

A Citizen's Guide to Protecting the Hackensack River's Category One Waterways



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Introduction

The purpose of this guide is to educate public officials and residents of the Hackensack River's Category One watershed to be better prepared to face challenges relating to development and water quality.

This document is not intended to substitute for formal legal advice. It is intended to be an introduction to New Jersey's environmental regulation (referred to as Rules) that govern the Hackensack River's Category One (C1) designated waterways. This designation applies to the Hackensack River from the New York/New Jersey State line to the Oradell Dam, including Lake Tappan and all tributaries draining to the River above the Oradell Dam. This guide is not exhaustive and further research is strongly encouraged.

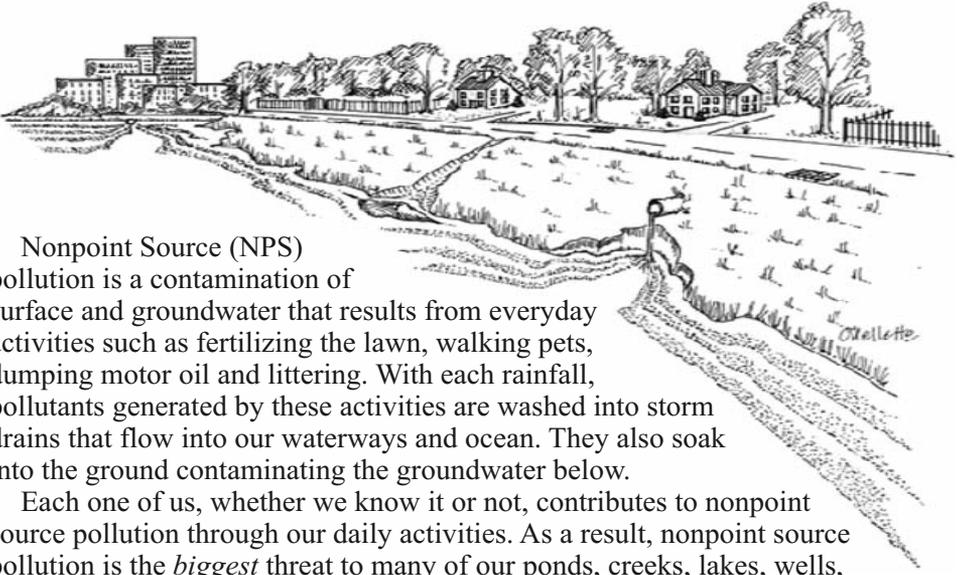
Though daunting, the New Jersey Administrative Code (N.J.A.C.) is reasonably straightforward and is THE source for the complete Rules. The Office of Administrative Law is responsible for the publication of the N.J.A.C.. The N.J.A.C. contains all Rules that have been adopted by State agencies. Title 7 of the N.J.A.C. contains all of the Rules adopted by the New Jersey Department of Environmental Protection (NJDEP). Included in this guide are many specific references to chapters that are found within Title 7. Certain sections of some Rules that do not apply to the upper Hackensack River watershed have been omitted.

**LexisNexis provides free online public access
to the New Jersey Administrative Code at
www.lexisnexis.com/njoal/**

Portions of this text were reprinted from the N.J.A.C.
and the NJDEP's website and publications.

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a program of the Stony Brook-Millstone Watershed Association.

What is Nonpoint Source Pollution?



Nonpoint Source (NPS) pollution is a contamination of surface and groundwater that results from everyday activities such as fertilizing the lawn, walking pets, dumping motor oil and littering. With each rainfall, pollutants generated by these activities are washed into storm drains that flow into our waterways and ocean. They also soak into the ground contaminating the groundwater below.

Each one of us, whether we know it or not, contributes to nonpoint source pollution through our daily activities. As a result, nonpoint source pollution is the *biggest* threat to many of our ponds, creeks, lakes, wells, streams, rivers, bays, groundwater and oceans.

The collective impact of nonpoint source pollution threatens aquatic and marine life, water based recreation, the fishing industry, tourism and our precious drinking water resources. Ultimately, the cost becomes the burden of every New Jersey resident.

But there's good news - in our everyday activities we can stop nonpoint source pollution and keep our environment clean. Simple changes in your daily lifestyle can make a tremendous difference in the quality of New Jersey's water resources. Here are just a few ways you can reduce nonpoint source pollution.

Litter: Place litter, including cigarette butts and fast food containers, in trash receptacles.

Fertilizers: Avoid the overuse of fertilizers. Do not apply them before a heavy rainfall.

Pesticides: If you do use a pesticide, follow the label directions carefully. Use non-chemical alternatives whenever possible.

Household hazardous products: Do not discard with the regular household trash. Use natural and less toxic alternatives whenever possible. Look for household hazardous waste collections operated by the Bergen County Utilities Authority and others.

Motor oil: Recycle all used motor oil by taking it to a local recycling center.

Car washing: Consider using a commercial car wash that recycles its wash water. If you wash your car at home, use a non-phosphate detergent and wash the car on the grass.

Pet Waste: Use newspaper, bags or scoopers to pick up after pets and dispose of wastes in the garbage or toilet.

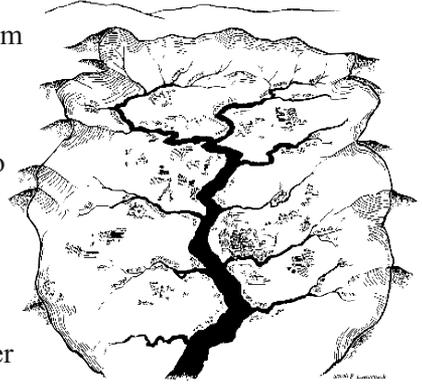
Septic systems: Inspect your tank annually and pump it out every three to five years depending on its use.

Boat discharges: Dumping boat sewage overboard introduces bacteria and viruses into the water. Boat owners should always use marine sanitation devices and pump-out facilities at marinas.

More information about NPS pollution is available online at www.njstormwater.org

What is a Watershed?

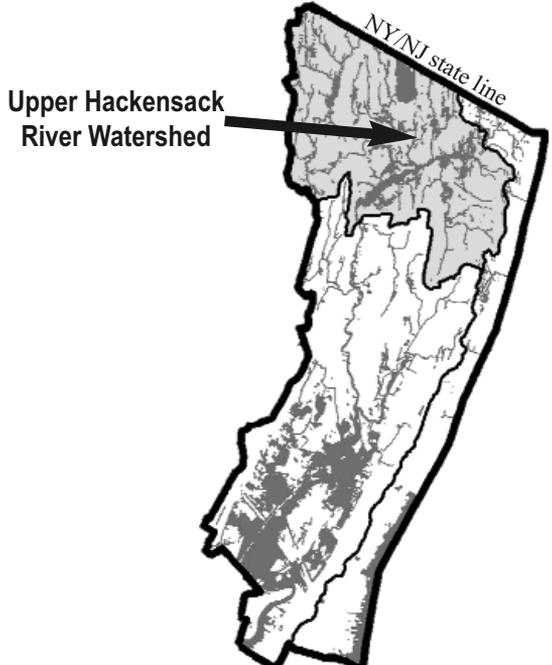
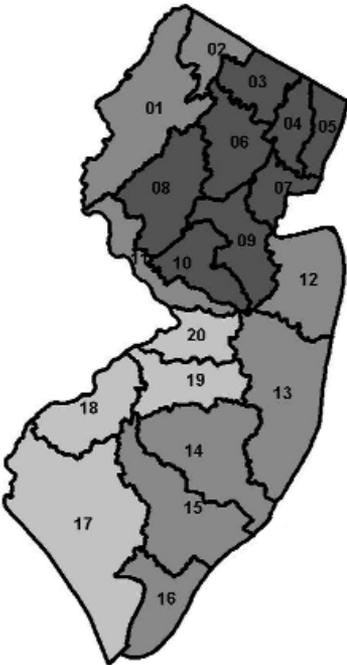
A watershed is the area of land that drains into a body of water such as a river, lake, stream or bay. Individual watersheds are separated by high points in the area such as hills or slopes. A watershed includes not only the waterway itself but also the entire land area that drains to it. For example, the watershed of a lake would include not only the streams entering the lake but also the land area that drains into those streams and eventually the lake. Drainage basins generally refer to large watersheds that encompass the sub-watersheds of many smaller rivers and streams.



For example, rain falls on the town of Cresskill. This rain water will run off neighborhood yards, roofs, streets and other impervious surfaces picking up pesticides, fertilizers, animal waste, road salt, and motor oil as it moves through the town. The now-polluted water can surge down the pavement and into a storm drain. Eventually, it will enter the Tenakill Brook which flows into the Hackensack River. The 100 square mile New Jersey portion of the upper Hackensack River watershed collects water from 21 towns.

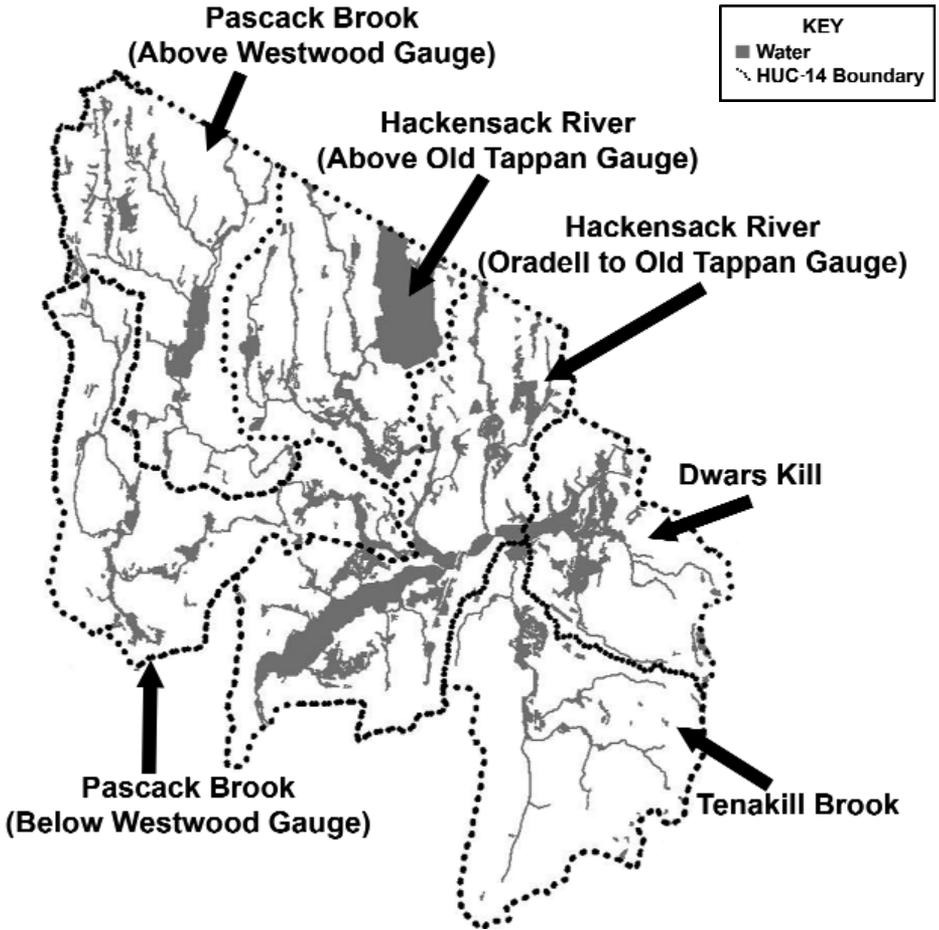
New Jersey's 20 Watershed Management Areas (WMAs)

Watershed Management Area 5 (WMA5)



For more information about NJ's watersheds visit www.nj.gov/dep/watershedmgt/

Upper Hackensack River HUC-14 Sub-Watersheds



The Hydrologic Unit Code (HUC) system was developed by the United States Geological Survey for delineating and identifying drainage areas (watersheds). The system starts with the largest possible drainage areas and progressively smaller subdivisions of the drainage area are delineated and numbered in a nested fashion. A drainage area with a hydrologic unit code designation with 14 numbers, or HUC-14, is one of several sub-watersheds of a larger watershed with 11 numbers, or a HUC-11. There are six HUC-14 sub-watersheds that make up the New Jersey portion of the upper Hackensack River HUC-11 watershed.

HUC-14 Watershed Name

Pascack Brook (above Westwood gauge)
 Pascack Brook (below Westwood gauge)
 Hackensack River (above Old Tappan gauge)
 Tenakill Brook
 Dwars Kill
 Hackensack River (Oradell to Old Tappan gauge)

HUC-14 Code

02030103170010
 02030103170020
 02030103170030
 02030103170040
 02030103170050
 02030103170060

The upper Hackensack River watershed is classified FW2-NT(C1) *What does this mean?*

New Jersey Surface Water Quality Standards (SWQS)

New Jersey Administrative Code (N.J.A.C.) 7:9B

NJ Surface Water Quality Standards, developed and administered in conformance with requirements of the Federal Water Pollution Control Act (also called the Clean Water Act), establish designated uses, classify streams based on uses, designate antidegradation categories, and develop water quality criteria to protect those uses. The SWQS require that all existing and designated uses shall be maintained and protected for all surface waters of the State. Impaired waters must be restored to meet SWQS. Existing water quality shall be maintained.

Designated Uses: Uses identified in the SWQS include: drinking water supply, fish consumption, shellfish resources, propagation of fish and wildlife, recreation, agricultural, and industrial water supplies.

Stream Classifications: Surface waters are classified based on designated uses. New Jersey has both fresh and saline waters. Freshwaters are classified as FW1 (not subject to any man-made wastewater discharges) and FW2 waters (all other freshwaters). Waters within Pinelands Protection and Preservation areas are classified as pinelands waters (PL). Freshwaters are further classified based on trout status, trout production (FW2-TP), trout maintenance (FW2-TM), and non-trout (FW2-NT). Saline waters are classified as saline estuarine (SE) and saline coastal (SC). SE waters are further classified into SE1, SE2, and SE3 based on the designated uses.

Antidegradation Designations: There are three levels of antidegradation designations: Outstanding National Resource Waters (ONRW), Category One waters (C1), and Category Two (C2) waters. All waters of the State are classified and assigned with one of the three antidegradation designations. Each stream is designated with a classification and antidegradation designation. Waterways can be designated as C1 because of their Exceptional Ecological Significance, Exceptional Water Supply, Exceptional Recreation, and Exceptional Fisheries to protect and maintain their water quality, aesthetic value, and ecological integrity. *In the Hackensack River watershed, C1 protection is based on its Exceptional Water Supply Significance.*

Water Quality Criteria: These are developed for individual pollutants to protect aquatic life (plants and animals that live and reproduce in water) and human health in both fresh and saline waters. Criteria are developed to protect water quality for designated uses, including survival, growth, and reproduction of aquatic life, and drinking water and fish consumption for human health protection. Total Maximum Daily Loads (TMDLs) are based on water quality criteria.

Enacted on February 2, 2004, New Jersey's stormwater management program, comprised of two separate Rules (N.J.A.C. 7:8 & 7:14A), establishes a comprehensive framework for addressing water quality impacts associated with existing and future stormwater discharges. Together with the new Flood Hazard Control Act Rule (N.J.A.C. 7:13) they provide the foundation for Category One water Protection.

Category One is an Antidegradation Designation that Protects Waterways from any Measurable Change in Water Quality. Category One Protections are Implemented Through the Following N.J.A.C. Rules

- **Stormwater Management (SWM) Rule (N.J.A.C. 7:8):** sets forth the required components of regional and municipal stormwater management plans, and establishes stormwater management design and performance standards for new and re-development. 300-foot Special Water Resource Protection Areas (SWRPA) or buffers are implemented on new major development adjacent to all C1 waters and upstream tributaries of C1 waters within the same HUC-14 sub-watershed. (www.njstormwater.org).
- **New Jersey Pollutant Discharge Elimination System (NJPDES) Rule (N.J.A.C. 7:14A):** is intended to address and reduce pollutants associated with existing stormwater runoff; and establishes a regulatory program for existing stormwater discharges as required under the Federal Clean Water Act. The NJPDES Rule governs the issuance of permits to entities that own or operate small municipal separate storm sewer systems, known as MS4s. New or expanded wastewater discharges must maintain the existing water quality of the receiving stream. If the discharge is located above a C1 segment the applicant must ensure that there is “no measurable change” in water quality at the C1 boundary. (www.nj.gov/dep/dwq/).
- **Flood Hazard Area Control Act (FHACA) Rule (N.J.A.C. 7:13):** incorporates more stringent standards for development in Flood Hazard Areas and Riparian Zones adjacent to surface waters throughout the State. The rule serves to better protect the public from the hazards of flooding, preserve the quality of surface waters, and protect the wildlife and vegetation that exist within and depend upon such areas for sustenance and habitat. A 300-foot Riparian Zone is imposed through Flood Hazard Area Control Act Rule Permits along all C1 waters and their upstream tributaries within the same HUC-14 sub-watershed. (www.nj.gov/dep/landuse/).

Stormwater Management (SWM) Rule 7:8

The goals of the Stormwater Management (SWM) Rule are to reduce flood damage, stormwater runoff and soil erosion, maintain groundwater recharge, prevent nonpoint source pollution and minimize pollutants in stormwater runoff from new and existing development in order to restore, enhance and maintain water quality and quantity.

The SWM Rule mandates the development, implementation and monitoring of regional and municipal stormwater management plans. Both regional and municipal plans must include a map showing topography, waterways, drainage and flood zones; and must address the following, taking into account both existing and future development:

- topography
- wetlands
- flood hazard areas
- groundwater recharge areas
- environmentally constrained or critical areas
- water quantity
- stormwater related pollutant sources

The NJDEP will use the stormwater management plans as the basis for reviewing projects or activities which are regulated by:

- Coastal Permit Program Rule (N.J.A.C. 7:7)
- Freshwater Wetland Protection Act Rule (N.J.A.C. 7:7A)
- Coastal Zone Management Rule (N.J.A.C. 7:7E)
- Flood Hazard Area Control Act Rule (N.J.A.C. 7:13)
- New Jersey Pollutant Discharge Elimination System Rule (N.J.A.C. 7:14A)
- Dam Safety Standards (N.J.A.C. 7:20)

The SWM Rule requires that Best Management Practices (BMPs) be employed to achieve the water quality standards set forth in the Rule. Non-structural Low-Impact Development BMPs (LID-BMPs) are given preference over structural BMPs and must be used whenever possible to achieve the standards.

Examples of Non-Structural LID-BMPs

Minimize Impact on Waterways
Minimize Land Disturbance
Prevent Soil Compaction
Reduce Impervious Surfaces
Low Maintenance Landscaping
Maintain Groundwater Recharge

Examples of Structural BMPs

Multilevel Bioretention Systems
Constructed Wetlands
Infiltration Structure
Vegetated Filters
Wet Pond
Extended Detention Basin

**Rule 7:8 Governs:
Major Development, defined as
development that disturbs
one or more acres of land,
AND/OR
development that increases
impervious cover by
one-quarter acre or more.**

300-foot Special Water Resource Protection Areas (SWRPA)

The Stormwater Management Rule establishes a 300-foot Special Water Resource Protection Area (SWRPA) adjacent to all C1 waters and their mapped tributaries within the same HUC-14 watershed. The purpose of the SWRPA is to protect the resource value for which the C1 designation was assigned by restricting any development or disturbances. In the case of the upper Hackensack River watershed, the SWRPA is intended to protect the drinking water supply.

The 300-foot SWRPA consisting of existing vegetation or vegetation allowed to follow natural succession, is provided on each side of the waterway. The SWRPA is measured perpendicular to the waterway from the top of bank outwards or from the centerline of the waterway where the bank is not defined.

SWRPA Exceptions:

The SWRPA does not apply to the construction of one individual single family dwelling that is not part of a larger development on a lot receiving preliminary or final subdivision approval on or before February 2, 2004, provided that the construction begins on or before February 2, 2009.

Encroachment may be allowed within the 150-300 foot portion of the SWRPA where previous development or disturbance has occurred, and as long as the applicant demonstrates that the functional value and overall condition of the SWRPA are being maintained. In no case shall the SWRPA be less than 150 feet. All encroachments are subject to review and approval by the NJDEP.

A municipality has the right to grant variances and/or exemptions to the SWRPA requirements, provided that the municipality's stormwater management plan includes a mitigation plan. Any mitigation must be carried out within the same HUC-14 drainage area and must compensate for the same standard for which the variance or exemption was issued.

New Jersey Pollutant Discharge Elimination System (NJPDES) Rule 7:14A

The goals of the NJPDES Rule are to: restore, enhance, and maintain the chemical, physical, and biological integrity of the waters of the State; protect public health and safety; protect potable water supplies; safeguard fish and aquatic life and scenic and ecological values; enhance the domestic, municipal, recreational, industrial, agricultural and other uses of water; and prevent, control, and abate water pollution. This is accomplished by regulating and issuing permits for the discharge of pollutants to surface and ground waters of the State.

When the NJPDES Rule was implemented in 2004, four general permits were issued by the NJDEP for: Tier A Municipalities, Tier B Municipalities, Public Complexes and Highway Agencies. All municipalities within the upper Hackensack River watershed are classified as Tier A (with the exception of Rockleigh).

The NJPDES Rule governs municipal compliance with the NJDEP Municipal Stormwater Discharge Permit system and also governs how municipalities and other public complexes (Prisons, hospitals, etc.) and transportation agencies (highways) manage their municipal separate storm sewer systems (MS4s) including the implementation of Statewide Basic Requirements (SBRs).

**NJPDES Municipal Stormwater Regulation Program
Implementation Schedule of Statewide Basic Requirements (SBRs)
Tier A Municipal Stormwater Permit**

Statewide Basic Requirements	Minimum Standard
April 1, 2004* (for most municipalities)	
Public Notice	Comply with applicable State and local public notice requirements when providing for public participation.
Residential Site Improvement Standards (RSIS)	Ensure compliance with RSIS for stormwater management (N.J.A.C. 5:21-7), including any exception, waiver, or special area standard approved under N.J.A.C. 5:21-3.
BMP Operation & Maintenance	Ensure adequate long-term operation and maintenance of BMPs on municipal property.
April 1, 2005* (for most municipalities)	
Stormwater Pollution Prevention Plan (SPPP)	SPPP describes the municipality's stormwater program, which includes details on the implementation of required SBRs.
Stormwater Management Plan	Adopt stormwater management (SWM) plan in accordance with N.J.A.C. 7:8-4.
Storm Drain Inlets Design Standard for New Construction	New storm drain inlets on municipal property must meet the design standards specified in Attachment C of the permit.
Local Public Education Program	Copy and distribute educational brochure (provided by the Department) annually to residents and businesses, and conduct a yearly educational "event". Have brochure available at this event.
Monthly Sweeping of Certain Streets in Predominantly Commercial Areas	In predominantly commercial areas, conduct monthly sweeping of curbed streets, roads and highways (with a speed limit < 35 mph), weather and street surface conditions permitting.
Storm Drain Inlet Retrofitting	Retrofitting of storm drain inlets during road repair, reconstruction, alterations or repaving with inlets that meet the design standards specified in Attachment C of the permit.
Stormwater Facility Maintenance	Develop and implement a stormwater facility maintenance program that includes yearly catch basin cleaning and ensures proper function and operation of all municipally operated stormwater facilities.
De-icing Material Storage	Seasonal tarping shall be used as an interim BMP until the permanent structure for de-icing material is completed. Uncovered sand may be stored outside if a 50' setback is maintained from any storm sewer inlet.

**NJPDES Municipal Stormwater Regulation Program
Implementation Schedule of Statewide Basic Requirements (SBRs)
Tier A Municipal Stormwater Permit**

Statewide Basic Requirements	Minimum Standard
April 1, 2005* (for most municipalities)	
Fueling Operations	Develop and implement SOPs for vehicle fueling and bulk delivery and implement with the required practices contained in Attachment D of the permit.
Vehicle Maintenance	Implement required practices for vehicle maintenance contained in Attachment D of the permit.
Good Housekeeping	Implement required practices for good housekeeping, contained in Attachment D of the permit.
Employee Training	Develop and conduct an employee training program for appropriate employees that covers the required topics contained in the permit.
May 2, 2005 and every year thereafter	
Annual Report and Certification	Summarize the status of compliance with permit on or before May 2, 2005 and every 12 months thereafter.
Pet Waste Ordinance	Adopt and enforce an ordinance requiring owners and keepers to immediately and properly dispose of their pet's solid waste. Distribute informational brochure with pet licenses.
Litter Ordinance	Adopt and enforce a litter ordinance, or enforce the existing State litter statute (N.J.S.A. 13:1E-99.3).
Improper Waste Disposal Ordinance	Adopt and enforce an ordinance prohibiting spilling, dumping or disposal of any materials other than stormwater into the MS4.
Wildlife Feeding Ordinance	Adopt and enforce an ordinance that prohibits feeding of non-confined wildlife in any public park or property owned/operated by the municipality (except environmental education centers and feral cats as part of an approved TNR program).
Yard Waste	Adopt and enforce an ordinance that prohibits placing non-containerized yard waste in the street, OR develop a yard waste collection program.
Illicit Connection Ordinance	Develop, implement and enforce a ordinance, to the extent allowable under State law, to prohibit illicit connections to the MS4.
Illicit Connection Elimination Program	Develop, implement and enforce a program to detect and eliminate illicit connections into the municipality's small MS4.

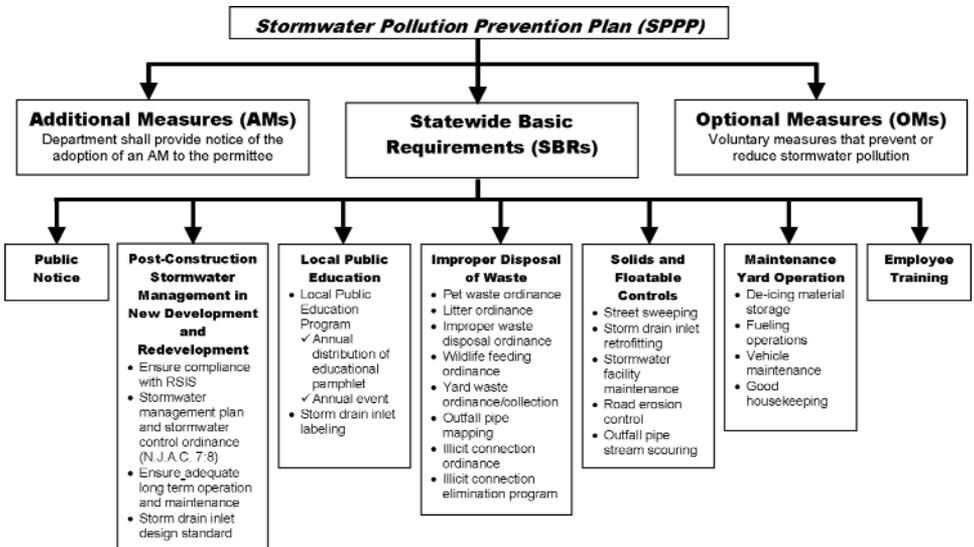
NJPDES Municipal Stormwater Regulation Program
Implementation Schedule of Statewide Basic Requirements (SBRs)
Tier A Municipal Stormwater Permit

Statewide Basic Requirements	Minimum Standard
May 2, 2005 and every year thereafter	
Road Erosion Control Maintenance	Develop a roadside erosion control maintenance program to identify and stabilize roadside erosion. Make repairs in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey (N.J.A.C. 2:90-1).
Outfall Pipe Stream Scouring Remediation	Develop and implement a stormwater outfall pipe scouring detection, remediation and maintenance program to identify and stabilize localized stream and stream bank scouring in the vicinity of outfall pipes operated by the municipality. Repairs shall be in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey (N.J.A.C. 2:90-1).
April 1, 2006* (for most municipalities)	
Stormwater Control Ordinance	Adopt and implement stormwater control ordinance in accordance with N.J.A.C. 7:8-4. Resubmit “conditionally approved” and “disapproved” municipal stormwater plans and ordinances to the county review agency 180 days from initial decision.
BMP Operation and Maintenance	Ensure adequate long-term operation and maintenance of BMPs (on property not owned or operated by the municipality).
Storm Drain Inlets Design Standard for New Construction	Ensure adequate long-term operation and maintenance of BMPs (on property not owned or operated by the municipality).
April 1, 2007* (for most municipalities)	
Storm Drain Labeling	Label first sector (or half) of municipal storm drain inlets that are next to sidewalks, or within plazas, parking areas or maintenance yards.
MS4 Outfall Pipe Mapping	Map first sector of municipal storm sewer outfall pipes which discharge to surface water.
De-icing Material Storage	Construct permanent indoor storage with an impermeable floor for deicing materials.
April 1, 2009* (for most municipalities)	
Storm Drain Labeling	Label second sector (or half) of municipal storm drain inlets that are next to sidewalks, or within plazas, parking areas or maintenance yards.

NJPDES Municipal Stormwater Regulation Program Implementation Schedule of Statewide Basic Requirements (SBRs) Tier A Municipal Stormwater Permit	
Statewide Basic Requirements	Minimum Standard
April 1, 2009* (for most municipalities)	
MS4 Outfall Pipe Mapping	Map second sector of municipal storm sewer outfall pipes which discharge to surface water.
February 28, 2009	
Equipment and Vehicle Washing	Implement program to eliminate the unpermitted discharge of equipment and vehicle washwater to the waters of the State.
* Actual compliance date is based on the Effective Date of Permit Authorization.	

Municipal Stormwater Pollution Prevention Plan (SPPP)

All NJ municipalities must have a Stormwater Pollution Prevention Plan in place. As of February 2008, 99% of New Jersey's Tier A municipalities have prepared and implemented SPPPs.



To view the full *Municipal Stormwater Regulation Program General Permits*, visit www.nj.gov/dep/dwq/msrp_home.htm

Flood Hazard Area Control Act (FHACA)

Rule 7:13

The Flood Hazard Area Control Act (FHACA) establishes two distinct and overlapping areas of jurisdiction along regulated waters; the Flood Hazard Area and the Riparian Zone. The goals of the FHACA are to prevent obstructions to flow and preserve flood storage capacity in Flood Hazard Areas AND to limit human disturbance to the land and vegetation in Riparian Zones.

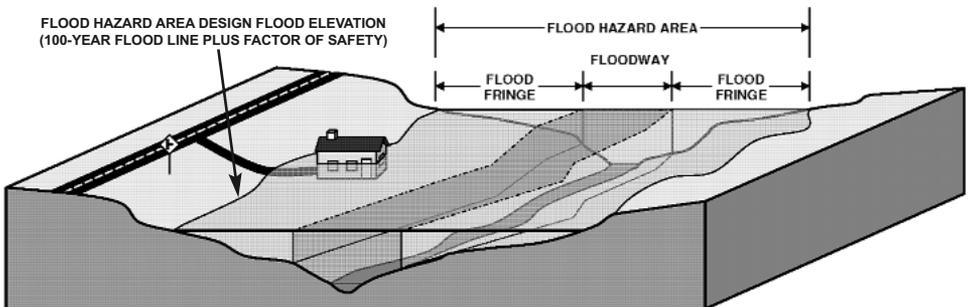
The Flood Hazard Area Control Act regulates any actions that takes place within Flood Hazard Areas AND/OR Riparian Zones that include or result in one or more of the following:

- The alteration of topography through excavation, grading and/or placement of fill
- The clearing, cutting and/or removal of vegetation in a riparian zone
- The creation of impervious surface
- The storage of unsecured material
- The construction, reconstruction and/or enlargement of a structure
- The conversion of a building into a private residence or a public building

Flood Hazard Area

Flood Hazard Areas are established in order to set standards for regulated activities that may impact flooding, i.e. elevating new residential structures above the Flood Hazard Area Design Flood Elevation (100-year flood line plus a factor of safety). Flood Hazard Areas can be determined through a number of methods, and include all the land, air, structures, fill and vegetation that would be under water in a 100-year flood (better described as a flood that has 1% probability of being equaled or exceeded in any one-year period). In the upper Hackensack River watershed, Flood Hazard Areas include an additional 25% factor of safety* to account for possible future increases in flows due to development or other factors. The Flood Hazard Area and Floodway described in this Rule may differ from areas identified as a “flood hazard area,” “flood zone,” “floodplain” or “floodway” by another public entity such as FEMA or a local government.

Because the upper Hackensack River watershed is non-tidal, flooding is governed by stormwater runoff.

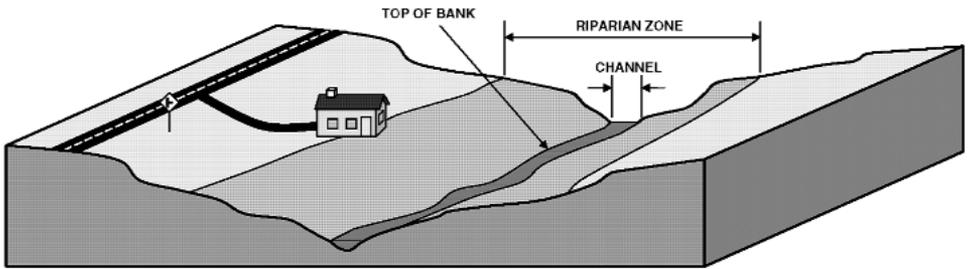


* 25% factor of safety is used when determining Flood Hazard Areas using all methods except FEMA methods.

Riparian Zone

Riparian Zones are the second area of jurisdiction established by the FHACA, and the section of the Rule through which C1 protections are implemented. Riparian Zones are established in order to protect habitat and water quality and to preserve channel integrity. This is accomplished by setting limits on disturbance to vegetation and requiring replanting of disturbed areas. Healthy vegetation adjacent to surface waters is essential for maintaining bank stability and water quality.

All regulated waters in New Jersey* have a Riparian Zone, which may extend 50, 150 or 300 feet outward from all sides of the waterway (for specific details on how to measure the Riparian Zone, refer to N.J.A.C. 7:13-4.1). The width of the Riparian Zone is 300 feet for all C1 waterways, which includes the upper Hackensack River watershed. The Riparian Zones established by the FHACA are separate from and in addition to any other similar zones or buffers established to protect surface waters.



For regulated activities that result in temporary or permanent disturbance of vegetation within the Riparian Zone, the applicant must meet a minimum of three basic criteria:

- Demonstrate the project cannot be accomplished onsite without disturbance
- Eliminate disturbance where possible and otherwise minimize it through relocating or reducing the size and scope of the project
- Replant all cleared areas with indigenous, non-invasive vegetation

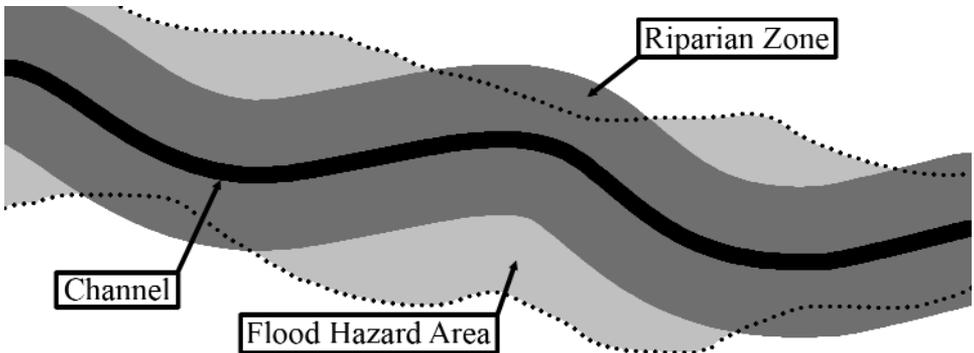
For approved projects that meet the basic criteria, the FHACA sets limits on the amount of vegetation disturbance allowed based on the proposed regulated activity and the width of the Riparian Zone. The table on the following page lists the maximum area of vegetation disturbance for various regulated activities within a 300-foot Riparian Zone.

Any disturbance in excess of the amount listed in the table must be compensated for by a 2:1 ratio as close as possible to the disturbance along the same body of water. Compensation can be accomplished either by removing existing structures or impervious surfaces and replanting OR planting new trees in an area that is substantially devoid of trees at the time of application. This 2:1 compensation applies to ALL disturbance (even within the allowable limit) for projects that are classified as “Other Regulated Activities.”

* Except stormwater management basins and piped sections of otherwise regulated waters.

Proposed Regulated Activity	Maximum Area of Vegetation Disturbance in a Category One 300-foot Riparian Zone
Railroad, Roadway and Driveway (construction, expansion & improvement)	
Railroad or Public Roadway New/Crossing Water	30,000 ft ²
Railroad or Public Roadway New/Not Crossing Water	12,000 ft ²
Railroad or Public Roadway Expanded/Improved/Crossing Water	15,000 ft ²
Railroad or Public Roadway Expanded/Improved/Not Crossing Water	6,000 ft ²
Private Road/Driveway to one Residence New/Crossing Water	9,000 ft ²
Private Road/Driveway to one Residence New/Not Crossing Water	3,600 ft ²
Pvt. Rd./D'way to one Residence Expanded/Improved/Crossing Water	4,500 ft ²
Pvt. Rd./D'way to one Residence Expanded/Improved/Not Crossing Water	1,800 ft ²
Other Private Roadways New/Crossing Water	18,000 ft ²
Other Private Roadways New/Not Crossing Water	7,200 ft ²
Other Private Roadways Expanded/Improved/Crossing Water	9,000 ft ²
Other Private Roadways Expanded/Improved/Not Crossing Water	3,600 ft ²
Bank Stabilization or Channel Restoration	
Accomplished with Vegetation Alone	*
Other Permanent Disturbance	2,000 ft ²
Other Temporary Disturbance	6,000 ft ²
Stormwater Discharge (including pipe & conduit outlet protection)	
Permanent Disturbance	1,000 ft ²
Temporary Disturbance	6,000 ft ²
Utility Line (temporary disturbance only)	
Crossing water	12,000 ft ²
Not crossing water	4,800 ft ²
Other Projects	
Private Residence	5,000 ft ²
Addition, Garage, Barn or Shed	2,000 ft ²
Flood Control Project	18,000 ft ²
Public Accessway or Public Access Area	*
Water Dependent Development	*
All Other Regulated Activities	6,000 ft ²
* No limit if disturbance is justified. See N.J.A.C. 7:13-10.2 for more detail	

Overlapping Flood Hazard Area and Riparian Zone



*Differences between the
300-foot SWRPA
and the
300-foot Riparian Zone*

Difference #1:

The 300-foot Special Water Resource Protection Area (SWRPA) established by the Stormwater Management Rule applies only to waters that are shown on a USGS Quad or a County Soil Survey map. The Riparian Zone established by the Flood Hazard Area Control Act applies to all regulated waters, mapped or unmapped.

Difference #2:

The 300-foot Special Water Resource Protection Area (SWRPA) established by the Stormwater Management Rule applies only to projects that are Major Developments. The Riparian Zone established by the Flood Hazard Area Control Act applies to all regulated waters regardless of the size of the project.

What Can YOU Do?

The most important thing you can do to ensure that environmental protections of our waterways are being upheld is to get involved at the municipal level. Local planning and zoning boards and environmental commissions are the first line of defense against development that infringes on our C1 waterways.

As proposed developments go through the permitting process, there are many opportunities to determine if a project complies with all regulations and whether or not it has been approved.

Steps to Development:

- 1) A certified engineer or architect should develop and/or review any site plans for development and include designations such as Category One SWRPAs (for Major Development), Riparian Zones and Flood Hazard Areas on all plans.
- 2) If land is zoned appropriately for the proposed development, the project bypasses the Zoning Board, and goes directly to the Planning Board. If not, the applicant must request a variance or waiver from the Zoning Board before proceeding.
- 3) The applicant must then apply to the municipal Planning Board for a permit for the development. The Planning Board must take into consideration all the environmental protections that pertain to the site in question. It may grant a permit that contains the contingency that all other necessary permits must be obtained, such as Flood Hazard Area Control Act permits.
- 4) Additional permits must also be obtained at the local and county levels, such as electrical, plumbing, wastewater discharge and soil conservation permits.
- 5) Once a permit has been obtained from the Planning Board, any further necessary permits must be obtained from the New Jersey Department of Environmental Protection (NJDEP), such as Flood Hazard Area, Wetlands, and Waterfront Development permits where applicable.

If you are concerned about a proposed development or disturbance that you suspect is less than 300 feet from a C1 waterway, your first step is to go to the Municipal Clerk and find out if the Planning Board has issued a permit for the project. If a permit was granted, you may obtain a copy of this permit and determine if any further NJDEP permits were required. If so, follow up by contacting the Division of Land Use Regulation (DLUR) at the NJDEP - all permits are coordinated by DLUR, though there may be additional review by other divisions within the NJDEP such as Watershed Management and Water Quality. If you determine that all necessary permits have been granted, but you suspect a violation is taking place, contact the Division of Land Use Compliance and Enforcement at 609-292-1240 or the NJDEP's environmental hotline at 877-927-6337.

Contacts and Resources

New Jersey Department of Environmental Protection

401 East State Street

Trenton, NJ 08625

Hotline - 877-WARN-DEP

For questions regarding C1 designation:

NJDEP Bureau of Water Quality, Standards and Assessment

Debra Hammond or Gigi Mallepalle - 609-777-1753

www.state.nj.us/dep/wms/bwqsa/

For questions regarding implementation of the 300-foot buffer:

NJDEP Division of Land Use Regulation - 609-292-2949

To determine if a Land Use permit has been obtained for a site:

NJDEP Division of Land Use Regulation - 609-777-0454

Make sure that you have municipality name and block and lot of the site.

For questions about permitting, variances, etc.:

Kati Wessling, NJDEP Land Use Management - 609-292-2178

www.nj.gov/dep/landuse/

For questions about the Stormwater Rules:

Sandra Blick, NJDEP Division of Watershed Management - 609-633-1441

Elizabeth Dragon, NJDEP Bureau of Watershed Regulation - 609-633-7028

Steve Jacobus, NJDEP Surface Water Quality Monitoring - 609-984-6888

For questions about the Flood Hazard Area Control Act:

Division of Land Use Regulation - 609-984-0162

Stormwater FAQs: www.nj.gov/dep/watershedmgt/stormwaterfaqs2.htm

Stormwater BMP Manual: http://www.njstormwater.org/bmp_manual2.htm

New Jersey Administrative Code (N.J.A.C.): www.lexisnexis.com/njoal/

N.J.A.C. 7:8 - Stormwater Management

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

N.J.A.C. 7:13 - Flood Hazard Area Control Act

N.J.A.C. 7:14A - Pollutant Discharge Elimination System

GLOSSARY

Additional Measures (AMs): non-numeric or numeric effluent limitations that are expressly required to be included in the stormwater program by an area-wide or Statewide water quality management plan.

Best Management Practices (BMPs): methods, measures, or practices to prevent or reduce the amount of pollution from point or nonpoint sources, including structural and nonstructural controls, as well as operation and maintenance procedures.

Category One (C1): an Antidegradation Designation that provides waterways special protection under New Jersey's Surface Water Quality Standards because of their clarity, color, scenic setting, or other characteristics of aesthetic value, exceptional ecological significance, exceptional recreational significance, exceptional water supply significance, or exceptional fisheries resource(s).

Division of Land Use Regulation (DLUR): a unit within the New Jersey Department of Environmental Protection's Land Use Management and Compliance Division. DLUR's main task is reviewing applications for permits to build or develop on environmentally sensitive land such as freshwater wetlands, coastal areas and floodplains.

Effective Date of Permit Authorization (EDPA): the first day of the following month of the date of the notification of authorization of the municipal stormwater general permit.

Effluent: the liquid that results from treatment by either a domestic or an industrial wastewater treatment facility in accordance with a New Jersey Pollutant Discharge Elimination System (NJPDES) permit.

Flood Hazard Area: the land, and the space above that land, which lies below the flood hazard area design flood elevation (equal to the 100-year flood). The inner portion of the flood hazard area is called the floodway and the outer portion of the flood hazard area is called the flood fringe.

General Permit (GP): used by Division of Water Quality to streamline processing time for specific classes of wastewater discharges. Once a permit is issued, processing time is greatly reduced because a standard set of conditions specific to a discharge type are developed and issued at one time.

Groundwater (GW): that portion of water beneath the land surface that is within the saturated zone (that part of the earth's crust in which all voids are filled with water).

Hydrological Unit Code (HUC): system developed by U.S. Geological Survey for delineating and identifying drainage areas. A drainage area with hydrological unit code designation with 14 numbers, or HUC-14, is one of several sub-watersheds of a larger watershed with 11 numbers (HUC-11).

Impervious surface: a surface that has been covered with a layer of material so that it is highly resistant to infiltration by water.

Low Impact Development (LID): is an innovative stormwater management approach with a basic principle that is modeled after nature: manage rainfall at the source using uniformly distributed decentralized micro-scale controls. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source.

Major development: any development that disturbs one or more acres of land or increases impervious surface by one-quarter acre or more.

Municipal Separate Storm Sewer System (MS4): addressed by the Municipal Stormwater Regulation Program which monitors pollutants entering waters. MS4s are owned or operated by local, county, state, interstate, or federal government agencies.

New Jersey Administrative Code (NJAC): contains all Rules adopted by state agencies. Available online at www.lexisnexis.com/njoal/

New Jersey Department of Environmental Protection (NJDEP): founded on Earth Day in 1970, the NJDEP is the state agency responsible for managing natural resources and solving pollution problems.

New Jersey Pollutant Discharge Elimination System (NJPDES): the New Jersey system for the issuance of permits pursuant to the State Act. The NJPDES Program protects New Jersey's ground and surface water quality by assuring the proper treatment and discharge of wastewater (and its residuals) and stormwater from various types of facilities and activities. To accomplish this, permits are issued limiting the mass and/or concentration of pollutants which may be discharged into ground water, streams, rivers, and the ocean. The types of regulated facilities can range from very small users such as campgrounds, schools, and shopping centers to larger industrial and municipal wastewater dischargers.

Nonpoint Source (NPS): a contributing factor to water pollution that cannot be traced to a specific discernible confined and discrete conveyance.

Point source: any discernible, confined and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, from which pollutants are or may be discharged.

Redevelopment: a new impervious surface that replaces an equal area of existing impervious surface on a project site.

Residential Site Improvement Standards (RSIS): establish municipal standards for streets, sidewalks, stormwater, and water and sewer systems. These standards are the minimum that can be proposed by the developer and the maximum that can be required by the municipality.

Riparian Zone: the land and vegetation within and adjacent to a regulated water.

Statewide Basic Requirements (SBRs): part of NJPDES permit program to reduce nonpoint source pollution through the adoption of ordinances (litter, pet waste, wildlife feeding, proper waste disposal, etc); development of a municipal stormwater management plan, and implementing ordinances; requiring certain maintenance activities (street sweeping and catch basin cleaning); implementing solids and floatables control; locating discharge points and stenciling catch basins; and conducting a public education campaign.

Stormwater Pollution Prevention Plan (SPPP): description of how municipalities will implement each permit requirement and provides a place for record-keeping and documenting when you met the permit requirements.

Stormwater Management (SWM): a water resource management strategy that identifies and develops solutions to problems that can be managed most effectively on a regional basis.

Surface Water Quality Standards (SWQS): establishes the designated uses to be achieved and specify water quality (criteria) necessary to protect the State's waters. Designated uses include potable water, propagation of fish and wildlife, recreation, agricultural and industrial supplies, and navigation.

Special Water Resource Protection Area (SWRPA): A 300-foot area on each side of Category One (C1) waters, measured perpendicular to the waterway from the top of bank outwards or from the centerline of the waterway where the bank is not defined, consisting of existing vegetation or vegetation allowed to follow natural succession is provided. The SWRPA is intended to act as a buffer between development and C1 waters to protect both water quality and the attributes for which the waters have been designated.

Stormwater: water resulting from precipitation (including rain and snow) that runs off the land's surface, is transmitted to the subsurface, is captured by separate storm sewers or other sewerage or drainage facilities, or is conveyed by snow removal equipment.

Total Maximum Daily Loads (TMDL): assimilative or carrying capacity of the receiving water taking into consideration point and nonpoint sources of pollution, natural background, and surface water withdrawals. Developed as a mechanism for identifying all the contributors to surface water quality impacts and setting goals for load reductions for specific pollutants as necessary to meet surface water quality standards.

Total Suspended Solids (TSS): the total nonfilterable residue as determined by analytical procedures set forth in the Manual of Methods for Chemical Analysis of Water and Wastes (USEPA Office of Technology Transfer, Washington, D.C. March 1983).



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