



# Surface Water Quality Standards

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1984

**PROPOSED**

## **SURFACE WATER QUALITY STANDARDS**

**N.J.A.C. 7:9-4.1 et seq.**

**October 1984**

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DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATER RESOURCES

Surface Water Quality Standards and  
Treatment of Wastewater Discharged into  
Surface Waters of the State

Proposed Repeal: N.J.A.C. 7:9-4 and  
N.J.A.C. 7:9-5

Proposed New Rules: N.J.A.C. 7:9-4 and N.J.A.C.  
7:9-5

Authorized By: Robert E. Hughey,  
Commissioner, Department  
of Environmental Protection

Authority: N.J.S.A. 13:1D-1 et seq.,  
N.J.S.A. 58:10A-1 et seq., and  
N.J.S.A. 58:11A-1 et seq.

DEP Docket No.: CG9-84-10

Three public hearings concerning this proposal will be held  
at the following times and locations:

January 3, 1985 - 3:30 P.M.-8:00 P.M.  
Glassboro State College  
Room 221 - Student Center  
Glassboro, N.J.

January 8, 1985 - 10:00 A.M.-2:00 P.M.  
Parsippany Troy Hills Municipal Bldg.  
Council Chambers  
1001 Parsippany Boulevard  
Parsippany, N.J.

January 8, 1985 - 6:30 P.M.-10:30 P.M.  
Rutgers, The State University  
Cook Campus  
Loree Addition - Room 124  
Lipman Drive  
New Brunswick, N.J.

Interested persons may submit in writing any data, views or  
arguments relevant to this proposal on or before January 18,  
1985. These submissions, and any inquiries about submissions and  
responses, should be addressed to:

Shing-Fu Hsueh, Ph.D., P.E., Chief  
Bureau of Systems Analysis and Wasteload Allocation  
Division of Water Resources  
Department of Environmental Protection  
CN 029  
Trenton, N.J. 08625

The Department of Environmental Protection may thereafter adopt this proposal, with any changes not in violation of the rule-making procedures at N.J.S.A. 1:30-3.5. The adoption becomes effective upon publication in the Register of a notice of adoption.

This proposal is known as PRN

The agency proposal follows:

#### SUMMARY

The Federal Clean Water Act (P.L. 92-500) requires the States to hold public hearings from time to time, but at least once every three years, for the purpose of reviewing and, as appropriate, modifying and adopting water quality standards. New Jersey's last review of its standards was conducted in 1980 with revised Water Quality Standards adopted in March 1981. As part of the 1984 review of those standards, the entire set of regulations has been rewritten. The department therefore proposes to repeal N.J.A.C. 7:9-4 and N.J.A.C. 7:9-5 and replace the material in those two subchapters with the material contained in this proposal. Highlights of the proposed revisions are discussed below:

**Format** - The existing Surface Water Quality Standards (WQS) have been rewritten with the goal of producing a clearer, more useable document. One of the major problems with the existing document is the way water quality policies and requirements are found in both Subchapters 4 and 5. As revised, all the water quality related policies and requirements have been consolidated into N.J.A.C. 7:9-4. N.J.A.C. 7:9-5 has been limited to discharge requirements concerning minimum treatment, disinfection, the use of TOC/COD as surrogates for BOD, and statewide effluent limitations for Toxicity and Phosphorus.

**Classifications** - Three major changes have been made to the classifications: 1) The TW classification which referred to Tidal Waters with a salinity of greater than 3.5 ppt has been changed to SE to represent Saline Estuarine waters; 2) The CW classification which referred to Coastal Waters has been changed to SC to represent Saline Coastal waters; and 3) The two Central Pinelands Categories have been combined into one PL classification to represent the Pinelands Area as

defined in the State Pinelands Protection Act (N.J.S.A. 13:18A-1 et seq.).

**Antidegradation Policy** - The existing Antidegradation Policy contained a policy protecting Outstanding National Resource Waters (ONRW) from change. It also established two special antidegradation categories within the Pinelands Area. The State Pinelands Protection Act and the corresponding Federal Act clearly indicate that the Pinelands Area is an ONRW as discussed in the EPA Water Quality Standards Regulations, November 8, 1983; the proposed regulations reflect that designation. The existing WQS set numerical criteria and an antidegradation policy that appears to be inconsistent with the Federal policy; these items have been replaced in the proposal with narrative criteria and an antidegradation policy applicable to the entire Pinelands Area.

Category I waters were limited to "High Quality Waters" in the 1981 WQS. The Department used exceptional use and exceptional value in deciding which waters would be considered Category I under the 1981 WQS. Additionally, the Federal Water Quality Standards Regulations (Nov. 1983) clarified the types of waters that should be given stringent antidegradation protection and included both "High Quality Waters" and waters with exceptional recreational, ecological, and scenic values. The proposed Antidegradation Policy has reflected this by establishing a new definition for Category I that includes those waters discussed in the Federal Regulations and limiting Category I waters to those that have been officially designated Category I in the WQS.

Category II and III waters were contained in the 1981 WQS and dealt respectively with waters that were better than and worse than the WQS. In practice this proved unworkable because almost all waters are better than the WQS for some parameters and worse than the WQS for other parameters. The proposed policy consolidates Categories II and III into a single Category II that deals with parameters that are better than and worse than the WQS.

Only instream uses were protected in the 1981 WQS. The proposed policy would protect all uses.

**Water Quality Based Effluent Limitations** - Previously called Wasteload Allocations, this section has been rewritten to reflect the actual practices of the Department in establishing limitations. Previously, existing dischargers were covered under one set of procedures while new or modified dischargers were covered under

another set. Since the Federal regulations require the establishment of water quality based effluent limitations that protect the uses, the distinction between existing and new or modified dischargers has been removed.

The existing procedures to be followed when setting limitations as part of Water Quality Management Planning activities and those to be followed when setting limitations under the NJPDES program have been revised so that there is one procedure to be followed in establishing Water Quality Based Effluent Limitations.

Whole effluent toxicity was regulated exclusively by use of acute toxicity testing under the 1981 WQS. The proposed regulations would allow the use of chronic toxicity tests to characterize and regulate discharges.

**Modification Procedures** - The 1981 WQS incorporated the test contained in Section 8 of the State Water Pollution Control Act. In the proposed regulations the test has been replaced by the test required by the EPA Water Quality Standards Regulations that calls for a showing that complying with the WQS would require more than technology based treatment and would result in wide-spread social and economic impacts.

Exemptions were allowed in the 1981 WQS from effluent limitations established to protect potable uses of the waters where the waters in question were not planned for such use over the next 20 years. This approach has been deleted.

**Reclassification Procedures** - The existing procedures have been expanded to allow petitions for more restrictive uses in addition to petitions for less restrictive uses. All petitions received between triennial reviews of the Surface Water Quality Standards would have to be sponsored by, or endorsed by, local or county governing bodies in order to be considered before the next triennial review. Additionally, in order to petition for a less restrictive use a petitioner will have to show that the designated use is nonexistent. Otherwise relief may be requested via a modification of Water Quality Based Effluent Limitations.

**Designated Uses** - Under the Federal WQS Regulations the States must perform use attainability analyses for any waters that do not have the uses contained in Section 101(a) of the Clean Water Act. After reviewing our classifications the 101(a) uses have been added to the FW1 and the old CW2 (now SC) classifications. The designated uses for TW2 (SE2), TW3 (SE3), and the

Guidelines for heavy metals have been changed to criteria which will apply to FW2 waters. The criteria for the 6 organic chemicals in the 1981 WQS have been modified to reflect the information contained in the EPA criteria documents. Criteria have been proposed for 4 additional organic chemicals. Finally, the criteria for Un-ionized Ammonia have been changed from maximum to 24 hour average criteria.

Stream Classification Listings - In the 1981 WQS, stream listings were divided by sub-basins and then by classification. In the proposed Standards the waters have been listed alphabetically within Major Basins. Additionally, Category I antidegradation waters have been listed for the first time.

N.J.A.C. 7:9-5 - In the existing regulations, seasonal disinfection was allowed for most of the area under the jurisdiction of the Interstate Sanitation Commission. A year-round disinfection policy has been included in the proposed Standards.

Minimum treatment requirements have been converted from a lengthy narrative section to a one page table. The minimum treatment requirements, which had been absolute, now would apply only where Water Quality Based Effluent Limitations have not been developed. These BOD objectives have been changed to criteria which will be suitable for use in permits.

An effluent standard for Phosphorus has been proposed for addition to N.J.A.C. 7:9-5. This effluent standard would apply to discharges upstream of, or into, lakes, ponds, or reservoirs.

#### SOCIAL IMPACT

The proposal should produce a positive social impact. Better regulation of dischargers will increase the Department's ability to protect the public health, welfare, and the environment and improve the quality of life.

#### ECONOMIC IMPACT

The economic impact on dischargers will vary; some requirements may be more stringent, some may be less stringent, but most requirements for most dischargers should remain the same. The increased clarity of the proposed regulations over the current version will make it easier to comply with them, and should eliminate any costs incurred as a result of confusion.

The economic impact on the general public should be negligible, since the proposal is an update and clarification of existing regulations.

Delaware River Zones 2 through 5, most of which are interstate waters, have not been changed to include all the 101(a) uses.

**Criteria** - Narrative criteria statements for the mainstem Delaware River and Delaware Bay have been put into a table. The criteria have also been modified to more closely reflect the Delaware River Basin Commission's regulations.

The various criteria tables covering freshwaters, tidal waters and coastal waters have been combined into one comprehensive table. This has eliminated repetitive text and allowed a clearer understanding of the differences in criteria between classifications.

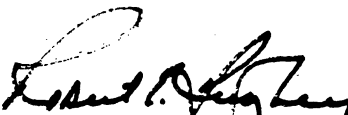
The numerical criteria for the two Central Pinelands categories from the 1981 WQS have been deleted. Instead, a narrative criteria statement has been added that sets the criteria at ambient water quality. This reflects the new PL antidegradation classification of these waters.

Total Coliform criteria for all shellfish waters have been changed to reflect the applicable criteria for approved shellfish waters. The old criteria varied with the Bureau of Shellfish Control classification of the waters relative to harvesting. The old approach would not meet the requirements of the Federal WQS Regulations that, "States must adopt those water quality criteria that protect the designated use...For waters with multiple use designations, the criteria shall support the most sensitive use." The criteria for Fecal Coliforms have also been changed so that they apply in shellfish waters in addition to the Total Coliform criteria, instead of being replaced by the Total Coliform criteria as was the case under the 1981 WQS.

Numerical criteria for Phosphorus in the 1981 WQS have been supplemented by a nutrient policy and an effluent standard. The criteria for Phosphorus has been the most frequently violated of the water quality criteria. Promulgation of a nutrient policy will give the Department the flexibility to develop site-specific criteria for Phosphorus and Nitrogen when necessary. The effluent standard formalizes the existing practice of setting interim Phosphorus limitations of 1.0 mg/l for discharges to selected waterbodies. This interim limitation is necessary due to delays in the processing of construction grants applications because of EPA's review requirements for proposed advanced wastewater treatment facilities.

DATE

10/22/81

  
ROBERT E. MUGHEY, Commissioner  
Department of Environmental Protection

Full text of the proposed repeal can be found in the New Jersey Administrative Code at N.J.A.C. 7:9-4 and 5.

Full text of the proposed new rule follows:

## SUBCHAPTER 4. SURFACE WATER QUALITY STANDARDS

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## SUBCHAPTER 4. SURFACE WATER QUALITY STANDARDS

### 7:9-4.1 Scope of subchapter

Unless otherwise provided by rule or statute, the following shall constitute the rules of the Department of Environmental Protection governing matters of policy with respect to the protection and enhancement of surface water resources, class definitions and quality criteria, use designation and quality criteria for the main stem of the Delaware River including the Delaware Bay, the classification of surface waters of the State, procedures for establishing water quality based effluent limitations, modification of water quality based effluent limitations, procedures for reclassifying specific segments for less restrictive uses and procedures for reclassifying specific segments for more restrictive uses pursuant to N.J.S.A. 13:1D-1 et seq., the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq. and the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq.

### 7:9-4.2 Construction

This subchapter shall be liberally construed to permit the department and its various divisions to discharge its statutory functions.

### 7:9-4.3 (Reserved)

### 7:9-4.4 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

"Acute toxicity" means a lethal or adverse sublethal effect to an organism exposed to a toxic substance for a relatively short period of time. Acute toxicity is measured by Short-Term Bioassays.

"Agricultural water supply" means water used for field crops, livestock, horticulture, and silviculture.

"Ambient temperature" means the temperature of a waterbody beyond the portion of the waterbody that is affected by the localized heated waste discharge or discharge complex; or the temperature of a waterbody that would exist without the addition of heated discharges.

"Anadromous fish" means fish that spend most of their life in saline waters and migrate to fresh waters to spawn.

"Application factor" means a number applied to an LC50 or an EC50 to estimate the concentration of a substance that will not be harmful to any life stage(s) of the test organisms in waters of

varying quality, or to other organisms within the aquatic environment that may be more sensitive than the test organism.

"Appropriate sanitary survey" means a survey that will be designed by the Department or its designee on a case-by-case basis to accurately identify bacterial or other related sources of contamination in a cost efficient, timely manner.

"Aquatic substrata" means soil material and associated biota underlying the water.

"Bioaccumulation" means the uptake and retention by an organism of toxic substances from the water or from consumption of other organisms.

"Bioassay" means a toxicity test using aquatic organisms to determine the concentration or amount of a toxic substance causing a specified response in the test organisms under stated test conditions.

"Biota" means the animal and plant life of an ecosystem; flora and fauna collectively.

"Calculable changes" means changes to water quality characteristics as demonstrated by any acceptable mathematical, predictive method.

"C1" means Category One waters.

"C2" means Category Two waters.

"Category one waters" means those waters designated in Indexes B,C,D,E and F incorporated in this subchapter, for purposes of implementing the Antidegradation Policies in this subchapter, for protection from measurable changes in water quality characteristics because of their clarity, color, scenic setting, other characteristics of aesthetic value, exceptional ecological significance, exceptional recreational significance, exceptional water supply significance, or exceptional fisheries resource(s). These waters may include, but are not limited to: 1) Waters originating wholly within Federal, Interstate, State, County, or Municipal parks, forests, fish and wildlife lands, and other special holdings that have not been designated as FW1 in this subchapter; 2) Waters classified in this subchapter as FW2 Trout Production waters and their tributaries; 3) Surface waters classified in this subchapter as FW2 Trout Maintenance or FW2 Nontrout that are upstream of waters classified in this subchapter as FW2 Trout Production; 4) Shellfish waters of exceptional resource value; or 5) Other waters and their tributaries that flow through, or border, Federal, State, County or Municipal parks, forests, fish and wildlife lands, and other special holdings.

"Category two waters" means those waters not designated as Nondegradation, Pinelands Waters, or Category One in this subchapter for purposes of implementing the Antidegradation Policies.

"Chronic toxicity" means death or other adverse impacts that affect the growth, survival, or reproductive success of an organism or its progeny after a relatively long exposure period to toxic substances. Chronic toxicity is measured using Intermediate-Term or Long-Term Bioassays.

"Cumulative substance" means a substance that may be bioaccumulated within an organism to concentrations that exert a toxic effect on that organism or render it unfit for consumption.

"Department" means the New Jersey Department of Environmental Protection.

"Designated use" means those surface water uses, both existing and potential, that have been established by the Department for a waterway or waterbody.

"Diadromous fish" means fish that spend most of their life in one type of water, either fresh or saline, and migrate to the other type to spawn.

"Disinfection" means the removal, destruction, or inactivation of pathogenic and indicator organisms.

"DRBC" means Delaware River Basin Commission.

"EC50" means the median effective concentration of a toxic substance expressed as a statistical estimate of the concentration that has a specified effect on 50 percent of the test organisms under specified test conditions.

"Epilimnion" means the freely circulating upper region of a thermally stratified waterbody extending from the surface to the thermocline.

"Existing uses" means those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the Water Quality Standards.

"Flow-through bioassay" means a toxicity test in which the test solutions flow into and out of the test chambers on a once-through basis for the duration of the test.

"Fresh water(s)" means all nontidal and tidal waters generally having a salinity, due to natural sources, of less than or equal to 3.5 parts per thousand at mean high tide.

"FW" means the general surface water classification applied to fresh waters.

"FW1" means those fresh waters that originate in and are wholly within Federal or State parks, forests, fish and wildlife lands, and other special holdings, that are to be maintained in their natural state of quality (set aside for posterity) and not subjected to any man-made wastewater discharges, as designated in Index A incorporated into this subchapter.

"FW2" means the general surface water classification applied to those fresh waters that are not designated as FW1 or Pinelands Waters.

"Heat dissipation area" means a mixing zone, as may be designated by the Department, into which thermal effluents may be discharged for the purpose of mixing, dispersing, or dissipating such effluents without creating nuisances, hazardous conditions, or violating the provisions of this subchapter.

"Hypolimnion" means the lower region of a stratified waterbody that extends from the thermocline to the bottom of the waterbody, and is isolated from circulation with the upper waters, thereby receiving little or no oxygen from the atmosphere.

"Important species" means species that are commercially valuable (e.g., within the top ten species landed, by dollar value); recreationally valuable; threatened or endangered; critical to the organization and/or maintenance of the ecosystem; or other species necessary in the food web for the well-being of the species identified in this definition.

"Industrial water supply" means water used for processing or cooling.

"Intermittent stream" means a stream with a MA7CD10 flow of less than one-tenth (0.1) cubic foot per second.

"Lake, pond, or reservoir" means any impoundment, whether naturally occurring or created in whole or in part by the building of structures for the retention of surface water, excluding sedimentation control and stormwater retention/detention basins.

"LC50" means the median lethal concentration of a toxic substance, expressed as a statistical estimate of the concentration that kills 50 percent of the test organisms under specified test conditions.

"Limiting nutrient" means a nutrient whose absence or scarcity exerts a restraining influence upon an aquatic biological population.

"MA7CD10" means the minimum average 7 consecutive day flow with a statistical recurrence interval of 10 years.

"Measurable changes" means changes measured or determined by a biological, chemical, physical analytical method, conducted in accordance with USEPA approved methods as identified in 40 C.F.R. 136 or other analytical methods (e.g. - mathematical models, ecological indices, etc.) approved by the Department, that might adversely impart a water use (including, but not limited to aesthetics).

"Mixing zones" means localized areas of surface waters, as may be designated by the Department, into which wastewater effluents may be discharged for the purpose of mixing, dispersing, or dissipating such effluents without creating nuisances or hazardous conditions, or violating the provisions of this subchapter.

"Natural flow" means the water flow that would exist in a waterway without the addition of flow of artificial origin.

"Natural water quality" means the water quality that would exist in a waterway or a waterbody without the addition of water or waterborne substances from artificial origin.

"NOEC" means the "no observable effect concentration", which is the highest concentration of a toxic substance that has no adverse effect(s) on survival, growth, or reproduction of species based upon the results of chronic toxicity testing.

"Nondegradation waters" means those waters set aside for posterity because of their clarity, color, scenic setting, other characteristic of aesthetic value, unique ecological significance, exceptional recreational significance, or exceptional water supply significance. These waters include all waters designated as FW1 in this subchapter.

"Nonpersistent" means degrading relatively quickly, generally having a half-life of less than 96 hours.

"Nontrout waters" means fresh waters that have not been designated in this sub-chapter as trout production or trout maintenance. These waters are generally not suitable for trout because of their physical, chemical, or biological characteristics, but are suitable for a wide variety of other fish species.

"NPDES" means National Pollutant Discharge Elimination System.

"NT" means nontrout waters.

"Nutrient" means a chemical element or compound, such as nitrogen or phosphorus, which is essential to and promotes the growth and development of organisms.

"Outstanding national resource waters" means high quality waters that constitute an outstanding national resource (e.g. - waters

of National and State Parks and Wildlife Refuges) and waters of exceptional recreational or ecological significance, including segments classified as FW1 or PL in this subchapter.

"Persistent" means relatively resistant to degradation, generally having a half life of over 96 hours.

"Pinelands waters" means all waters within the boundaries of the Pineland Area, except those waters designated as FW1 in this subchapter, as established in the Pinelands Protection Act (N.J.S.A. 13:18A-1 et seq.) and shown on Plate 1 of the "Comprehensive Management Plan" adopted by the New Jersey Pinelands Commission in November 1980.

"PL" means the general surface water classification applied to Pinelands Waters.

"Primary contact recreation" means recreational activities that involve significant ingestion risks and includes, but is not limited to, wading, swimming, diving, surfing, and water skiing.

"Public hearing" means a legislative type hearing before a representative or representatives of the Department providing the opportunity for public comment, but does not include cross-examination.

"River mile" means the distance, measured in statute miles, between two locations on a stream, with the first location designated as mile zero. Mile zero for the Delaware River is located at the intersection of the centerline of the navigation channel and a line between the Cape May Light, New Jersey, and the tip of Cape Henlopen, Delaware.

"Saline waters" means waters having salinities generally greater than 3.5 parts per thousand at mean high tide.

"SC" means the general surface water classification applied to coastal saline waters.

"SE" means the general surface water classification applied to saline waters of estuaries.

"Secondary contact recreation" means recreational activities where the probability of water ingestion is minimal and includes, but is not limited to, boating and fishing.

"Shellfish" means those mollusks commonly known as clams, oysters, or mussels.

"Shellfish waters" means waters classified as Approved, Seasonally Approved, Special Restricted, Seasonally Special Restricted or Condemned that support or possess the potential to support shellfish which are within the Coastal Area Facility Review Act (C.A.F.R.A.) zone as delineated in 1973, (excluding:

1 - The Cohansey River upstream of Brown's Run; 2 - The Maurice River upstream of Route 548; 3 - The Great Egg Harbor River upstream of Powell Creek; 4 - The Tuckahoe River upstream of Route 50; 5 - The Mullica River upstream of the Garden State Parkway) plus the adjacent areas between Route 35 (from its juncture with the C.A.F.R.A. zone just north of Red Bank to its juncture with the C.A.F.R.A. zone just south of Keyport) and the C.A.F.R.A. zone and the area from the C.A.F.R.A. zone on the south northwesterly along Route 35 to the northern shore of the Raritan River, then easterly along the northern shore of the Raritan River to the southeast point of Perth Amboy, the due east to the New Jersey jurisdictional limit, and seaward along the jurisdictional limit to the Atlantic Ocean.

"Stream temperature" means the temperature of a stream outside of a designated heat dissipation area.

"Surface water classifications" means names assigned by the Department in this subchapter to waters having the same designated uses and water quality criteria (e.g. FW1, PL, FW2-NT, SE1, SC, Zone 1C).

"Thermal alterations" means the increase or decrease in the temperature of surface waters, above or below the natural, that may be caused by the activities of man.

"Thermocline" means the plane of maximum rate of change in temperature with respect to depth.

"Tidal waters" means fresh or saline water under tidal influence, up to the head of tide.

"TM" means trout maintenance.

"TP" means trout production.

"Total residual chlorine" means all chemical species of dissolved gaseous chlorine and its oxidation products that can be detected by methods approved by the Department for the analysis of chlorine in waters and wastewaters.

"Toxic substances" means those substances, or combination of substances, which upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly through food chains, will, on the basis of the information available to the Department, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformation, in such organisms or their offspring.

"Trout maintenance waters" means waters so designated in this subchapter because they support trout throughout the year or have

high potential for such use pending the correction of short term environmental alterations.

"Trout production waters" means waters designated in this subchapter, that are used by trout for spawning or nursery purposes during their first summer or have high potential for such use pending the correction of short term environmental alterations.

"USEPA" means the United States Environmental Protection Agency.

"Water quality based effluent limitations" means effluent limitations established so that the quality of the waters receiving a discharge will meet the Water Quality Criteria and Policies of this subchapter after the introduction of the treated wastewaters.

"Zone" means the general surface water classification applied to the mainstem Delaware River and Delaware Bay.

#### 7:9-4.5 Statements of Policy

##### (a). General Policies:

1. These Surface Water Quality Standards apply to all surface waters of the State.
2. Water is vital to life and comprises an invaluable natural resource which is not to be abused by any segment of the State's population or economy. It is the policy of the State to restore, maintain and enhance the chemical, physical and biological integrity of its waters, to protect the public health, to safeguard the aquatic biota, protect scenic and ecological values, and to enhance the domestic, municipal, recreational, industrial, agricultural and other reasonable uses of the State's waters.
3. Toxic substances in waters of the State shall not be at levels that are toxic to humans or the aquatic biota, or that bioaccumulate in the aquatic biota so as to render them unfit for human consumption.
4. The introduction of substances into the waters of the State in concentrations that are known to be carcinogenic, mutagenic, or teratogenic shall not be permitted. The Department shall direct its control efforts to require the removal of such substances from wastewater discharges which are shown to contain such substances in concentrations that violate this policy.
5. Existing uses shall be maintained and protected. Designated uses shall, as soon as technically and economically feasible, be attained wherever these uses

are not precluded by natural conditions. Where existing criteria are inadequate to support the existing or designated uses, the criteria shall be changed to support the existing uses.

6. The restoration of saline waters to levels which permit unrestricted shellfish harvesting is an objective of the Department.

(b). Interstate Waters Policies:

1. The designated uses and water quality criteria for the fresh and saline waters under the jurisdiction of the Delaware River Basin Commission shall be as established in this subchapter, or in accordance with the prevailing "Basin Regulations - Water Quality" adopted by the Delaware River Basin Commission as part of its Comprehensive Plan, whichever are more stringent.
2. The designated uses and water quality criteria for waters under the jurisdiction of the Interstate Sanitation Commission in the New Jersey/New York metropolitan area shall be as established in this subchapter, or in accordance with the prevailing Water Quality Regulations of the Interstate Sanitation Commission, whichever are more stringent.

(c). General Technical Policies:

1. The natural water quality shall be used in place of the promulgated Water Quality Criteria of N.J.A.C. 7:9-4.14 for all water quality characteristics that do not meet the promulgated Water Quality Criteria as a result of natural causes.
2. Water quality criteria are expected to be maintained during periods when stream flows are at or greater than the MA7CD10 flow.
3. Water quality criteria are expected to be maintained in intermittent streams during all natural flow conditions. When the intermittent stream does not contain natural flow of sufficient magnitude to determine water quality, the criteria to be maintained in the intermittent stream will be those pertaining to the measurable natural flow immediately downstream of the intermittent stream.
4. Mixing Zone Policies:
  - i. Water quality within a mixing zone may be allowed to fall below applicable water quality criteria provided the existing and designated uses are not adversely impacted.

- ii. Mixing zone requirements will be determined by the Department on a case-by-case basis taking into special consideration the extent and nature of the receiving waters so as to meet the intent and purpose of the criteria and standards.
  - iii. The total area and volume of a waterway or waterbody assigned to mixing zones shall be limited to that which will not interfere with biological communities or populations of important species to a degree which is damaging to the ecosystem or which diminishes other beneficial uses disproportionately. Furthermore, significant acute mortality of aquatic biota shall not occur within the mixing zone.
  - iv. Zones of passage shall be provided for the passage of free-swimming and drifting organisms wherever mixing zones are allowed.
  - v. Temperature changes in designated heat dissipation areas shall not cause mortality of the aquatic biota nor create conditions which allow the introduction or maintenance of populations of undesirable organisms.
  - vi. Adjacent heat dissipation areas: Where waste discharges would result in heat dissipation areas in such close proximity to each other as to impair protected uses, additional limitations shall be prescribed to avoid such impairment.
  - vii. No heat dissipation areas shall be permitted in waters classified as FW2-TP or within 1500 feet of the shoreline in SC waters.
5. All analytical data to be incorporated by the Department in water quality monitoring or other activities shall be from laboratories approved or certified by the Department for the analysis of those specific parameters. If certification is not offered for the specific parameter the laboratory performing the analysis shall, at a minimum hold certification in the category of certification covering that type of parameter.

(d). Antidegradation Policies

- 1. These antidegradation policies apply to all surface waters of the State.
- 2. Existing uses shall be maintained and protected. Designated uses shall be maintained or, as soon as technically and economically feasible, be attained

wherever these uses are not precluded by natural conditions.

3. No irreversible changes may be made to existing water quality that would impair or preclude attainment of the designated uses of a waterway.
4. No changes shall be allowed in waters which constitute an outstanding National or State resource or in waters that may affect these outstanding resource waters.
5. Where water quality exceeds levels necessary to support the designated uses, including but not limited to, propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the Department finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the Department's continuing planning process as set forth in this subchapter, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.
6. These antidegradation policies shall be applied as follows:
  - i. The quality of Nondegradation waters shall be maintained in their natural state (set aside for posterity) and shall not be subject to any man-made wastewater discharges.
  - ii. For Pinelands waters, the Department shall not approve any activity which alone or in combination with any other activities, might cause degradation in the existing surface water quality characteristics. This policy shall apply as follows:
    - (1) This Policy is not intended to interfere with water control in the operation of cranberry bogs or blueberry production.
    - (2) Dischargers holding valid NJPDES permits as of the date of promulgation of these regulations shall be allowed to continue discharging under the terms of their existing NJPDES permits provided that the discharge is not creating any water quality problems and that the designated uses are being attained. If a water quality problem has been created or the designated uses are not being attained the NJPDES permit shall be modified to eliminate the water quality problem or attain the designated uses.



ensure that the quality and uses of the higher classification water are protected.

8. A waterway or waterbody from which water is pumped to another waterway or waterbody shall be treated as a tributary to the waterway or waterbody receiving the pumped water.
9. Modifications of water quality based effluent limitations established to implement this antidegradation policy may be granted pursuant to N.J.A.C. 7:9-4.8 and 4.9.

(e). Water Quality Based Effluent Limitation Policies

1. Water quality based effluent limitations may be established so as to minimize total expenditures, subject to social and environmental constraints, so that the provisions of the water quality standards (which includes the antidegradation policies) are met. This policy may result in the assignment of different levels of treatment to different dischargers where this proves more beneficial on a study area basis.
2. Levels of treatment established as a result of water quality studies shall take precedence over the Minimum Treatment Requirements of N.J.A.C. 7:9-5.8.
3. The Department may establish seasonal effluent limitations when it determines that such seasonal limitations are necessary due to seasonal variations in treatment performance caused by ambient conditions and, that the seasonal limitations will not cause or contribute to violation of the Water Quality Standards.
4. Whenever discharges of pollutants from a point source or group of point sources, after the application of effluent limitations at least as stringent as those required pursuant to sections 301, 306, and 307 of the Federal Clean Water Act or effluent limitations based upon the provisions of N.J.A.C. 7:9-5.1 et seq. (which ever are more stringent), would interfere with the attainment and maintenance of the water quality standards (which includes the antidegradation policies), the Department shall establish more stringent, water quality based, effluent limitations that will ensure the attainment and maintenance of the water quality standards (which includes the antidegradation policies).
5. Modifications of water quality based effluent limitations established to implement the water quality standards (which includes the Antidegradation Policies) granted pursuant to section N.J.A.C. 7:9-4.8 and 4.9,

shall provide for effluent limits at least as stringent as those required pursuant to sections 301, 306, and 307 of the Federal Clean Water Act or the Minimum Treatment Requirements of N.J.A.C. 7:9-5.8, where applicable, whichever are more stringent.

6. When a discharge is made to a tidal waterway in the reach where the salinity varies from less than 3.5 ppt. to greater than 3.5 ppt., or the salinity data is inconclusive, the Department shall establish as water quality based effluent limitations the more stringent of the limitations, on a parameter specific basis, required for the upstream, FW, waters or the downstream, SE, waters.

(f). Bioassay and Biomonitoring Policies

1. Bioassay Test Species Selection

- i. The objective of the Department is to use test species for toxicity testing bioassays that are representative of the more sensitive aquatic biota from the different trophic levels of the waters in question.
  - ii. Test species need not be indigenous to, nor occur in the waters in question.
  - iii. When the bioassay test protocol being utilized falls under the scope of N.J.A.C. 7:18 the Department shall designate the approved representative species considered to be the most sensitive to the discharge.
2. Acute definitive bioassay tests, in accordance with N.J.A.C. 7:18, will routinely be utilized in determining the toxicity of a discharge to the aquatic biota.
  3. The Department, in order to further characterize the toxicity of a discharge, may allow or require the use of other procedures including, but not limited to:
    - i. Chronic bioassay testing.
    - ii. Bioaccumulation testing.
    - iii. Mutagenicity testing.
    - iv. Measures of the structure and function of the aquatic community in the receiving waters.
  4. The Department may allow or require the use of alternative application factors based upon acute and chronic toxicity testing of specific discharge-receiving water combinations.

5. Parameter specific water quality criteria for toxic substances in a waterbody may be established by the Department when adequate data, from appropriate bioassays or scientific literature, is available.
  - i. Appropriate bioassays, for purposes of this policy, shall include both acute definitive and chronic definitive bioassays.
  - ii. The amount of bioassay data or scientific literature needed to support adoption of a parameter specific criterion in a given waterbody will be determined by the Department on a case-by-case basis.

(g). Nutrient Policies

1. These policies apply to all FW waters of the State.
2. Except as due to natural conditions, nutrients shall not be allowed in concentrations that cause objectionable algal densities, nuisance aquatic vegetation, or otherwise render the waters unsuitable for the designated uses.
3. The Department may establish site-specific Water Quality Criteria for nutrients in lakes, ponds, reservoirs or streams, in addition to or in place of the criteria in 7:9-4.14, when necessary to protect existing or designated uses. Such criteria shall become part of these Water Quality Standards.
4. The Department shall establish water quality based effluent limits for nutrients, in addition to or more stringent than, the effluent standard in N.J.A.C. 7:9-5.7, as necessary to meet the quality criteria.
5. Activities resulting in the non-point discharge of nutrients shall implement the best management practices determined by the Department to be necessary to protect the existing or designated uses.
6. The Department may allow or require the use of algal biostimulation assays, to determine the limiting nutrient in a lake, pond, reservoir or stream.

7:9-4.6 Establishment of Water Quality Based Effluent Limitations

- (a) Water quality based effluent limitations are established where technology based effluent limitations, established pursuant to Sections 301(b) and 306 of the Federal Clean Water Act, or toxic effluent standards, established pursuant to Section 307 of the Federal Clean Water Act, and/or Minimum

Treatment Requirements set out in N.J.A.C. 7:9-5.8, are insufficient to attain, maintain and protect the designated and existing uses, water quality criteria and policies of N.J.A.C. 7:9-4.

- (b) The conditions of a Draft NJPDES Permit or a Draft DAC shall include any water quality based effluent limitations developed pursuant to N.J.A.C. 7:9-4.6(c), in addition to any other appropriate conditions. The water quality based effluent limitations may be modified as a result of hearings held on the Draft NJPDES Permit or Draft DAC provided that the water quality based effluent limitations incorporated into the Final NJPDES Permit or DAC must be consistent with the provisions of N.J.A.C. 7:9-4 (including, but not limited to, 7:9-4.5, 4.6(c), 4.8, and 4.9).
- (c) The Department may develop water quality based effluent limitations for a single point source discharger on a case-by-case basis. The procedure to be followed by the Department in developing such effluent limitations shall be as follows:
  - 1. For Category One Waters, as defined in N.J.A.C. 7:9-4.4, draft water quality based effluent limitations shall be assigned to a point source discharger so as to protect the existing water quality from any measurable or calculable changes. The Department shall establish draft water quality based effluent limitations, as appropriate, for those parameters contained in N.J.A.C. 7:9-4.14, as well as any other parameters the Department believes may have a detrimental effect on the designated or existing uses.
  - 2. For Category Two Waters, as defined in N.J.A.C. 7:9-4.4, draft water quality based effluent limitations shall be assigned to a point source discharge so as to:
    - i. Maintain water quality characteristics that are generally better than or equal to the water quality standards at a level that will protect the existing and designated uses, and;
    - ii. Bring water quality characteristics that are generally worse than the water quality criteria, except as due to natural conditions, up to the water quality criteria.
  - 3. The following information shall be submitted by the applicant for a water quality based effluent limitation:

- i. Type of waste (domestic or industrial) to be discharged, accompanied by an analysis of the treated and untreated wastewater characteristics.
  - ii. Type of treatment process and level of treatment being considered.
  - iii. United States Geological Survey Topographic Maps, 7.5 Quadrangle series, showing treatment facility locations, discharge point, and the location of other treatment facilities on the receiving stream within five miles of the proposed discharge.
  - iv. Name and classification of receiving stream including a description of the stream's existing beneficial uses.
  - v. Stream analysis, which shall include:
    - (1) A flow analysis to determine the MA7CD10 flow, and;
    - (2) A water quality analysis program to be developed in coordination with the Department and to include, at a minimum, sampling stations upstream and downstream of all existing discharges, as well as the proposed discharge.
4. The Department will utilize the following methodologies in the development of chemical specific water quality based effluent limitations for point source discharges:
- i. The Department shall take into consideration the contribution of nonpoint source loading(s) and the need for some reserve capacity in the stream segment. The parameters to be considered will vary with the type of discharge, the existing and designated uses of the waters, and the ambient water quality.
  - ii. Scientifically defensible technical approaches, such as, calibrated and verified mathematical water quality models developed or adapted for a particular stream, simplified modelling approaches, as outlined in "Water Quality Assessment" (EPA-600/6-82-004), a simple mass balance, or bioassay procedures, as contained in N.J.A.C. 7:9-18, shall be utilized by the Department

in developing water quality based effluent limitations.

5. The following methodologies may be utilized by the Department in developing water quality based whole effluent toxicity limitations for point source discharges.

- i. When using acute definitive bioassays as the measure of whole effluent toxicity, the following effluent toxicity limitation formula may be utilized:

$$L_A = \frac{I}{F} (100)$$

Where:  $L_A$  = Toxicity limitation expressed as an acute definitive LC50 or EC50, in percent effluent.

F = Application factor, 0.05 where toxicity is due to non-persistence substances or 0.01 where toxicity is known or suspected to be due to persistent substances.

I = Critical instream waste concentration, determined in accordance with the methods in ii below.

- (1) A draft limitation must meet the requirements of the effluent standard for toxic discharges found in N.J.A.C. 7:9-5.7.
- (2) If the calculated limit,  $L_A$ , is greater than 100 percent effluent, the draft limit shall require that no measurable acute toxicity occur in any bioassay test concentration, including 100 percent effluent, above normal background mortality levels for the test organism population.

- ii. The critical instream waste concentration, I, is determined as follows:

- (1) For non-tidal streams, or small tidal streams with a cross-sectional area not greater than 1,000 square feet at mean sea level and a freshwater inflow MA7CD10 not greater than 10 cfs:

$$I = \frac{Q_E}{Q_E + Q_S}$$

Where:  $Q_E$  = Effluent flow  
 $Q_S$  = Upstream freshwater  
 MA7CD10 flow

(2) For all other waterbodies the instream waste concentration, I, will be determined on a case-by-case basis utilizing applicable scientific methods, including but not limited to, plume models and the mixing zone concept.

iii. When utilizing chronic bioassays as the measure of whole effluent toxicity, the following effluent toxicity limitation formula may be utilized:

$$L_C = I (100)$$

Where:  $L_C$  = Toxicity limitation expressed as a chronic NOEC in percent effluent.

$I$  = Critical instream waste concentration, determined in accordance with the method in ii above.

7:9-4.7 Water Quality Based Effluent Limitations and Water Quality Management Planning

- (a) Water quality based effluent limitations established under the procedures of N.J.A.C. 7:9-4.6 shall be amendments to appropriate Water Quality Management Plans
1. Water quality based effluent limitations established as a NJPDES permit condition under N.J.A.C. 7:14A-8.6, may be adopted as an amendment to the Statewide Plan pursuant to N.J.A.C. 7:15-2.1(c)4 and 2.2(b)2 without further adoption proceedings as long as proper notice is given with the NJPDES notice.
  2. Water quality based effluent limitations established as an amendment to the Statewide or appropriate Areawide Plan under N.J.A.C. 7:15-3.4 and 3.5 must be consistent with all of the provisions of this subchapter, and shall be adopted pursuant to N.J.A.C. 7:15-3.5.
- (b) The Department shall not issue any permit for a discharge that conflicts with an Areawide Plan.

7:9-4.8 Procedures for Modifying Water Quality Based Effluent Limitations for Individual Dischargers to Category One Waters

- (a) The criteria for modifying water quality based effluent limitations established on a case-by-case basis are:
1. The applicant must demonstrate, to the satisfaction of the Department, after public notice (including notice to affected municipalities) and a public hearing (where sufficient public interest exists), that:
    - i. Some change in ambient water quality should be allowed because of necessary and justifiable social or economic development; and
    - ii. Alternative effluent limitations, at least as stringent as the technology based effluent limitations required by either sections 301, 306, and 307 of the Federal Clean Water Act, or the effluent limitations resulting from application of the minimum treatment requirements in N.J.A.C. 7:9-5.8 (where applicable), whichever are more stringent, will not interfere with nor be injurious to the existing or designated uses; and

- iii. Where the requested modified effluent limitations would result in contravention of the water quality criteria or the degradation of the natural water quality, whichever is less stringent;
  - (1) The water quality criteria are not attainable because of natural background; or
  - (2) The water quality criteria are not attainable because of irretrievable man-induced conditions; or
  - (3) Natural, ephemeral, intermittent, or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or
  - (4) Controls more stringent than those required by Sections 301(b) and 306 of the Federal Clean Water Act would result in substantial and widespread adverse social and economic impact.
- (b) It is the responsibility of the applicant to provide the Department with all of the information needed to evaluate the requested modification(s).
- (c) In no case shall changes to water quality be allowed in Outstanding National Resource Waters, such as waters of National and State parks, wildlife refuges and other waters of exceptional recreational or ecological significance.
- (d) Modified effluent limitations may be granted for a time period that shall not exceed that of the permit in which the modified effluent limitations appear.
- (e) Modified effluent limitations may be renewed if the discharger demonstrates, to the Departments satisfaction, after public notice (including notice to affected municipalities) and a public hearing (where sufficient interest exists), that there has been no adverse effect on water quality and the designated and existing uses.
- (f) Where water quality criteria are not currently met the Department shall not grant a modification, as set forth in this subsection, establishing an effluent limitation

less stringent than the limitation(s) in the existing permit, unless the criteria are not met because of natural conditions.

7:9-4.9

Procedures for Modifying Water Quality Based Effluent Limitations for Individual Dischargers to Category Two Waters

(a) The criteria for modifying water quality based effluent limitations established on a case-by-case basis are:

1. The applicant for modification of effluent limitations for parameters that are currently better than the water quality criteria must demonstrate, to the satisfaction of the Department, after public notice (including notice to affected municipalities) and a public hearing (where sufficient public interest exists), that:
  - i. Some degradation of water quality parameters currently better than the water quality criteria should be allowed because of necessary and justifiable social or economic development; and
  - ii. Alternative effluent limitations, at least as stringent as the technology based effluent limitations required by either sections 301, 306, and 307 of the Federal Clean Water Act, or the effluent limitations resulting from application of the Minimum Treatment Requirements (where applicable) in N.J.A.C. 7:9-5.1 et seq., whichever are more stringent, will not interfere with nor be injurious to the existing or designated uses.
2. The applicant for modification of effluent limitations for parameters that are currently equal to or currently do not meet the water quality criteria in this subchapter must demonstrate, to the satisfaction of the Department, after public notice (including notice to affected municipalities) and a public hearing (where sufficient public interest exists), that:
  - i. The water quality criteria are not attainable because of natural background; or
  - ii. The water quality criteria are not attainable because of irretrievable man-induced conditions; or
  - iii. Natural, ephemeral, intermittent, or low flow conditions or water levels prevent the

attainment of the water quality criteria, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or

- iv. Controls more stringent than those required by Sections 301(b) and 306 of the Federal Clean Water Act would result in substantial and widespread adverse social and economic impact.
- (b) Where water quality criteria are not currently met the Department shall not grant a modification, as set forth in this subsection, establishing an effluent limitation less stringent than the limitation(s) in the existing permit, unless the criteria are not met because of natural conditions.
- (c) Modified effluent limitations may be granted for a time period that shall not exceed that of the permit in which the modified effluent limitations appear.
- (d) Modified effluent limitations may be renewed if the discharger demonstrates, to the satisfaction of the Department, after public notice (including notice to affected municipalities) and a public hearing (where sufficient interest exists), that there has been no adverse effect on water quality and the designated and existing uses.

7:9-4.10

Procedures for Reclassifying Specific Segments for Less Restrictive Uses

- (a) The Department may entertain petitions, sponsored or endorsed by County or Municipal Governing Bodies, for reclassification of specific segments to less restrictive uses, or decide to initiate reclassification proceedings on its own, at any time.
- (b) Any reclassification proceeding will include full documentation of the items contained in (d) and (e) below. The documentation will be prepared by either the Department (where the Department has initiated the reclassification on its own) or the petitioner for the reclassification.
- (c) The Department shall issue public notice to all interested parties (including affected municipalities) and shall hold public hearing(s) as part of any reclassification proceeding.
- (d) The Department or the petitioner, as indicated in (b) above, shall include in the reclassification

documentation appropriate water quality studies and analyses, biological studies and analyses, environmental, social, and economic studies as are necessary to demonstrate the satisfaction of at least one of the criteria listed in (e) below.

- (e) The Department may establish less restrictive uses than the designated uses only after it has been demonstrated to the satisfaction of the Department that:
1. None of the uses being removed are existing uses; and
  2. The uses to be removed will not be attained by implementing effluent limits required by Sections 301(b) and 306 of the Federal Clean Water Act in conjunction with implementation of cost-effective and reasonable best management requirements for nonpoint source pollution control; and
  3. The existing designated use is not attainable because of natural background; or
  4. The existing designated use is not attainable because of irretrievable man-induced conditions; or
  5. Natural, ephemeral, intermittent, or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or
  6. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or
  7. Controls more stringent than those required by Sections 301(b) and 306 of the Federal Clean Water Act would result in substantial and widespread adverse social and economic impact.
- (f) Any reclassification for less restrictive uses, established pursuant to this section shall be reviewed during each review of water quality standards pursuant to Section 303 of the Federal Clean Water Act (at least once every three years). Either the Department or the original petitioner, as indicated in (b) above, shall

be responsible for supplying documentation showing that the bases for the reclassification still exist.

- (g) In those cases in which a thermal discharge is involved, the procedures for reclassifying segments for less restrictive use shall be consistent with section 316 of the Federal Clean Water Act.

7:9-4.11 Procedures for Reclassifying Specific Segments for More Restrictive Uses

- (a) The Department will entertain petitions, sponsored or endorsed by County or Municipal Governing Bodies, for reclassification of specific segments, pursuant to (e) below, or may decide to initiate reclassification proceedings on its own, at any time.
- (b) The Department may entertain petitions for reclassification of specific segments, pursuant to (f) below, at any time.
- (c) Documentation supporting the petition for reclassification for more restrictive use(s) shall be prepared by the petitioner for such reclassification, where one exists, or by the Department, where it decides to initiate such reclassification on its own.
- (d) The Department shall issue public notice to all interested parties (including affected municipalities and dischargers) and shall hold public hearing(s) as part of any reclassification proceeding.
- (e) A reclassification for more restrictive uses shall be made whenever:
  - 1. It is demonstrated to the satisfaction of the Department that there are existing uses of the specific segment that are not included in the designated uses; or
  - 2. Where a reclassification for less restrictive uses has been granted pursuant to N.J.A.C. 7:9-4.10, the bases for that reclassification no longer exist, or:
  - 3. It is demonstrated to the satisfaction of the Department that any uses in Section 101 (a) (2) of the Federal Clean Water Act, protection and propagation of fish, shellfish, and wildlife, and recreation in and on the water, which are not included in the designated uses listed in this subchapter are attainable.
- (f) A reclassification for more restrictive uses may be made when;

1. It is demonstrated to the satisfaction of the Department that the waters should be set aside to represent the natural aquatic environment and its associated biota, or;
2. It is demonstrated to the satisfaction of the Department that a more restrictive use is necessary to protect a unique ecological system or threatened/endangered species.

(g) In those cases in which a thermal discharge is involved, the procedures for reclassifying segments for more restrictive uses shall be consistent with section 316 of the Federal Clean Water Act.

7:9-4.12 Designated Uses of FW1, PL, FW2, SE1, SE2, SE3, and SC Waters

- (a) In all FW1 waters the designated uses are: Set aside for posterity to represent the natural aquatic environment and its associated biota; Primary and secondary contact recreation; Maintenance, migration and propagation of the natural and established aquatic biota; and any other reasonable uses.
- (b) In all PL waters the designated uses are: Cranberry bog water supply and other agricultural uses; Maintenance, migration and propagation of the natural and established biota indigenous to this unique ecological system; Public potable water supply after such treatment as required by law or regulations; Primary and secondary contact recreation; and any other reasonable uses.
- (c) In all FW2 waters the designated uses are: Maintenance, migration and propagation of the natural and established biota; Primary and secondary contact recreation; Industrial and agricultural water supply; Public potable water supply after such treatment as required by law or regulation; and any other reasonable uses.
- (d) In all SE1 waters the designated uses are: Shellfish harvesting in accordance with N.J.A.C. 7:9-12; Maintenance, migration and propagation of the natural and established biota; Primary and secondary contact recreation; and any other reasonable uses.
- (e) In all SE2 waters the designated uses are: Maintenance, migration and propagation of the natural and established biota; Migration of diadromous fish; Maintenance of wildlife; Secondary contact recreation; and any other reasonable uses.

- (f) In all SE3 waters the designated uses are: Secondary contact recreation; Propagation and migration of fish populations; Migration of diadromous fish; Maintenance of wildlife; and any other reasonable uses.
- (g) In all SC waters the designated uses are: Shellfish harvesting in accordance with N.J.A.C. 7:9-12; Primary and secondary contact recreation; Maintenance, migration and propagation of the natural and established biota; and any other reasonable uses.

7:9-4.13 Designated Uses - Mainstem Delaware River and Delaware Bay (Summarized From the DRBC "Administrative Manual; Part III; Basin Regulations; Water Quality; Including Amendments Through June 29, 1983")

- (a) The designated uses for Zone 1C, 1D, and 1E are: Agricultural, industrial and public water supply after reasonable treatment; Wildlife; Maintenance and propagation of resident gamefish and other aquatic biota; Spawning and nursery habitat for anadromous fish; Passage of anadromous fish; Primary and secondary contact recreation.
- (b) The designated uses for Zone 2 are: Agricultural, industrial and public water supply after reasonable treatment; Wildlife, Maintenance and propagation of resident gamefish and other aquatic biota; Passage of anadromous fish; Primary contact recreation from R.M. 133.4 to R.M. 117.81; Secondary contact recreation from R.M. 133.4 to R.M. 108.4; and Navigation.
- (c) The designated uses for Zone 3 are: Agricultural, industrial and public water supply after reasonable treatment; Wildlife, Maintenance of resident fish and other aquatic biota; Migration of anadromous fish; Secondary contact recreation; and Navigation.
- (d) The designated uses for Zone 4 are: Industrial water supply after reasonable treatment; Wildlife; Maintenance of resident fish and other aquatic biota; Migration of anadromous fish; Secondary contact recreation; and Navigation.
- (e) The designated uses for Zone 5 are: Industrial water supply after reasonable treatment; Wildlife; Migration of anadromous fish; Maintenance of resident fish and other aquatic biota; Propagation of resident fish from R.M. 70.0 to R.M. 48.2; Secondary contact recreation; Primary contact recreation from R.M. 59.5 to R.M. 48.2; and Navigation.
- (f) The designated uses for Zone 6 are: Industrial water supply after reasonable treatment; Wildlife;

Maintenance and propagation of resident fish, shellfish, and other aquatic biota; Migration of anadromous fish; Primary contact recreation; Secondary contact recreation; and Navigation.

7:9-4.14 Surface Water Quality Criteria

(a) Surface Water Quality Criteria For FWI Classification

1. These waters shall be maintained as to quality in their natural state.

(b) Surface Water Quality Criteria For PL Classification

1. These waters shall be maintained as to quality in their existing state or that quality necessary to attain or protect the designated uses, whichever are more stringent.

117-4.14(C) Surface Water Quality Criteria for  
FW2, SE and SC Waters

(Expressed as maximum concentrations unless otherwise noted)

Substance	Criteria	Classifications
1. Bacterial quality (Counts/100 ml)	<p>i. Total Coliforms shall not exceed, in all shellfish waters, the standard for approved shellfish waters as established by the National Shellfish Sanitation Program as set forth in its current manual of operations.</p> <p>ii. Fecal Coliforms:</p> <p>(1) Fecal coliform levels shall not exceed a geometric average of 50/100 ml.</p> <p>(2) Fecal coliform levels shall not exceed a geometric average of 200/100 ml nor should more than 10 percent of the total samples taken during any 30-day period exceed 400/100 ml.</p> <p>(3) Fecal coliform levels shall not exceed a geometric average of 770/100 ml.</p> <p>(4) Fecal coliform levels shall not exceed a geometric average of 770/100 ml.</p> <p>(5) Fecal coliform levels shall not exceed a geometric average of 1500/100 ml.</p> <p>iii. Samples shall be obtained at sufficient frequencies and at locations during periods which will permit valid interpretation of laboratory analyses. As a guideline and for the purpose of these regulations, a minimum of five samples taken over a 30-day period should be collected, however, the number of samples, frequencies and locations will be determined by the department or other appropriate agency in any particular case.</p>	<p>Shellfish Waters</p> <p>Within 1500 feet of shoreline in SC waters.</p> <p>FW2 (except as in (3) below), SE1, and SC 1500 feet to 3 miles from the shoreline.</p> <p>Tidal portion of FW2-NT tributaries to the Delaware River, between Rancocas Creek and Big Timber Creek inclusive.</p> <p>SE2</p> <p>SE3</p> <p>All Classifications</p>

7:9-4.14(c) Surface Water Quality Criteria for  
FW2, SE and SC Waters

(Expressed as maximum concentrations unless otherwise noted)

Substance	Criteria	Classifications
2. Chloride (mg/l)	i. 250	FW2
3. Dissolved oxygen (mg/l)	i. Not less than 7.0 at any time.	FW2-TP
	ii. 24 hour average not less than 6.0. Not less than 5.0 at any time (see paragraph viii below).	FW2-IM
	iii. 24 hour average not less than 5.0, but not less than 4.0 at anytime (see paragraph viii below).	FW2-NT (except as in iv below), SE1
	iv. Not less than 4.0 at any time.	Tidal portions of FW2-NT tributaries to the Delaware River, between Rancocas Creek and Big Timber Creek inclusive.
	v. Not less than 5.0 at any time.	SC
	vi. Not less than 4.0 at any time.	SE2
	vii. Not less than 3.0 at any time.	SE3
	viii. Supersaturated dissolved oxygen values shall be expressed as their corresponding 100 percent saturation values for purposes of calculating 24 hour averages.	FW2-IM, FW2-NT, SE1
4. Floating, colloidal, color and settleable solids; petroleum hydrocarbons and other oils and grease	i. None noticeable in the water or deposited along the shore or on the aquatic substrata in quantities detrimental to the natural biota. None which would render the waters unsuitable for the designated uses.	All Classifications

(Expressed as maximum concentrations unless otherwise noted)

Substance	Criteria	Classifications
	ii. For "Petroleum Hydrocarbons" the goal is none detectable utilizing the Federal EPA Environmental Monitoring and Support Laboratory Method (Freon Extractable - Silica Gel Adsorption - Infrared Measurement); the present criteria, however, are those of paragraph i. above.	All Classifications
5. pH (Standard Units)	i. 6.5-8.5 ii. Natural pH conditions shall prevail.	FW2, All SE SC
6. Phosphorus, Total (mg/l)	i. <u>Lakes</u> : Phosphorus as total P shall not exceed 0.05 in any lake, pond or reservoir, or in a tributary at the point where it enters such bodies of water. ii. <u>Streams</u> : Except as necessary to satisfy the more stringent criteria in paragraph i above, phosphorus as total P shall not exceed 0.1 in any stream, unless it can be demonstrated that total P is not a limiting nutrient and will not otherwise render the waters unsuitable for the designated uses.	FW2 FW2
7. Radioactivity	i. Prevailing regulations adopted by the U.S. Environmental Protection Agency pursuant to Sections 1412, 1445, and 1450 of the Public Health Services Act, as amended by the Safe Drinking Water Act (PL 93-523).	All Classifications



(Expressed as maximum concentrations unless otherwise noted)

Substance	Criteria	Classifications
12. Temperature and Heat Dissipation Areas	i. Thermal Alterations (Temperatures shall be measured outside of heat dissipation areas)	
	(1) Streams	
	(i) Ambient temperatures shall prevail except where properly treated wastewater effluents are discharged. Where such discharges occur, temperatures shall not deviate more than 0.6°C (1°F) from ambient temperature.	FW2-TP
	(ii) No thermal alterations which would cause temperatures to exceed ambient by more than 1.1°C (2°F) at any time or which would cause temperatures in excess of 20°C (68°F).	FW2-TM
	(iii) No thermal deviations which would cause temperatures to deviate more than 2.8°C (5°F) at any time from ambient temperatures. No heat may be added which would cause temperatures to exceed 27.8°C (82°F) for small mouth bass or yellow perch waters, or 30°C (86°F) for other nontrout waters.	FW2-NI
	(iv) No thermal alterations which would cause temperatures to deviate from ambient by more than 2.2°C (4°F), from September through May, nor more than 0.8°C (1.5°F) from June through August, nor cause temperatures to exceed 29.4°C (85°F).	All SE

7:9-4.14(c) Surface Water Quality Criteria for  
FW2, SE and SC Waters

(Expressed as maximum concentrations unless otherwise noted)

Substance	Criteria	Classifications
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(2) Lakes

(i) No thermal alterations except where it can be shown to be beneficial to the designated and existing uses.

FW2-TM

(ii) No thermal alterations of more than 1.7°C (3°F) in the epilimnion of lakes and other standing waters. No discharges of heated effluent into the hypolimnion nor pumping of water from the hypolimnion (for discharge back into the same water body) shall be permitted unless it is demonstrated, to the satisfaction of the Department, that such practices will be beneficial to the existing and designated uses.

FW2-NI

(3) No direct heat additions within 1500 feet of the shoreline. No thermal alterations which would cause temperatures to deviate from ambient temperatures by more than 2.2°C (4°F) from September through May, nor more than 0.8°C (1.5°F) from June through August, nor which would cause temperatures to exceed 26.7°C (80°F).

SC

ii. Heat Dissipation Areas

(1) Streams

(i) Not more than one-quarter (1/4) of the cross section and/or volume of the water body at any time.

FW2-TM, FW2-NI,  
A11 SE

(Expressed as maximum concentrations unless otherwise noted)

Substance	Criteria	Classifications
	(ii) Not more than two-thirds (2/3) of the surface from shore to shore at any time.	
	(iii) These limits may be exceeded by special permission, on a case-by-case basis, when a discharger can demonstrate that a larger heat dissipation area meets the tests for a waiver under Section 316 of the Federal Clean Water Act.	
	(2) Lakes, Ponds, Reservoirs, Bays or Coastal Waters: Heat dissipation areas will be developed on a case-by-case basis.	FW2-TM, FW2-NT, All SE, SC
13. Toxic Substances (general)	i. None, either alone or in combination with other substances, in such concentrations as to affect humans or be detrimental to the natural aquatic biota, produce undesirable aquatic life, or which would render the waters unsuitable for the designated uses.	All Classifications
	ii. None which would cause standards for drinking water to be exceeded after appropriate treatment.	FW2
	iii. Toxic substances shall not be present in concentrations that cause acute or chronic toxicity to aquatic biota, or bioaccumulate within an organism to concentrations that exert a toxic effect on that organism or render it unfit for consumption.	All Classifications

7:9-4.14(c) Surface Water Quality Criteria for  
FW2, SE and SC Waters

(Expressed as maximum concentrations unless otherwise noted)

Substance	Criteria	Classifications
	iv. The concentrations of nonpersistent toxic substances in the State's waters shall not exceed one-twentieth (0.05) of the acute definitive LC50 or EC50 value, as determined by appropriate bioassays conducted in accordance with N.J.A.C. 7:18.	All Classifications
	v. The concentration of persistent toxic substances in the State's waters shall not exceed one-hundredth (0.01) of the acute definitive LC50 or EC50 value, as determined by appropriate bioassays conducted in accordance with N.J.A.C. 7:18.	All Classifications
14. Toxic Substances (ug/l):		
i. Aldrin/Dieldrin	(1) 0.0019	All Classifications
ii. Ammonia, un-ionized (24 hr. average)	(1) 20 (2) 50 (3) 0.1 of acute definitive LC50 or EC50	FW2-TP, FW2-IM FW2-NT All SE, SC
iii. Arsenic, Total	(1) 50	FW2
iv. Barium, Total	(1) 1000	FW2
v. Benzidine	(1) 0.1	All Classifications
vi. Cadmium, Total	(1) 10	FW2
vii. Chlordane	(1) 0.0043 (2) 0.0040	FW2 All SE, SC

SURFACE WATER QUALITY CRITERIA FOR  
FW2, SE and SC Waters

(Expressed as maximum concentrations unless otherwise noted)

Substance	Criteria	Classifications
viii. Chlorine, Total Residual [TRC]	(1) 3.0 (2) 10.0	FW2 A11 SE, SC
ix. Chromium, Total	(1) 50	FW2
x. DDT and Metabolites	(1) 0.0010	All Classifications
xi. Endosulfan	(1) 0.056 (2) 0.0087	FW2 A11 SE, SC
xii. Endrin	(1) 0.0023	All Classifications
xiii. Heptachlor	(1) 0.0038 (2) 0.0036	FW2 A11 SE, SC
xiv. Lead, Total	(1) 50	FW2
xv. Lindane	(1) 0.080 (2) 0.004	FW2 A11 SE, SC
xvi. Mercury, Total	(1) 2	FW2
xvii. Polychlorinated biphenyls [PCB's]	(1) 0.014 (2) 0.030	FW2 A11 SE, SC
xviii. Selenium, Total	(1) 10	FW2
xix. Silver, Total	(1) 50	FW2
xx. Toxaphene	(1) 0.013 (2) 0.005	FW2 A11 SE, SC

7:9-4.14(c) Surface Water Quality Criteria for  
FW2, SE and SC Waters

(Expressed as maximum concentrations unless otherwise noted)

Substance	Criteria	Classifications
15. Turbidity (Nephelometric Turbidity Unit-NTU)	i. Maximum 30-day average of 15 NTU, a maximum of 50 NTU at any time.	FW2, SE3
	ii. Maximum 30-day average of 10 NTU, a maximum of 30 NTU at any time.	SE1, SE2
	iii. Levels shall not exceed 10.0 NTU.	SC

Substance	Criteria	Zones
1. General Criteria	<p>1. The waters shall not contain substances attributable to municipal, industrial, or other discharges in concentrations or amounts sufficient to preclude the specified water uses to be protected. Within this requirement:</p>	All Zones
	<p>(1) the waters shall be substantially free from unsightly or malodorous nuisances due to floating solids, sludge deposits, debris, oil, scum; and substances in concentrations or combinations which are toxic or harmful to human, animal, plant, or aquatic life, or that produce color, taste, or odor in the water, or that taint fish or shellfish flesh.</p>	
2. Alkalinity	<p>ii. In no case shall concentrations of substances exceed those values given for rejection of water supplies in the United States Public Health Service Drinking Water Standards.</p>	All Zones
	<p>i. Not less than 20 mg/l.</p>	1E
	<p>ii. Must be maintained between 20 and 100 mg/l.</p>	2
3. Bacterial Quality	<p>iii. Must be maintained between 20 and 120 mg/l.</p>	3,4,5,6
	<p>1. Total Coliforms: Most Probable Number not to exceed U.S. Public Health Service's shellfish standards in designated shellfish areas.</p>	6

7:9-4.14 (d) Surface Water Quality Criteria for the Mainstem  
Delaware River and Delaware Bay - Zones 1C through 6

Substance	Criteria	Zones
	<p>ii. Fecal Coliforms:</p> <p>(1) Maximum geometric average not to exceed 200 per 100 ml. Samples shall be taken at such frequency and location as to permit valid data interpretation.</p>	1C,1D,1E,6
	<p>(2) Maximum geometric average not to exceed 200 per 100 ml above R.M. 117.81, and 770 per 100 ml below R.M. 117.81. Samples shall be taken at such frequency and location as to permit valid data interpretation.</p>	2
	<p>(3) Maximum geometric average of 770 per 100 ml. Samples shall be taken at such frequency and location as to permit valid data interpretation.</p>	3,4
	<p>(4) Maximum geometric average of 770 per 100 ml from R.M. 78.8 to 59.5, and of 200 per 100 ml from R.M. 59.5 to 48.2. Samples shall be taken at such frequency and location as to permit valid interpretation.</p>	5
4. Chlorides	<p>i. Maximum 15-day average of 50 mg/l.</p>	2
	<p>ii. Maximum 30-day average concentration of 180 mg/l at R.M. 98.</p>	3
5. Detergents, Synthetic [Methylene blue active substances (MBAS)]	<p>i. Not to exceed 0.5 mg/l.</p>	1C,1D,1E
	<p>ii. Maximum 30-day average of 0.5 mg/l.</p>	2

7:9-4.14 (d) Surface Water Quality Criteria for the Mainstem  
 Delaware River and Delaware Bay - Zones 1C through 6

Substance	Criteria	Zones
6. Dissolved Oxygen	iii. Maximum 30-day average of 1.0 mg/l.	3,4,5,6
	i. Not less than 4.0 mg/l at any time; minimum 24-hour average concentration of 5.0 mg/l.	1C,1D,1E
	ii. Minimum 24 hour average concentration shall not be less than 5.0 mg/l. During periods from April 1 to June 15 and September 16 to December 31 the seasonal average shall not be less than 6.5 mg/l.	2
	iii. Minimum 24 hour average concentration of 3.5 mg/l. During periods from April 1 to June 15 and September 16 to December 31, the seasonal average shall not be less than 6.5 mg/l.	3,4
	iv. Minimum 24 hour average concentration of 3.5 mg/l at R.M.78.8, 4.5 mg/l at R.M. 70.0 and 6.0 mg/l at R.M. 59.5. During the periods from April 1 to June 15 and September 16 to December 31, the seasonal average shall not be less than 6.5 mg/l over the entire zone.	5
	v. Minimum 24 hour average concentration of 6.0 mg/l, with a minimum concentration of 5.0 mg/l at any time, unless due to natural conditions.	6

7:9-4.14 (d) Surface Water Quality Criteria for the Mainstem  
Delaware River and Delaware Bay - Zones 1C through 6

Substance	Criteria	Zones
7. Hardness	i. Maximum 30-day average of 95 mg/l.	2
	ii. Maximum 30-day average of 150 mg/l.	3
8. pH (standard units)	i. Must be maintained between 6.0 and 8.5.	1C,1D,1E
	ii. Must be maintained between 6.5 and 8.5.	2,3,4,5,6
9. Phenols	i. Maximum of 0.005 mg/l, unless exceeded due to natural conditions.	1C,1D,1E,2,3
	ii. Maximum of 0.02 mg/l, unless exceeded due to natural conditions.	4
	iii. Maximum of 0.01 mg/l, unless exceeded due to natural conditions.	5,6
10. Radioactivity	i. Alpha emitters - maximum 3 pc/l (picocuries per liter);	All Zones
	ii. Beta emitters - maximum 1,000 pc/l.	All Zones
11. Sodium	i. Maximum 30-day average concentration of 100 mg/l at R.M. 98.	3
12. Solids, Total Dissolved [Filterable Residue]	i. Not to exceed 133 percent of background or 500 mg/l, whichever is less. (Background is 90 mg/l for Zones 1C and 1D and 200 mg/l for Zones 1E and 2)	1C,1D,1E,2,3
	ii. Not to exceed 133 percent of background.	4,5,6

Substance	Criteria	Zones
<p>13. Temperature and Heat Dissipation Areas</p>	<p>i. Temperature, except in designated heat dissipation areas:</p>	
	<p>(1) Shall not be raised more than 5°F (2.8°C) above ambient temperature until stream temperatures reach 87°F (30.6°C); above 87°F (30.6°C) natural temperature will prevail.</p>	<p>1C,1D,1E</p>
	<p>(2) Shall not be raised more than 5°F (2.8°C) above the average 24 hour temperature gradient displayed during the 1961-1966 period, or to a maximum of 86°F (30.0°C), whichever is lower.</p>	<p>2,3,4</p>
	<p>(3) Shall not be raised above ambient temperature by more than 4°F(2.2°C) during the period from September through May nor more than 1.5°F(0.8°C) during the period from June through August, nor shall maximum temperatures exceed 86°F(30.0°C) in Zone 5 or 85°F(29.4°C) in Zone 6.</p>	<p>5,6</p>
	<p>ii. Heat Dissipation Areas: Temperature limitations may be exceeded by special permission in heat dissipation areas designated on a case-by-case basis, subject to the following conditions:</p>	

7:9-4.14 (d) Surface Water Quality Criteria for the Mainstem  
 Delaware River and Delaware Bay - Zones 1C through 6

Substance	Criteria	Zones
	(1) Maximum Length:	
	(i) 1000 feet or twenty times the average width of the stream, whichever is less, measured from the point where the waste discharge enters the stream.	1C
	(ii) 3500 feet or twenty times the average width of the stream, whichever is less, measured from the point where the waste discharge enters the stream.	1D,1E
	(iii) 3500 feet measured from the point where the waste discharge enters the stream.	2,3,4,5,6
	(2) Maximum Width:	
	(i) One-half the surface width of the stream or the width encompassing one-half of the entire cross-sectional area of the stream, whichever is less. Within any one heat dissipation area only one shore shall be used in determining the limits of the area.	1C,1D,1E

1:9-4.14 (d) Surface Water Quality Criteria for the Mainstem  
 Delaware River and Delaware Bay - Zones 1C through 6

Substance	Criteria	Zones
	(ii) Two-thirds the surface width measured from shore to shore at any stage of tide. Within any one heat dissipation area only one shore shall be used in determining the limits of the area.	2,3,4
	(3) Maximum Cross-section: One quarter of the cross-sectional area of the stream.	2,3,4
14. Threshold Odor Number	i. Not to exceed 24 at 60°C.	All Zones
15. Turbidity (Nephelometric Turbidity Unit - NTU)	i. Maximum 30-day average of 20 NTU, and a maximum of 150 NTU at any time, unless exceeded due to natural conditions.	1C,1D
	ii. Maximum 30 day average of 30 NTU, and a maximum of 150 NTU at any time, unless exceeded due to natural conditions.	1E
	iii. Maximum 30-day average of 40 NTU and a maximum of 150 NTU at any time, except in Zone 2 above R.M. 117.81 during the period from May 30 to September 15 when the turbidity shall not exceed 30 NTU, unless exceeded due to natural conditions.	2,3,4,5,6

INDEX A - FW1 Waters by Tract Within Basins

(a) ATLANTIC COASTAL PLAIN BASIN

ALLAIRE STATE PARK

MANASQUAN RIVER WATERSHED

Those portions of the first and second southerly tributaries to the Manasquan River, which are west of Hospital Rd. and are located entirely within the boundaries of Allaire State Park

The easterly tributary to the brook entering Brisbane Lake located entirely within the boundaries of Allaire State Park, downstream to its confluence with the westerly tributary

BASS RIVER STATE FOREST

BASS RIVER WATERSHED

Tommy's Branch from its headwaters downstream to the Bass River State Forest Recreation Area service road

Falkenburg Branch of Lake Absegami from its headwaters to the Lake

GREENWOOD FOREST FISH  
AND GAME TRACT

CEDAR CREEK WATERSHED

Webbs Mill Branch and tributaries, located entirely within the Greenwood Forest Tract boundaries

Chamberlain's Branch and five tributaries, located entirely within the boundaries of the Greenwood Forest Tract, upstream from the blueberry farm exception

Other tributaries to Chamberlain's Branch located entirely within the boundaries of the Greenwood Forest Tract

WADING RIVER WATERSHED

Westerly tributary to the Howardsville Cranberry Bog Reservoir and other tributaries that are located entirely within the boundaries of the Greenwood Forest Tract

ISLAND BEACH STATE PARK

BARNEGAT BAY WATERSHED

All freshwater ponds in Island Beach State Park

TUCKAHOE PUBLIC FISHING  
AND HUNTING GROUNDS

GREAT EGG HARBOR RIVER WATERSHED  
Hawkins Creek and the next  
adjacent, northern tributary to  
the Great Egg Harbor River, from  
their origins downstream to where  
the influence of impoundment  
begins

WHARTON TRACT

MULLICA RIVER WATERSHED  
Deep Run and tributaries from their  
headwaters downstream to  
Springer's Brook

Skit Branch and tributaries from  
their headwaters downstream to  
the confluence with Robert's  
Branch

Tulpehocken Creek and tributaries  
from their sources downstream to  
the confluence with Featherbed  
Branch

The westerly tributaries to  
Tulpehocken Creek and those  
natural ponds within the lands  
bounded by Hawkins Rd., Hampton  
Gate Rd., and Sandy Ridge Rd.

Stream in the southeasterly corner  
of the Wharton Tract, located  
between Ridge Rd. and Seaf Weeks  
Rd. downstream to the boundaries  
of the Wharton Tract

Brooks and tributaries to the  
Batsto River between and  
immediately to the west of  
Tylertown and Crowleytown, from  
their headwaters downstream to  
the head of tide at mean high  
water

The easterly branches of the Batsto  
River from Batsto Village to the  
confluence with Skits Branch

Gun Branch from its headwaters  
downstream to U.S. Route 206

(b) DELAWARE RIVER BASIN

ALLAMUCHY STATE PARK

PEQUEST RIVER WATERSHED  
All tributaries that are located  
entirely within Allamuchy State  
Park and flow into Allamuchy Pond

**MUSCONETCONG RIVER WATERSHED**

All those tributaries to Deer Park Pond and its outlet stream, that are located entirely within the boundaries of Allamuchy State Park

**BELLEPLAIN STATE FOREST**

**EAST CREEK WATERSHED**

All tributaries to Lake Nummi from their origins downstream to the Lake

Those two tributaries to Savages Run and portions thereof downstream of Lake Nummi, which are located entirely within the Belleplain State Forest boundaries

The stream and its tributaries that originate just south of East Creek Mill Rd., 1.2+ miles north-northeast of Eldora, and are located entirely within the boundaries of Belleplain State Forest

**WEST CREEK WATERSHED**

The portion of the tributary to West Creek that originates about 0.9 miles southeast of Hoffman's Mill and is located entirely within the boundaries of Belleplain State Forest

Eastern branch of the easterly tributary to Pickle Factory Pond from its origin to its confluence with the western branch

Those tributaries to West Creek which originate approximately 0.5 miles upstream of Hoffman's Mill and which are located entirely within the boundaries of Belleplain State Forest

**COLLIERS MILLS FISH AND GAME TRACT**

**CROSSWICKS CREEK WATERSHED**

All tributaries to Lahaway Creek originating in the Colliers Mills Tract north-northeast of Archers Corner, from their origins downstream to Lahaway Creek

DELAWARE WATER GAP  
NATIONAL RECREATION  
AREAS

DELAWARE RIVER WATERSHED  
Van Campen's Brook above the  
village of Millbrook

All tributaries to Flat Brook  
flowing from the Kittatiny Ridge  
and located entirely within the  
proposed boundaries of the  
Delaware Water Gap National  
Recreation Area

Rundle Brook upstream of Flatbrook  
Road

Smith Ferry Brook

Donkey's Corner Brook

Sambo Island Brook and Pond

Coppermine Brook and Pahaquarry

Dunfield Creek to Route I-80

DIX FISH AND GAME TRACT

MIDDLE MARSH CREEK WATERSHED  
All fresh waters which originate in  
and are located entirely within  
the boundaries of the Dix Fish  
and Game Tract

FISH AND GAME TRACTS

FLAT BROOK WATERSHED  
The tributary to Little Flat Brook  
which originates north of the  
Bevans-Layton Rd., downstream to  
the first pond adjacent to the  
Fish and Game headquarters  
building

Two tributaries to Big Flat Brook  
which originate along Struble Rd.  
in Stokes State Forest, down-  
stream to the confluence with Big  
Flat Brook on Fish and Game  
property

GLASSBORO FISH AND GAME  
TRACT

MAURICE RIVER WATERSHED  
That tributary to the Branch of  
Little East Run which joins the  
branch just south of Stangor  
Avenue

First and second easterly  
tributaries to Little East Run  
north of Academy Avenue

## HIGH POINT STATE PARK

### CLOVE BROOK WATERSHED

The second and third northerly tributaries to Clove Brook, those tributaries to Steeny Kill Lake and those downstream of the Lake which originate in High Point State Park, downstream to the confluence with Clove Brook or to the boundaries of High Point State Park

The northerly tributaries to Mill Brook due west of Steeny Kill Lake, within the High Point State Park boundaries

### FLAT BROOK WATERSHED

All surface waters of the Flat Brook drainage within the boundaries of High Point State Park and Stokes State Forest except the following:

- (1) Saw Mill Pond and Big Flat Brook downstream;
- (2) Mashipacong Pond and its outlet stream (Parker Brook) to the confluence with Big Flat Brook;
- (3) Lake Wapalanne and its outlet stream to the confluence with Big Flat Brook;
- (4) Lake Ocquittunk and waters connecting it with Big Flat Brook;
- (5) Stony Lake and its outlet stream (Stony Brook) downstream to the confluence with the Big Flat Brook;
- (6) Kittatinny Lake, that portion of its inlet stream outside the Stokes State Forest boundaries, and its outlet stream, including the Shotwell Camping Area tributary, to the confluence with Big Flat Brook;
- (7) Deer Lake and its outlet stream to Lake Ashroe;

- (8) Lake Ashroe, the portions of its tributaries outside the Stokes State Forest boundaries, and its outlet stream to the confluence with Big Flat Brook;
- (9) Lake Shawanni and its outlet stream to the confluence with Big Flat Brook;
- (10) Crigger Brook and its tributary to the confluence with Big Flat Brook

SHIMERS BROOK WATERSHED

The portion of Shimers Brook and its tributaries, as well as any other tributaries, that are located within the boundaries of High Point State Park

JOHNSONBURG TRACT

PEQUEST RIVER WATERSHED

Mud Pond and its outlet stream to the Erie-Lackawanna Railroad trestle, north of Johnsonburg

LEBANON STATE FOREST

RANCOCAS CREEK WATERSHED

Deer Park Branch and tributaries near Buckingham, downstream to the confluence with Pole Bridge Branch

Tributaries to the South Branch of Mount Misery Brook located entirely within the boundaries of Lebanon State Forest

Cooper Branch and tributaries downstream to Pakim Pond and those tributaries to Cooper Branch downstream of Pakim Pond that are located entirely within the boundaries of Lebanon State Forest

Shinns Branch and tributaries, located entirely within the boundaries of Lebanon State Forest

Jade Run located entirely within the boundaries of Lebanon State Forest

MILLVILLE FISH AND GAME  
TRACT

MacDonald's Branch and tributaries  
located entirely within the  
boundaries of Lebanon State  
Forest

MAURICE RIVER WATERSHED

Joshua and Pine Branches of  
Buckshutem Creek to their  
confluences with Buckshutem Creek  
Gravelly Run downstream to the  
boundaries of the Millville Fish  
and Game Tract

NANTUXENT CREEK WATERSHED

Cedar and Mile Branches to Shaw's  
Mill Pond

DIVIDING CREEK WATERSHED

Those tributaries to Cedar Creek  
which originate in and are lo-  
cated entirely within the  
Millville Fish and Game Tract  
boundaries

Those portions of tributaries to  
Dividing Creek, located entirely  
within the boundaries of the  
Millville Fish and Game Tract and  
which are north of Whitehead  
Station

PASADENA FISH AND GAME  
TRACT

RANCOCAS CREEK WATERSHED

The two easterly branches of the  
South Branch of Mount Misery  
Brook, located entirely within  
the boundaries of the Pasadena  
Fish and Game Tract

PEASELEE FISH AND GAME  
TRACT

MAURICE RIVER WATERSHED

Middle Branch of Muskee Creek from  
its origin to the boundaries of  
the Peaselee Fish and Game Tract

Cedar Branch of the Manumuski  
River, from its origin to the  
boundaries of the Peaselee Fish  
and Game Tract

Those portions of tributaries to  
Slab Branch located entirely  
within the boundaries of the  
Peaselee Fish and Game Tract

WASHINGTON CROSSING STATE  
PARK

STEELE RUN WATERSHED

That portion of Steele Run which is located within the boundaries of Washington Crossing State Park and is upstream of New Jersey Rt. 29

WHITTINGHAM TRACT

PEQUEST RIVER WATERSHED

Northwesterly tributaries to the Pequest River, including Big Spring, located within the boundaries of the Whittingham Tract southwest of Springdale, from their origins to their confluence with the Pequest River

WORTHINGTON TRACT

DUNNFIELD CREEK WATERSHED

Sunfish Pond, its outlet stream to the Delaware River and all unnamed waters located entirely within the boundaries of the Worthington Tract

(c) PASSAIC RIVER, HACKENSACK RIVER, NY HARBOR COMPLEX BASIN

Tract

Waterbody

A. S. HEWITT STATE  
FOREST

WANAQUE RIVER WATERSHED

Cooley Brook and tributaries located entirely within the boundaries of Hewitt State Forest

Surprise Lake

Green Brook and tributaries located entirely within the boundaries of Hewitt State Forest

West Pond

BERKSHIRE VALLEY FISH  
AND GAME TRACT

ROCKAWAY RIVER WATERSHED

Stephens Brook north of the boundaries of the Berkshire Valley Tract

CITY OF NEWARK HOLDINGS

PEQUANNOCK RIVER WATERSHED

Cedar Pond and all tributaries

Hanks Pond and all tributaries

Tributary to Pequannock River at Green Pond Junction

Tributary joining the main stem of the Pequannock River 3500+ feet southeast of the Sussex-Passaic County line, near Jefferson

Packack Brook and its tributaries upstream of Canistear Reservoir, located entirely within the boundaries of the Newark watershed

Cherry Ridge Brook and its tributaries north of Canistear Reservoir, located entirely within the boundaries of the Newark watershed lands and Wawayanda State Park

The southern branch of the easterly tributary to Canistear Reservoir Pequannock River and tributaries upstream of the confluence with Packack Brook

The northwestern tributary to Oak Ridge Reservoir

The westerly tributary to Lake Stockholm Brook, located entirely within the boundaries of the Newark watershed

Lud-Day Brook downstream to its confluence with a tributary from Camp Garfield

Brook between Hamburg Turnpike and Williamsville-Stockholm Road, downstream to its confluence with Lake Stockholm Brook, north of Rt. 23

(d) RARITAN RIVER BASIN

NONE

(e) WALLKILL RIVER BASIN

Tract

CITY OF NEWARK HOLDINGS  
AND WAWAYANDA TRACT

Waterbody

LAKE LOOKOUT BROOK WATERSHED

Lake Lookout Brook and tributaries from its headwaters in the Newark City holdings, downstream through

the State-owned Wawayanda Tract, to the confluence with the outlet stream from Lake Wawayanda

#### HAMBURG MOUNTAIN TRACT

#### SAND HILLS BROOK WATERSHED

The upstream portion of Sand Hills Brook located entirely within the boundaries of the Hamburg Mtn. Tract

#### BLACK CREEK WATERSHED

All those portions of three tributaries to Black Creek originating in the Hamburg Mtn. Tract, from their origin downstream to the tract boundaries

#### FRANKLIN POND CREEK WATERSHED

The first tributary to Franklin Pond Creek just south of Hamburg Mountain, flowing toward the Wallkill River and located entirely within the Hamburg Mtn. Tract

#### HAMBURG CREEK WATERSHED

The third tributary just southwest of Hamburg Mountain, which flows toward the Wallkill River and is located entirely within the Hamburg Mtn. Tract

#### HIGHPOINT STATE PARK

#### CLOVE RIVER WATERSHED

Those portions of the two northernmost tributaries to Clove River which are located entirely within the boundaries of High Point State Park, and are immediately east of Steeny Kill Lake

#### RUTGERS CREEK WATERSHED

The Cedar Swamp headwaters of the tributary to Rutgers Creek, located entirely within the boundaries of High Point State Park, just south of the New Jersey - New York state line

#### SUSSEX BOROUGH WATER SUPPLY LAND

#### LAKE RUTHERFORD WATERSHED

Lake Rutherford, located northwest of Colesville

WAWAYANDA TRACT

LAUREL POND WATERSHED

Laurel Pond, and its outlet stream  
and tributaries downstream to the  
outlet stream from Lake Wawayanda

## GUIDE TO USE OF INDEXES B THROUGH F

The Surface Water Classification Indexes give the surface water classifications for the waters of the State. The listing is divided into five indexes by major drainage basin: b) Atlantic Coastal; c) Delaware River; d) Passaic River, Hudson River, and New York Harbor Complex; e) Raritan River; and f) Wallkill River. Within each basin the waters are listed alphabetically and segment descriptions begin at the headwaters and proceed downstream.

a) To find a stream in this listing:

1. Determine which Major Basin the stream is in;
2. Look for the name of the stream in the appropriate index and find the classification;
3. For unnamed or unlisted streams, find the stream or other waterbody that the stream of interest flows into and look for the classification of that stream or waterbody. The classification of the stream of interest may then be determined by referring to c) below. If the second stream or waterbody is also unlisted, repeat the process until a listed stream or waterbody is found. Use c)1 through c)3 below to classify streams entering unlisted lakes.

b) To find a lake or other non-stream waterbody:

1. Determine which Major Basin the waterbody is in;
2. Look for the waterbody name in the appropriate index;
3. If the waterbody is not listed use c)2, c)5 and c)6 below to determine the appropriate classification.

c) To find unnamed waterways or waterbodies or named waterways or waterbodies which do not appear in the listing, use the following rules:

1. Unnamed or unlisted freshwater streams that flow into streams classified as FW2-TP, FW2-TM, or FW2-NT or lakes classified as FW2-NT take the classification of the waters they enter, unless the unlisted stream is a PL water (see 6 below). If the stream could be a C1 water also see 5 below.

2. All fresh water lakes, ponds and reservoirs that exceed one acre in surface area, are not located within the Pinelands Area boundaries (see 6 below) and are not specifically listed as FW2-TM are classified as FW2-NT. This includes impoundments on segments of streams which are classified as FW2-TM such as Saxton Lake on the Musconetcong River. If the waterbody could be a C1 water also check 5 below.
3. Unnamed or unlisted streams which enter FW2-TM lakes are classified as FW2-TM only if all of the listed streams in the watershed that flow into the lake are classified as FW2-TM and/or FW2-TP. If none of the streams that flow into the lake are listed, the stream of interest is classified as FW2-TM only if the outlet stream from the lake is classified as FW2-TM or FW2-TP. If the stream is located within the boundaries of the Pinelands Area see 6 below; if it could be a C1 water also see 5 below.
4. Unnamed or unlisted saline waterways and waterbodies are classified as SE1 in the Atlantic Coastal Basin. Unnamed or unlisted saline waterways which enter SE2 or SE3 waters in the Passaic, Hackensack and NY Harbor Complex basin are classified as SE2 unless specifically listed within Index d. Freshwater portions of unnamed or unlisted streams entering SE1, SE2 or SE3 waters are classified as FW2-NT. This only applies to waters that are not PL waters (see 6 below). If the waterbody or waterway could be a C1 water also see 5 below.
5. If the waterway or waterbody of interest flows through or is entirely located within State parks, forests or fish and game lands, Federal wildlife refuges, other special holdings, or is a State shellfish water as defined in N.J.A.C. 7:9-4, the Department's maps should be checked to determine if the waterbody of interest is mapped as a C1 water. If the waterway or waterbody does not appear on the USGS quadrangle that the Department used as a base map in its designation of the C1 waters, the Department will determine on a case-by-case basis whether the waterway or waterbody should be designated as C1.

6. Unnamed and unlisted waterways or waterbodies are classified as PL only for those portions that are located within the boundaries of the Pinelands Area. A tributary entering a PL stream is classified as PL only for those portions where it actually flows within the Pinelands Area. Lakes are classified as PL only if they are located entirely within the Pinelands Area.

#### CLASSIFICATIONS:

FW1

FW2-TP -- FW2 Trout Production

FW2-TM -- FW2 Trout Maintenance

FW2-NT -- FW2 Non Trout

PL -- Pinelands Waters

SE1

SE2

SE3

SC

FW2-NT/SE1 (or similar designation) -- Indicates a waterway in which there may be a salt water/fresh water interface. The exact point of demarcation between the fresh and saline waters must be determined by salinity measurements and is that point where the salinity reaches 3.5 parts per thousand at mean high tide. The stream is classified as FW2-NT in the fresh portions (salinity less than 3.5 parts per thousand at mean high tide) and SE1 in the saline portions.

#### DESIGNATIONS:

(C1) -- Category 1 waters

[tp] -- Indicates trout production in waters which are classified as FW1; this is for information only and does not affect the water quality criteria for any stream

[tm] -- Indicates trout maintenance in waters which are classified as PL or FW1. For FW1 this is for information only and does not affect the water quality criteria for any stream.

INDEX B - SURFACE WATER CLASSIFICATIONS - Atlantic Coastal Basin

ABRAMS CREEK

(Marmora) - Entire length, except portion outside the boundaries of the MacNamara Wildlife Management Area FW2-NT/SE1 (C1)

(Griscom) - Portions of the Creek and tributaries outside of the MacNamara Wildlife Management Area FW2-NT/SE1

ABSECON BAY ( Absecon) - All waters within Absecon Wildlife Management Area SE1 (C1)

ABSECON CREEK (Absecon) - Entire length FW2-NT/SE1

ARNOLD POND (Barnegat) FW2-NT/SE1 (C1)

ATLANTIC OCEAN

(Offshore) - Waters from the shoreline out to the three mile limit, except areas described below SC

(Beach Haven) - Waters of the Atlantic Ocean out to the State's three mile limit from Beach Haven Inlet to Cape May Point, excluding the following waters: SC (C1)

1) (Atlantic City) - All of the Ocean waters inshore of a line that begins at the center of Convention Hall, Atlantic City bearing approximately 153 degrees T (True North) and extends 2.0 nautical miles to a point with coordinates of latitude 39 degrees 19.4 minutes N., longitude 74 degrees 25.1 minutes W., from this point, approximately 2 nautical miles offshore, the line runs parallel to the shoreline in a southwesterly direction for approximately 2.1 nautical miles to a point with coordinates of latitude 39 degrees 18.4 minutes N., longitude 74 degrees 27.5 minutes W., then bearing approximately 333 degrees T (reciprocal 153 degrees T) for approximately 1.9 nautical miles to the outermost tip of the Ventnor City Fishing Pier located at the Boardwalk and South Cambridge Ave., City of Ventnor, then along that pier to the shore and terminating.

2) (Ocean City) - All of the ocean waters inshore of a line which begins at the City of Ocean City's Beach Patrol, First Aid and Rest

Room building located on the beach at 34th Street, with coordinates of latitude 39 degrees 15.0 minutes N., longitude 74 degrees 36.6 minutes W., and bears approximately 126 degrees T (True North) for approximately 1.5 nautical miles from the shoreline to a point with coordinates of latitude 39 degrees 14.1 minutes N., longitude 74 degrees 35.0 minutes W., then bears approximately 216 degrees T along the shoreline in a southwesterly direction 1.5 nautical miles offshore, for approximately 2.3 nautical miles to a point with coordinates of latitude 39 degrees 12.3 minutes N., longitude 74 degrees 36.7 minutes W., then bears approximately 306 degrees T for approximately 1.4 nautical miles to the outermost tip of Anglers Fishing Club's Pier, 5825 Central Ave., Ocean City, then along that pier to the shoreline.

- 3) Seven mile beach outfall exclusion
- 4) Wildwood outfall exclusion

TRIBUTARIES, ATLANTIC OCEAN

(New Jersey Coast) - All those streams or segments of streams that flow directly into the Atlantic Ocean or into back bays of the Ocean which are not included elsewhere in this list, are not within the boundaries of the Pinelands Protection or Preservation Areas and are not mapped as C1 waters by the Department

FW2-NT/SE1

(Pinelands) - All streams or segments of streams which flow directly into the Atlantic Ocean or into back bays of the Ocean, are within the boundaries of the Pinelands Protection and Preservation Areas and are not classified as FW1 in this Index

PL

(New Jersey Coast) - All streams or segments of streams which flow directly into the Atlantic Ocean or into back bays of the Ocean, are mapped as C1 waters by the Department are not trout maintenance waters, and are not classified as FW1 in this Index

FW2-NT/SE1 (C1)

BABCOCK CREEK (Marmora) - Entire length

FW2-NT/SE1 (C1)

BALLANGER CREEK	
(New Gretna) - Source to Pollys Ditch	FW2-NT/SE1
(New Gretna) - Pollys Ditch to Bay	SE1 (C1)
BANKS CREEK (Marmora) - Entire length	SE1 (C1)
BARNEGAT BAY	
(Barnegat National Wildlife Refuge) -	
All waters within the boundaries of	
the Barnegat National Wildlife	
Refuge	SE1 (C1)
(Barnegat Light) - All other waters of the	
Bay	SE1 (C1)
(Island Beach State Park) - All fresh-	
water ponds within the boundaries	
of Island Beach State Park	FW1
(Island Beach State Park) - All waters	
in the Park, not classified as	
FW1 above	FW2-NT/SE1/SC1 (C1)
BARNEGAT BAY TRIBUTARIES - See ATLANTIC OCEAN,	
TRIBUTARIES	
BASS RIVER	
(Oswego Lake) - Source to Pineland	
Protection and Preservation Area	
boundary at the Garden State	
Parkway, except those branches	
described separately below	PL
(New Gretna) - Pineland Protection	
and Preservation Area boundary to	
the boundary of shellfish waters	FW2-NT/SE1
(New Gretna) - Boundary of shellfish	
waters to Mullica River	SE1 (C1)
(Bass River State Forest) - Tommy's	
Branch from its headwaters to the	
Bass River Recreation Area service road	FW1
(Bass River State Forest) - Falkenburg	
Branch of Lake Absegami from its	
headwaters to the Lake	FW1
BATSTO RIVER	
(Browns Mills) - Entire length, except	
waters described separately below	PL
(Wharton) - Brooks and tributaries to	
the Batsto River between and	
immediately to the west of Tylertown	
and Crowleytown, from their head-	
waters to the head of tide at mean	
high water	FW1
(Wharton) - The easterly branches of the	
Batsto River from Batsto Village	
upstream to the confluence with	
Skits Branch	FW1
BEACH THOROFARE (Margate) - Entire length	SE1 (C1)
BEAR SWAMP BROOK	
(Squankum) - Entire length, except	
segment described below	FW2-NT
(Allaire) - Segment within the	
boundaries of Allaire State Park	FW2-NT (C1)

BIG ELDER CREEK	
(Sea Isle City) - Segment within the boundaries of Marmora Wildlife Management Area	SE1 (C1)
(Sea Isle City) - Segment outside the boundaries of Marmora Wildlife Management Area	SE1
BIG GRAVELING CREEK (Great Bay) - Entire length	SE1 (C1)
BIG GREAVES CREEK	
(MacNamara) - Segment of the Creek outside the boundaries of MacNamara Wildlife Management Area	SE1
(MacNamara) - Creek and tributaries within the boundaries of MacNamara Wildlife Management Area	SE1 (C1)
BIG THOROFARE	
(Tuckerton) - Source to boundary of Great Bay Blvd. Wildlife Management Area	SE1
(Tuckerton) - Segment within the boundaries of Great Bay Blvd. Wildlife Management Area	SE1 (C1)
BLUEFISH BROTHERS (Stone Harbor) - Entire length	SE1 (C1)
BLUEFISH CREEK (Stone Harbor) - Entire length	SE1 (C1)
BOG BRANCH CREEK (Middletown) - Entire length	SE1 (C1)
BRIGANTINE (Brigantine National Wildlife Refuge) - All waters within the boundaries of the Brigantine National Wildlife Refuge	FW2-NT/SE1 (C1)
BRISBANE LAKE	
(Allenwood) - The lake, its tributaries and outlet streams within the boundaries of Allaire State Park, except tributary described separately below	FW2-NT (C1)
(Allaire) - The easterly tributary to the brook entering Brisbane Lake, located entirely within the Allaire State Park boundaries, downstream to its confluence with the westerly tributary	FW1 [tm]
BROAD CREEK (New Gretna) - Entire length	SE1 (C1)
BROAD THOROFARE	
(Longport) - South of Rt. 152	SE1
(Longport) - North of Rt. 152	SE1 (C1)
BROTHERS CREEK (Burleigh) - Entire length	SE1 (C1)
CABBAGE THOROFARE (Great Bay) - Entire length	SE1 (C1)
CEDAR BRIDGE BRANCH (Lakewood) - Entire length	FW2-NT
CEDAR CREEK	
(Manahawkin) - Source to boundaries of the Manahawkin Wildlife Management Area	FW2-NT/SE1

(Manahawkin) - Creek and tributaries within the boundaries of the Manahawkin Wildlife Management Area	FW2-NT/SE1 (C1)
<b>CEDAR CREEK</b>	
(Cedar Crest) - Entire length, except branches described below	FW2-NT
(Greenwood Forest) - Webbs Mill Branch and tributaries located entirely within the boundaries of Greenwood Forest Tract	FW1
(Greenwood Forest) - Chamberlain's Branch and five tributaries which originate in and are located entirely within the boundaries of the Greenwood Forest Tract upstream of the blueberry farm exception	FW1
(Greenwood Forest) - Other tributaries to Chamberlain's Branch, located within the boundaries of the Greenwood Forest Tract	FW1
<b>CEDAR HAMMOCKS CREEK</b> (English Creek Landing) - Entire length	SE1 (C1)
<b>CEDAR RUN</b>	
(Stafford) - Source to the boundaries of the Pinelands Protection and Preservation Area at the Garden State Parkway	PL
(Cedar Run) - Garden State Parkway to the boundaries of the Barnegat National Wildlife Refuge	FW2-NT/SE1
(Barnegat) - National Wildlife Refuge boundaries to Barnegat Bay	FW2-NT/SE1 (C1)
<b>CEDAR SWAMP CREEK</b>	
(Cedar Spring) - Entire length, except segment described separately below	FW2-NT/SE1
(Marmora) - Creek and tributaries within the boundaries of the MacNamara Wildlife Management Area	FW2-NT/SE1 (C1)
<b>CHAMBERLAIN BRANCH</b> - See CEDAR CREEK	
<b>CHANNEL CREEK</b> (Barnegat Bay) - Entire length	SE1 (C1)
<b>CHARLEY CREEK</b> (Marmora) - Entire length	FW2-NT/SE1 (C1)
<b>COLLINS TIDE PONDS</b> (Barnegat)	FW2-NT/SE1 (C1)
<b>COMMANDO CREEK</b> (Marmora) - Entire length	SE1 (C1)
<b>CRANBERRY BROOK</b> (Monmouth) - Entire length	FW2-NT/SE1
<b>DAVENPORT BROOK</b> (Berkeley) - Entire length	FW2-NT
<b>DEEP CREEK</b> (Herbertsville) - Entire length	FW2-NT
<b>DEEP RUN</b> (Wharton) - Run and tributaries from their sources to Springer's Brook	FW1
<b>DICKS BROOK</b> (Larrabee's Crossing) - Entire length	FW2-NT
<b>DOCK THOROFARE</b> (Northfield) - Entire length	SE1 (C1)
<b>DINNER POINT CREEK</b> (Staffordsville) - Entire length	SE1 (C1)

DOVE MILL BRANCH - See TOMS RIVER	
EDWARD CREEK	
(Sea Isle City) - Source to the boundary of Marmora Wildlife Management Area	SE1
(Sea Isle City) - Boundary of Marmora Wildlife Management Area to Horn Creek	SE1 (C1)
FALKENBURG BRANCH - See BASS RIVER	
FLAT CREEK (Marmora) - Entire length	FW2-NT/SE1 (C1)
FLATTERAS CREEK (Beach Haven Heights) - Entire length	SE1 (C1)
FORKED RIVER (Forked River) - Entire length	FW2-NT
FORTESCUE (Fortescue) - All waters within the Fortescue Wildlife Management Area	FW2-NT/SE1 (C1)
GIBSON CREEK	
(Gibson Landing) - Entire length, except segment described below	PL
(Marmora) - Segment and tributaries within the MacNamara Wildlife Management Area	FW2-NT/SE1 (C1)
GO THROUGH CREEK	
(Burleigh) - Entire length, except segment described below	SE1
(Burleigh) - Segment within the boundaries of the Marmora Wildlife Management Area	SE1 (C1)
GOING THROUGH CREEK (English Creek Landing)	SE1 (C1)
GREAT BAY (Brigantine) - All waters of the Bay and all natural waterways which are tributary to the Bay and all waters, including both natural and manmade channels and ponds within the boundaries of the Brigantine National Wildlife Refuge and the Great Bay Wildlife Management Area	FW2-NT/SE1 (C1)
GREAT EGG HARBOR RIVER	
(Berlin) - Tinker Branch, the River from its confluence with Tinker Branch, and all tributaries within the Pinelands Protection and Preservation Area, downstream to the boundary at the Rt. 40 bridge in Mays Landing	PL
(Berlin) - All tributaries or segments of tributaries outside of the boundaries of the Pinelands Protection and Preservation Area, downstream to Rt. 40 at Mays Landing	FW2-NT
(Mays Landing) - Rt. 40 bridge to Great Egg Harbor, except those tributaries described separately below	FW2-NT/SE1
(Mays Landing) - All tributaries or segments of tributaries within the boundaries of the Pinelands Protection and Preservation Areas	PL

(Egg Harbor) - Tributaries and all other waters within MacNamara Wildlife Management Area, except tributary described below	FW2-NT/SE1 (C1)
(Tuckahoe) - Tributary adjacent to and north of Hawkin's Creek from its origin to the point where the influence of impoundment occurs	FW1
GREAT SOUND (Avalon) - All waters within Great Sound State Park	SE1 (C1)
GREAT THOROFARE	
(Ventnor) - West of Rt. 40	SE1 (C1)
(Ventnor) - East of Rt. 40	SE1
GRISCOM CREEK (Gibson Landing) - Entire length	FW2-NT/SE1 (C1)
GUNNING RIVER	
(Barnegat) - Entire length, except segment described below	FW2-NT/SE1
(Barnegat) - Stream and tributaries within the boundaries of Barnegat National Wildlife Refuge	FW2-NT/SE1 (C1)
HALFWAY CREEK	
(Middletown) - Source to the boundary of the MacNamara Wildlife Management Area	FW2-NT/SE1
(MacNamara) - Creek and tributaries within the boundaries of the MacNamara Wildlife Management Area	SE1 (C1)
HATFIELD CREEK (Beach Haven Heights) - Entire length	SE1 (C1)
HARRY POND (Barnegat)	FW2-NT/SE1 (C1)
HAWKINS CREEK	
(Tuckahoe) - Source to the point where impoundment influences flow	FW1
(Tuckahoe) - Downstream of the influence of impoundment	SE1 (C1)
HAY STACK BROOK (Howell) - Entire length	FW2-NT
HIGHS BEACH (Highs Beach) - All waters within the Wildlife Management Area south of Highs Beach	FW2-NT/SE1 (C1)
HOSPITALITY CREEK (Longport) - Entire length	SE1 (C1)
JACOVY CREEK (Stone Harbor) - Entire length	SE1 (C1)
JAKES BRANCH (Toms River) - Entire length	FW2-NT
JAY CREEK	SE1 (C1)
JIMMIES CREEK	
(Stone Harbor) - Source to the boundary of Great Bay Wildlife Management Area	SE1 (C1)
(Stone Harbor) - Segments of the Creek outside the boundaries of Great Bay Wildlife Management Area	SE1
JOSH CREEK (Stone Harbor) - Entire length	SE1 (C1)
JUDIES CREEK	
(Great Bay) - Source to widening of creek	SE1
(Great Bay) - Widening of creek to mouth	SE1 (C1)
JUMPING BROOK (Neptune) - Entire length	FW2-NT/SE1

KNOLL POND (Barnegat)	FW2-NT/SE1 (C1)
LAKES BAY (Ventnor)	SE1 (C1)
LAKES CHANNEL (Ventnor) - Entire length	SE1 (C1)
LITTLE GREAVES CREEK (MacNamara) - Entire length	SE1 (C1)
LITTLE SCOTCH BONNET	
(Stone Harbor) - Entire length, except segment described below	SE1
(Stone Harbor) - Segment within the boundaries of Marmora Wildlife Management Area	SE1 (C1)
LITTLE THOROFARE (Tuckerton) - Entire length	SE1 (C1)
LONG POINT CREEK (Marmora) - Entire length	FW2-NT/SE1 (C1)
LONG SWAMP BROOK	
(Squankum) - Entire length, except segment within the boundaries of Allaire State Park	FW2-TM
(Allaire) - Segment within the boundaries of Allaire State Park	FW2-TM (C1)
LOWER LONG REACH (Stone Harbor) - Entire length	SE1 (C1)
LUDLAM CREEK (Marmora) - Entire length	SE1 (C1)
MAIN MARSH CREEK (Brigantine) - Entire length	SE1 (C1)
MANAHAWKIN CREEK	
(Manahawkin) - Source to the boundaries of Manahawkin Wildlife Management Area	FW2-NT/SE1
(Manahawkin) - Within the boundaries of the Wildlife Management Area	FW2-NT/SE1 (C1)
MANASQUAN RIVER	
MAIN STEM	
(Freehold) - Source to Rt. 9 bridge, except tributaries described separately under Tributaries, below	FW2-NT
(Farmingdale) - Rt. 9 bridge to the "Narrows" in the vicinity of the Meadows Marina, except trib- utaries described separately under Tributaries, below	FW2-TM
(Meadows Marina) - The "Narrows" to surf waters	SE1
TRIBUTARIES, MANASQUAN RIVER (See also BRISBANE LAKE)	
(Adelphia) - Entire length	FW2-NT
(Allaire) - Those portions of the first and second southerly tributaries west of the Hospital Rd. which are located entirely within the boundaries of Allaire State Park	FW1 [tm]
(Brick) - Tributaries within the boundaries of Allaire State Park and Manasquan River Wildlife Manage- ment Area, except those designated FW1, above	FW2-TM (C1)
(Freehold) - Tributaries within the boundaries of Turkey Swamp Wildlife Management Area	FW2-NT (C1)

MARMORA WILDLIFE MANAGEMENT AREA (Strathmere) - All waters within the boundaries of Marmora Wildlife Management Area	FW2-NT/SE1 (C1)
MARSH BOG BROOK (Farmingdale) - Source to Yellow Brook Rd. (Allaire) - Allaire State Park boundary at Yellow Brook Rd. to Manasquan River	FW2-NT FW2-NT (C1)
MASONS CREEK (Marmora) - Entire length	SE1 (C1)
MCNEALS BRANCH - See TUCKAHOE RIVER	
METEDECONK RIVER SOUTH BRANCH (Lakewood) - Entire length, except segment described below	FW2-NT
(Turkey Swamp) - Tributaries within the boundaries of Turkey Swamp Wildlife Management Area	FW2-NT (C1)
NORTH BRANCH METEDECONK RIVER (Freehold) - Source to Aldrich Rd., except segment described below	FW2-NT
(Turkey Swamp) - River and tributaries within the boundaries of Turkey Swamp Wildlife Management Area	FW2-NT (C1)
(Lakewood) - Aldrich Rd. to Lanes Mills	FW2-TM
(Brick) - Lanes Mills to confluence with Metedeconk River, South Branch	FW2-NT
MAIN STEM METEDECONK RIVER (Brick) - Confluence of North and South branches to Barnegat Bay	FW2-NT/SE1
MIDDLE RIVER (Tuckahoe) - Entire length, except the segment described below	FW2-NT/SE1
(Middletown) - Segment within the boundaries of MacNamara Wildlife Management Area	FW2-NT/SE1 (C1)
MILE THOROFARE - Entire length	SE1 (C1)
MILL RUN (Allaire) - Entire length	FW2-TM (C1)
MINGAMAHONE BROOK (Farmingdale) - Entire length, except segment described below	FW2-TM
(Allaire) - Brook and tributaries within the boundaries of Allaire State Park	FW2-TM (C1)
MIRY RUN (MacNamara) - Entire length	FW2-NT/SE1 (C1)
MOTT CREEK (Brigantine) - Entire length	SE1 (C1)
MUD CREEK (MacNamara) - Entire length	SE1 (C1)
MUDDY FORD BROOK (Larrabee's Crossing) - Entire length	FW2-TM
MULBERRY THOROFARE (Northfield) - Entire length	SE1 (C1)
MULLICA RIVER (Berlin) - Source to Pinelands Pro- tection and Preservation Area boundaries at the Garden State Parkway, except branches and tributaries described below	PL

(Wharton) - Skit Branch and tributaries from their headwaters to the confluence with Robert's Branch	FW1
(Wharton) - Stream in the southeasterly corner of the Wharton Tract located between Ridge Rd. and Seaf Weeks Rd., downstream to the boundaries of the Wharton Tract	FW1
(Wharton) - Gun Branch from its headwaters to US Rt. 206	FW1
(New Gretna) - River and tributaries from the Pinelands Protection and Preservation Area boundary to Great Bay	SE1 (C1)
NARROWS CREEK (Middletown) - Entire length	SE1 (C1)
NORTH CHANNEL POND (Stone Harbor)	FW2-NT/SE1 (C1)
OLDMAN CREEK (Stone Harbor) - Entire length	SE1 (C1)
OTTER CREEK (Middletown) - Entire length	SE1 (C1)
OYSTER CREEK (Forked River) - Entire length	FW2-NT
OYSTER CREEK (Great Bay) - Entire length	SE1 (C1)
RING ISLAND CREEK (Stone Harbor) - Entire length	SE1 (C1)
RISLEY CHANNEL (Margate) - Entire length	SE1 (C1)
ROUNABOUT CREEK (New Gretna) - Entire length	SE1 (C1)
SALT CREEK (Stone Harbor) - Entire length	SE1 (C1)
SCULL BAY (Linwood)	SE1 (C1)
SEDGE CREEK - Entire length	SE1 (C1)
SHARK CREEK (Stone Harbor) - Entire length	SE1 (C1)
SHARK RIVER	
(Colts Neck) - Source to Rt. 33	FW2-NT
(Neptune) - Rt. 33 to Brighton Ave. bridge, Glendola	FW2-TM/SE1
(Glendola) - Brighton Ave. bridge to Atlantic Ocean	FW2-NT/SE1
SHELL THOROFARE (Wildwood Gables) - Entire length	SE1 (C1)
SHELTER ISLAND BAY (Margate)	SE1 (C1)
SHELTER ISLAND WATERS (Margate) - Entire length	SE1 (C1)
SKIT BRANCH - See MULLICA RIVER	
SOD THOROFARE (Linwood) - Entire length	SE1 (C1)
SOUTHEAST CREEK (Stone Harbor) - Entire length	SE1 (C1)
SQUANKUM BROOK	
(Squankum) - Entire length, except segment described below	FW2-NT
(Allaire) - Segment within Allaire State Park	FW2-NT (C1)
STEELMAN BAY (Somers Point)	SE1 (C1)
SWAN POND (Marmora)	FW2-NT/SE1 (C1)
SWAN POND RACE (Marmora) - Entire length	FW2-NT/SE1 (C1)
TAUGH CREEK	
(Whitesboro) - Entire length, except segment described below	SE1 (C1)
(Whitesboro) - Portions outside the boundaries of	SE1

TIMBER SWAMP BROOK (Oak Glen) - Entire length	FW2-NT
TINKER BRANCH - See GREAT EGG HARBOR RIVER	
TITMOUSE BROOK (Howell) - Entire length	FW2-TM
TOMMYS BRANCH - See BASS RIVER	
TOMS RIVER	
MAIN STEM	
(Holmeson) - Source to Rt. 528 bridge, Cassville except those tributaries described separately under Tributaries below	FW2-NT
(Van Hiseville) - Rt. 528 bridge to Rt. 547 bridge in Whitesville, except tributaries described separately, under Tributaries below	PL [tm]
(Whitesville) - Rt. 547 bridge to Pinelands Protection and Preservation Area boundaries at the NJ Central Railroad tracks, except tributaries described separately, under Tributaries below	PL
(Toms River) - NJ Central Railroad tracks to Barnegat Bay, except tributaries described separately, under Tributaries below	FW2-NT/SE1
TRIBUTARIES, TOMS RIVER	
(Holmeson) - Tributaries within the boundaries of the Pinelands Protection and Preservation Area	PL
(Van Hiseville) - All tributaries outside the boundaries of the Pinelands Protection and Preservation Area which enter the River between the Rt. 528 bridge, Cassville and the Rt. 547 bridge, Whitesville, except Dove's Mill Branch described separately below	FW2-TM
(Toms River) - All tributaries within the boundaries of the Pinelands Protection and Preservation Area	PL
(Archer's Corners) - All tributaries outside the boundaries of the Pinelands Protection and Preservation Area and within the boundaries of Collier's Mills Wildlife Management Area	FW2-NT (C1)
DOVE'S MILL BRANCH	
(Van Hiseville) - Entire length, except the segment described separately below	FW2-TM
(Holmansville) - Stream and tributaries within Butterfly Bogs Wildlife Management Area	FW2-TM (C1)
TUCKAHOE RIVER	
(Milmay) - Source to Pinelands Protection and Preservation Area boundary at Rt. 49	PL

(Head of River) - McNeals Branch and the River within the boundaries of the Peaselee Wildlife Management Area, except tributaries within the boundaries of the Pinelands Protection and Preservation Area, described separately below	FW2-NT/SE1 (C1)
(Head of River) - Tributaries within the Pinelands Protection and Preservation Area boundaries	PL
(Tuckahoe) - Edge of Fish and Wildlife Management Area at confluence with Warners Mill Stream to Great Egg Harbor except segment described separately below	FW2-NT/SE1 (C1)
(Tuckahoe) - River, tributaries and all other waters within boundaries of the MacNamara Wildlife Management Area	FW2-NT/SE1 (C1)
TUCKAHOE LAKE (Tuckahoe)	FW2-NT (C1)
TULPEHOCKEN CREEK	
(Wharton) - Creek and tributaries from their origin to the confluence with Featherbed Brook	FW1
(Wharton) - The westerly tributaries and those natural ponds within the lands bounded by Hawkins Rd., Hampton Gate Rd., and Sandy Ridge Rd.	FW1
TURTLE GROUND CREEK (Jeffers Landing) - Entire length	SE1 (C1)
TURTLE GUT (Ventnor) - Entire length	SE1 (C1)
WADING RIVER	
(Chatsworth) - Entire length, except tributaries described separately below	PL
(Greenwood Forest) - Westerly tributary to Howardsville Cranberry Bog Reservoir and other tributaries located entirely within the boundaries of the Greenwood Forest Tract	FW1
WARNERS MILL STREAM	
(Head of River) - Source to Pinelands Protection and Preservation Area boundary at Aetna Dr.	PL
(Head of River) - Aetna Dr. to boundary of the Peaselee Wildlife Management Area	FW2-NT/SE1
(Head of River) - Within the boundaries of the Peaselee Wildlife Management Area to the Tuckahoe River	FW2-NT/SE1 (C1)
WEBBS MILL BRANCH - See CEDAR CREEK	

WIGWAM CREEK	
(Great Bay) - Source to Rt. 9	FW2-NT/SE1
(Great Bay) - Rt. 9 to Mott Creek	SE1 (C1)
WINTER CREEK (New Gretna) - Entire length	SE1 (C1)
WHIRLPOOL CHANNEL (Margate) - Entire length	SE1 (C1)
WORLDS END CREEK (New Gretna) - Entire length	SE1 (C1)
WRANGLE BROOK	
(Keswick Grove) - Entire length, except segment described below	FW2-NT/SE1
(Whiting) - Brook and tributaries within Whiting Wildlife Management Area	FW2-NT (C1)
WRANGLE CREEK (Forked River) - Entire length and all waters within Forked River Game Farm	FW2-NT/SE1 (C1)
WRECK POND BROOK (Wall) - Entire length	FW2-NT

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ALEXAUKEN CREEK (Lambertville) - Entire length	FW2-TM
ALLAMUCHY CREEK (Allamuchy) - Entire length	FW2-NT (C1)
ALLAMUCHY POND (Allamuchy)	FW2-NT (C1)
ALLAMUCHY POND TRIBUTARIES (Allamuchy) - All tributaries that are located entirely within the boundaries of Allamuchy State Park and that flow into Allamuchy Pond	FW1
ALLOWAY CREEK (Alloways) - Entire length	FW2-NT/SE1
ALMS HOUSE BROOK (Andover) - Source to, but not including, County Farm Pond	FW2-TM
(Frankford) - County Farm Pond to Paulins Kill	FW2-NT
ANDOVER JUNCTION BROOK (Andover) - Entire length	FW2-TM
ASSISCUNK CREEK (Burlington) - Entire length	FW2-NT
ASSUNPINK CREEK (Washington) - Source to boundary of Van Ness Park, except segments described separately below	FW2-NT
(Roosevelt) - Creek and those tributaries within the boundaries of the Assunpink Wildlife Management Area	FW2-NT (C1)
(Quaker Bridge) - Boundary of Van Ness Park to Quaker Bridge Rd.	FW2-NT (C1)
(Quaker Bridge) - Quaker Bridge Rd. to Park boundary	FW2-TM (C1)
(Lawrence) - Van Ness Park boundary to, but not including, Whitehead Mill Pond	FW2-TM
(Trenton) - Whitehead Mill Pond to Delaware River	FW2-NT
BALDRIDGE CREEK (Salem Creek) - Entire length, except segments described below	FW2-NT/SE1 (C1)
(Salem Creek) - Segments outside the boundaries of the Supawna National Wildlife Refuge	FW2-NT/SE1
BAY PONDS (Egg Island)	FW2-NT/SE1 (C1)
BEADONS CREEK (Fortescue) - Entire length	SE1 (C1)
BEAR BROOK (Johnsonburg) - Entire length	FW2-TP (C1)
BEAR CREEK (Johnsonburg) - Entire length	FW2-TM
BEATTY'S BROOK (Penwell) - Entire length	FW2-TP (C1)
BEAVER BROOK (Hope) - Entire length	FW2-NT
BEAVERDAM BRANCH (Glassboro) - Source to boundary of the Glassboro Wildlife Management Area	FW2-NT
(Glassboro) - Within the boundaries of Glassboro Wildlife Management Area	FW2-NT (C1)
BEERS CREEK (Shaytown) - Entire length	FW2-TP (C1)
BIG FLAT BROOK (Montague) - Sawmill Lake to confluence with Parker Brook, except segments	FW2-NT (C1)

described directly below and those described under the listing for Flat Brook, below	
(Stokes State Forest) - Two tributaries to Big Flat Brook which originate along Struble Road in Stokes State Forest to their confluences with Big Flat Brook on Fish and Game properties boundaries	FW1
(Sandyston) - Confluence with Parker Brook, through the Blewitt Tract, to the confluence with Little Flat Brook, except tributaries described under the listing for Flat Brook, below	FW2-TP (C1)
<b>BIG TIMBER CREEK</b>	
(Westville) - Entire length, except segment described below	FW2-NT
(Rowands Pond) - Segment within the boundaries of Rowands Pond Wildlife Management Area	FW2-NT (C1)
<b>BLACKBIRD GUT (Newport)</b> - Entire length	SE1 (C1)
<b>BLACKS CREEK (Bordentown)</b> - Entire length	FW2-NT
<b>BLAIR CREEK</b>	
(Hardwick) - Source to Bass Lake	FW2-NT
(Hardwick Center) - Bass Lake outlet to Paulins Kill	FW2-TM
<b>BOILER DITCH (Egg Island)</b> - Entire length	FW2-NT/SE1 (C1)
<b>BRASS CASTLE CREEK (Brass Castle)</b> - Entire length	FW2-TP (C1)
<b>BROOKALOO SWAMP (Hope)</b> - Entire length	FW2-TM
<b>BUCKHORN CREEK (Hutchinson)</b> - Entire length	FW2-TP (C1)
<b>BUCKS DITCH (Mad Horse Creek)</b> - Entire length	SE1 (C1)
<b>BUCKSHUTEM CREEK</b>	
(Centre Grove) - Entire length, except segments described separately below	FW2-NT
(Millville) - Creek and tributaries within the boundaries of Millville Wildlife Management Area, except those tributaries described separately below	FW2-NT (C1)
(Millville) - Joshua and Pine Branches to their confluence with Buckshutem Creek	FW1
<b>CAT GUT (Mad Horse Creek)</b> - Entire length	SE1 (C1)
<b>CEDAR BRANCH (Manumuskin River)</b> - Source to Manumuskin River	FW1
<b>CEDAR BRANCH</b>	
(Frames Corner) - Entire length, except segment described below	FW2-NT/SE1
(Bevans) - That portion of the Branch and all tributaries within the boundaries of Bevans Wildlife Management Area	FW2-NT/SE1 (C1)

CEDAR BRANCH (Millville) - See NANTUXENT CREEK	
CEDAR CREEK	
(Dividing Creek Station) - Entire length, except portions described separately below	FW2-NT
(Millville) - Those tributaries to Cedar Creek that originate in and are located entirely within the boundaries of the Millville Fish and Game Tract	FW1
CEDARVILLE POND (Cedarville)	FW2-NT (C1)
CHERRY TREE CREEK (Mad Horse Creek) - Entire length	SE1 (C1)
CLARKS POND (Bridgeton)	FW2-NT (C1)
CLEARVIEW CREEK (Hampton) - Source to Alms House Brook	FW2-NT
CLINT MILLPOND	FW2-NT (C1)
CLOVE [MILL] BROOK	
(Montague) - Lake Marcia outlet to State line, except tributaries described below	FW2-TP (C1)
(High Point State Park) - The second and third northerly tributaries to Clove Brook, the tributaries to Steeny Kill Lake, and those tributaries downstream of Steeny Kill Lake that originate in High Point State Park downstream to their confluence with Clove Brook or to the High Point State Park Boundaries	FW1 [tp]
(High Point State Park) - Those northerly tributaries to Mill Brook that are located due west of Steeny Kill Lake, within the boundaries of High Point State Park	FW1 [tp]
COHANSEY RIVER (Bridgeton) - Entire length	FW2-NT/SE1
COOPER BRANCH - See RANCOCAS CREEK	
COOPER CREEK (Camden) - Entire length	FW2-NT
COPPERMINE BROOK (Pahaquarry) - Entire length	FW1
COURTENY PONDS (Egg Island)	FW2-NT/SE1 (C1)
CRANBERRY LAKE (Byram) - Lake and its outlet stream within Cranberry Lake State Park	FW2-TM (C1)
CRISS BROOK (Stokes State Forest) - Entire length	FW1
CROSSWICKS CREEK (Bordentown) - Entire length	FW2-NT
CROW CREEK (S. Dennis) - Entire length	FW2-NT/SE1 (C1)
CULVER'S CREEK (Frankford) - Entire length	FW2-TM
CULVER'S LAKE (Frankford)	FW2-TM
DEER PARK BRANCH - See RANCOCAS CREEK	
DEER PARK POND	
(Allamuchy) - Pond, tributaries and outlet stream within Allamuchy State Park, except those tributaries classified as FW1, below	FW2-NT (C1)
(Allamuchy) - All tributaries to the Pond and to its outlet stream that are	FW1

located entirely with the boundaries  
of Allamuchy State Park

DELAWANNA CREEK (Delaware) - Entire length FW2-TM

DELAWARE RIVER

MAIN STEM (Interstate Waters - Classifications  
from Delaware River Basin Commission  
(DRBC))

(State Line) - That portion of DRBC's Zone 1C from the New York-New Jersey state line to the proposed axis of the Tocks Island Dam at River Mile 217.0 Zone 1C

(Tocks Island) - Proposed axis of Tocks Island Dam at River Mile 217.0 to the mouth of the Lehigh River at Easton, Pennsylvania, at River Mile 183.66 Zone 1D

(Easton, Pa.) - Mouth of the Lehigh River at River Mile 183.66, to the head of tide at the Trenton-Morrisville Toll Bridge, Trenton at River Mile 133.4 Zone 1E

(Trenton) - Head of tide at the Trenton-Morrisville Bridge, Trenton, River Mile 133.4 to below the mouth of Pennypack Creek, Pennsylvania at River Mile 108.4 Zone 2

(Philadelphia) - River Mile 108.4 to below the mouth of Big Timber Creek, New Jersey, at River Mile 95.0 Zone 3

(Gloucester) - River Mile 95.0 to the Pennsylvania-Delaware state line at River Mile 78.8 Zone 4

(Marcus Hook) - Pennsylvania-Delaware state line at River Mile 78.8 to Liston Pt., Delaware at River Mile 48.2 Zone 5

(Liston Point) - Delaware Bay from Liston Point, Delaware at River Mile 48.2 to River Mile 0.0 at the intersection of the centerline of the navigation channel and a line between Cape May Light and the tip of Cape Henlopen, Delaware Zone 6 (C1)

TRIBUTARIES, DELAWARE RIVER

(Holland) - Entire length FW2-TP (C1)

(Port Jervis) - Unnamed or unlisted direct tributaries that are north of Big Timber Creek, are outside of the Pinelands Protection and Preservation Areas, and are not mapped as C1 waters by the Department FW2-NT

(Titusville) - Unnamed tributaries through Washington Crossing State Park FW2-NT (C1)

(Brooklawn) - Unnamed or unlisted direct tributaries, south of Big Timber Creek and north of Oldman's FW2-NT/SE2

Creek, that are outside of the Pinelands Protection and Preservation Areas and are not mapped as C1 waters by the Department	
(Penns Grove) - Unnamed or unlisted direct tributaries, south of and including Oldmans Creek, that are outside of the Pinelands Protection and Preser- vation Areas and are not mapped as C1 waters by the Department	FW2-NT/SE1
(Port Jervis) - Unnamed or unlisted direct tributaries that are located within the boundaries of the Pinelands Protection and Preservation Areas and are not FW1 waters	PL
DELAWARE AND RARITAN CANAL (Lambertville) - Entire length	FW2-NT
DENNIS CREEK	
(South Dennis) - Entire length, except segments described below	FW2-NT/SE1
(Woodbine) - All tributaries within the boundaries of the Pinelands Protection and Preservation Areas	PL
(Dennis Creek) - Segment of the Creek, all tributaries, and all other surface waters within the boundaries of the Dennis Creek Wildlife Management Area	FW2-NT/SE1 (C1)
DEVILS GUT	
(Mad Horse Creek) - Entire length, except tributaries described below	SE1 (C1)
(Mad Horse Creek) - Tributaries outside the Mad Horse Creek Wildlife Management Area	SE1
DIVIDING CREEK	
(Dividing Creek) - Entire length, except those segments described below	FW2-NT/SE1
(Millville) - Those segments of tributaries that are located entirely within the boundaries of the Millville Fish and Game Tract, north of Whitehead Station	FW1
DIVISION CREEK (Dix) - Entire length	SE1 (C1)
DOCTORS CREEK	
(Red Creek) - Entire length, except segment described below	FW2-NT
(Imlaystown) - Segment within Imlaystown Lake Wildlife Management Area	FW2-NT (C1)
DONKEY'S CORNER BROOK (Delaware Wate Gap) - Entire length	FW1
DRUMBO CREEK	
(Dix) - Entire length except segment described below	FW2-NT/SE1
(Dix) - Segment within the boundaries of Dix Wildlife Management Area	FW2-NT/SE1 (C1)
DRY BROOK (Branchville) - Entire length	FW2-NT

DUCK POND (Swartswood)	FW2-NT (C1)
DUNNFIELD CREEK	
(Del. Water Gap) - Source to Rt. I-80	FW1
(Del. Water Gap) - Rt. I-80 to Delaware River, except tributaries described below	FW2-TP (C1)
(Worthington) - Sunfish Pond, its outlet stream to the Delaware River and all unnamed waters that are located entirely within the boundaries of the Worthington Tract	FW1
EAST CREEK	
(Lake Nummi) - Source to boundaries of the Pinelands Protection and Preservation Area except those portions described separately below	PL
(Belleplain) - All tributaries to Lake Nummi from their origins to the Lake	FW1
(Belleplain) - A stream and tributary that originate just south of East Creek Mill Rd., 1.2+ miles north-northeast of Eldora and are located entirely within the boundaries of Belleplain State Forest	FW1
(Eldora) - Boundary of the Pinelands Protection and Preservation Area to Delaware Bay except segment described separately below	FW2-NT/SE1
(Dennis Creek) - Segment within the boundaries of the Dennis Creek Wildlife Management Area	FW2-NT/SE1 (C1)
ELDER GUT (Egg Island) - Entire length	FW2-NT/SE1 (C1)
FIDDLERS CREEK (Titusville) - Entire length	FW2-NT
FISHING CREEK (Egg Island) - Entire length	FW2-NT/SE1 (C1)
FISHING CREEK	
(Canton) - Source to Mad Horse Creek Wildlife Management Area and all tributaries outside of the boundaries of Mad Horse Creek Wildlife Management Area	SE1
(Mad Horse Creek) - Creek and tributaries within the boundaries of Mad Horse Creek Wildlife Management Area	SE1 (C1)
FLAT BROOK	
(Blewitt) - Confluence of Big Flat Brook and Little Flat Brook to the boundary of the Blewitt Tract, except segments described below	FW2-TP (C1)
(Flatbrookville) - Blewitt Tract boundary to Delaware River, except segments described below	FW2-TM
(Walpack) - Segment of the Brook within Walpack Wildlife Management Area	FW2-TM (C1)
(High Point) - All surface waters of the	FW1

Flat Brook drainage area within the boundaries of High Point State Park and Stokes State Forest, except the following waters:

- 1) Saw Mill Pond and Big Flat Brook downstream;
- 2) Mashipacong Pond and its outlet stream (Parker Brook) to the confluence with Big Flat Brook;
- 3) Lake Wapalanne and its outlet stream to the confluence with Big Flat Brook;
- 4) Lake Ocquittunk and waters connecting it with Big Flat Brook;
- 5) Stony Lake and its outlet stream (Stony Brook) to the confluence with Big Flat Brook;
- 6) Kittatinny Lake, that portion of its inlet stream outside the Stokes State Forest boundaries, and its outlet stream, including the Shotwell Camping Area tributary, to the confluence with Big Flat Brook;
- 7) Deer Lake and its outlet stream to Lake Ashroe;
- 8) Lake Ashroe, portions of its tributaries outside the Stokes State Forest boundaries, and its outlet stream to the confluence with Big Flat Brook;
- 9) Lake Shawanni and its outlet stream to its confluence with Big Flat Brook;
- 10) Crigger Brook and tributary to its confluence with Big Flat Brook

(Del. Water Gap) - All tributaries to Flat Brook that flow from the Kittatinny Ridge and are located entirely within the proposed boundaries of the Delaware Water Gap National Recreation Area	FW1
FORKED BROOK (Stokes State Forest) - Entire length	FW2-TP (C1)
FURNACE BROOK (Oxford) - Source to railroad bridge at Oxford	FW2-TP (C1)
(Oxford) - Railroad bridge to Pequest River	FW2-NT
FURNACE LAKE (Oxford)	FW2-TM
GARDNERS LAKE (Andover)	FW2-TM
GOOSE POND (Mad Horse Creek)	SE1 (C1)
GOSHEN CREEK (Woodbine) - Entire length except segment described below	SE1

(Dennis Creek) - Segment and all tributaries within the Dennis Creek Wildlife Management Area	SE1 (C1)
GRAVELLY RUN (Millville) - Downstream to the Millville Fish and Game Tract boundaries	FW1
HAKIHOKAKE CREEK (Milford) - Entire length, except section known as Little York Creek	FW2-TM
HAINESVILLE POND (Hainesville)	FW2-NT (C1)
HANCES BROOK (Rockport) - Entire length	FW2-TP (C1)
HARIHOKAKE CREEK (Alexandria) - Source to Rt. 519 bridge	FW2-NT
(Frenchtown) - Rt. 519 bridge to Delaware River	FW2-TM
HARRISONVILLE LAKE (Harrisonville)	FW2-NT (C1)
HATCHERY BROOK (Hackettstown) - Entire length	FW2-TM
HONEY RUN (Hope) - Entire length	FW2-TM
HOPATCONG, LAKE (Hopatcong)	FW2-TM
ILLIF, LAKE (Andover)	FW2-TM
IMLAYSTOWN LAKE (Imlaystown)	FW2-NT (C1)
INDEPENDENCE CREEK (Alphano) - Source to Alphano Rd.	FW2-TP (C1)
(Alphano) - Alphano Rd. to Pequest River	FW2-NT
INDIAN DITCH (Egg Island) - Entire length	FW2-NT/SE1 (C1)
ISLAND DITCH (Egg Island) - Entire length	FW2-NT/SE1 (C1)
JACKSONBURG CREEK (Blairstown) - Entire length	FW2-TM
JACOBS CREEK (Hopewell) - Entire length	FW2-NT
JADE RUN (Lebanon State Forest)	FW1
JOSHUA BRANCH - See BUCKSHUTEM CREEK	
KING POND (Egg Island)	SE1 (C1)
KITTATINY LAKE (Sandyston)	FW2-NT (C1)
KITTATINY LAKE TRIBUTARY (Sandyston) - Entire length	FW2-TP (C1)
KYMER BROOK (Andover) - Entire length	FW2-NT
LAHAWAY CREEK (Prosperstown) - Entire length, except tributaries described separately below	FW2-NT
(Colliers Mills) - All tributaries which originate in the Colliers Mills Tract north-northeast of Archers Corners, from their sources to Lahaway Creek	FW1
LAKE - See listing under Name	
LITTLE EAST RUN (Glassboro) - Entire length, except portion described separately below	FW2-NT
(Glassboro) - Run and tributaries within the Glassboro Wildlife Management Area, except tributary described separately below	FW2-NT (C1)

(Glassboro) - That tributary to the Branch of Little East Run which joins the Branch just south of Stangor Ave.	FW1
(Glassboro) - The first and second easterly tributaries to Little East Run north of Academy Ave.	FW1
LITTLE FLAT BROOK	
(Layton) - Source to, but not including, Hainesville Pond, except tributaries described below or under the listing for Flat Brook above	FW2-TM(C1)
(Bevans) - Tributary which originates north of Bevans - Layton Rd. downstream to the first pond adjacent to the Fish and Game headquarters building	FW1
(Hainesville) - Hainesville Pond to Rt. 206 bridge, except tributaries described under the listing for Flat Brook, above	FW2-NT(C1)
(Hainesville) - Rt. 206 bridge to confluence with Big Flat Brook, except tributaries described under listing for Flat Brook, above	FW2-TM(C1)
LITTLE SHABACUNK CREEK (Lawrence) - Entire length	FW2-NT
LITTLE SWARTSWOOD LAKE (Swartswood)	FW2-NT(C1)
LITTLE YORK CREEK (Little York) - Entire length	FW2-TP(C1)
LOCKATONG CREEK	
(Kingwood) - Source to Idell Bridge	FW2-NT
(Raven Rock) - Idell Bridge to Delaware River	FW2-TM
LOGAN POND (Repaupo)	FW2-NT(C1)
LOMISONS GLEN BROOK (Lomisons Glen) - Entire length	FW2-TP(C1)
LONG POND (Mad Horse Creek)	SE1(C1)
LONG TREE CREEK (Egg Island) - Entire length	SE1(C1)
LOPATCONG CREEK	
(Allens Mills) - Source to Decker Rd. bridge	FW2-TP(C1)
(Herkers Hollow) - Decker Rd. bridge to Rt. 22 bridge	FW2-TM
(Phillipsburg) - Rt. 22 bridge to Delaware River	FW2-NT
LOWER BROTHERS CREEK (Egg Island) - Entire length	SE1(C1),
LOWER DEEP CREEK (Mad Horse Creek) - Entire length	SE1(C1)
LUBBERS RUN (Byram) - Entire length	FW2-TM
MAD HORSE CREEK	
(Canton) - Source to the boundary of Mad Horse Creek Wildlife Management Area and all tributaries outside the	FW2-NT/SE1

boundaries of the Wildlife Management Area	
(Mad Horse Creek) - Creek and all waters within the Mad Horse Creek Wildlife Management Area	FW2-NT/SE1 (C1)
<b>MALAPATIS CREEK</b>	
(Mad Horse Creek) - Entire length, except segment described below	SE1 (C1)
(Mad Horse Creek) - Portions of the Creek beyond the boundaries of the Mad Horse Creek Wildlife Management Area	SE1
<b>MANANTICO CREEK</b>	
(Millville) - Entire length, except segment described below	FW2-NT
(Menantico) - Segment within the boundaries of the Menantico Ponds Wildlife Management Area	FW2-NT (C1)
<b>MANTUA CREEK (Woodbury)</b> - Entire length	FW2-NT/SE2
<b>MARCIA LAKE (Montague)</b>	FW2-TM (C1)
<b>MASON CREEK</b>	
(Springville) - Entire length, except segment described below	FW2-NT
(Medford) - Segment within Medford Wildlife Management Area	FW2-NT (C1)
<b>MASONS RUN</b>	
(Pine Hill) - Source to Little Mill Rd.	FW2-TP (C1)
(Lindenwold) - Little Mill Rd. to confluence with Big Timber Creek	FW2-NT
<b>MAURICE RIVER</b>	
<b>MAIN STEM</b>	
(Willow's Grove) - Source to the boundary of the section of Union Lake Wildlife Management Area north of Vineland	FW2-NT
(Vineland) - Boundary of the Union Lake Wildlife Management Area to confluence with Blackwater Branch	FW2-NT (C1)
(Vineland) - Confluence with Blackwater Branch to Delaware Bay, except tributaries described under Tributaries below	FW2-NT/SE1
<b>TRIBUTARIES, MAURICE RIVER</b>	
(Willow's Grove) - Those portions of tributaries that are within the boundaries of the Pinelands Protection and Preservation Area	PL
(Vineland) - All tributaries within the boundaries of the Union Lake Wildlife Management Area and within the Wildlife Management Area that borders Delaware Bay	FW2-NT/SE1 (C1)
<b>MCCORMICK POND (Egg Island)</b>	FW2-NT/SE1 (C1)

MACDONALD BRANCH - See RANCOCAS CREEK	
MERRILL CREEK (Harmony) - Entire length	FW2-TP (C1)
MIDDLE BROTHERS CREEK (Egg Island) - Entire length	SE1 (C1)
MIDDLE MARSH CREEK	
(Dix) - All fresh waters which originate in and are located entirely within the boundaries of the Dix Wildlife Management Area	FW1
MILE BRANCH - See NANTUXENT CREEK	
MILL BROOK (Montague) - See CLOVE BROOK	
MILL BROOK (Broadway) - Entire length	FW2-TP (C1)
MILL CREEK	
(Carmel) - Entire length, except segment described below	FW2-NT
(Union Lake) - Creek and tributaries within the boundaries of the Union Lake Wildlife Management Area	FW2-NT (C1)
MINE BROOK	
(Mt. Olive) - Source to, but not including, Upper Mine Brook Reservoir	FW2-TM
(Mt. Olive) - Upper Mine Brook Reservoir to Musconetcong River	FW2-NT
MIRY RUN (Mercerville) - Entire length	FW2-NT
MOORE CREEK (Hopewell) - Entire length	FW2-TM
MOUNT MISERY BROOK	
(Woodmansie) - Entire length, except segments described below	PL
SOUTH BRANCH, MOUNT MISSERY BROOK	
(Lebanon State Forest) - All tributaries to the South Branch that are located entirely within the boundaries of Lebanon State Forest	FW1
(Pasadena) - The two easterly branches of the Branch which are located entirely within the boundaries of the Pasadena Fish and Game Tract	FW1
MOUNTAIN LAKE (Liberty)	FW2-TM
MOUNTAIN LAKE CREEK	
(Liberty) - Source to Mountain Lake	FW2-TM
(White) - Mountain Lake dam to Pequest River	FW2-NT
MUD POND (Johnsonburg) - Pond and its outlet stream to the Erie-Lackawanna Railroad trestle north of Johnsonburg	FW1
MUDDY CREEK	
(Mad Horse Creek) - Entire length, except segments described below	SE1 (C1)
(Mad Horse Creek) - Segments outside of the boundaries of the Mad Horse Creek Wildlife Management Area	SE1
MUDDY RUN	
(Elmer) - Entire length, except segments described below	FW2-NT

(Elmer) - Portion of the Run within Greenwood Pond Wildlife Management Area	FW2-NT (C1)
(Centerton) - Portion of the Run within Parvin State Park	FW2-NT (C1)
<b>MUDDY RUN</b>	
(Pittsgrove) - Entire length, except segment described below	FW2-NT
(Vineland) - Segment within Union Lake Wildlife Management Area	FW2-NT (C1)
<b>MUSCONETCONG RIVER</b>	
(Hackettstown) - Lake Hopatcong dam to Delaware River, except tributaries described below	FW2-TM
<b>TRIBUTARIES</b>	
(Changewater) - Entire length	FW2-TP (C1)
(Franklin) - Entire length	FW2-TP (C1)
(Lebanon) - Entire length	FW2-TP (C1)
(Port Murray) - Entire length	FW2-TP (C1)
(S. of Schooley's Mtn. Brook) - Entire length	FW2-TP (C1)
<b>MUSKEE CREEK</b>	
(Port Elizabeth) - Source to boundary of Pinelands Protection and Preservation Area, except segments described separately, below	PL
(Peaselee) - The Middle Branch from its origin to the boundaries of the Peaselee Fish and Game Tract	FW1
(Peaselee) - Those portions of the tributaries to Slab Branch which are located entirely within the boundaries of the Peaselee Fish and Game Tract	FW1
(Bricksboro) - Pinelands Protection and Preservation Area boundaries to Maurice River	FW2-NT
<b>NANCY GUT</b>	
(Newport) - Source to the boundary of Nantuxent Creek Wildlife Management Area	SE1 (C1)
(Newport) - Stream and all tributaries outside of the boundaries of the Nantuxent Creek Wildlife Management Area	SE1
<b>NANTUXENT CREEK</b>	
(Newport Landing) - Entire length, except segment described below	FW2-NT/SE1
(Newport Landing) - All waters within the boundaries of Nantuxent Creek Wildlife Management Area	FW2-NT/SE1 (C1)
(Newport Landing) - Cedar and Mill Branches to Shaw's Mill Pond	FW1
<b>NEW WAWAYANDA LAKE (Andover)</b>	FW2-TM
<b>NISHISAKAWICK CREEK (Frenchtown) - Entire length</b>	FW2-NT

OLDMANS CREEK	
(Lincoln) - Entire length, except portion described below	FW2-NT/SE1
(Harrisonville) - Portion within Harrisonville Lake Wildlife Management Area	FW2-NT (C1)
ORANDAKEN CREEK	
(Fortescue) - Source to boundary of Egg Island Berrytown Wildlife Management Area	FW2-NT/SE1
(Egg Island) - Creek and tributaries within the boundaries of the Egg Island Berrytown Wildlife Management Area	FW2-NT/SE1 (C1)
PATTYS FORK - See MAD HORSE CREEK	
PARGEY CREEK	
(Gibbstown) - Entire length, except segment described below	FW2-NT/SE2
(Logans Pond) - Segment within the boundaries of Logans Pond Wildlife Management Area	FW2-NT/SE2 (C1)
PARKER BROOK (Montague) - Entire length	FW2-TP (C1)
PARVIN LAKE (Parvin State Park)	FW2-NT (C1)
PAULINA CREEK (Paulina) - Entire length	FW2-TM
PAULINS KILL	
EAST BRANCH	
(Andover) - Source to Limecrest quarry	FW2-NT (C1)
(Lafayette) - Limecrest quarry to confluence with Paulins Kill, West Branch, except tributary described below	FW2-TP (C1)
TRIBUTARY EAST BRANCH	
(Sussex Mills) - Entire length of tributary to the East Branch at Sussex Mills	FW2-NT (C1)
WEST BRANCH	
(Newton) - Entire length	FW2-NT
MAIN STEM	
(Blairstown) - Confluence of East and West branches to Rt. 15 bridge (bench mark 507)	FW2-TM
(Hampton) - Rt. 15 bridge to Paulins Kill Lake dam	FW2-NT
(Paulins Kill Lake) - Paulins Kill Lake dam to Delaware River, except tributaries described separately below	FW2-TM
TRIBUTARIES, MAIN STEM	
(Emmons Station) - Entire length	FW2-TP (C1)
(Stillwater Station) - Entire length	FW2-TP (C1)
PENNSAUKEN CREEK (Cinnaminson) - Entire length	FW2-NT
PEQUEST RIVER	
(Belvidere) - Source to Tranquility bridge except segments described below	FW2-TM
(Whittingham) - Northwestern tributaries which are located within the boundaries of the Whittingham Tract from their	FW1 [tm]

origin to their confluence with the Pequest River	
(Whittingham) - Stream and tributaries within the Whittingham tract, except those classified as FW1, above	FW2-TM (C1)
(Vienna) - Tranquility bridge to Townsbury bridge, except segment described below	FW2-NT
(Pequest) - Segment and tributaries within the boundaries of the Pequest Wildlife Management Area	FW2-NT (C1)
(Townsbury) - Townsbury bridge to Delaware River	FW2-TM
PIERSONS DITCH (Egg Island) - Entire length	FW2-NT/SE1 (C1)
PINE BRANCH - See BUCKSHUTEM CREEK	
PLUM BROOK (Sergeantsville) - Entire length	FW2-TM
POHATCONG CREEK	
(Mansfield) - Source to Karrsville bridge	FW2-TP (C1)
(Pohatcong) - Karrsville bridge to Delaware River	FW2-TM
POND BROOK (Middleville) - Swartswood Lake outlet to Trout Brook	FW2-NT
POPHANDUSING BROOK (Belvidere) - Entire length	FW2-TM
RACCOON CREEK (Logan) - Entire length	FW2-NT/SE2
RANCOCAS CREEK	
NORTH BRANCH	
(North Hanover) - Source to boundary of the Pinelands Protection and Preservation Area at Pemberton	PL
(Pemberton) - Boundary of the Pinelands Protection and Preservation Area to the Delaware River, except tributaries described below	FW2-NT
(Pemberton) - Tributaries within the boundaries of the Pinelands Protection and Preservation Areas	PL
SOUTH BRANCH RANCOCAS CREEK	
(Southampton) - Source to Pinelands Protection and Preservation Area boundaries at Rt. 206 bridge south of Vincentown	PL
(Vincentown) - Vincentown to Delaware River, except tributaries described separately below	FW2-NT
(Vincentown) - All tributaries within the Pinelands Protection and Preservation Areas	PL
COOPER BRANCH RANCOCAS CREEK	
(Woodmansie) - Entire length, except portions described separately, below	PL
(Lebanon State Forest) - Branch and tributaries downstream to Pakim Pond, and tributaries to Cooper Branch located entirely within the Lebanon State Forest boundaries	FW1

DEER PARK BRANCH RANCOCAS CREEK (Buckingham) - Stream and tributaries near Buckingham to confluence with Pole Bridge Branch	FW1
MACDONALD BRANCH RANCOCAS CREEK (Woodmansie) - Entire length, except as described separately below	PL
(Lebanon State Forest) - Branch and tributaries located entirely within Lebanon State Forest	FW1
SHINNS BRANCH RANCOCAS CREEK (Lebanon State Forest) - Branch and tributaries located entirely within the boundaries of Lebanon State Forest, from their sources to the forest boundary	FW1
(Lebanon Lake Estates) - Forest boundary to lake	PL
ROARING DITCH (Heislerville) - Entire length, except segment described below	SE1
(Eldora) - Ditch and all tributaries within the Dennis Creek Wildlife Management Area boundaries	SE1 (C1)
RUNDLE BROOK (Del. Water Gap) - Source to Flatbrook Rd.	FW1
SALEM CREEK [RIVER] (Salem) - Entire length	FW2-NT/SE1
SAMBO ISLAND BROOK (Del. Water Gap) - Entire length	FW1
SAMBO ISLAND POND (Del. Water Gap)	FW1
SANDYSTON CREEK (Sandyston) - Entire length	FW2-TP (C1)
SAVAGES RUN (East Creek) (Lake Nummi) - Entire length, except portions described separately, below	PL
(Belleplaine) - Those two tributaries and portions thereof downstream of Lake Nummi that are located entirely within the boundaries of Belleplaine State Forest	FW1
SAWMILL POND (High Point)	FW2-NT (C1)
SCHOOLEYS MTN. BROOK (Schooley's Mtn.) - Entire length	FW2-TP (C1)
SHABACUNK [SHABBECONG] CREEK (Ewing) - Entire length	FW2-NT
SHAWS MILL POND (Cedarville)	FW2-NT/SE1 (C1)
SHAWANNI CREEK (Walpack) - Entire length	FW2-TP (C1)
SHAWANNI LAKE	FW2-NT (C1)
SHIMERS BROOK (Millville) - Entire length, except those segments designated FW1, below	FW2-TP (C1)
(High Point) - That segment of Shimers Brook and all tributaries within the boundaries of High Point State Park	FW1 [tp]
SHINNS BRANCH - See RANCOCAS CREEK	

SHIPETAUKIN CREEK (Lawrenceville) - Entire length	FW2-NT
SHORE DITCH (Mad Horse Creek) - Entire length	SE1 (C1)
SILVER LAKE (Hope)	FW2-TM
SILVER LAKE FORK - See MAD HORSE CREEK	
SLAB BRANCH - See MUSKEE CREEK	
SLUICE CREEK	
(South Dennis) - Entire length, except segment described below	FW2-NT/SE1
(Dennis Creek) - Segments of tributaries that are within the Dennis Creek and the Beaver Swamp Wildlife Manage- ment Areas	FW2-NT/SE1 (C1)
SMITH FERRY BROOK (Del. Water Gap) - Entire length	FW1
SPARTA JUNCTION BROOK (Sparta Junction) - Entire length	FW2-TM (C1)
SPRING MILLS BROOK	
(Spring Mills) - Source to Rt. 519 bridge	FW2-TP (C1)
(Milford) - Rt. 519 bridge to confluence with Hakiwokake Creek	FW2-TM
STEELE RUN	
(Washington Crossing State Park) - Source to Rt. 29	FW1
(Titusville) - Rt. 29 to the Delaware River	FW2-NT
STEENY KILL LAKE (High Point)	FW2-NT (C1)
STEEP RUN (Mauricetown) - Entire length	FW2-NT (C1)
STEPHENSBURG BROOK (Stephensburg) - Entire length	FW2-TP (C1)
STONY BROOK (Knowlton) - Entire length	FW2-NT
STONY BROOK (Stokes State Forest) - Entire length	FW2-TP (C1)
STONY LAKE (Stokes State Forest)	FW2-TM (C1)
STOW CREEK	
(Stow Creek Landing) - Entire length, except tributaries described separately below	FW2-NT/SE1
(Mad Horse Creek) - Tributaries within the boundaries of the Mad Horse Creek Wildlife Management Area	FW2-NT/SE1 (C1)
STRAIGHT CREEK (Berrytown) - Entire length	SE1 (C1)
SWAN CREEK (Lambertville) - Entire length	FW2-NT
SWARTSWOOD CREEK (Swartswood) - Entire length	FW2-TM
SWARTSWOOD LAKE (Stillwater)	FW2-TM (C1)
TAR HILL BROOK	
(Lake Lenape) - Source to, but not including, Lake Lenape	FW2-TM
(Lake Lenape) - Lake Lenape to Andover Junction Brook	FW2-NT
THREE MOUTHS (Egg Island)	FW2-NT/SE1 (C1)
THUNDERGUST BROOK	
(Deerfield) - Entire length, except segment described below	FW2-NT
(Deerfield) - That segment within the boundaries of Parvin State Park	FW2-NT (C1)

THUNDERGUST LAKE (Parvin State Park)	FW2-NT (C1)
TILLMAN BROOK (Walpack) - Entire length	FW2-TP (C1)
TROUT BROOK (Hackettstown) - Entire length	FW2-TM (C1)
TROUT BROOK (Tranquility) - Entire length	FW2-TP (C1)
TROUT BROOK (Hope) - Entire length	FW2-TM
TROUT BROOK (Allamuchy) - Entire length	FW2-NT
TROUT BROOK (Middleville) - Source to confluence with Pond Brook	FW2-TP (C1)
(Middleville) - Confluence with Pond Brook to Paulins Kill	FW2-NT
TURNERS FORK - See MAD HORSE CREEK	
TUTTLES CORNER BROOK (Tuttles Corner) - Entire length	FW2-TP (C1)
UPPER BROTHERS CREEK (Egg Island) - Entire length	SE1 (C1)
UPPER DEEP CREEK (Mad Horse Creek) - Entire length	SE1 (C1)
VANCAMPENS BROOK (Millbrook) - Source to the village of Millbrook	FW1[tp]
(Millbrook) - Village of Millbrook to mouth	FW2-TP (C1)
WAPALANNE LAKE (Stokes State Forest)	FW2-NT (C1)
WEST CREEK (Halberton) - Source to the boundary of the Pinelands Protection and Preservation Areas, except those portions described separately, below	PL
(Belleplain) - The portion of the tributary that originates about 0.9 miles south- east of Hoffman's Mill and is located entirely within the boundaries of Belleplain State Forest	FW1
(Belleplain) - Those tributaries that originate about 0.5 miles upstream of Hoffman's Mill and are located entirely within the boundaries of Belleplain State Forest	FW1
(Belleplain) - Eastern branch of the easterly tributary to Pickle Factory Pond from its origin to its confluence with the western branch	FW1
(Delmont) - Boundary of the Pinelands Protection and Preservation Area to the boundary of the Fish and Game lands	FW2-NT/SE1 (C1)
(Delmont) - Boundary of the Fish and Game lands to Delaware Bay	SE1
WEST PORTAL CREEK (West Portal) - Entire length	FW2-TP (C1)
WHITE BROOK (Montague) - Entire length	FW2-TP (C1)
WHITE LAKE (Hardwick)	FW2-TM

WICKECHEOKE CREEK

(Locktown) - Source to confluence with Plum Brook

FW2-NT

(Stockton) - Confluence with Plum Brook to Delaware River

FW2-TM

WIDGEON PONDS (Egg Island)

FW2-NT/SE1 (C1)

WILLS BROOK (Mt. Olive) - Entire length

FW2-TM

YARDS CREEK (Blairstown) - Entire length

FW2-TP (C1)

INDEX D - Surface Water Classifications of the Passaic,  
Hackensack and N.Y. Harbor Complex Basin

ARTHUR KILL

(Perth Amboy) - The Kill and its saline New Jersey tributaries between the Outerbridge Crossing and a line connecting Ferry Pt., Perth Amboy to Wards Pt., Staten Island, N.Y.	SE2
(Elizabeth) - From an east-west line connecting Elizabethport with Bergen Pt., Bayonne to the Outerbridge Crossing	SE3
(Woodbridge) - All freshwater tributaries	FW2-NT
BEAR SWAMP BROOK (Mahwah) - Entire length	FW2-TP (C1)
BEAR SWAMP LAKE (Ringwood)	FW2-NT (C1)
BEAVER BROOK (Meriden) - Entire length	FW2-NT
BELCHER CREEK (W. Milford) - Entire length	FW2-NT
BERRYS CREEK (Secaucus) - Entire length	FW2-NT/SE2
BLACK BROOK	
(Meyersville) - Entire length, except segment described below	FW2-NT
(Great Swamp) - Segment and tributaries within the Great Swamp National Wildlife Refuge	FW2-NT (C1)
BLUE MINE BROOK	
(Wanaque) - Entire length, except segment described below	FW2-TM
(Norvin Green State Forest) - That portion of the stream and any tributaries within Norvin Green State Forest	FW2-TM (C1)
BRUSHWOOD POND (Ringwood)	FW2-NT (C1)
BUCKABEAR POND (Newfoundland) - Pond, its tributaries and connecting stream to Clinton Reservoir	FW2-NT (C1)
CANISTEAR RESERVOIR (Vernon)	FW2-TM
CANISTEAR RESERVOIR TRIBUTARY (Vernon) - The southern branch of the eastern tributary to the Reservoir	FW1 [tm]
CANOE BROOK (Chatham) - Entire length	FW2-NT
CEDAR POND (Clinton) - Pond and all tributaries	FW1
CHARLOTTEBURG RESERVOIR (Charlotteburg)	FW2-TM
CHERRY RIDGE BROOK	
(Vernon) - Entire length, except segments described below	FW2-NT
(Canistear) - Brook and tributaries upstream of Canistear Reservoir located entirely within the boundaries of Wawayanda State Park and the Newark Watershed lands	FW1
CLINTON BROOK	
(Mossmans Brook) (W. Milford) - Source to, but not including, Clinton Reservoir	FW2-NT (C1)
(Newfoundland) - Clinton Reservoir dam to Pequannock River	FW2-TP (C1)
CLINTON RESERVOIR (W. Milford)	FW2-TM (C1)
CLOVE BROOK - See STAG BROOK	

COOLEY BROOK	
(W. Milford) - Entire length, except segments	
FW2-TP (C1)	
described below	
(Hewitt) - Segments of the brook and all	FW1 [tp]
tributaries located entirely within	
Hewitt State Forest	
CORYS BROOK (Warren) - Entire length	FW2-NT
CRESSKILL BROOK	
(Alpine) - Source to Duck Pond Rd.	FW2-TP (C1)
bridge, Demarest	
(Demarest) - Duck Pond Rd. bridge to	FW2-NT
Tenakill Brook	
CUPSAW BROOK	
(Skylands) - Entire length, except segment	FW2-TM
described separately below	
(Skylands) - That segment of Cupsaw	FW2-TM (C1)
Brook within the boundaries of Ringwood	
State Park	
DEAD RIVER (Liberty Corners) - Entire length	FW2-NT
DEN BROOK (Denville) - Entire length	FW2-NT
DUCK POND (Ringwood)	FW2-NT (C1)
ELIZABETH RIVER	
(Elizabeth) - Source to Broad St. bridge,	FW2-NT
Elizabeth and all freshwater tributaries	
(Elizabeth) - Broad St. bridge to mouth	SE3
FOX BROOK (Mahwah) - Entire length	FW2-NT
GLASMERE POND (Ringwood)	FW2-NT (C1)
GOFFLE BROOK (Hawthorne) - Entire length	FW2-NT
GRANNIS BROOK (Morris Plains) - Entire length	FW2-NT
GREAT BROOK	
(Chatham) - Entire length, except segment	FW2-NT
described below	
(Great Swamp) - Segment within the boundaries	FW2-NT (C1)
of the Great Swamp National Wildlife	
Refuge	
GREEN BROOK	
(W. Milford) - Entire length, except those	FW2-TP (C1)
segments described below	
(Hewitt) - Those segments located entirely	FW1 [tp]
within the Hewitt State Forest boundaries	
GREEN POND (Rockaway)	FW2-TM
GREEN POND BROOK (Picatinny Arsenal) - Green Pond	FW2-NT
outlet to Rockaway River	
GREENWOOD LAKE (W. Milford)	FW2-TM
HACKENSACK RIVER	
(Oradell) - Source to Oradell dam	FW2-NT
(Oradell) - Main stem and saline tributaries	SE1
from Oradell dam to the confluence with	
Overpeck Creek	
(Little Ferry) - Main stem and saline	SE2
tributaries from Overpeck Creek to	
confluence with Berrys Creek	
(Secaucus) - Main stem downstream of Berrys	SE3
Creek	

(Oradell) - Tributaries joining the main stem between Oradell dam and the confluence with Overpeck Creek	FW2-NT/SE1
(Little Ferry) - Tributaries joining the main stem downstream of Overpeck Creek	FW2-NT/SE2
HANKS POND (Clinton) - Pond and all tributaries	FW1
HARMONY BROOK (Brookside) - Entire length	FW2-TP (C1)
HARRISONS BROOK (Bernards) - Entire length	FW2-NT
HAVEMEYER BROOK (Mahwah) - Entire length	FW2-TP (C1)
HEWITT BROOK (W. Milford) - Entire length	FW2-TP (C1)
HIBERNIA BROOK (Hibernia) - Entire length, except tributary described separately below	FW2-TM
(Rockaway) - Entire length of tributary at Rockaway	FW2-TP (C1)
HIGH MOUNTAIN BROOK (Ringwood) - Source to, but not including, Skyline Lake	FW2-TP (C1)
HOHOKUS BROOK (Hohokus) - Entire length	FW2-NT/SE2
HUDSON RIVER (Rockleigh) - River and saline New Jersey tributaries from a north-south line connecting Constable Hook (Bayonne) to St. George (Staten Island, N.Y.) to the Bergen County - Rockland County, N.Y. line	SE2
(Rockleigh) - All other tributaries to the Hudson in New Jersey	FW2-NT/SE2
INDIAN GROVE BROOK (Somersetin) - Entire length	FW2-TM
JACKSON BROOK (Mine Hill) - Source to the boundary of Hurd Park, Dover	FW2-TP (C1)
(Dover) - Hurd Park to Rockaway River	FW2-NT
JENNINGS CREEK (W. Milford) - State line to Wanaque River	FW2-TP (C1)
JERSEY CITY RESERVOIR (Boonton)	FW2-TM
KANOUSE BROOK (Newfoundland) - Entire length	FW2-TP (C1)
KIKEOUT BROOK (Butler) - Entire length	FW2-NT
KILL VAN KULL (Bayonne) - Westerly from a north-south line connecting Constable Hook (Bayonne) to St. George (Staten Island, N.Y.)	SE3
LAKE RICKONDA OUTLET STREAM (Monks) - That segment of the outlet stream from Lake Rickonda within Ringwood State Park	FW2-TM (C1)
LAKE STOCKHOLM BROOK (Stockholm) - Entire length, except tributaries described separately below	FW2-TM
(Stockholm) - Westerly tributary located entirely within the boundaries of the Newark Watershed	FW1 [tm]
(Stockholm) - Brook between Hamburg Turnpike and Williamsville-Stockholm Rd. to its confluence with Lake Stockholm Brook, north of Rt. 23	FW1 [tm]
LITTLE POND BROOK (Oakland) - Entire length	FW2-TP (C1)

LOANTAKA BROOK (Green Village) - Entire length, except segment described below	FW2-NT
(Great Swamp) - Brook and all tributaries within the boundaries of Great Swamp National Wildlife Refuge	FW2-NT (C1)
LUD-DAY BROOK (Camp Garfield) - Source to confluence with a tributary from Camp Garfield	FW1
MACOPIN RIVER (Newfoundland) - Source to Echo Lake dam	FW2-NT
(Newfoundland) - Echo Lake dam to Pequannock River	FW2-TM
MEADOW BROOK (Wanaque) - Skyline Lake to Wanaque River	FW2-NT
MILL BROOK (Randolph) - Source to Rt. 10 bridge	FW2-TP (C1)
(Randolph) - Rt. 10 bridge to Rockaway River	FW2-NT
MORSES CREEK - Entire length	FW2-NT/SE3
MOSSMAN'S BROOK - See CLINTON BROOK	
MT. TABOR BROOK (Morris Plains) - Entire length	FW2-NT
NEWARK BAY (Newark) - North of an east-west line connecting Elizabethport with Bergen Pt., Bayonne up to the mouths of the Passaic and Hackensack Rivers	SE3
NOSENZO POND (Upper Macopin)	FW2-NT (C1)
OAK RIDGE RESERVOIR (Oak Ridge)	FW2-TM
OAK RIDGE RESERVOIR (Oak Ridge) - Northwestern tributary to Reservoir	FW1 [tm]
OVERPECK CREEK (Palisades Park) - Entire length	FW2-NT/SE2
PECKMAN RIVER (Verona) - Entire length	FW2-NT
PACACK BROOK (Stockholm) - Source to Pequannock River, excluding Canistear Reservoir, except segments described separately below	FW2-NT
(Canistear) - Brook and tributaries upstream of Canistear Reservoir located entirely within the boundaries of the Newark Watershed	FW1 [tm]
PASSAIC RIVER (Mendham) - Source to Rt. 202 bridge (Van Doren's Mill), except tributaries described separately below	FW2-TM
(Paterson) - Rt. 202 bridge to Dundee Lake dam	FW2-NT
(Little Falls) - Dundee Lake dam to confluence with Second River	FW2-NT/SE2
(Newark) - Confluence with Second River to mouth	SE3
TRIBUTARIES (Fairfield) - Tributaries within Great Piece Meadows	FW2-TM (C1)
PECKMAN RIVER (Verona) - Entire length	FW2-NT

PEQUANNOCK RIVER

MAIN STEM

- (Vernon) - Source to confluence with Pacack Brook FW1 [tp]
- (Newfoundland) - Pacack Brook to Hamburg Turnpike, (Bench Mark 257) in Bloomingdale except tributaries described separately below FW2-TM
- (Riverdale) - Hamburg Turnpike bridge to Pompton River FW2-NT

TRIBUTARIES

- (Copperas Mtn.) - Entire length FW2-TP (C1)
- (Smoke Rise) - Entire length FW2-TP (C1)
- (Green Pond Junction) - Tributary at Green Pond Junction FW1 [tm]
- (Jefferson) - Tributary joining the main stem about 3500+ feet southeast of the Sussex-Passaic County line, near Jefferson FW1 [tm]
- (Lake Kampfe) - Tributary originating south and west of Torne Mtn. in Norvin Green State Forest and flowing through Lake Kampfe FW2-TM (C1)

PILES CREEK - Entire length FW2-NT/SE3

POMPTON LAKE (Pompton Lakes) FW2-NT

POMPTON RIVER (Wayne) - Entire length FW2-NT

POND BROOK (Oakland) - Entire length FW2-NT

POSTS BROOK

- (Bloomingdale) - Source to Wanaque Reservoir, except segment described below FW2-TM
- (Norvin Green State Forest) - That segment of the stream and all tributaries within the boundaries of Norvin Green State Forest FW2-TM (C1)
- (Haskell) - Wanaque Reservoir dam to Wanaque River FW2-NT

PREAKNESS [SINGAC] BROOK

- (Wayne) - Source to, but not including, Barbours Pond FW2-TP (C1)
- (Barbours Pond) - Pond to Passaic River FW2-NT

PRIMROSE BROOK

- (Harding) - Source to Rt. 202 bridge FW2-TM
- (Harding) - Rt. 202 bridge to Great Swamp National Wildlife Refuge boundary FW2-NT
- (Great Swamp) - Wildlife Refuge boundary to Great Brook FW2-NT (C1)

RAHWAY RIVER

SOUTH BRANCH

- (Rahway) - Source to Hazelwood Ave., Rahway FW2-NT
- (Rahway) - Hazelwood Ave. to mouth SE2

MAIN STEM

- (Rahway) - Upstream of Pennsylvania Railroad bridge FW2-NT
- (Linden) - Penn. Railroad bridge to Route 1&9 crossing SE2
- (Carteret) - Route 1-9 crossing to mouth SE3

RAMAPO LAKE (Ramapo) - Lake and all outlet streams and tributaries within the boundaries of Ramapo Mtn. State Forest	FW2-NT (C1)
RAMAPO RIVER (Oakland) - State line to Pompton River	FW2-NT
RINGWOOD CREEK (Ringwood) - Entire length, except segment described below	FW2-TM
(Sloatsburg) - Creek and tributaries within Ramapo Mountain State Park	FW2-TM (C1)
RINGWOOD MILL POND (Ringwood)	FW2-NT (C1)
ROCKAWAY RIVER (Dover) - Source to Passaic River, excluding the Jersey City Reservoir and the segment described below	FW2-NT
(Berkshire Valley) - That segment within the boundaries of the Berkshire Valley Wildlife Management Area	FW2-NT (C1)
RUSSIA BROOK (Sparta) - Source to Lake Hartung dam	FW2-NT
(Milton) - Lake Hartung dam to, but not including, Lake Swannanoa	FW2-TM
SADDLE RIVER (Upper Saddle River) - State line to Bergen County Rt. 2 bridge	FW2-TP (C1)
(Saddle River) - Bergen County Rt. 2 bridge to Allendale Rd. bridge	FW2-TM
(Lodi) - Allendale Rd. bridge to Passaic River	FW2-NT/SE3
SAWMILL CREEK (Pompton Plains) - Entire length	FW2-NT
SHEPPARD LAKE (Ringwood)	FW2-TM (C1)
SINGAC BROOK - See PREAKNESS BROOK	
SLOUGH BROOK (Livingston) - Entire length	FW2-NT
SMITH CREEK - Entire length	FW2-NT/SE2
SPLIT ROCK RESERVOIR (Rockaway)	FW2-TM
SPLIT ROCK RESERVOIR TRIBUTARIES (Farny State Park) - Three tributaries within Farny State Park	FW2-NT (C1)
SPRING GARDEN BROOK (Florham) - Entire length	FW2-NT
STAG [CLOVE] BROOK (Mahwah) - Entire length	FW2-TP (C1)
STEPHENS BROOK (Roxbury) - Entire length, except segment described separately, below	FW2-NT
(Berkshire Valley) - That segment north of the boundaries of the Berkshire Valley Tract	FW1
STONE HOUSE BROOK (Kinneelon) - Entire length	FW2-NT
STONY BROOK (Boonton) - Entire length	FW2-NT
SUPRISE LAKE (Hewitt)	FW1
SWAN POND (Ringwood)	FW2-NT (C1)
TENAKILL BROOK (Demarest) - Entire length	FW2-NT
TERRACE POND (Wawayanda)	FW2-NT (C1)
TIMBER BROOK (Charlotteburg) - Headwater segment of tributary to Timber Brook within Farny State Park	FW2-TM (C1)
TROY BROOK (Troy Hills) - Entire length	FW2-NT
WANAQUE RESERVOIR	FW2-TM

WANAQUE RIVER

MAIN STEM

(Hewitt) - Greenwood Lake outlet, through Wanaque Wildlife Management Area to the boundary of the State Park and Forest land at Monks, except tributary described separately below	FW2-TM(C1)
(Hewitt) - Entire length of tributary south of Jennings Creek	FW2-TP(C1)
(Monks) - Parkland boundary to Wanaque Reservoir	FW2-TM
(Pompton Lakes) - Wanaque Reservoir dam to Pompton River	FW2-NT
WEST BROOK (W. Milford) - Entire length	FW2-TP(C1)
WEST POND (Hewitt)	FW1
WEYBLE POND (Ringwood)	FW2-NT(C1)
WHIPPANY RIVER	
(Brookside) - Source to Whitehead Rd. bridge	FW2-TP(C1)
(Morristown) - Whitehead Rd. bridge to Passaic River	FW2-NT
WONDER LAKE (West Milford)	FW2-NT(C1)
WOODBIDGE RIVER - Entire length	FW2-NT/SE3

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ALLERTON CREEK (Allerton) - Entire length	FW2-NT
AMBROSE BROOK (Piscataway) - Entire length	FW2-NT
AMWELL LAKE (Snydertown)	FW2-NT (C1)
ASSISCONG CREEK (Flemington) - Entire length	FW2-NT
BACK BROOK (Vanliew's Corners) - Entire length	FW2-NT
BALDWINS CREEK (Pennington) - Entire length, except segment described separately below	FW2-NT
(Baldwin) - Segment within the boundaries of Baldwin Lake Wildlife Management Area	FW2-NT (C1)
BARCLAY BROOK (Redshaw Corners) - Entire length	FW2-NT
BEAVER BROOK (Cokesbury) - Source to Reformatory Road bridge	FW2-TP (C1)
(Annandale) - Reformatory Rd. bridge to Raritan River, South Branch	FW2-TM
BEDEN BROOK (Montgomery) - Entire length	FW2-NT
BIG BEAR BROOK (West Windsor) - Entire length	FW2-NT
BIG BROOK (Vanderberg) - Entire length	FW2-NT
BLACK BROOK (Polktown) - Entire length	FW2-TP (C1)
BLACK RIVER - See LAMINGTON RIVER	
BLACKBERRY CREEK (Oceanport) - Source to a line beginning on the easternmost extent of Gooseneck Point and bearing approximately 162 degrees True North to its terminus on the westernmost extent of an unnamed point of land in the vicinity of the western extent of Cayuga Ave. in Oceanport	SE1
(Oceanport) - Creek below the line described above	SE1
BLUE BROOK (Mountainside) - Entire length	FW2-NT
BOULDER HILL BROOK (Tewksbury) - Entire length	FW2-TP (C1)
BOUND BROOK (Dunellen) - Entire length	FW2-NT
BRANCHPORT CREEK (Long Branch) - Source to a line beginning on the northernmost extent of an unnamed point of land lying north of Pocano Ave. in Oceanport and bearing approximately 055 degrees True North to its terminus on the westernmost extent of the northern bulkhead at the lagoon located between France Rd. and Lori Rd. in Monmouth Beach	FW2-NT/SE1
(Monmouth Beach) - Creek below line described above	SE1 (C1)
BUDD LAKE (Mt. Olive)	FW2-NT (C1)
BURNETT BROOK (Ralston) - Entire length	FW2-TP (C1)
CAPOOLONG CREEK (Sydney) - Entire length	FW2-TP (C1)
CEDAR BROOK (Spotswood) - Entire length	FW2-NT
CHAMBERS BROOK (Whitehouse) - Entire length	FW2-NT
CHEESEQUAKE STATE PARK WATERS (S. Amboy) - Fresh waters within the park upstream of the limits of tidal influence	FW2-NT (C1)

CLAYPIT CREEK (Navesink) - Source to widening of the Creek near Linden Ave. and just north of the Locust Ave. bridge in Navesink	FW2-NT/SE1
(Navesink) - Widening of Creek to Navesink River	SE1 (C1)
COLD BROOK (Oldwick) - Entire length	FW2-TP (C1)
CRAMERS CREEK (Hamden) - Entire length	FW2-NT
CRANBURY BOOK (Old Church) - Entire length	FW2-NT
CRUSER BROOK (Montgomery) - Entire length	FW2-NT
CUCKELS BROOK (Bridgewater) - Entire length	FW2-NT
DAWSONS BROOK (Ironia) - Entire length	FW2-TP (C1)
DEEP RUN (Old Bridge) - Entire length	FW2-NT
DEVILS BROOK (Schalks) - Entire length	FW2-NT
DRAKES BROOK (Flanders) - Entire length	FW2-NT (C1)
DUCK POND RUN (Port Mercer) - Entire length	FW2-NT
DUKES BROOK (Somerville) - Entire length	FW2-NT
ELECTRIC BROOK (Schooley's Mtn.) - Entire length	FW2-TP (C1)
FLANDER'S BROOK (Flanders) - Entire length	FW2-TP (C1)
FLANDERS CANAL (Flanders) - Entire length	FW2-NT (C1)
FROG HOLLOW BROOK (Califon) - Entire length	FW2-TP (C1)
GANDER BROOK (Manalapan) - Entire length	FW2-NT
GLADSTONE BROOK (St. Bernards School) - Entire length	FW2-TP (C1)
GREAT DITCH (S. Brunswick) - That portion of Great Ditch and its tributaries within Pigeon Swamp State Park	FW2-NT (C1)
GREEN BROOK (Watchung) - Source to Rt. 22 bridge (Plainfield) - Rt. 22 bridge to Bound Brook	FW2-TM FW2-NT
GUINEA HOLLOW BROOK (Tewksbury)	FW2-TP (C1)
HACKLEBARNEY BROOK (Hacklebarney) - Entire length	FW2-TP (C1)
HEATHCOTE BROOK (Kingston) - Entire length	FW2-NT
HERZOG BROOK (Pottersville) - Entire length	FW2-TP (C1)
HICKORY RUN (Califon) - Entire length	FW2-TP (C1)
HOCKHOCKSON BROOK (Colts Neck) - Entire length	FW2-TM
HOLLAND BROOK (Readington) - Entire length	FW2-NT
HOLLOW BROOK (Pottersville) - Entire length	FW2-TP (C1)
HOOKS CREEK LAKE (Cheesequake State Park)	FW2-NT (C1)
HOOPSTICK BROOK (Oldwick) - Entire length	FW2-NT
INDIA BROOK [NORTH BRANCH, RARITAN RIVER] (Randolph) - Entire length	FW2-TP (C1)
IRELAND BROOK (Paulus Corners) - Entire length	FW2-NT
IRESICK BROOK (Spotswood) - Entire length	FW2-NT
LAMINGTON RIVER [BLACK RIVER] (Succasunna) - Source to Rt. 206 bridge (Milltown) - Rt. 206 bridge to confluence with Rinehart Brook (Pottersville) - Confluence with Rinehart Brook to Camp Brady bridge, Bedminster (Vlietown) - Camp Brady bridge to Rt. 523 bridge (Burnt Mills) - Rt. 523 to North Branch, Raritan River	FW2-NT (C1) FW2-TM (C1) FW2-TP (C1) FW2-TM FW2-NT

LAWRENCE BROOK	
(Deans) - Source to the intake of the New Brunswick Water Department at Weston's Mill Dam	FW2-NT
(New Brunswick) - Weston's Mill Dam to Raritan River	SE1
LEDGEWOOD BROOK (Ledgewood) - Entire length	FW2-TP (C1)
LITTLE BROOK (Califon) - Entire length	FW2-TP (C1)
LITTLE SILVER CREEK	
(Shresbury) - Source to a line beginning on the eastern bank of that unnamed lagoon located between Wardell Ave. and Oakes Rd. in Rumson and bearing approximately 171 degrees T (True North) to its terminus on the south shore of Little Silver Creek	FW2-NT/SE1
(Rumson) - Creek below line described above	SE1 (C1)
LOMERSON BROOK - See HERZOG BROOK	
MANALAPAN BROOK - (Jamesburg) - Source to Duhernal Lake dam	FW2-NT
MATCHAPONIX BROOK [WEAMACONK CREEK]	
(Mount Mills) - Entire length, except segments described below	FW2-NT
(Freehold) - The brook and tributaries within the boundaries of Monmouth Battlefield State Park	FW2-NT (C1)
MCGELLAIRDS BROOK	
(Englishtown) - Entire length, except tributary described separately below	FW2-NT
(Freehold) - Tributary within Monmouth Battlefield State Park	FW2-NT (C1)
MCVICKERS BROOK (Mendham) - Entire length	FW2-TM (C1)
MIDDLE BROOK (Greater Cross Roads) - Entire length	FW2-NT
MIDDLE BROOK	
EAST BRANCH	
(Bound Brook) - Entire length	FW2-TM
WEST BRANCH	
(Martinsville) - Entire length	FW2-NT
MAIN STEM	
(Bound Brook) - Confluence of East and West branches to Raritan River	FW2-NT
MILFORD BROOK (Lafayette Mills) - Entire length	FW2-NT
MILLSTONE RIVER (Hightstown) - Entire length	FW2-NT
MINE BROOK (Mine Brook) - Entire length	FW2-NT
MINE BROOK (Colts Neck) - Entire length	FW2-NT
MULHOCKAWAY CREEK (Pattenburg) - Entire length	FW2-TP (C1)
NAVESINK RIVER	
(Red Bank) - Source to a line starting at a point at the northeast end of Blossom Cove, bearing approximately 142 degrees T (True North), through navigational aid C23 to the south bank near Riverview Hospital	FW2-NT/SE1
(Rumson) - River southeast of the line described above, except segment described below	SE1 (C1)

(Monmouth Beach) - All waters south and east of a line beginning on the northwesternmost point of land on Racoon Island (in the vicinity of the western extent of Highland Ave.) in Monmouth Beach, and bearing approximately 056 degrees T (True North) to the southernmost point of a small unnamed island, and then bearing approximately 091 degrees T to its terminus on the northernmost point of land located at the northern extent of Monmouth Parkway in Monmouth Beach and all waters south of a line beginning on the western shoreline (just east of Monmouth Parkway in Monmouth Beach) and bearing approximately 081 degrees T, intersecting Channel Marker Flashing Red 4 and Channel Marker Flashing Red 2 and terminating on the eastern shoreline of the Galilee section of Monmouth Beach.	SE1
NESHANIC RIVER (Reaville) - Entire length	FW2-NT
NORTON BROOK (Norton) - Entire length	FW2-TP (C1)
OAKDALE CREEK (Chester) - Entire length	FW2-TP (C1)
OAKEYS BROOK (Deans) - Entire length	FW2-NT
OCEANPORT CREEK (Fort Monmouth) - Source to a line beginning on the easternmost extent of Horseneck Point and bearing approximately 140 degrees True North to its terminus on the westernmost extent of an unnamed point of land located at the westernmost extent of Monmouth Boulevard in Oceanport	FW2-NT/SE1
(Oceanport) - Creek downstream of line described above	SE1 (C1)
PARKERS CREEK (Fort Monmouth) - Source to a line beginning on the easternmost extent of Horseneck Point and bearing approximately 000 degrees True North to its terminus on Breezy Point on the Little Silver side (north) side of the creek.	FW2-NT/SE1
(Fort Monmouth) - Creek downstream of line described above	SE1 (C1)
PEAPACK BROOK (Gladstone) - Entire length	FW2-TP (C1)
PETERS BROOK (Somerville) - Entire length	FW2-NT
PIGEON SWAMP (S. Brunswick) - All waters within the boundaries of Pigeon Swamp State Park	FW2-NT (C1)
PIKE RUN (Belle Meade) - Entire length	FW2-NT
PINE BROOK (Clarks Mills) - Entire length	FW2-NT
PINE BROOK (Cooks Mill) - Entire length	FW2-TM
PLEASANT RUN (Readington) - Entire length	FW2-NT
PRESCOTT BROOK (Stanton Station) - Entire length	FW2-TM
RAMANESSIN [HOP] BROOK (Holmdel) - Entire length	FW2-TM

RARITAN BAY - Entire Drainage	FW2-NT/SE1
RARITAN RIVER	
NORTH BRANCH (Also see INDIA BROOK)	
(Pleasant Valley) - Source to, but not including, Ravine Lake	FW2-TP (C1)
(Far Hills) - Ravine Lake dam to Rt. 512 bridge	FW2-TM
(Bedminster) - Rt. 512 bridge to confluence with South Branch, Raritan River	FW2-NT
SOUTH BRANCH RARITAN RIVER	
(Mt. Olive) - Source to the dam that is 390 feet upstream of the Flanders-Drakestown Road bridge	FW2-NT (C1)
(Mt. Olive) - Dam to confluence with Turkey Brook	FW2-TM (C1)
(Naughtright) - Confluence with Turkey Brook to confluence with Electric Brook	FW2-TP (C1)
(Clinton) - Confluence with Electric Brook to downstream end of Packers Island, except segment described separately, below	FW2-TM
(Ken Lockwood Gorge) - River and tributaries within Ken Lockwood Gorge Wildlife Management Area	FW2-TM (C1)
(Neshanic Sta.) - Downstream end of Packers Island to confluence with North Branch, Raritan River	FW2-NT
MAIN STEM RARITAN RIVER	
(Bound Brook) - From confluence of North and South Branches to Landing Lane bridge in New Brunswick and all freshwater tributaries downstream of Landing Lane bridge.	FW2-NT
(Sayreville) - Landing Lane bridge to Raritan Bay and all saline water tributaries	SE1
RINEHART BROOK (Hacklebarney) - Entire length	FW2-TP (C1)
ROCK BROOK (Montgomery) - Entire length	FW2-NT
ROCKAWAY CREEK	
NORTH BRANCH	
(Mountainville) - Source to Rt. 523 bridge	FW2-TP (C1)
(Whitehouse) - Rt. 523 bridge to confluence with South Branch	FW2-TM
SOUTH BRANCH	
(Whitehouse) - Entire length	FW2-TM
MAIN STEM	
(Whitehouse) - Confluence of North and South Branches to Lamington River	FW2-NT
ROUND VALLEY RESERVOIR (Clinton)	FW2-TM
ROYCE BROOK (Manville) - Entire length	FW2-NT
SHREWSBURY RIVER	
(Little Silver) - Source to Rt. 36 highway bridge	SE1 (C1)
(Highlands) - Rt. 36 bridge to Sandy Hook bay	SE1

SIMONSON BROOK (Griggstown) - Entire length	FW2-NT
SIX MILE RUN	
(Franklin Church) - Entire length, except segment described below	FW2-NT
(Hillsborough) - Segment within the boundaries of Six Mile Run State Park	FW2-NT (C1)
SOUTH RIVER	
(Manalapan) - Source to intake of the Sayreville Water Department, except tributary described below	FW2-NT
(Tennent) - That portion of the tributary at Tennent along the boundary of Monmouth Battlefield State Park	FW2-NT (C1)
(Sayreville) - Below the intake of the Sayreville Water Department	SE1
SPOOKY BROOK (Bound Brook)	FW2-NT
SPRUCE RUN	
(Glen Gardner) - Source to, but not including, Spruce Run Reservoir	FW2-TP (C1)
(Clinton) - Spruce Run Reservoir dam to Raritan River, South Branch	FW2-TM
SPRUCE RUN RESERVOIR (Union) - Reservoir and tributaries	FW2-TM (C1)
STONY BROOK (Washington) - Entire length	FW2-TP (C1)
STONY BROOK	
(Hopewell) - Entire length, except that segment described below	FW2-NT
(Snydertown) - Brook and tributaries within Amwell Lake Wildlife Management Area	FW2-NT (C1)
STONY BROOK (Watchung) - Entire length	FW2-NT
SUN VALLEY BROOK (Mt. Olive) - Entire length	FW2-TP (C1)
SWIMMING RIVER	
(Red Bank) - Source to the intake of the Monmouth Consolidated Water Company at the Swimming River Reservoir dam	FW2-NT
(Red Bank) - Below the Swimming River Reservoir dam to the Navesink River	SE1
TANNERS BROOK (Washington) - Entire length	FW2-NT (C1)
TEETERTOWN BROOK (Lebanon) - Entire length	FW2-TP (C1)
TEN MILE RUN (Franklin) - Entire length	FW2-NT
TENNENT BROOK (Old Bridge) - Entire length	FW2-NT
TOWN NECK CREEK	
(Little Silver) - Source to a line beginning on the easternmost extent of the unnamed point of land located just east of Paag Circle on the south bank of Town Neck Creek and bearing approximately 095 degrees True North and terminating on Silver Point	FW2-NT/SE1
(Little Silver) - Creek below line described below	SE1 (C1)
TEPEHEMUS BROOK (Manalapan) - Entire length	FW2-NT
TROUT BROOK (Hacklebarney) - Entire length	FW2-TP (C1)
TURKEY BROOK (Mt. Olive) - Entire length	FW2-TP (C1)

WALNUT BROOK (Flemington) - Entire length	FW2-TM
WEAMACONK CREEK - See MATCHAPONIX BROOK	
WEMROCK BROOK	
(Millhurst) - Entire length, except that segment described below	FW2-NT
(Monmouth Battlefield State Park) - Those segments of the brook and its tributaries within the boundaries of Monmouth Battlefield State Park	FW2-NT (C1)
WEMROCK POND (Monmouth Battlefield State Park)	FW2-NT (C1)
WILLOUGHBY BROOK (Buffalo Hollow) - Entire length	FW2-TP (C1)
WILLOW BROOK (Holmdel) - Entire length	FW2-NT
YELLOW BROOK (Colts Neck) - Entire length	FW2-NT

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BEAVER RUN (Wantage) - Entire length	FW2-NT
BEARFORT WATERS (Wawayanda)	FW2-NT (C1)
BLACK CREEK	FW2-TM
(McAfee) - Source to Rt. 94 bridge, except those tributaries described separately, below	
(Vernon) - Rt. 94 bridge to Pochuck Creek	FW2-NT
TRIBUTARIES	
(Hamburg) - Three tributaries to Black Creek which originate in the Hamburg Mtn. Tract from their sources to the Tract boundaries	FW1 [tm]
(Rudeville) - Tributaries within the Hamburg Mtn. Tract not classified as FW1, above	FW2-TM (C1)
(McAfee) - Entire length	FW2-TP (C1)
(Vernon Valley) - Entire length	FW2-NT
CLOVE CREEK (Colesville) - Entire length	FW2-TM
CLOVE RIVER	
(Wantage) - Source to, but not including, Clove Acres Lake, except those tributaries described separately below	FW2-TM
(Sussex) - Clove Acres Lake to Papakating Creek	FW2-NT
(High Point) - Those portions of the two northernmost tributaries located entirely within High Point State Park boundaries, immediately east of Steeny Kill Lake	FW1 [tp]
FRANKLIN POND CREEK	
(Franklin) - Entire length, except those tributaries described separately, below	FW2-TM
(Hamburg Mtn.) - The first tributary, just south of Hamburg Mtn. flowing to the Wallkill River and located entirely within the Hamburg Mtn. Tract	FW1 [tm]
(Hamburg Mtn.) - Tributaries within the Hamburg Mtn. Tract not classified as FW1 as described above	FW2-TM (C1)
GLENWOOD BROOK (Glenwood) - Outlet of Glenwood Lake to State line	FW2-TM
HAMBURG CREEK	
(Hamburg Mtn.) - Source to Rt. 517 bridge, Rudeville, except tributary described separately below	FW2-TM
(Hardistonville) - Rt. 517 bridge to Wallkill River	FW2-NT
(Hamburg Mtn.) - The third tributary just southwest of Hamburg Mtn. flowing toward the Wallkill River and located entirely within the Hamburg Mtn. Tract	FW1
HANFORD BROOK (Hanford) - Entire length within New Jersey	FW2-NT
LAKE LOOKOUT (Wawayanda)	FW2-NT (C1)
LAKE LOOKOUT BROOK (Wawayanda) - Brook and tributaries from source in Newark City	FW1

Holdings, through the Wawayanda Tract, to confluence with the outlet stream from Lake Wawayanda

LAKE RUTHERFORD (Wantage) FW1 [tm]

LAUREL POND (Wawayanda) - Laurel Pond, including its outlet stream and tributaries, to the outlet stream from Lake Wawayanda FW1

LIVINGSTON PONDS (Wawayanda) - The two northwestern ponds which are within State Park lands FW2-NT (C1)

LONG HOUSE BROOK  
 (Upper Greenwood Lake) - Source to State line, except segment described below FW2-NT  
 (Upper Greenwood Lake) - Segment within the bounds of Hewitt State Forest FW2-NT (C1)

LOUNSBERRY HOLLOW BROOK (Vernon Valley) - Outlet of Glenwood Lake to Pochuck Creek FW2-TM

MUD POND OUTLET STREAM (Hamburg) - Outlet stream from the Pond, located within Hamburg Mtn. Tract FW2-NT (C1)

PAPAKATING CREEK  
 MAIN STEM  
 (Frankford) - Source to Rt. 629 bridge, except tributary described below FW2-TM  
 (Pelletstown) - Entire length of tributary FW2-NT  
 (Wantage) - Rt. 629 bridge to Wallkill River FW2-NT  
 WEST BRANCH  
 (Wantage) - Entire length FW2-NT

PARKER LAKE (Wawayanda) FW2-NT (C1)

POCHUCK CREEK  
 (Vernon) - Source to State line, except segment described separately below FW2-NT  
 (High Point) - Segment within State Park lands FW2-NT (C1)

QUARRYVILLE BROOK - See WILLOW BROOK

RUTGERS CREEK (High Point) - The Cedar Swamp headwaters of the tributary to Rutgers Creek located entirely within the High Point State Park boundaries just south of the State line FW1

SAND HILLS BROOK  
 (Hamburg Mtn.) - The upstream portion of Sand Hills Brook located entirely within the boundaries of the Hamburg Mtn. Tract FW1  
 (Hamburg) - Brook and tributaries beyond tract boundaries FW2-NT

SAWMILL POND BROOK  
 (W. Milford) - Entire length, except segment described separately below FW2-NT  
 (Wawayanda) - Segment within the boundaries of Wawayanda State Park FW2-NT (C1)

SPARTA GLEN BROOK (Sparta) - Entire length FW2-TM

SPRING BROOK (Maple Grange) - Entire length FW2-TP (C1)

WALLKILL RIVER		
(Sparta) - Source to confluence with Sparta Glen Brook		FW2-NT
(Franklin) - Sparta Glen Brook to Rt. 23 bridge		FW2-TM
(Wantage) - Rt. 23 bridge to State line		FW2-NT
WANTAGE BROOK (Wantage) - Entire length		FW2-NT
WAWAYANDA CREEK		
(Vernon) - State line to Pochuck Creek, except unnamed tributary described below		FW2-NT
TRIBUTARY		
(Wawayanda) - Source to State line		FW2-NT
(Wawayanda) - Segment within State Park boundaries		FW2-NT (C1)
WAWAYANDA LAKE (Wawayanda)		FW2-TM (C1)
WILDCAT BROOK (Franklin) - Entire length		FW2-NT
WILLOW [QUARRYVILLE] BROOK (Wantage) - Entire length		FW2-TM





# **Wastewater Discharge Requirements**

**PROPOSED**

**WASTEWATER DISCHARGE REQUIREMENTS**

**N.J.A.C. 7:9-5.1 et seq.**

**October 1984**



SUBCHAPTER 5  
WASTEWATER DISCHARGE REQUIREMENTS

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## SUBCHAPTER 5. WASTEWATER DISCHARGE REQUIREMENTS

### 7:9-5.1 Scope of Rules

- (a) Unless otherwise provided by rule or statute, the following shall constitute the rules of the Department of Environmental Protection concerning matters of policy with respect to the protection and enhancement of surface waters of the State, disinfection, and minimum treatment requirements pursuant to the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq. and the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq.
- (b) This subchapter shall apply to effluent limitations and other requirements applicable to discharges into the surface waters of the State.

### 7:9-5.2 Construction

These rules shall be liberally construed to permit the Department and its various divisions to discharge its statutory functions.

### 7:9-5.3 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings unless the context clearly indicates otherwise.

"BOD" means biochemical oxygen demand.

"COD" means chemical oxygen demand.

"Commissioner" means the Commissioner of the Department of Environmental Protection.

"Department" means the New Jersey Department of Environmental Protection.

"Discharge" means the releasing, spilling, leaking, pumping, pouring, emitting, emptying, or dumping of a pollutant into the waters of the State or onto land or into wells from which it might flow or drain into said waters.

"Discharger" means any person, corporation, municipality, sewerage authority or other legal entity, who causes, suffers, or allows any discharge.

"Disinfection" means the removal, destruction or inactivation of pathogenic and indicator organisms.

"EC50" means the median effective concentration of a toxic substance. Generally, this is a statistical estimate of the concentration that has a specified effect on 50 percent of the test organisms under specified test conditions.

"Lake, pond, or reservoir" means any impoundment, whether naturally occurring or created in whole or in part by the building of structures for the retention of surface water, excluding sedimentation control and stormwater retention/detention basins.

"LC50" means the median lethal concentration of a toxic substance. Generally, this is a statistical estimate of the concentration that has a specified effect on 50 percent of the test organisms under specified test conditions.

"Level of treatment" means the degree of waste removal and accompanying residual wastewater effluent to be attained by any discharger.

"MG/L" means milligrams per liter.

"Pollutant" means any dredged spoil, solid waste, incinerator residue, sewage, garbage, refuse, oil, grease, sewage sludge, munition, chemical waste, biological material, radioactive substance, thermal waste, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, or agricultural waste or other residue discharged or otherwise entering into the waters of the State.

"TOC" means total organic carbon.

"Toxic substance" means those substances, or combination of substances, which upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly through food chains, will, on the basis of information available to the Department, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction), or physical deformation in such organisms or their offspring.

"Water quality standards" means the designated uses and the physical, chemical, biological and esthetic characteristics of a water body as described by ambient water quality criteria, set forth in N.J.A.C. 7:9-4.1 et seq.

#### 7:9-5.4 Statements of Policy

(a) The following are general statements of policy:

1. It shall be unlawful for any person to discharge any pollutant into waters of the State, except in conformity with a valid permit issued by the Commissioner or by the Administrator of the United States Environmental Protection Agency.
2. It shall be unlawful for any person to build, install, modify or operate any facility for the collection, treatment or discharge of any pollutant, except after approval by the Department pursuant to regulations adopted by the Commissioner.
3. The protection and enhancement of the quality and function of the waters of this State into which effluents are discharged is a principal concern of the Department when considering the approval of permits to discharge or the designs of proposed facilities for the collection, treatment or discharge of pollutants.
4. The minimum level of treatment required for any wastewater must be such that discharges will meet effluent limitations established pursuant to N.J.A.C. 7:9-5.8 (where applicable) or Sections 301, 306 and 307 of the Federal Clean Water Act, whichever are more stringent, and shall not cause any of the provisions contained in N.J.A.C. 7:9-4.1 et seq. to be contravened.
5. No discharger shall have the privilege of using the entire theoretical capacity of a surface water to receive waste discharges.
6. The policies for interstate waters are:
  - i. The minimum level of treatment for wastewater treatment facilities that discharge treated wastewater to the Delaware River, including freshwater and saline water tidal tributaries to the Delaware River and Delaware Bay, shall be as established in N.J.A.C. 7:9-5.8 (where applicable) or pursuant to Sections 301, 306 and 307 of the Federal Clean Water Act whichever is more stringent.
  - ii. The minimum level of treatment for wastewater treatment facilities that discharge treated wastewaters to waters under the jurisdiction of the Interstate Sanitation Commission in the New Jersey

- New York Metropolitan area shall be as established in N.J.A.C. 7:9-5.8 (where applicable), or in accordance with the current Interstate Sanitation Commission's Water Quality Regulations (and subsequent revisions), or in accordance with Sections 301, 306 and 307 of the Federal Clean Water Act, whichever is more stringent.

- (b) The following are statements of policy concerning disinfection of wastewater:
1. All wastewaters that could contain pathogenic organisms shall receive continuous year round disinfection prior to their discharge into waters of the State.
  2. In order to maintain adequate disinfection of all treated wastewaters while protecting both human health and the aquatic biota from the deleterious effects of chlorine and its disinfection by-products, the Department requires the efficient use of chlorine when it is used as a disinfectant.
  3. The Department encourages the use of alternatives to chlorination for disinfection provided that the following can be demonstrated:
    - i. The alternative method is effective in the removal of viable pathogens and indicators of pathogenic organisms; and
    - ii. The alternative method is safe and will have a less deleterious effect on the health of humans who may ingest or come into contact with waters receiving these discharges than chlorination would; and
    - iii. The alternative method will have a less deleterious effect on the aquatic environment, including its biota, than chlorination would and will not result in a contravention of prevailing surface water quality standards.
  4. Dechlorination may be required to protect or attain the designated uses set forth in N.J.A.C. 7:9-4.12 and 4.13.
  5. Unless it can be demonstrated that a disinfectant and its by-products are nonpersistent, the disinfectant and its by-products shall be considered to be persistent for

purposes of determining water quality based effluent limitations.

7:9-5.5 Use of Indicators of Pollution Levels

In applying the minimum treatment requirements of N.J.A.C. 7:9-5.8 the Department may use TOC or COD in place of, or in combination with, BOD when, in the Department's judgement, it would be more appropriate to use them as indicators of pollution levels.

7:9-5.6 Dilute Industrial Process Wastewater

For dilute industrial process wastewater, the percent BOD (or other indicator) reduction, as set forth in N.J.A.C. 7:9-5.8, may be modified, upon request, provided it has been demonstrated to the satisfaction of the Department that the highest degree of waste treatment determined to be practicable by the Department will be applied.

7:9-5.7 Effluent Standards

- (a) The effluent standard for toxic discharges is that, at a minimum, no effluent shall be more toxic than an LC50 or EC50 of 50 percent (by volume) as determined by acute definitive bioassay(s) conducted in conformance with N.J.A.C. 7:9-18.
- (b) The effluent standard for phosphorus discharged to freshwater lakes, ponds, reservoirs, or tributaries to these waterbodies is that, at a minimum, no effluent shall contain, as a monthly average, more than 1.0 mg/l total phosphorus (as P), unless the discharger can demonstrate that it will not result in a violation of Water Quality Standards.

7:9-5.8 Minimum Treatment Requirements

These minimum treatment requirements apply in all cases where effluent limitations based upon water quality studies acceptable to the Department have not been developed.

Watershed	Classifications	% BOD Removal*	BOD Maximum (mg/l)**	Discharge Type
Atlantic Coastal Plain	FW2,SE1	95	15	All
	SC	85	40	Domestic or Domestic in combination with Industrial
	SC	85	--	Industrial
Delaware River Basin	FW2,SE1,SE2	90	25	All
	Main Stem - All Zones	As set forth in Water Quality Standards for the Delaware River Basin; Resolution 67-7 of the DRBC; April 26, 1967 and subsequent revisions		All
Hackensack River Basin	FW2,SE1	90	25	All
	SE2,SE3	85	40	All
Passaic River Basin (including Newark Bay)	FW2	90	25	All
	SE2,SE3	85	40	All
Raritan River Basin (including Raritan Bay and Sandy Hook Bay)	FW2	90	--	All
	SE1	85	--	All
Wallkill River Basin	FW2	95	15	All
Hudson River, Kill Van Kull, and Arthur Kill Basins	FW2,SE2,SE3	85	--	All

\* Minimum percent reduction of BOD at all times including any four-hour period of a day when the strength of the wastes to be treated might be expected to or actually exceeds average conditions.

\*\* Average over any four-hour period of a day, including periods when the strength of the wastes to be treated might be expected to or actually exceeds average conditions.



