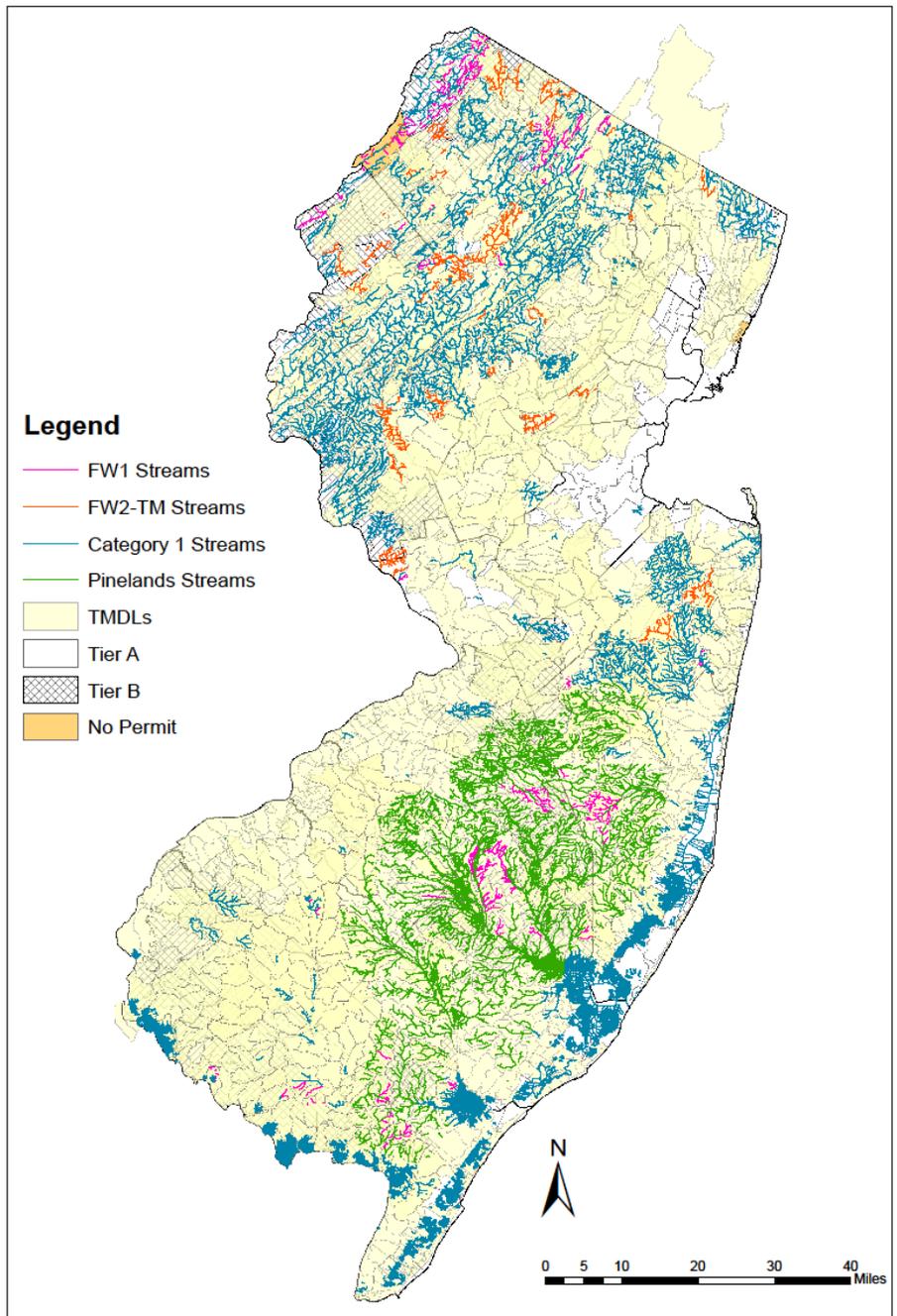
Freshwater 2-Trout Production (Category 1), FW2-Trout Maintenance & FW2- NonTrout (Category 1).

Stream Coverage & Impairments

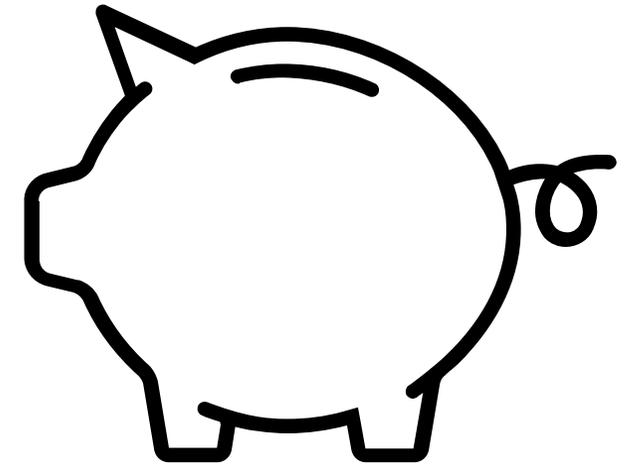


Sensitive waters
with Water
Quality
Impairments
and/or
TMDLs

Stream Coverage & TMDLs



NJDEP
Stormwater Utility
Technical Assistance
Program



Stormwater Utility Act

Clean Stormwater and Flood Reduction Act

https://nj.gov/dep/dwq/SWU_stormwater_utility.html

- ❖ Purpose: Option to create a dedicated source of funding for stormwater management, operations, maintenance, repairs, and improvements
- ❖ Requirements: Fees must be based on a fair and equitable approximation of the proportionate contribution of stormwater runoff from a real property
- ❖ Eligibility: SWU can be formed by a one or more Municipalities/Counties or Municipal/County Sewerage Authorities, Utilities Authorities, and Improvement Authorities
- ❖ NJDEP created a SWU website
 - Background & Basics
 - Establishing a Stormwater Utility
 - Stormwater Utility Fees & Credits
 - Using Fees
 - Asset Management
 - Resources

Steps to Establish a Stormwater Utility



1. Discuss Concept



2. Conduct Preliminary Feasibility Study



3. Engage Management



4. Conduct Comprehensive Feasibility Study



5. Engage Stakeholders



6. Engage Public



7. Implement Stormwater Utility

Stormwater Utility Technical Assistance

**Apply by
November 1,
2022**

Apply for a FREE comprehensive feasibility study by a DEP-appointed consultant

Applicants must agree to participate fully and designate a qualified liaison

Submit Letter of Interest by November 1 to <https://nj.gov/dep/wlm/grants/swgrant.html>

Letter of Interest

<https://nj.gov/dep/wlm/grants/swgrant.html>

Demonstrate	Demonstrate your group's eligibility, explain commitment to forming a SWU, and attach documentation of steps already undertaken
Include	Include contact information for liaison and other government employees participating in the work
Provide	Provide a map of the area that would be covered by the SWU (if other than a municipality or county)
Submit	Email a Letter of Interest to stormwaterutility@dep.nj.gov signed by a principal executive officer or ranking elected official

Selection Process

NJDEP will prioritize awards to qualified applicants who meet the following criteria:

- Benefit communities defined as overburdened communities (N.J.S.A. 13:1D-157)
- Will serve the largest populations
- Show evidence of a regional approach
- Have begun a feasibility study and require additional funding to ensure completion

Thank You!

Nancy.Kempel@dep.nj.gov