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CHAPTER 9B

SURFACE WATER QUALITY STANDARDS

Authority

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

Source and Effective Date

R.1996 d.87, effective January 18, 1996.
See: 27 N.J.R. 3521(a), 28 N.J.R. 1202(a).

Executive Order No. 66(1978) Expiration Date

Chapter 9B, Surface Water Quality Standards, expires on April 18, 1998.

Chapter Historical Note

Chapter 9B, Surface Water Quality Standards, was recodified with amendments from N.J.A.C. 7:9-4 by R.1993 d.610, effective December 6, 1993. See: 24 N.J.R. 3983(a), 24 N.J.R. 4471(a), 25 N.J.R. 404(a), 25 N.J.R. 5569(a). Pursuant to Executive Order No. 66(1978), Chapter 9B was readopted as R.1996 d.87, effective January 18, 1996. See: Source and Effective Date.

Cross References

Flood control, storm water systems, degradation of water quality, see N.J.A.C. § 7:13-2.8.

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SUBCHAPTER 1. SURFACE WATER QUALITY STANDARDS

7:9B-1.1 Scope of subchapter

Unless otherwise provided by rule or statute, this subchapter shall constitute the rules of the Department of Environmental Protection and Energy 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.

Amended by R.1993 d.610, effective December 6, 1993.
See: 24 N.J.R. 3983(a), 25 N.J.R. 5569(a).

7:9B-1.2 Construction

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

Amended by R.1993 d.610, effective December 6, 1993.
See: 24 N.J.R. 3983(a), 25 N.J.R. 5569(a).

7:9B-1.3 Severability

If any subchapter, section, subsection, provision, clause, or portion of this chapter, or the application thereof to any person, is adjudged unconstitutional or invalid by a court of competent jurisdiction, such judgment shall be confined in its operation to the subchapter, section, subsection, clause, portion, or application directly involved in the controversy in which such judgment shall have been rendered and it shall not affect or impair the remainder of this chapter or the application thereof to other persons.

New Rule, R.1993 d.610, effective December 6, 1993.
See: 24 N.J.R. 3983(a), 25 N.J.R. 5569(a).

7:9B-1.4 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 severe adverse sublethal effect (for example, immobilization of daphnids) to an organism exposed to a toxic substance for a relatively short period of time. Acute toxicity is measured by Short-Term Bioassays, generally of 48 or 96 hour duration.

"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.

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

"Bioaccumulation" means the increase of the concentration of a substance within the tissues of an organism, to levels in excess of that substance's ambient environmental concentration, directly from the water or through the ingestion of food (usually 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 the tables in N.J.A.C. 7:9B-1.15(c) through (h), 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 Nont Trout 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, forest, 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.

"Chlorine produced oxidants" means the sum of free and combined chlorine and bromine as measured by the methods approved under N.J.A.C. 7:18. In fresh waters the oxidants measured are comprised predominantly of hypochlorous acid (HOCl), hypochlorite ion (OCl⁻), monochloramine and dichloramine. In saline waters the oxidants measured are comprised predominately of the oxidants listed for fresh waters plus hypobromous acid (HOBr⁻), hypobromous ion (OBr⁻) and bromamines.

"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.

"Criteria" means those elements of the Surface Water Quality Standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use. When the criteria are met, water quality will generally protect the designated use.

"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.

"DAC" means a discharge allocation certificate issued pursuant to N.J.A.C. 7:14A-3.3.

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

"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 adverse effect on 50 percent of the test organisms under specified test conditions, based on the results of an acute bioassay.

"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 waterbody on or after November 28, 1975, whether or not they are included in the Surface Water Quality Standards.

"Federal Act" means the "Federal Water Pollution Control Act" (33 U.S.C. § 1251 et seq.) including all subsequent supplements and amendments.

"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, in accordance with N.J.A.C. 7:18.

"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 N.J.A.C. 7:9B-1.15(h) Table 6.

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

"Groundwater" means that portion of water beneath the land surface that is within the zone of saturation (below the water table) where pore spaces are filled with water.

"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 (for example, within the top 10 species landed, by dollar value); recreationally valuable; threatened or endan-

gered; 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, based on the results of an acute bioassay.

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

"Long term harmonic mean flow" means the number of daily flow measurements divided by the sum of reciprocals of the flows; in other words, it is the appropriate design flow for health effects occurring after long term exposures and is calculated by

$$\frac{n}{\sum_{i=1}^n (1/Q_i)^5}$$

where n is the number of recorded flows and Q is the combined receiving water and effluent flow.

"MA1CD10" means the minimum average one day flow with a statistical recurrence interval of 10 years.

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

"MA30CD5" means the minimum average 30 consecutive day flow with a statistical recurrence interval of five 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 (for example, mathematical models, ecological indices, etc.) approved by the Department, that might adversely impact 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.

“NJPDES” means New Jersey Pollutant Discharge Elimination System.

“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, 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 subchapter 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 (for example, waters of National/State Parks and Wildlife Refuges and waters of exceptional recreational or ecological significance) as designated in N.J.A.C. 7:9B-1.15(i).

“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 Pinelands 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” or “R.M.” 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 center line 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, then 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 (for example, FW1, PL, FW2-NT, SE1, SC, Zone 1C).

“Surface Water Quality Standards” means the New Jersey rules which set forth a designated use or uses for the waters of the State, use classifications, water quality criteria for the State’s waters based upon such uses, and the Department’s policies concerning these uses, classifications and criteria.

“Surface waters” means water at or above the land’s surface which is neither groundwater nor contained within the unsaturated zone, including, but not limited to, the ocean and its tributaries, all springs, streams, rivers, lakes, ponds, wetlands, and artificial waterbodies.

“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.

“Total maximum daily load” means the sum of individual wasteload allocations for point sources and load allocations for nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments.

“Total recoverable metal” means the concentration of metal in an unfiltered sample following treatment with hot dilute mineral acid (as defined in “Methods for Chemical Analysis of Water and Wastes”, EPA-600/4-79-020, March 1979, incorporated herein by reference).

“Toxic substances” or “toxic pollutants” means any pollutant identified pursuant to the Federal Act, or any pollutant or combination of pollutants, including disease causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly or indirectly by ingestion 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.

“TP” means trout production.

“Trout maintenance waters” means waters designated in this subchapter for the support of trout throughout the year.

“Trout production waters” means waters designated in this subchapter for use by trout for spawning or nursery purposes during their first summer.

“Unsaturated zone” means the subsurface volume between the land’s surface and the top of the saturated zone (water table), where moisture does not fill all the pore spaces in the formation or soil.

“USEPA” means the United States Environmental Protection Agency.

“Wasteload allocation” means the portion of a receiving water’s total maximum daily load that is allocated to one of its existing or future point sources of pollution.

“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.

“Wetlands” means those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation. The Department shall evaluate the parameters of hydrology, soils, and vegetation to determine the presence and extent of wetlands.

“Zone” means the general surface water classification applied to the main stem Delaware River and Delaware Bay.

Amended by R.1989 d.420, effective August 7, 1989.

See: 20 N.J.R. 1597(a), 21 N.J.R. 2302(b).

Amended by R.1993 d.610, effective December 6, 1993.

See: 24 N.J.R. 3983(a), 25 N.J.R. 5569(a).

7:9B-1.5 Statements of policy

(a) General policies are as follows:

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 discharge in domestic or industrial wastewater of carcinogenic, mutagenic, or teratogenic substances is of particular concern to the Department. Human health-based ambient criteria have been established for carcinogenic substances at levels which would result in no greater than a one-in-one-million lifetime excess cancer risk for Group A and B carcinogens, under exposure assumptions appropriate for the designated uses of the waterbody. Criteria for Group C carcinogens, for which reference doses are not available, have been established at levels which would result in no greater than a one-in-one-hundred thousand lifetime excess cancer risk.

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 are as follows:

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 accordance with N.J.A.C. 7:9B-1.13, 1.14(c), and 1.14(d).

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, including all amendments and future supplements thereto, whichever are more stringent.

(c) General technical policies are as follows:

1. The natural water quality shall be used in place of the promulgated Water Quality Criteria of N.J.A.C. 7:9B-1.14 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 nontidal or small tidal stream flows are at or greater than the appropriate design flow. For carcinogenic effect-based human health criteria, the design flow shall be the long term harmonic mean flow. For noncarcinogenic effect-based human health criteria, the design flow shall be the MA30CD5 flow. For acute aquatic life protection criteria, the design flow shall be the MA1CD10 flow. For chronic aquatic life protection criteria the design flow shall be the MA7CD10 flow. The design flow for all other criteria shall be the MA7CD10 flow.

3. Water quality criteria are expected to be maintained in intermittent streams during all natural flow conditions. When an 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 zones policies are as follows:

i. Water quality within a mixing zone may be allowed to fall below applicable water quality criteria provided the existing and designated uses outside the mixing zone 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 at nuisance levels.

vi. 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 1,500 feet of the shoreline in SC waters.

viii. No mixing zones shall be permitted for indicators of bacterial quality including but not limited to, fecal coliforms and enterococci.

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 are as follows:

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 the Statewide Water Quality Management Plan (see N.J.A.C. 7:15), which includes, but is not limited to, the NJPDES Regulations (N.J.A.C. 7:14A), 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 manmade wastewater discharges. The Department shall not approve any activity which, alone or in combination with any other activities, might cause changes, other than toward natural water quality, in the existing surface water quality characteristics.

ii. For Pinelands waters, the Department shall not approve any activity which alone or in combination with any other activities, might cause changes, other than toward natural water quality, 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 May 20, 1985 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.

(3) Existing dischargers shall be subject to all the provisions of this subchapter when they apply for modification or expansion of their existing discharge.

iii. Category One waters shall be protected from any measurable changes (including calculable or predicted changes) to the existing water quality. Water quality characteristics that are generally worse than the water quality criteria, except as due to natural conditions, shall be improved to maintain or provide for the designated uses where this can be accomplished without adverse impacts on organisms, communities or ecosystems of concern.

iv. For Category Two waters, water quality characteristics that are generally better than, or equal to, the water quality standards shall be maintained within a range of quality that shall protect the existing/designated uses, as determined by studies acceptable to the Department, relating existing/designated uses to water quality. Where such studies are not available or are inconclusive, water quality shall be protected from changes that might be detrimental to the attainment of the designated uses or maintenance of the existing uses. Water quality characteristics that are generally worse than the water quality criteria shall be improved to meet the water quality criteria.

7. Where a lower classification of water (including the different antidegradation waters) may impinge upon a higher classification of water the Department shall ensure that the quality and uses of the higher classification water are protected.

8. A waterway or waterbody from which raw water is transferred to another waterway or waterbody shall be treated as a tributary to the waterway or waterbody receiving the transferred water.

9. Modifications of water quality based effluent limitations established to implement this antidegradation policy may be granted pursuant to N.J.A.C. 7:9B-1.8 and 1.9.

(e) Water quality based effluent limitation policies are as follows:

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 discharges 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 Surface 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. (whichever 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 include 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 N.J.A.C. 7:9B-1.8 and 1.9, 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.

7. Where the effluent limitations developed pursuant to N.J.A.C. 7:9B-1.6 are below the level of detectability of the procedures in N.J.A.C. 7:18 the Department will use an effluent limitation of nondetectable in any NJPDES permit or DAC.

8. Compliance schedules may be issued in accordance with N.J.A.C. 7:14A-2.8(a)1 when it is demonstrated by a discharger that new or revised water quality-based effluent limitations, based on ambient criteria adopted or revised after July 1, 1977, cannot be consistently met with the facility's existing treatment process. No schedule of compliance may be allowed for parameter specific water quality based effluent limitations where the parameter specific ambient water quality criterion, which was the basis for developing that limitation, was adopted prior to July 1, 1977 and has not been revised since adoption.

(f) Bioassay and biomonitoring policies are as follows:

1. Bioassay test species selection criteria follow:

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 normally 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. Bioaccumulation testing;

ii. Mutagenicity testing; and

iii. 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, are available as follows:

i. Appropriate bioassays, for purposes of this policy, shall include both acute definitive and chronic definitive bioassays; and

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 are as follows:

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 N.J.A.C. 7:9B-1.14, 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.

Amended by R.1989 d.420, effective August 7, 1989.

See: 20 N.J.R. 1597(a), 21 N.J.R. 2302(b).

Amended by R.1993 d.610, effective December 6, 1993.

See: 24 N.J.R. 3983(a), 25 N.J.R. 5569(a).

Amended by R.1994 d.84, effective February 22, 1994.

See: 25 N.J.R. 405(a), 26 N.J.R. 1124(a).

7:9B-1.6 Establishment of water quality based effluent limitations

(a) Water quality based effluent limitations shall be 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 this subchapter.

(b) The conditions of a Draft NJPDES Permit or a Draft DAC shall include any water quality based effluent limitations developed pursuant to (c) below, 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 this subchapter (including, but not limited to, N.J.A.C. 7:9B-1.5, 1.6(c), 1.8, and 1.9).

(c) The Department may develop water quality based effluent limitations for a single point source discharger in response to an application for DAC or NJPDES permit. 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. 7:9B-1.4, 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. 7:9B-1.14, 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. 7:9B-1.4, 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, in addition to any information required pursuant to N.J.A.C. 7:14A:

- 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; and

- v. Stream analyses, which shall include:

- (1) A flow analysis to determine the appropriate long term harmonic mean, MA30CD5, MA1CD10, or 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. 7:18, shall be utilized by the Department in developing water quality based effluent limitations.

iii. The Department shall utilize the parameter specific criteria contained in N.J.A.C. 7:9B-1.14, in the development of chemical specific water quality based effluent limitations for point source discharges. Whenever parameter specific criteria have not been adopted, the Department will utilize the best available scientific information in the development of chemical specific water quality based effluent limitations for point source discharges. Ambient criteria published by the United States Environmental Protection Agency pursuant to section 304(a) of the Federal Clean Water Act represent the minimum acceptable best scientific information to be used in the development of water quality based effluent limitations for point source discharges.

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-persistent substances or 0.01 where toxicity is known or suspected to be due to persistent substances, or an alternative application factor developed in accordance with N.J.A.C. 7:9B-1.5(f)4.
 I = Critical instream waste concentration, determined in accordance with the methods in (c)5ii 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 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:

Where: L_C = $I(100)$
 L_C = Toxicity limitation expressed as a chronic NOEC in percent effluent.
 I = Critical instream waste concentration, determined in accordance with the method of (c)5ii above.

iv. If the calculated limit, L_C , is greater than 100 percent effluent, the draft limit shall be 100.

6. Water quality based effluent limits for chlorine produced oxidants based on the criteria in N.J.A.C. 7:9B-1.14(c)14 are not applicable where:

i. The aquatic community of a waterbody is exposed to one or more point source discharges of non-contact cooling water that is intermittently chlorinated to control condenser biofouling;

ii. The total period of such exposure to chlorinated wastewater is two hours per day or less; and

iii. The maximum concentration of chlorine produced oxidants in the effluents of such discharges shall not exceed 200 $\mu\text{g/L}$.

Amended by R.1989 d.420, effective August 7, 1989.

See: 20 N.J.R. 1597(a), 21 N.J.R. 2302(b).

Administrative Correction.

See: 23 N.J.R. 302(a).

Amended by R.1993 d.610, effective December 6, 1993.

See: 24 N.J.R. 3983(a), 25 N.J.R. 5569(a).

Case Notes

Department of Environmental Protection findings should be adequately supported by the record and carefully explained. Matter of Issuance of a Permit by Dept. of Environmental Protection to Ciba-Geigy Corp., 120 N.J. 164, 576 A.2d 784 (1990).

Department of Environmental Protection must state whether a final permit satisfies Ocean Discharge Criteria and must state in both the draft and final permit the basis of its finding. Matter of Issuance of a Permit by Dept. of Environmental Protection to Ciba-Geigy Corp., 120 N.J. 164, 576 A.2d 784 (1990).

A discharge seeking to reduce water quality below the level necessary to support designated uses must advance important economic or social development in the area. Matter of Issuance of a Permit by Dept. of Environmental Protection to Ciba-Geigy Corp., 120 N.J. 164, 576 A.2d 784 (1990).

Department of Environmental Protection should determine whether discharges into "Category Two" waters maintain water quality to protect designated uses. Matter of Issuance of a Permit by Dept. of Environmental Protection to Ciba-Geigy Corp., 120 N.J. 164, 576 A.2d 784 (1990).

7:9B-1.7 Waterway loadings in areawide water quality management plans

Any total maximum daily load, wasteload allocation, or load allocation established as an amendment to an areawide water quality management plan under N.J.A.C. 7:15-3.4 shall be consistent with all of the provisions of this subchapter.

Amended by R.1993 d.610, effective December 6, 1993.

See: 24 N.J.R. 3983(a), 25 N.J.R. 5569(a).

7:9B-1.8 Procedures for modifying water quality based effluent limitations for individual dischargers to Category One waters

(a) An applicant requesting modification of a water quality based effluent limitation, established on a case-by-case

basis, 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:

1. Some change in ambient water quality should be allowed because of necessary and justifiable social or economic development;

2. 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 nor be injurious to the existing or designated uses; and

3. 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:

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 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

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) 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.

(d) Modified effluent limitations may be granted for a time period not to exceed three years or the time period of the permit in which the modified effluent limitations appear, whichever is shorter.

(e) Modified effluent limitations may be renewed if the discharger demonstrates, to the Department's satisfaction, after public notice (including notice to affected municipalities) and a public hearing (where sufficient interest exists), that the basis for issuing the variance still exists and there have been no adverse impacts on the existing uses.

(f) Where water quality criteria are not currently met the Department shall not grant a modification, as set forth in

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

Amended by R.1993 d.610, effective December 6, 1993.
See: 24 N.J.R. 3983(a), 25 N.J.R. 5569(a).

7:9B-1.9 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 section, 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 not to exceed three years or the time period of the permit in which the modified effluent limitations appear, whichever is shorter.

(d) Modified effluent limitations may be renewed if the discharger demonstrates, to the satisfaction of the Department, after the public notice (including notice to affected municipalities) and a public hearing (where sufficient interest exists), that the basis for issuing the variance still exists and there have been no adverse impacts on the existing uses.

Amended by R.1993 d.610, effective December 6, 1993.
See: 24 N.J.R. 3983(a), 25 N.J.R. 5569(a).

7:9B-1.10 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 proceedings 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 (e)1 and 2 below, in addition to at least one of the remaining criteria 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.

7:9B-1.11 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. 7:9B-1.10, the bases for the 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.

Amended by R.1993 d.610, effective December 6, 1993.
See: 24 N.J.R. 3983(a), 25 N.J.R. 5569(a).

7:9B-1.12 Designated uses of FW1, PL, FW2, SE1, SE2, SE3, and SC waters

(a) In all FW1 waters the designated uses are:

1. Set aside for posterity to represent the natural aquatic environment and its associated biota;

2. Primary and secondary contact recreation;

3. Maintenance, migration and propagation of the natural and established aquatic biota; and

4. Any other reasonable uses.

(b) In all PL waters the designated uses are:

1. Cranberry bog water supply and other agricultural uses;
2. Maintenance, migration and propagation of the natural and established biota indigenous to this unique ecological system;
3. Public potable water supply after such treatment as required by law or regulations;
4. Primary and secondary contact recreation; and
5. Any other reasonable uses.

(c) In all FW2 waters the designated uses are:

1. Maintenance, migration and propagation of the natural and established biota;
2. Primary and secondary contact recreation;
3. Industrial and agricultural water supply;
4. Public potable water supply after such treatment as required by law or regulation; and
5. Any other reasonable uses.

(d) In all SE1 waters the designated uses are:

1. Shellfish harvesting in accordance with N.J.A.C. 7:12;
2. Maintenance, migration and propagation of the natural and established biota;
3. Primary and secondary contact recreation; and
4. Any other reasonable uses.

(e) In all SE2 waters the designated uses are:

1. Maintenance, migration and propagation of the natural and established biota;
2. Migration of diadromous fish;
3. Maintenance of wildlife;
4. Secondary contact recreation; and
5. Any other reasonable uses.

(f) In all SE3 waters the designated uses are:

1. Secondary contact recreation;

2. Maintenance and migration of fish populations;
3. Migration of diadromous fish;
4. Maintenance of wildlife; and
5. Any other reasonable uses.

(g) In all SC waters the designated uses are:

1. Shellfish harvesting in accordance with N.J.A.C. 7:12;
2. Primary and secondary contact recreation;
3. Maintenance, migration and propagation of the natural and established biota; and
4. Any other reasonable uses.

Petition for Rulemaking: Exxon petitioning for reclassification to less restrictive uses of portion of Morses Creek.
21 N.J.R. 3791(c).

Case Notes

Leasehold in shellfish bottoms was not particularized property right sufficient to entitle holder to adjudicatory hearing regarding coastal development. N.J.S.A. 12:5-1 et seq., 13:19-1 et seq., 50:1-5 et seq., 52:14B-2(b), 52:14B-9. Spalt v. New Jersey Dept. of Environmental Protection, 237 N.J.Super. 206, 567 A.2d 264 (A.D.1989), certification denied 122 N.J. 140, 584 A.2d 213.

7:9B-1.13 Designated uses of main stem Delaware River and Delaware Bay as set forth in the "Delaware River Basin Commission, Administrative Manual—Part III Water Quality Regulations," Article 3, dated May 22, 1991 including all amendments and future supplements thereto

(a) The designated uses for the main stem Delaware River and Delaware Bay are those contained in "Delaware River Basin Commission, Water Quality Regulations, Administrative Manual—Part III," Article 3, dated May 22, 1991, including all amendments and future supplements thereto.

(b) The designated uses for other waters under the jurisdiction of the DRBC are as set forth at N.J.A.C. 7:9B-1.15(d).

Amended by R.1993 d.610, effective December 6, 1993.
See: 24 N.J.R. 3983(a), 25 N.J.R. 5569(a).

7:9B-1.14 Surface water quality criteria

(a) Surface water quality criteria for FW1 waters shall be maintained as to quality in their natural state.

(b) Surface water quality criteria for PL waters are as follows:

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 is more stringent.

i. For Nitrate-Nitrogen a level of 2 mg/l shall be maintained in the surface waters unless it is shown that a lower level must be maintained to protect the existing surface water quality.

ii. A pH level between 3.5 and 5.5 shall be maintained unless it is demonstrated that a pH level outside of that range is necessary to protect the existing/designated uses.

2. The water quality criteria for existing discharges are the water quality criteria contained in "Surface Water

Quality Standards" as adopted in March 1981, except that:

i. The criteria for Nitrate-Nitrogen and pH promulgated in N.J.A.C. 7:9B-1.14(b)1 for PL waters apply instead of the 1981 criteria; and

ii. The criteria for phosphorous and toxic substances promulgated in N.J.A.C. 7:9B-1.14(c) apply instead of the 1981 criteria, as though the freshwater portions of the PL waters were classified as FW2 and the saline portions were classified as SE1.

(c) Surface Water Quality Criteria for FW2, SE and SC Waters:

Substance	Criteria	Classifications
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)	i. Bacterial Indicators 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. ii. Fecal Coliforms: (1) Fecal coliform levels shall not exceed a geometric average of 50/100 ml. (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. (3) Fecal coliform levels shall not exceed a geometric average of 770/100 ml. (4) Fecal coliform levels shall not exceed a geometric average of 1500/100 ml. iii. Enterococci: (1) Enterococci levels shall not exceed a geometric mean of 33/100 ml, nor shall any single sample exceed 61/100 ml. (2) Enterococci levels shall not exceed a geometric mean of 35/100 ml, nor shall any single sample exceed 104/100 ml. iv. 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 as equally spaced over a 30-day period, as feasible, 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.	Shellfish Waters Within 1500 feet of shoreline in SC waters. FW2, SE1, and SC 1500 feet to 3 miles from the shoreline. SE2 SE3 FW2 SE1 and SC All Classifications

Substance	Criteria	Classifications
2. 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-TM
	iii. 24 hour average not less than 5.0, but not less than 4.0 at any time (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; and	SE3
	viii. Supersaturated dissolved oxygen values shall be expressed as their corresponding 100 percent saturation values for purposes of calculating 24 hour averages.	FW2-TM, FW2-NT, SE1
3. 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; and	All 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
4. pH (Standard Units)	i. 6.5-8.5.	FW2, All SE
	ii. Natural pH conditions shall prevail.	SC
5. Phosphorus, Total (mg/l)	i. <i>Lakes</i> : 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, except where site-specific criteria are developed pursuant to N.J.A.C. 7:9B-1.5(g)3.	FW2
	ii. <i>Streams</i> : Except as necessary to satisfy the more stringent criteria in paragraph i above or where site-specific criteria are developed pursuant to N.J.A.C. 7:9B-1.5(g)3, 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
6. Radioactivity	i. Prevailing regulations including all amendments and future supplements thereto adopted by the U.S. Environmental Protection Agency pursuant to Sections 1412, 1445, and 1450 of the Public Health	All Classifications

Substance	Criteria	Classifications
	Services Act, as amended by the Safe Drinking Water Act (PL 93-523).	
7. Solids, Suspended (mg/l) [Non-filterable residue]	i. 25.0	FW2-TP, FW2-TM
	ii. 40.	FW2-NT
	iii. None which would render the waters unsuitable for the designated uses.	All SE, SC
8. Solids, Total Dissolved [Filterable Residue] (mg/l)	i. No increase in background which may adversely affect the survival growth or propagation of the aquatic biota or would interfere with the designated or existing uses, or 500 mg/l, whichever is more stringent. (Increases up to 133 percent of background are deemed to be in compliance with the narrative criterion above. Increases above 133 percent of background may be granted where the discharger demonstrates, to the satisfaction of the department, that the proposed increase will not adversely affect the aquatic biota.)	FW2
	ii. None which would render the water unsuitable for the designated uses.	All SE
9. Sulfate (mg/l)	i. 250	FW2
10. Taste and odor producing substances	i. None offensive to humans or which would produce offensive taste or odors in water supplies and biota used for human consumption. None which would render the waters unsuitable for the designated uses.	All Classifications
11. Temperature and Heat Dissipation Areas	i. Thermal Alterations (Temperatures shall be measured outside of heat dissipation areas)	
	(1) Streams	
	(i) No thermal alterations which would cause changes in ambient temperatures 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	FW2-NT

Substance	Criteria	Classifications
	exceed 27.8°C (82°F) for small mouth bass or yellow perch waters, or 30°C (86°F) for other nontrout waters.	
	(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
	(2) Lakes, Ponds or Reservoirs	
	(i) No thermal alterations except where it can be shown to be beneficial to the designated and existing uses.	FW2-TM, FW2-TP
	(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-NT
	(3) Saline Bays—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
	(4) Coastal Waters—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	FW2-TM, FW2-NT, All SE
	(i) Not more than one-quarter (¼) of the cross section and/or volume of the water body at any time;	
	(ii) Not more than two-thirds (⅔) of the surface from shore to shore at any time; and	

Substance	Criteria	Classifications
	(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-TP, FW2-NT, All SE, SC
12. 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. ii. None which would cause standards for drinking water to be exceeded after appropriate treatment. 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. 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. 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 FW2 All Classifications All Classifications All Classifications
13. Toxic Substances (ug/l):		
NOTE: Except as noted, aquatic life criteria followed by an (a) represent acute aquatic life protection criteria as a one-hour average and aquatic life criteria followed by (c) represent chronic aquatic life protection criteria as a four-day average. No exceedance of aquatic life criteria shall be permitted at or above the design flows specified in section N.J.A.C. 7:9B-1.5(c)2. Criteria followed by an (h) are noncarcinogenic effect-based human health criteria as a 30-day average with no frequency of exceedance at or above the design flows specified in section N.J.A.C. 7:9B-1.5(c)2. Criteria followed by an (hc) are carcinogenic effect-based human health criteria as a 70-year average with no frequency of exceedance at or above the design flows specified in section N.J.A.C. 7:9B-1.5(c)2 and are based on a risk level of one-in-one-million. Criteria followed by an (hcc) are for toxic substances considered to be possible human carcinogens as a 70-year average with no frequency of exceedance at or above the design flows specified in section N.J.A.C. 7:9B-1.5(c)2 and are based on a risk level of one-in-one hundred thousand. Criteria followed by an (OL) are organoleptic effect-based criteria and are maximum concentrations.		
i. Acenaphthylene	Reserved.	
ii. Acrolein	(1) 320(h)	All FW2
	(2) 780(h)	All SE, SC
iii. Acrylonitrile	(1) 0.0591(hc)	All FW2
	(2) 0.665(hc)	All SE, SC

Substance	Criteria	Classifications
iv. Aldrin	(1) 3.0(a); 0.000135(hc) (2) 1.3(a); 0.000144(hc)	All FW2 All SE, SC
v. Aluminum (Total recoverable)	Reserved.	
vi. Ammonia, un-ionized (24-hour average)	(1) 20(c) (2) 50(c) (3) 0.1 of acute definitive LCS0 or EC50(c)	FW2-TP, FW2-TM FW2-NT All SE, SC
vii. Anthracene	(1) 9,570(h) (2) 108,000(h)	All FW2 All SE, SC
viii. Antimony (Total recoverable)	(1) 12.2(h) (2) 4,300(h)	All FW2 All SE, SC
ix. Arsenic (Total recoverable)	(1) 0.0170(hc) (2) 0.136(hc)	All FW2 All SE, SC
x. Asbestos	(1) 7 million fibers/L(h) (fibers longer than 10 micrometers)	All FW2
xi. Barium (Total recoverable)	(1) 2,000(h)	All FW2
xii. Benz(a)anthracene	(1) 0.0028(hc) (2) 0.031(hc)	All FW2 All SE, SC
xiii. Benzene	(1) 0.150(hc) (2) 71(hc)	All FW2 All SE, SC
xiv. Benzidine	(1) 0.000118(hc) (2) 0.000535(hc)	All FW2 All SE, SC
xv. 3,4-Benzofluoranthene (Benzo(b)fluoranthene)	(1) 0.0028(hc) (2) 0.031(hc)	All FW2 All SE, SC
xvi. Benzo(a)pyrene (BaP)	(1) 0.0028(hc) (2) 0.031(hc)	All FW2 All SE, SC
xvii. Benzo(ghi)perylene	Reserved.	
xviii. Benzo(k)fluoranthene	(1) 0.0028(hc) (2) 0.031(hc)	All FW2 All SE, SC
xix. Beryllium (Total recoverable)	Reserved.	
xx. alpha-BHC (alpha-HCH)	(1) 0.00391(hc) (2) 0.0131(hc)	All FW2 All SE, SC
xxi. beta-BHC (beta-HCH)	(1) 0.137(hcc) (2) 0.460(hcc)	All FW2 All SE, SC
xxii. gamma-BHC (gamma-HCH/Lindane)	(1) 2.0(a); 0.080(c) (2) 0.16(a)	All FW2 All SE, SC
xxiii. Bis(2-chloroethyl) ether	(1) 0.0311(hc) (2) 1.4(hc)	All FW2 All SE, SC
xxiv. Bis(2-chloroisopropyl) ether	(1) 1,250(h) (2) 170,000(h)	All FW2 All SE, SC
xxv. Bis(2-ethylhexyl)phthalate	(1) 1.76(hc) (2) 5.92(hc)	All FW2 All SE, SC
xxvi. Bromodichloromethane (Dichlorobromomethane)	(1) 0.266(hc) (2) 22(hc)	All FW2 All SE, SC
xxvii. Bromoform	(1) 4.38(hc) (2) 360(hc)	All FW2 All SE, SC
xxviii. Butylbenzyl phthalate	(1) 239(h) (2) 416(h)	All FW2 All SE, SC
xxix. Cadmium (Total recoverable)	(1) 10(h)	All FW2
xxx. Carbon tetrachloride	(1) 0.363(hc) (2) 6.31(hc)	All FW2 All SE, SC
xxxi. Chlordane	(1) 2.4(a); 0.0043(c); 0.000277(hc) (2) 0.09(a); 0.0040(c); 0.000283(hc)	All FW2 All SE, SC
xxxii. Chloride	(1) 250,000(ol); 860,000(a); 230,000(c)	All FW2
xxxiii. Chlorine Produced Oxidants (CPO)	(1) 19(a); 11(c) (2) 13(a); 7.5(c)	All FW2 All SE, SC

Substance	Criteria	Classifications
xxxiv. Chlorobenzene	(1) 22.0(h) (2) 21,000(h)	All FW2 All SE, SC
xxxv. Chloroform	(1) 5.67(hc) (2) 470(hc)	All FW2 All SE, SC
xxxvi. 2-Chlorophenol	(1) 122(h) (2) 402(h)	All FW2 All SE, SC
xxxvii. Chlorpyrifos	(1) 0.083(a); 0.041(c) (2) 0.011(a); 0.0056(c)	All FW2 All SE, SC
xxxviii. Chromium (Total recoverable)	(1) 160(h) (2) 3,230(h)	All FW2 All SE, SC
xxxix. Chrysene	(1) 0.0028(hc) (2) 0.031(hc)	All FW2 All SE, SC
xl. Copper (Total recoverable)	Reserved.	
xli. Cyanide	(1) 22(a); 5.2(c); 768(h) (2) 1.0(a); 1.0(c); 220,000(h)	All FW2 All SE, SC
xl. 4,4'-DDD (p,p'-TDE)	(1) 0.000832(hc) (2) 0.000837(hc)	All FW2 All SE, SC
xl. 4,4'-DDE	(1) 0.000588(hc) (2) 0.000591(hc)	All FW2 All SE, SC
xl. 4,4'-DDT	(1) 1.1(a); 0.0010(c); 0.000588(hc) (2) 0.13(a); 0.0010(c); 0.000591(hc)	All FW2 All SE, SC
xl. Demeton	(1) 0.1(c)	All FW2 SE, and SC
xlvi. Dibenzo(a,h)anthracene	(1) 0.0028(hc)	All FW2
xlvi. anthracene	(2) 0.031(hc)	All SE, SC
xlvi. Dibromochloromethane (Chlorodibromomethane)	(1) 72.6(h)	All FW2
xl. Di-n-butyl phthalate	(1) 3,530(h) (2) 15,700(h)	All FW2 All SE, SC
xl. 1,2-Dichlorobenzene	(1) 2,520(h) (2) 16,500(h)	All FW2 All SE, SC
li. 1,3-Dichlorobenzene	(1) 2,620(h) (2) 22,200(h)	All FW2 All SE, SC
li. 1,4'-Dichlorobenzene	(1) 343(h) (2) 3,159(h)	All FW2 All SE, SC
lii. 3,3'-Dichloro-benzidine	(1) 0.0386(hc) (2) 0.0767(hc)	All FW2 All SE, SC
liii. 1,2-Dichloroethane	(1) 0.291(hc) (2) 99(hc)	All FW2 All SE, SC
liv. 1,1-Dichloroethylene	(1) 4.81(h)	All FW2
lv. trans-1,2-Dichloro-ethylene	(1) 592(h)	All FW2
lvi. 2,4-Dichlorophenol	(1) 92.7(h) (2) 794(h)	All FW2 All SE, SC
lvii. 1,3-Dichloropropene	(1) 0.193(hc) (2) 1700(h)	All FW2 All SE, SC
lviii. Dieldrin	(1) 2.5(a); 0.0019(c); 0.000135(hc) (2) 0.71(a); 0.0019(c); 0.000144(hc)	All FW2 All SE, SC
lix. Diethyl phthalate	(1) 21,200(h) (2) 111,000(h)	All FW2 All SE, SC
lx. Dimethyl phthalate	(1) 313,000(h) (2) 2,900,000(h)	All FW2 All SE, SC
lxi. 4,6-Dinitro-o-cresol	(1) 13.4(h) (2) 765(h)	All FW2 All SE, SC
lxii. 2,4-Dinitrophenol	(1) 69.7(h) (2) 14,000(h)	All FW2 All SE, SC
lxiii. 2,4-Dinitrotoluene	(1) 0.11(hc) (2) 9.1(hc)	All FW2 All SE, SC

Substance	Criteria	Classifications
lxiv. 1,2-Diphenyl-hydrazine	(1) 0.0405(hc) (2) 0.541(hc)	All FW2 All SE, SC
lxv. Endosulfans (alpha and beta)	(1) 0.22(a); 0.056(c); 0.932(h) (2) 0.034(a); 0.0087(c); 1.99(h)	All FW2 All SE, SC
lxvi. Endosulfan sulfate	(1) 0.93(h) (2) 2.0(h)	All FW2 All SE, SC
lxvii. Endrin	(1) 0.18(a); 0.0023(c); 0.629(h) (2) 0.037(a); 0.0023(c); 0.678(h)	All FW2 All SE, SC
lxviii. Endrin aldehyde	(1) 0.76(h) (2) 0.81(h)	All FW2 All SE, SC
lxix. Ethylbenzene	(1) 3,030(h) (2) 27,900(h)	All FW2 All SE, SC
lxx. Fluoranthene	(1) 310(h) (2) 393(h)	All FW2 All SE, SC
lxxi. Fluorene	(1) 1,340(h)	All FW2
lxxii. Guthion	(1) 0.01(c)	All FW2, SE and SC
lxxiii. Heptachlor	(1) 0.52(a); 0.0038(c); 0.000208(hc) (2) 0.053(a); 0.0036(c); 0.000214(hc)	All FW2 All SE, SC
lxxiv. Heptachlor epoxide	(1) 0.52(a); 0.0038(c); 0.000103(hc) (2) 0.053(a); 0.0036(c); 0.000106(hc)	All FW2 All SE, SC
lxxv. Hexachlorobenzene	(1) 0.000748(hc) (2) 0.000775(hc)	All FW2 All SE, SC
lxxvi. Hexachlorobutadiene	(1) 6.94(h)	All FW2
lxxvii. Hexachlorocyclopentadiene	(1) 245(h) (2) 17,000(h)	All FW2 All SE, SC
lxxviii. Hexachloroethane	(1) 2.73(h) (2) 12.4(h)	All FW2 All SE, SC
lxxix. Indeno(1,2,3-cd) pyrene	(1) 0.0028(hc) (2) 0.031(hc)	All FW2 All SE, SC
lxxx. Iron (Total recoverable)	Reserved.	
lxxxi. Isophorone	(1) 552(h)	All FW2
lxxxii. Lead (Total recoverable)	(1) 5(h)	All FW2
lxxxiii. Malathion	(1) 0.1(c)	All FW2, SE and SC
lxxxiv. Manganese (Total recoverable)	(1) 100(h)	All SE, SC
lxxxv. Mercury (Total recoverable)	(1) 0.144(h) (2) 0.146(h)	All FW2 All SE, SC
lxxxvi. Methoxychlor	(1) 0.03(c); 40(h) (2) 0.03(c)	All FW2 All SE, SC
lxxxvii. Methyl bromide (Bromomethane)	(1) 48.4(h) (2) 4,000(h)	All FW2 All SE, SC
lxxxviii. Methyl chloride (Chloromethane)	Reserved.	
lxxxix. Methylene chloride	(1) 2.49(hc) (2) 1,600(hc)	All FW2 All SE, SC
xc. Mirex	(1) 0.001(c)	All FW2, SE and SC
xc. Nickel (Total recoverable)	(1) 516(h) (2) 3,900(h)	All FW2 All SE, SC
xcii. Nitrate (as N)	(1) 10,000(h)	All FW2
xciii. Nitrobenzene	(1) 16.0(h) (2) 1,900(h)	All FW2 All SE, SC
xciv. N-Nitrosodi-n-butylamine	(1) 0.00641(hc)	All FW2
xcv. N-Nitrosodie-thylamine	(1) 0.000233(hc)	All FW2
xcvi. N-Nitrosodimethylamine	(1) 0.000686(hc) (2) 8.1(hc)	All FW2 All SE, SC

Substance	Criteria	Classifications
xvii. N-Nitrosodiphenylamine	(1) 4.95(hc) (2) 16.2(hc)	All FW2 All SE, SC
xviii. N-Nitroso-pyrrolidine	(1) 0.0167(hc)	All FW2
xcix. Parathion	(1) 0.065(a); 0.013(c)	All FW2
c. Pentachlorobenzene	(1) 3.67(h) (2) 4.21(h)	All FW2 All SE, SC
ci. Pentachlorophenol	(1) $e^{(1.005(\text{pH})-4.830)}(a)$; $e^{(1.005(\text{pH})-5.290)}(c)$; 0.282(hc) (2) 13(a); 7.9(c); 8.2(hc)	All FW2 All SE, SC
cii. Phenanthrene	Reserved.	
ciii. Phenol	(1) 20,900(h) (2) 4,600,000(h)	All FW2 All SE, SC
civ. Phosphorous (yellow)	(1) 0.1(c)	All SE, SC
cv. Polychlorinated biphenyls (PCBs-1242, 1254, 1221, 1232, 1248, 1260, and 1016)	(1) 0.014(c); 0.000244(hc) (2) 0.030(c); 0.000247(hc)	All FW2 All SE, SC
cvi. Pyrene	(1) 797(h) (2) 8,970(h)	All FW2 All SE, SC
cvii. Selenium (Total recoverable)	(1) 10(h)	All FW2
cviii. Silver (Total recoverable)	(1) 164(h)	All FW2
cix. Sulfide-hydrogen sulfide (undissociated)	(1) 2(c)	All FW2. SE and SC
cx. 1,2,4,5-Tetra-chlorobenzene	(1) 2.56(h) (2) 3.25(h)	All FW2 All SE, SC
cxii. 2,3,7,8-Tetra-chlorodibenzo-p- dioxin (TCDD)	(1) 0.00000013(hc) (2) 0.00000014(hc)	All FW2 All SE, SC
cxiii. 1,1,2,2-Tetra-chloroethane	(1) 1.72(hcc)	All FW2
cxiii. Tetrachloroethylene	(1) 0.388(hc) (2) 4.29(hc)	All FW2 All SE, SC
cxiv. Thallium (Total recoverable)	(1) 1.70(h) (2) 6.22(h)	All FW2 All SE, SC
cxv. Toluene	(1) 7,440(h) (2) 200,000(h)	All FW2 All SE, SC
cxvi. Toxaphene	(1) 0.73(a); 0.0002(c); 0.000730(hc) (2) 0.21(a); 0.0002(c); 0.000747(hc)	All FW2 All SE, SC
cxvii. 1,2,4-Trichlorobenzene	(1) 30.6(h) (2) 113(h)	All FW2 All SE, SC
cxviii. 1,1,1-Trichloroethane	(1) 127(h)	All FW2
cxix. 1,1,2-Trichloroethane	(1) 13.5(h)	All FW2
cxx. Trichloroethylene	(1) 1.09(hc) (2) 81(hc)	All FW2 All SE, SC
cxxi. 2,4,5-Trichlorophenol	(1) 2,580(h) (2) 9,790(h)	All FW2 All SE, SC
cxxii. 2,4,6-Trichlorophenol	(1) 2.14(hc) (2) 6.53(hc)	All FW2 All SE, SC
cxxiii. Vinyl chloride	(1) 0.0830(hc) (2) 525(hc)	All FW2 All SE, SC
cxxiv. Zinc (Total recoverable)	Reserved.	
14. Turbidity (Nephelometric Turbidity Unit-NTU)	i. Maximum 30-day average of 15 NTU, a maximum of 50 NTU at any time. ii. Maximum 30-day average of 10 NTU, a maximum of 30 NTU at any time iii. Levels shall not exceed 10.0 NTU.	FW2, SE3 SE1, SE2 SC

(d) Surface Water Quality Criteria for waters under the jurisdiction of the DRBC:

1. Main stem Delaware River and Delaware Bay:

i. For parameters with criteria in "Delaware River Basin Commission, Administrative Manual—Part III, Water Quality Regulations," Article 3, dated May 22, 1991, including all amendments and future supplements thereto, the criteria contained therein are the applicable criteria.

ii. For parameters without criteria in "Delaware River Basin Commission, Administrative Manual—Part III, Water Quality Regulations," Article 3, dated May

22, 1991, including all amendments and future supplements thereto, the criteria at (c) above are the applicable criteria and shall be applied as follows:

(1) Criteria applicable to FW2-NT waters apply where salinities are less than or equal to 3.5 parts per thousand (ppt) at mean high tide;

(2) Criteria applicable to SE waters apply where salinities are greater than 3.5 ppt at mean high tide; and

(3) Where salinities vary from 3.5 ppt or less, to greater than 3.5 ppt, at mean high tide, the more stringent of the FW2-NT or SE criteria apply.

2. Tributaries to the main stem Delaware River and Delaware Bay:

i. The applicable criteria are those contained in "Delaware River Basin Commission, Administrative Manual—Part III, Water Quality Regulations," Article 3, dated May 22, 1991 including all amendments and supplements thereto; or

ii. The criteria at (c) above, whichever are more stringent.

3. For all waters under the jurisdiction of the DRBC where criteria are not established in "Delaware River Basin Commission, Administrative Manual—Part III, Water Quality Regulations," Article 3, dated May 22, 1991, including all amendments and future supplements thereto, or at (c) above, the Department shall use criteria based upon the best available scientific information, in accordance with N.J.A.C. 7:9B-1.6(b)4iii and (d)1ii above, to establish water quality based effluent limitations.

Amended by R.1987 d.320, effective August 3, 1987 (operative October 1, 1987).

See: 18 N.J.R. 1435(a), 19 N.J.R. 1433(a).

Amended by R.1989 d.420, effective August 7, 1989.

See: 20 N.J.R. 1597(a), 21 N.J.R. 2302(b).

Amended by R.1993 d.415, effective August 16, 1993.

See: 25 N.J.R. 405(a), 25 N.J.R. 3755(a).

Amended by R.1993 d.610, effective December 6, 1993.

See: 24 N.J.R. 3983(a), 24 N.J.R. 4471(a), 25 N.J.R. 5569(a).

7:9B-1.15 Surface water classifications for the waters of the State of New Jersey

(a) This section contains the surface water classifications for the waters of the State of New Jersey. Surface water classifications are presented in tabular form. Subsections (c) through (g) contain surface water classifications by major drainage basin. Subsection (h) lists FW1 waters by tract within basins and subsection (i) identifies the outstanding national resource waters of the State.

(b) The following are instructions for the use of Tables 1 through 5 found in N.J.A.C. 7:9B-1.15(c) through (g) respectively:

1. The surface water classification tables give the surface water classifications for waters of the State. Surface waters of the State and their classification are listed in the Table covering the major drainage basin in which they are located. The major drainage basins are:

i. The Atlantic Coastal drainage basin which contains the surface waters listed in Table 1 in (c) below;

ii. The Delaware River which drainage basin contains the surface waters listed in Table 2 in (d) below;

iii. The Passaic River, Hudson River and New York Harbor Complex drainage basin which contains the surface waters listed in Table 3 in (e) below;

iv. The Raritan River and Raritan Bay drainage basin which contains the surface waters listed in Table 4 in (f) below; and

v. The Wallkill River drainage basin which contains the surface waters listed in Table 5 in (g) below.

2. Within each basin the waters are listed alphabetically and segment descriptions begin at the headwaters and proceed downstream.

3. To find a stream:

i. Determine which major drainage basin the stream is in;

ii. Look for the name of the stream in the appropriate Table and find the classification;

iii. 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 (b)5 below. If the second stream or waterbody is also unlisted, repeat the process until a listed stream or waterbody is found. Use (b)5iv below to classify streams entering unlisted lakes.

4. To find a lake or other non-stream waterbody:

i. Determine which major drainage basin the waterbody is in;

ii. Look for the waterbody name in the appropriate Table;

iii. If the waterbody is not listed, use (b)5ii, 5iii, 5vi, and 5vii below to determine the appropriate classification.

5. To find unnamed waterways or waterbodies or named waterways or waterbodies which do not appear in the listing, use the following instructions:

i. Unnamed or unlisted freshwater streams that flow into streams classified as FW2-TP, FW2-TM, or FW2-NT take the classification of the classified stream they enter, unless the unlisted stream is a PL water which is covered in (b)5vii below. If the stream could be a C1 water, see (b)5vi below.

ii. All freshwater lakes, ponds and reservoirs that are five or more acres in surface area, that are not located entirely within the Pinelands Area boundaries (see (b)5vii below) and that are not specifically listed as FW2-TP or FW2-TM are classified as FW2-NT. This includes lakes, ponds and reservoirs on segments of streams which are classified as FW2-TM or FW2-TP such as Saxton Lake on the Musconetcong River. If the waterbody could be a C1 water, also check (b)5vi below.

iii. All freshwater lakes, ponds and reservoirs, that are less than five acres in surface area, upstream of and contiguous with FW2-TP or FW2-TM streams, and which are not located entirely within the Pinelands Area boundaries (see (b)5vii below) are classified as FW2-TM. All other freshwater lakes, ponds and reservoirs that are not otherwise classified in this subsection or the following Tables are classified as FW2-NT. If the waterbody could be a C1 water, also check (b)5vi below.

iv. Unnamed or unlisted streams that enter FW2 lakes, ponds and reservoirs take the classification of either the listed tributary stream flowing into the lake with the highest classification or the listed tributary stream leaving the lake with the highest classification, whichever has the highest classification, or, if there are no listed tributary or outlet streams to the lake, the first listed stream downstream of the lake. If the stream is located within the boundaries of the Pinelands Area, see (b)5vii below; if it could be a C1 water, also see (b)5vi below.

v. 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 New York Harbor Complex basin are classified as SE2 unless otherwise classified within Table 3 in (e) below. 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 (b)5vii below). If the waterbody or waterway could be a C1 water, also see (b)5vi below.

vi. 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 this subchapter, 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 United States Geological Survey 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.

vii. All waterways or waterbodies, or portions of waterways or waterbodies, that are located within the boundaries of the Pinelands Area established at N.J.S.A. 13:18A-11a are classified as PL unless they are listed as FW1 waters in Table 6 in (h) below. A tributary entering a PL stream is classified as PL only for those portions of the tributary that are within the

Pinelands Area. Lakes are classified as PL only if they are located entirely within the Pinelands Area.

6. The following 10 classifications are used for the sole purpose of identifying the water quality classification of the waters listed in the Tables in (c) through (h) below:

i. "FW1" means freshwaters wholly within Federal or State lands or special holdings that are preserved for posterity and are not subject to manmade wastewater discharges.

ii. "FW2-TP" means FW2 Trout Production.

iii. "FW2-TM" means FW2 Trout Maintenance.

iv. "FW2-NT" means FW2 Non Trout.

v. "PL" means Pinelands Waters.

vi. "SE1" means saline estuarine waters whose designated uses are listed in N.J.A.C. 7:9B-1.12(d).

vii. "SE2" means saline estuarine waters whose designated uses are listed in N.J.A.C. 7:9B-1.12(e).

viii. "SE3" means saline estuarine waters whose designated uses are listed in N.J.A.C. 7:9B-1.12(f).

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

x. FW2-NT/SE1 (or a similar designation that combines two classifications) means 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 or equal to 3.5 parts per thousand at mean high tide) and SE1 in the saline portions.

7. The following water quality designations are used in Tables 1 through 5 in (c) through (g), respectively, below:

i. "(C1)" means Category 1 waters;

ii. "(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 those waters;

iii. "(tm)" indicates trout maintenance in waters which are classified as PL or FW1. For FW1 waters this is for information only and does not affect the water quality criteria for those waters.

(c) The surface water classifications in Table 1 are for waters of the Atlantic Coastal Basin:

TABLE 1

Waterbody	Classification
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	
(Egg Harbor)—North and South Branches from their origins downstream to the boundary of the Pinelands Protection and Preservation Area	PL
(Absecon)—Entire length, except portions described above	FW2-NT/SE1 FW2-NT/SE1(C1)
ARNOLD POND (Barnegat)	
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 off-shore, 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 Table

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 Table

FW2-NT/SE1(C1)
FW2-NT/SE1(C1)

BABCOCK CREEK (Marmora)—Entire length

BALLANGER CREEK

(New Gretna)—Source to Pollys Ditch

(New Gretna)—Pollys Ditch to Bay

BANKS CREEK (Marmora)—Entire length

FW2-NT/SE1
SE1(C1)
SE1(C1)

BARNEGAT BAY

(Barnegat National Wildlife Refuge)—All waters within the boundaries of the Barnegat National Wildlife Refuge

SE1(C1)
SE1(C1)

(Barnegat Light)—All other waters of the bay

(Island Beach State Park)—All freshwater 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/SC(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 State Forest 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)—Skit Branch and tributaries from their headwaters to the confluence with Robert's Branch	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	
(Allaire State Park)—The lake and its tributaries within the boundaries of Allaire State Park, except Mill Run, which is listed separately, and the tributary described separately below	FW2-NT (C1)
(Allaire State Park)—The easterly tributary to Mill Run upstream of Brisbane Lake, located entirely within the Allaire State Park boundaries	FW1

(Mill Run)—Mill Run from its source to Brisbane Lake	FW2-NT (C1)
(Mill Run)—Mill Run from the outlet of Brisbane Lake to the Manasquan River	FW2-NT (C1)
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)
CEDAR CREEK	
(Cedar Crest)—Source to the boundaries of the Pinelands Protection and Preservation Area at the Garden State Parkway, except branches described separately below	PL
(Berkeley)—Garden State Parkway to Barnegat Bay	FW2-NT/SE1
(Greenwood Forest)—Webbs Mill Branch and tributaries located entirely within the boundaries of Greenwood Forest Wildlife Management Area	FW1
(Greenwood Forest)—Chamberlain's Branch from its origins to a point 1000 feet west of Route 539	FW1
(Greenwood Forest)—Those portions of the tributaries to Chamberlain's Branch originating and wholly contained within the boundaries of the Greenwood Forest Wildlife Management Area	FW1
CEDAR HAMMOCKS CREEK (English Creek Landing)—Entire length	SE1(C1)
CEDAR RUN	
(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)
CEDAR SWAMP CREEK	
(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)
CHAMBERLAIN BRANCH—See CEDAR CREEK	
CHANNEL CREEK (Barnegat Bay)—Entire length	SE1(C1)
CHARLEY CREEK (Marmora)—Entire length	FW2-NT/SE1(C1)
CLEAR STREAM (Jackson)—Entire length	FW2-NT
COLLINS TIDE PONDS (Barnegat)	FW2-NT/SE1(C1)
COMMANDO CREEK (Marmora)—Entire length	SE1(C1)
CRANBERRY BROOK (Monmouth)—Entire length	FW2-NT/SE1
DAVENPORT BROOK	
(Berkeley)—Source to the boundaries of the Pinelands Protection and Preservation Area at the Penn Central railroad tracks	PL

(Toms River)—Railroad tracks to confluence with Wrangel Brook	FW2-NT
DEEP CREEK (Herbertsville)—Entire length	FW2-NT
DEEP RUN (Wharton)—Run and tributaries from their sources to Springer's Brook	FW1
DICKS BROOK (Larrabee's Crossing)—Entire length	FW2-NT
DINNER POINT CREEK (Staffordsville)—Entire length	SE1(C1)
DOCK THOROFARE (Northfield)—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	
(Lacey)—River and branches from their sources to the boundaries of the Pinelands Protection and Preservation Area at the Garden State Parkway	PL
(Forked River)—Garden State Parkway to Barnegat Bay	FW2-NT/SE1
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)—Source to confluence with Tinker Branch	FW2-NT
(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
(Winslow)—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)—Stream adjacent to and north of Hawkins Creek, and its tributaries, from their origins to the point where the influence of impoundment begins	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)
HARRY POND (Barnegat)	FW2-NT/SE1(C1)
HATFIELD CREEK (Beach Haven Heights)—Entire length	SE1(C1)
HAWKINS CREEK	
(Tuckahoe)—Source to the point where the influence of impoundment begins	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	
(Berkeley)—Source to the boundaries of the Pinelands Protection and Preservation Area at the Garden State Parkway	PL
(Beachwood)—Garden State Parkway to Toms River	FW2-NT/SE1
JAY CREEK	SE1(C1)
JIMMIES CREEK	
(Great Bay)—Source to the boundary of Great Bay Wildlife Management Area	SE1 (C1)
(Parkers Landing)—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 BROOK (Jackson)—Entire length	PL
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-NT
(Allaire)—Segment within the boundaries of Allaire State Park	FW2-NT(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 Manahawkin 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 tributaries 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 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 Management 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.	FW2-NT
(Allaire)—Allaire State Park boundary at Yellow Brook Rd. to Manasquan River	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)
MINGAMAHONE BROOK	
MAIN STREM	
(Farmingdale)—Entire length, except segments described below	FW2-TM
(Allaire State Park)—Brook and tributaries within the boundaries of Allaire State Park	FW2-TM(C1)
EAST BRANCH	
(Farmingdale)—Source to confluence with main stem north of Farmingdale	FW2-NT
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 (Brigantine)—Entire length	SE1(C1)
MILL RUN (Allaire)—See BRISBANE LAKE	
MINGAMAHONE BROOK	
MAINSTEM	
(Farmingdale)—Entire length, except segments described below	FW2-TM
(Allaire State Park)—Brook and tributaries within the boundaries of Allaire State Park	FW2-TM(C1)
EASTBRANCH	
(Farmingdale)—Source to confluence with mainstem north of Farmingdale	FW2-NT
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 Protection and Preservation Area boundaries at the Garden State Parkway, except branches and tributaries described below	PL
(Wharton)—Stream in the southeasterly corner of the Wharton State Forest located between Ridge Rd. and Seaf Weeks Rd., downstream to the boundaries of the Wharton state Forest	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)
(Wharton)—Brooks and tributaries between and immediately to the west of Tylertown and Crowleytown, from their headwaters to the head of tide at mean high water	FW1
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	
(Brookville)—Source to the boundaries of the Pinelands Protection and Preservation Area at the Garden State Parkway	PL
(Forked River)—Garden State Parkway to Barnegat Bay	FW2-NT/SE1
OYSTER CREEK (Great Bay)—Entire length	SE1(C1)
REEVY BRANCH—See SHARK RIVER	
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 (MacNamara)—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
TRIBUTARY	
REEVY BRANCH (Reevytown)—Source to confluence with Shark River	FW2-NT
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 BATSTO 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 Marmora Wildlife Management Area	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(tm)

(Manchester)—NJ Central Railroad tracks to Rt. 571 Bridge, except tributaries described separately, under Tributaries below

FW2-TM

(Toms River)—Rt. 571 Bridge 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 Area and within the boundaries of Colliers Mills Wildlife Management Area

FW2-NT (C1)

DOVE'S MILL BRANCH

(Van Hiseville)—Entire length, except the segment described separately below

FW2-NT

(Holmansville)—Stream and tributaries within Butterfly Bogs Wildlife Management area

FW2-NT(C1)

MAPLE ROOT BRANCH

(Jackson)—Source to confluence with Toms River

PL

TUCKAHOE LAKE (Tuckahoe)

FW2-NT(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)
TULPEHOCKEN CREEK	
(Wharton)—Creek and tributaries from their origin to the confluence with Featherbed Branch	FW1
(Wharton)—The westerly tributaries and those natural ponds within the lands bounded by Hawkins (Bulltown-Hawkins) Rd., Hampton Gate (Tuckerton) 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 Wildlife Management Area	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

(d) The surface classifications in Table 2 are for waters of the Delaware River Basin:

TABLE 2

Waterbody	Classification
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	
(Hampton)—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
ASHROE LAKE (Stokes State Forest)	FW2-NT(C1)
ASHROE LAKE TRIBUTARIES	
(Stokes State Forest)—Tributary to the Lake from Deer Lake and portion of southernmost tributary to Ashroe Lake outside of the Stokes State Forest boundary	FW2-TP(C1)
(Stokes State Forest)—Southernmost tributary to the Lake from its source to the Stokes State Forest boundary	FW1(tp)
ASSISCUNK CREEK (Burlington)—Entire length	FW2-NT
ASSUNPINK CREEK	
(Trenton)—Source to confluence with the Delaware River, 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)—Portions of the creek within the boundaries of Van Ness Refuge	FW2-NT(C1)
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
BARKERS MILL BROOK (Independence)—Entire length	FW2-TP(C1)
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)—Mud Pond to the Erie-Lackawanna Railroad trestle north of Johnsonburg	FW1
(Frelinghuysen)—Erie-Lackawanna Railroad trestle to confluence with Pequest River	FW2-TM
BEATTY'S BROOK (Penwell)—Entire length	FW2-TP(C1)
BEAVER BROOK (Hope)—Entire length	FW2-NT
BEAVER BROOK (Jefferson)—Source to, but not including, Lake Shawnee	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)

BEERSKILL	
(High Point State Park)—Source to boundary of High Point State Park at 41° 15' 48" N, 74° 45' 49" W	FW1 (tp)
(Shaytown)—Boundary of High Point State Park to confluence with Little Flat Brook	FW2-TP (C1)
BIG FLAT BROOK	
(Montague)—Sawmill Pond to confluence with Parker Brook, except segments described under the listing for Flat Brook, below	FW2-NT (C1)
(Sandyston)—Confluence with Parker Brook, through the Blewitt Tract, to the confluence with Flat Brook, except tributaries described under the listing for Flat Brook, below	FW2-TP (C1)
(Tuttles Corner)—Outlet stream from Lake Ashroe to its confluence with Big Flat Brook	FW2-TP(C1)
BIG TIMBER CREEK	
(Westville)—Entire length	FW2-NT
BLACKBIRD GUT (Newport)—Entire length	SE1(C1)
BLACKS CREEK (Bordentown)—Entire length	FW2-NT
BLAIR CREEK	
(Hardwick)—Source to Bass Lake	FW2-NT
(Hardwick Center)—Bass Lake outlet to Paulins Kill	FW2-TM
BOILER DITCH (Egg Island)—Entire length	FW2-NT/SE1(C1)
BRASS CASTLE CREEK (Brass Castle)—Entire length	FW2-TP(C1)
BROOKALOO SWAMP (Hope)—Entire length	FW2-TM
BUCKHORN CREEK (Hutchinson)—Entire length	FW2-TP(C1)
BUCKS DITCH (Mad Horse Creek)—Entire length	SE1(C1)
BUCKSHUTEM CREEK	
(Centre Grove)—Entire length, except segments described separately below	FW2-NT
(Edward G. Bevan)—Creek and tributaries within the boundaries of Edward G. Bevan Wildlife Management Area, except those tributaries described separately below	FW2-NT (C1)
(Edward G. Bevan)—Joshua and Pine Branches to their confluence with Buckshutem Creek	FW1
CAT GUT (Mad Horse Creek)—Entire length	SE1 (C1)
CEDAR BRANCH (Manumuskin River)—Source to Manumuskin River	FW1
CEDAR BRANCH (Edward G. Bevan)—Entire length	FW1
CEDAR BRANCH (Edward G. Bevan)—See NANTUXENT CREEK	
CEDAR CREEK	
(Dividing Creek Station)—Entire length, except portions described separately below	FW2-NT
(Edward G. Bevan)—Those tributaries to Cedar Creek that originate in and are located entirely within the boundaries of Edward G. Bevan Wildlife Management Area	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 (Beaver Swamp)	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)

FW2-NT/SE1

COHANSEY RIVER (Bridgeton)—Entire length

COOPER BRANCH—See RANOCAS 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)

FW2-TM(C1)

CRANBERRY LAKE OUTLET STREAM

(Byram)—Entire length within Cranberry Lake State Park

FW2-NT(C1)

(Byram)—Stream outside of Cranberry Lake State Park

FW2-NT

CRISS BROOK (Stokes State Forest)—Entire length within the boundaries of Stokes State Forest

FW1 (tp)

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 LAKE (Sandyston)

FW2-NT (C1)

DEER PARK BRANCH—See RANOCAS CREEK

DEER PARK POND

(Allamuchy)—Pond and tributaries to the pond 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 located entirely within the boundaries of Allamuchy State Park

FW1

(Allamuchy)—Deer Park Pond outlet stream downstream to Musconetcong River

FW2-TM(C1)

DELAWANNA CREEK (Delaware)—Entire length

FW2-TM

DELAWARE AND RARITAN CANAL (Lambertville)—Entire length

FW2-NT

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
(Knowlton)—Source, north of Hope-Delaware Road, to confluence with the Delaware River 0.5 mile south of Ramseysburg	FW2-TP(C1)
(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 Creek, that are outside of the Pinelands Protection and Preservation Areas and are not mapped as C1 waters by the Department	FW2-NT/SE2
(Penns Grove)—Unnamed or unlisted direct tributaries, south of and including Oldmans Creek, that are outside of the Pinelands Protection and 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 Delaware River, are within the boundaries of the Pinelands Area and are not classified as FW1 waters in this Table	PL
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

(Edward G. Bevan)—Those segments of tributaries that are located entirely within the boundaries of the Edward G. Bevan Wildlife Management Area	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 Water 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)—All unnamed waters that are located entirely within the boundaries of the Worthington State Forest	FW1
EAST CREEK	
(Dennis)—Source to boundaries of the Pinelands Protection and Preservation Area except those portions described separately below	PL
(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-TM
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	
(Flatbrook-Roy)—Confluence of Big Flat Brook and Little Flat Brook to the boundary of Flatbrook-Roy Wildlife Management Area, except segments described below	FW2-TP (C1)

(Flatbrookville)—Flatbrook-Roy Wildlife Management Area boundary to Delaware River, except segments described below	FW2-TM
(Walpack)—Segment of the Brook within Walpack Wildlife Management Area	FW2-TM(C1)
(Stokes State Forest)—Two tributaries to Flat Brook which originate along Struble Road in Stokes State Forest to their confluences with Flat Brook within the boundaries of Flatbrook-Roy Wildlife Management Area	FW1(tm)
(High Point)—All surface waters of the Flat Brook drainage area within the boundaries of High Point State Park and Stokes State Forest, except the following waters:	FW1
1. Saw Mill Pond and Big Flat Brook downstream to the confluence with Flat Brook;	
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. Lack 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 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 boundaries of the Delaware Water Gap National Recreation Area	FW1
FORKED BROOK (Stokes State Forest)—Entire length	FW2-TP(C1)
FURNACE (OXFORD) 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 (Edward G. Bevan)—Downstream to the Edward G. Bevan Wildlife Management Area boundaries	FW1
HAINESVILLE POND (Hainsville)	FW2-NT(C1)

HAKIHOKAKE CREEK (Milford)—Entire length including headwaters known as Little York Creek	FW2-TP(C1)
TRIBUTARIES	
(Wydner)—Source to confluence with Hakiokake Creek west of York Road	FW2-TP(C1)
HALFWAY HOUSE BROOK (Franklin)—Entire length	FW2-TP(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)
KITTATINNY LAKE (Sandyston)	FW2-NT(C1)
KITTATINNY LAKE TRIBUTARY	
(Stokes State Forest)—Source to boundary of Stokes State Forest	FW1(tp)
(Sandyston)—State Forest boundary to Kittatinny Lake	FW2-TP(C1)
KNOWLTON BROOK (Knowlton)—Entire length	FW2-TP(C1)
KURTENBACH'S BROOK (Waterloo)—Entire length	FW2-TP(C1)
KYMER BROOK (Andover)—Entire length	FW2-NT
LAHAWAY CREEK	
(Propserstown)—Entire length, except tributaries described separately below	FW2-NT
(Colliers Mills)—All tributaries which originate in the Colliers Mills Wildlife Management Area north-northeast of Archers Corners, from their sources to the boundaries of the Colliers Mills Wildlife Management Area Area	FW1
LAKE—See listing under Name	
LITTLE EASE 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)—The portion of a branch of Little Ease Run situated immediately north of Stanger Avenue, and entirely within the Glassboro Wildlife Management Area	FW1
(Glassboro)—The first and second easterly tributaries to Little Ease Run north of Academy Road	FW1

LITTLE FLAT BROOK	
(High Point State Park)—Source to boundary of High Point State Park	FW1(tp)
(Layton)—State park boundary to, but not including, tributary described below, to confluence with Big Flat Brook	FW2-TP(C1)
(Flatbrook-Roy)—Tributary which originates north of Bevans-Layton Rd. downstream to the first pond adjacent to the Fish and Game headquarters building	FW1(tp)
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)
LONE 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 R. 22 bridge	FW2-TM
(Phillipsburg)—Rt. 22 bridge to Delaware River	FW2-NT
TRIBUTARY	
(Uniontown)—Entire length	FW2-TP(C1)
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 boundaries of the Wildlife Management Area	FW2-NT/SE1
(Mad Horse Creek)—Creek and all waters within the Mad Horse Creek Wildlife Management Area	FW2-NT/SE1(C1)
MALAPATIS CREEK	
(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
MANANTICO CREEK	
(Millville)—Entire length, except segment described below	FW2-NT
(Menantico)—Segment within the boundaries of the Menantico Ponds Wildlife Management Area	FW2-NT(C1)
MANTUA CREEK (Woodbury)—Entire length	FW2-NT/SE2
MARCIA LAKE	
(High Point State Park)—Entire length	FW2-TM(C1)
(High Point State Park)—Outlet stream from the Lake to the confluence with Clove (Mill) Brook	FW2-TP(C1)
MASHIPACONG POND (Montague)	FW2-NT(C1)
MASON CREEK	
(Springfield)—Entire length, except segment described below	FW2-NT

(Medford)—Segment within Medford Wildlife Management Area	FW2-NT(C1)
MASONS RUN	
(Pine Hill)—Source to Little Mill Rd.	FW2-TP(C1)
(Lindenwold)—Little Mill Rd. to confluence with Big Timber Creek	FW2-NT
MAURICE RIVER	
MAIN STEM	
(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
TRIBUTARIES, MAURICE RIVER	
(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)
MCCORMICK POND (Egg Island)	FW2-NT/SE1(C1)
MACDONALD BRANCH—See RANCOCAS CREEK	
MERRILL CREEK (Harmony)—Entire length, but not including Merrill Creek Reservoir	FW2-TP(1)
MERRILL CREEK RESERVOIR (Harmony)	FW2-TM
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—Entire length	FW1
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, downstream to Lower Mine Brook Reservoir outlet	FW2-TM
(Mt. Olive)—Lower Mine Brook Reservoir outlet downstream to Drakestown Road bridge	FW2-TP(C1)
(Hackettstown)—Drakestown Road bridge downstream to confluence with Musconetcong River	FW2-TM

TRIBUTARIES

(Drakestown)—Source downstream to, but not including, Burd Reservoir	FW2-TP(C1)
(Drakestown)—Burd Reservoir downstream to confluence with Mine Brook	FW2-TM
(Washington)—Entire length of tributary which joins Mine Brook approximately 280 yards upstream of the confluence with the Musconetcong River	FW2-TP(C1)
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 MISERY 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 Wildlife Management Area	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, Bear Creek, to the Erie-Lackawanna Railroad trestle north of Johnsonburg	FW1
MUDDY BROOK (Hope)—Entire length	FW2-NT
MUDDY CREEK	FW1
(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)
MUDDY RUN	
(Pittsgrove)—Entire length, except segment described below	FW2-NT
(Vineland)—Segment within Union Lake Wildlife Management Area	FW2-NT(C1)
MUSCONETCONG RIVER	
(Hackettstown)—Lake Hopatcong dam to Delaware River, except tributaries described below	FW2-TM
TRIBUTARIES	
(Anderson)—Entire length	FW2-TP(C1)
(Changewater)—Entire length	FW2-TP(C1)
(Deer Park Pond)—See DEER PARK POND	
(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)
(Waterloo)—Tributary west of Kurtenbach's Brook from source downstream to Waterloo Valley Road bridge	FW2-TP(C1)
MUSKEE CREEK	
(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 Wildlife Management Area	FW1
(Peaselee)—Those portions of the tributaries to Slab Branch which are located entirely within the boundaries of the Peaselee Wildlife Management Area	FW1
(Bricksboro)—Pinelands Protection and Preservation Area boundaries to Maurice River	FW2-NT
NANCY GUT	
(Nantuxent)—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
NANTUXENT CREEK	
(Newport Landing)—Entire length, except segment described below	FW2-NT/SE1
(Nantuxent)—All waters within the boundaries of Nantuxent Creek Wildlife Management Area	FW2-NT/SE1 (C1)
NEW WAWAYANDA LAKE (Andover)	FW2-TM
NISHISAKAWICK CREEK (Frenchtown)—Entire length	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)
OCQUITTUNK LAKE	
(Stokes State Forest)—Entire lake	FW2-NT (C1)
(Stokes State Forest)—From the outlet of the Lake to the confluence with Big Flat Brook	FW2-TP (C1)
OCQUITTUNK LAKE TRIBUTARY (Stokes State Forest)—Source to Ocquittunk Lake	FW1 (tp)
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)
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)
PATTYS FORK—See MAD HORSE CREEK	
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	
(Blairstown)—Entire length of tributary east of Walnut Valley	FW2-TM
(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)—Northwesterly tributaries, including Big Spring, located within the boundaries of the Whittingham Wildlife Management Area, southwest of Springdale, from their origins to their confluence with the Pequest River	FW1 (tm)
(Whittingham)—Stream and tributaries within the Whittingham Wildlife Management Area, except those classified as FW1, above	FW2-TM (C1)
(Vienna)—Tranquility bridge to Townsbury bridge	FW2-NT
(Townsbury)—Townsbury bridge to Delaware River, except segment described below	FW2-TM
(Pequest)—Segment and tributaries within the boundaries of the Pequest Wildlife Management Area	FW2-NT (C1)
TRIBUTARIES	
(Petersburg)—Headwaters and tributaries downstream to Ryan Road bridge	FW2-TP(C1)
PIERSONS DITCH (Egg Island)—Entire length	FW2-NT/SE1(C1)
PINE BRANCH—See BUCKSHUTEM CREEK	
PLUM BROOK (Sergeantsville)—Entire length	FW2-TM
POHATCONG CREEK	
MAIN STEM	
(Mansfield)—Source to Karrsville bridge	FW2-TP(C1)
(Pohatcong)—Karrsville bridge to Delaware River	FW2-TM
TRIBUTARIES	
(Greenwich)—Entire length	FW2-TP(C1)
(New Village)—Entire length	FW2-TP(C1)
(Willow Grove)—Entire length	FW2-TP(C1)
POND BROOK (Middleville)—Swartswood Lake outlet to Trout Brook	FW2-NT

POPHANDUSING BROOK (Belvidere)	
(Hazen)—Source downstream to Route 519 bridge	FW2-TP(C1)
(Belvidere)—Route 519 bridge downstream to	
confluence with the Delaware River	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 Area	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
MACDONALDS 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)
ROWANDS POND (Clementon)—Pond, inlet stream and	
outlet stream within Rowands Pond Wildlife	
Management Area	FW2-NT (C1)
RUNDLE BROOK (Del. Water Gap)—Source to Sussex	
County Route 615	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
(Belleplain)—Those two tributaries and portions thereof downstream of Lake Nummi and all tributaries to Lake Nummi that are located entirely within the boundaries of Belleplain State Forest	
SAWMILL POND (High Point)	FW1
SCHOOLEYS MTN. BROOK (Schooley's Mtn.)—Entire length	FW2-NT(C1)
SHABACUNK (SHABBECONO) CREEK (Ewing)—Entire length	FW2-TP(C1)
SHAWANNI CREEK (Walpack)—Entire length	FW2-NT
SHAWANNI LAKE (Stokes State Forest)	FW2-TP(C1)
SHAWS MILL POND (Cedarville)	FW2-NT(C1)
TRIBUTARIES	FW2-NT/SE1(C1)
(Edward G. Bevan)—Cedar and Mile Branches to Shaw's Mill Pond	
SHAWANNI CREEK (Walpack)—Entire length	FW1
SHAWANNI LAKE (Stokes State Forest)	FW2-TP(C1)
SHIMERS BROOK	FW2-NT(C1)
(Millville)—Entire length, except those segments and tributaries designated FW1, below	
(High Point)—That segment of Shimers Brook and all tributaries within the boundaries of High Point State Park	FW2-TP(C1)
SHINNS BRANCH—See RANOCAS CREEK	FW1(tp)
SHIPETAUKIN CREEK (Lawrenceville)—Entire length	
SHORE DITCH (Mad Horse Creek)—Entire length	FW2-NT
SILVER LAKE (Hope)	SE1(C1)
SILVER LAKE FORK—See MAD HORSE CREEK	FW2-TM
SLAB BRANCH—See MUSKEE CREEK	
SLUICE CREEK	
(South Dennis)—Entire length, except segment described below	
(Dennis Creek)—Segments of tributaries that are within the Dennis Creek and the Beaver Swamp Wildlife Management Areas	FW2-NT/SE1
SMITH FERRY BROOK (Del. Water Gap)—Entire length	FW2-NT/SE1(C1)
SPARTA JUNCTION BROOK (Sparta Junction)—Entire length	FW1
SPRING MILLS BROOK	FW2-TM(C1)
(Spring Mills)—Source to Rt. 519 bridge	
(Milford)—Rt. 519 bridge to confluence with Hakihokake Creek	FW2-TP(C1)
STEELE RUN	FW2-TM
(Washington Crossing State Park)—Source to confluence with westerly tributary	
(Titusville)—Confluence with westerly tributary to the Delaware River	FW1
STEENY KILL LAKE (High Point)	FW2-NT
STEEP RUN (Mauricetown)—Entire length	FW1
STEPHENSURG BROOK (Stephensburg)—Entire length	FW2-NT(C1)
STONY BROOK (Knowlton)—Entire length	FW2-TP(C1)
	FW2-TP(C1)

STONY BROOK	
(Stokes State Forest)—Source and tributaries, wholly contained within Stokes State Forest, from their origins to, but not including, Stony Lake	FW1(tp)
(Stokes State Forest)—Tributary originating approximately one mile west of the Branchville Reservoir to the confluence with Stony Brook	FW1(tp)
(Stokes State Forest)—Outlet of Stoney Lake to the confluence with Big Flat Brook	FW2-TP(C1)
STONEY LAKE (Stokes State Forest)	FW2-TM(C1)
TRIBUTARIES—See STONY BROOK	
STOW CREEK	
(Stow Creek Landing)—Entire length, except tributaries describe 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)
SUNFISH POND (Worthington)—The pond and its outlet stream to the Delaware River	FW1
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	FW1(tp)
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
TURKEY HILL BROOK (Bethlehem)—Entire length	FW2-TM
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)—Entire length	FW2-TP(C1)
WAPALANNE LAKE (Stokes State Forest)	FW2-NT(C1)
WELDON BROOK (Jefferson Township), from source to, but not including, Lake Shawnee	FW2-TM
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 southeast 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)

(e) The surface water classifications in Table 3 are for waters of the Passaic, Hackensack and New York Harbor Complex Basin:

TABLE 3

Waterbody	Classification
APSHAWA BROOK (Macopin)—Entire length	FW2-TP(C1)
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, New York	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 State Park)	FW2-NT(C1)
BEAVER BROOK	
(Meriden)—From Splitrock Reservoir Dam downstream to Meriden Road bridge	FW2-TP(C1)
(Denville)—Meriden Road Bridge to Rockaway River	FW2-NT
TRIBUTARIES	
(Meriden)—Two tributaries located approximately three quarters of a mile southwest of Meriden	FW2-TP(C1)
BEECH BROOK	
(West Milford)—From State line downstream to Monksville Reservoir	FW2-TM
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 State Park)	FW2-TM(C1)
BUCKABEAR POND (Newfoundland)—Pond, its tributaries and connecting stream to Clinton Reservoir	FW2-NT(C1)
BURNT MEADOW BROOK (Green Pond)—Source downstream to confluence with Green Pond Brook	FW2-NT
BURNT MEADOW BROOK (Stonetown)—Entire length	FW2-TP(C1)
CANISTEAR RESERVOIR (Vernon)	FW2-TM
CANISTEAR RESERVOIR TRIBUTARY (Vernon)—The southern branch of the eastern tributary to the Reservoir	FW1
CANOE BROOK (Chatham)—Entire length	FW2-NT
CEDAR POND (Potsville)—Pond and all tributaries	FW1
CHARLOTTEBURG RESERVOIR (Charlotteburg)	FW2-TM
CHERRY RIDGE BROOK	
(Vernon)—Tributaries not contained within Wawayanda State Park and Newark Watershed lands	FW2-NT
(Wawayanda State Park)—Brook and tributaries upstream of Canistear Reservoir located entirely within the boundaries of Wawayanda State Park and the Newark Watershed lands	FW1
CLINTON BROOK	
(W. Milford)—Source to Pequannock River, except Clinton Reservoir listed separately below	FW2-TP(C1)
CLINTON RESERVOIR (W. Milford)	FW2-TM(C1)
CLOVE BROOK —See STAG BROOK	
COOLEY BROOK	
(W. Milford)—Entire length, except segments described below	FW2-TP(C1)
(Hewitt State Forest)—Segments of the brook and all tributaries which originate and are located entirely within Hewitt State Forest	FW1(tp)
CORYS BROOK (Warren)—Entire length	FW2-NT
CRESSKILL BROOK	
(Alpine)—Source to Duck Pond Rd. bridge, Demarest	FW2-TP(C1)
(Demarest)—Duck Pond Rd. bridge to Tenakill Brook	FW2-NT

CUPSAW BROOK	
(Skylands)—Source to Wanaque Reservoir, except segment described below	FW2-NT
(Ringwood State Park)—That segment of Cupsaw Brook within the boundaries of Ringwood State Park	FW2-NT (C1)
DEAD RIVER (Liberty Corners) —Entire length	FW2-NT
DEN BROOK (Randolph) —Entire length	FW2-NT
TRIBUTARY	
(Randolph)—Tributary west of Shongum Lake	FW2-TP(C1)
DUCK POND (Ringwood)	FW2-NT(C1)
ELIZABETH RIVER	
(Elizabeth)—Source to Broad St. bridge, Elizabeth and all freshwater tributaries	FW2-NT
(Elizabeth)—Broad St. bridge to mouth	SE3
FOX BROOK (Mahwah) —Entire length	FW2-NT
GLASMERE PONDS (Ringwood)	FW2-NT(C1)
GOFFLE BROOK (Hawthorne) —Entire length	FW2-NT
GRANNEY BROOK —See SPRING BROOK	
GRANNIS BROOK (Morris Plains) —Entire length	FW2-NT
GREAT BROOK	
(Chatham)—Entire length, except segment described below	FW2-NT
(Great Swamp)—Segment within the boundaries of the Great Swamp National Wildlife Refuge	FW2-NT (C1)
GREEN BROOK	
(W. Milford)—Entire length, except those segments described below	FW2-TP (C1)
(Hewitt State Forest)—These segments and tributaries which originate and are located entirely within the Hewitt State Forest boundaries	FW1 (tp)
GREEN POND (Rockaway)	FW2-TM
GREEN POND BROOK	
(Picatinny Arsenal)—Green Pond outlet to, but not including, Picatinny Lake	FW2-TP(C1)
(Wharton)—Outlet of Picatinny Lake to the confluence with the Rockaway River	FW2-NT
GREENWOOD LAKE (W. Milford)	FW2-TM
HACKENSACK RIVER	
(Oradell)—Source to Oradell dam	FW2-NT
(Oradell)—Main stem and saline tributaries from Oradell dam to the confluence with Overpeck Creek	SE1
(Little Ferry)—Main stem and saline tributaries from Overpeck Creek to Route 1 and 9 crossing	SE2
(Kearny Point)—Main stem downstream from Route 1 and 9 crossing	SE3
TRIBUTARIES	
(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	
(Marcella)—Source to first Green Pond Road bridge downstream of Lake Emma	FW2-TP(C1)
(Hibernia)—First Green Pond Road bridge to confluence with Beaver Brook	FW2-TM
TRIBUTARY	
(Lake Ames)—Source to, but not including, Lake Ames	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 portions New Jersey tributaries from the New Jersey-New York boundary line in the north to its confluence with the Harlem River, New York	SE1
(Englewood Cliffs)—River and saline portions of New Jersey tributaries from the confluence with the Harlem River, New York to a north-south line connecting Constable Hook (Bayonne) to St. George (Staten Island, New York)	SE2
TRIBUTARIES	
(Rockleigh)—Freshwater portions of tributaries to the Hudson River in New Jersey	FW2-NT
INDIAN GROVE BROOK	
(Bernardsville)—Entire length	FW2-TP(C1)
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, New York)	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-TP (C1)
(Stockholm)—Portion of westerly tributary, from its origins to about 1,000 feet south of the Route 23 bridge, located entirely within the boundaries of the Newark watershed	FW1 (tp)
(Stockholm)—Brook between Hamburg Turnpike and Vernon-Stockholm Rd. to its confluence with Lake Stockholm Brook, north of Rt. 23	FW1 (tp)
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 downstream to its confluence with the southwestern outlet stream from Clinton Reservoir just upstream of the confluence of the outlet stream and a tributary from Camp Garfield	FW1
MONKSVILLE RESERVOIR (Long Pond Ironworks State Park)	FW2-TM(C1) FW2-NT/SE3
MORSES CREEK (Linden)—Entire length	
MOSSMANS BROOK—(West Milford)—Source to confluence with Clinton Reservoir	FW2-TP(C1) FW2-NT
MT. TABOR BROOK (Morris Plains)—Entire length	
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 FW2-NT(C1) FW2-TM
NOSENZO POND (Upper Macopin)	
OAK RIDGE RESERVOIR (Oak Ridge)	
OAK RIDGE RESERVOIR (Oak Ridge)—Northwestern tributary to Reservoir	FW1(tm)
OHIO BROOK (Morris Township)—Source downstream to Morristown town line	FW2-TM FW2-NT/SE2
OVERPECK CREEK (Palisades Park)—Entire length	
PACACK BROOK (Stockholm)—Outlet of Canistear Reservoir to Pequannock River	FW2-NT
(Canistear)—Brook and tributaries upstream of Canistear Reservoir located entirely within the boundaries of the Newark Watershed	FW1
PASSIAC RIVER (Mendham)—Source to Interstate 287 bridge, except tributaries described separately below	FW2-TP(C1) FW2-NT
(Paterson)—Interstate 287 bridge to Dundee Lake dam	
(Little Falls)—Dundee Lake dam to confluence with Second River	FW2-NT/SE2 SE3
(Newark)—Confluence with Second River to mouth	
TRIBUTARIES (Great Piece Meadows State Park)—Tributaries within Great Piece Meadows State Park	FW2-NT(C1) FW2-NT
PECKMAN RIVER (Verona)—Entire length	
PEQUANNOCK RIVER MAIN STEM (Vernon)—Source to confluence with Pacack Brook	FW1(tp)
(Hardyston)—Pacack Brook to, but not including, Macopin Reservoir or the tributaries described separately below	FW2-TM
(Kinnelon)—Macopin Reservoir outlet to Hamburg Turnpike bridge in Pompton Lakes Borough	FW2-TP(C1)
(Riverdale)—Hamburg Turnpike bridge in Pompton Lakes Borough to confluence with Wanaque River	FW2-TM
(Pompton Plains)—Confluence with Wanaque River downstream to confluence with Pompton River	FW2-NT
TRIBUTARIES (Copperas Mtn.)—Entire length	FW2-TP(C1) FW2-TP(C1)
(Smoke Rise)—Entire length	
(Green Pond Junction)—Tributary at Green Pond Junction from its origin downstream to Route 23	FW1(tm)
(Jefferson)—Tributary joining the main stem about 3,500 ± feet southeast of the Sussex-Passaic County line, near Jefferson from its origin to about 2,000 feet upstream of the pond	FW1(tm)

(Lake Kampfe)—Source to, but not including, Lake Kampfe	FW2-TM
(Lake Kampfe)—Lake Kampfe to Pequannock River, except tributary described separately below	FW2-NT
(Lake Kampfe)—Tributary within the boundaries of Norvin Green State Forest, originating west of Torne Mtn.	FW2-NT(C1)
PILES CREEK (Grasselli)—Entire length	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 confluence with Wanaque River, except Wanaque Reservoir, and segment described below	FW2-NT
(Norvin Green State Forest)—That segment of the stream and all tributaries within the boundaries of Norvin Green State Forest	FW2-NT(C1)
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 Lees Hill Road bridge	FW2-TP(C1)
(Harding)—Lees Hill Road 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 (Mahwah)—State line to Pompton River	FW2-NT
TRIBUTARY (Oakland)—Entire length	FW2-TP(C1)
RINGWOOD CREEK	
(Ringwood)—Entire length, except segment described below	FW2-TM
(Sloatsburg)—Creek within Ringwood State Park	FW2-TM(C1)
RINGWOOD MILL POND (Ringwood)	FW2-NT(C1)
ROCKAWAY RIVER	
(Wharton)—Source to Washington Pond outlet, excluding the segment within the boundaries of the Berkshire Valley Wildlife Management area	FW2-NT
(Berkshire Valley)—That segment within the boundaries of the Berkshire Valley Wildlife Management Area	FW2-NT(C1)
(Dover)—Washington Pond outlet downstream to Rt. 46 bridge	FW2-TM(C1)
(Boonton)—Rt. 46 bridge to Passaic River, excluding Jersey City Reservoir	FW2-NT
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 (Woodbridge)—Entire length	FW2-NT/SE3
SPLIT ROCK RESERVOIR (Rockaway)	FW2-TM
SPLIT ROCK RESERVOIR TRIBUTARIES (Farny State Park)—Three tributaries within Farny State Park	FW2-NT (C1)
SPRING (GRANNEY) BROOK (Mine Hill)—Entire length	FW2-TP (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 Wildlife Management Area	FW1
STONE HOUSE BROOK (Kinnelon)—Entire length	FW2-NT
STONY BROOK (Boonton)—Entire length	FW2-NT
SURPRISE LAKE (Hewitt)	FW1
SWAN POND (Ringwood)	FW2-NT(C1)
TENAKILL BROOK (Demarest)—Entire length	FW2-NT
TERRACE POND (Wawayanda)	FW2-NT(C1)
TIMBER BROOK (Kitchell)—Entire length, except tributary described separately below	FW2-NT
TIMBER BROOK (Farny State Park)—Headwater segment of tributary to Timber Brook within Farny State Park	FW2-NT(C1)
TROY BROOK (Troy Hills)—Entire length	FW2-NT
WANAQUE RESERVOIR	FW2-TM
WANAQUE RIVER MAIN STEM (Wanaque)—Greenwood Lake outlet, through Wanaque Wildlife Management Area and Long Pond Iron Works State Park, including the Monksville Reservoir, to the Monksville Reservoir Dam at Stonetown Road, except tributary described separately below	FW2-TM(C1)
(Hewitt)—Entire length of tributary south of Jennings Creek	FW2-TP(C1)
(Pompton Lakes)—Wanaque Reservoir dam to confluence with the Pequannock 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 (Morristown)—Whitehead Rd. bridge to Rockaway River	FW2-TP (C1)
	FW2-NT
TRIBUTARIES (Brookside)—Entire length	FW2-TP (C1)
(E. of Brookside)—Entire length	FW2-TM
(E. of Washington Valley)—Entire length	FW2-TM
(Gillespie Hill)—Entire length	FW2-TP (C1)
(Shongum Mtn.)—Entire length	FW2-NT
WONDER LAKE (West Milford)	FW2-NT (C1)
WOODBIDGE CREEK (Woodbridge)—Entire length	FW2-NT/SE3

(f) The surface water classifications in Table 4 are for waters of the Raritan River and Raritan Bay Basin:

$$\left[\frac{1}{6} \right] \left[\begin{array}{ccc} V(1988,G) + V(1989,G) + V(1990,G) + \\ V(1988,NJ) \quad V(1989,NJ) \quad V(1990,NJ) \end{array} \right]$$

$$\left[\begin{array}{ccc} A(1988,G) + A(1989,G) + A(1990,G) \\ A(1988,NJ) \quad A(1989,NJ) \quad A(1990,NJ) \end{array} \right]$$

multiplied by [93% of the Assessment Budget]

TABLE 4

Waterbody	Classification
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 (Annandale)—Reformatory Rd. bridge to Raritan River, South Branch	FW2-TP(C1)
BEDEN BROOK (Montgomery)—Entire length	FW2-TM
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 (C1)
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 (CAKEPOULIN) 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 to the Locust Ave. bridge in Navesink	FW2-NT/SE1 SE1(C1)
(Navesink)—Widening of Creek to Navesink River	FW2-TP(C1)
COLD BROOK (Oldwick)—Entire length	FW2-NT
CRAMERS CREEK (Hamden)—Entire length	FW2-NT
CRANBURY BROOK (Old Church)—Entire length	FW2-NT
CRUSER BROOK (Montgomery)—Entire length	FW2-NT
CUCKELS BROOK (Bridgewater)—Entire length	FW2-TP(C1)
DAWSONS BROOK (Ironia)—Entire length	FW2-NT
DEEP RUN (Old Bridge)—Entire length	FW2-NT
DEVILS BROOK (Schalks)—Entire length	FW2-TM(C1)
DRAKES BROOK (Ledgewood)—Source downstream to Hillside Avenue bridge	FW2-NT(C1)
(Flanders)—Hillside Avenue bridge to confluence with the South Branch Raritan River	FW2-NT
DUCK POND RUN (Port Mercer)—Entire length	FW2-NT
DUKES BROOK (Somerville)—Entire length	FW2-TP(C1)
ELECTRIC BROOK (Schooley's Mtn.)—Entire length	FW2-TP(C1)
FLANDER'S BROOK (Flanders)—Entire length	FW2-NT(C1)
FLANDERS CANAL (Flanders)—Entire length	FW2-TP(C1)
FROG HOLLOW BROOK (Califon)—Entire length	FW2-NT
GANDER BROOK (Manalapan)—Entire length	FW2-TP(C1)
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	FW2-TM
(Plainfield)—Rt. 22 bridge to Bound Brook	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 (Bedminster)—Entire length	FW2-NT
INDIA BROOK [NORTH BRANCH, RARITAN RIVER] (Randolph)—Entire length	FW2-TP(C1)
IRELAND BROOK (Paulus Corners)—Entire length	FW2-NT

IRISICK BROOK (Spotswood)—Entire length	FW2-NT
KRUEGER'S BROOK (Flanders)—Entire length	FW2-TP(C1)
LAMINGTON RIVER	
(Succasunna)—Source to Rt. 206 bridge	FW2-NT(C1)
(Milltown)—Rt. 206 bridge to confluence with Rinehart Brook	FW2-TM(C1)
(Pottersville)—Confluence with Rinehart Brook to Camp Brady bridge, Bedminster	FW2-TP(C1)
(Vlietown)—Camp Brady bridge to Rt. 523 bridge	FW2-TM
(Burnt Mills)—Rt. 523 to North Branch, Raritan River	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	
(Shrewsbury)—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 except tributary described separately below	FW2-NT
(Tennent)—That portion of the tributary at Tennent along the boundary of Monmouth Battlefield State Park	FW2-NT(C1)
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 (Mendham)—Entire length	FW2-TM(C1)
MIDDLE BROOK (Greater Cross Roads)—Entire length	FW2-NT
MIDDLE BROOK	
EAST BRANCH (Springfield)—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 (Rumson)—River southeast of the line described above, except segment described below (Monmouth Beach)—All waters south and east of a line beginning on the northwesternmost point of land on Raccoon 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 (True North) 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 (True North), 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. NESHANIC RIVER (Reaville)—Entire length NORTON BROOK (Norton)—Entire length OAKDALE CREEK (Chester)—Entire length OAKEYS BROOK (Deans)—Entire length OCEANPORT CREEK (Fort Monmouth)—Source to a line beginning on the easternmost extent of Horseneck Point and bearing approximately 140 degrees T (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 (Oceanport)—Creek downstream of line described above PARKERS CREEK (Fort Monmouth)—Source to a line beginning on the easternmost extent of Horseneck Point and bearing approximately 000 degrees T (True North) to its terminus on Breezy Point on the Little Silver side (north) side of the creek. (Fort Monmouth)—Creek downstream of line described above PEAPACK BROOK (Gladstone)—Entire length PETERS BROOK (Somerville)—Entire length PIGEON SWAMP (Pigeon Swamp State Park)—All waters within the boundaries of Pigeon Swamp State Park PIKE RUN (Belle Meade)—Entire length PINE BROOK (Clarks Mills)—Entire length PINE BROOK (Cooks Mill)—Entire length PLEASANT RUN (Readington)—Entire length PRESCOTT BROOK (Stanton Station)—Entire length RAMANESSIN (HOP) BROOK (Holmdel)—Entire length RARITAN BAY—Entire drainage	SE1 SE1(C1) SE1 FW2-NT FW2-TP(C1) FW2-TP(C1) FW2-NT FW2-NT/SE1 SE1(C1) FW2-NT/SE1 SE1(C1) FW2-TP(C1) FW2-NT FW2-NT (C1) FW2-NT FW2-NT FW2-TM FW2-NT FW2-TM FW2-TM FW2-TM FW2-NT/SE1
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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 and the two tributaries which originate north and east of the Budd Lake Airfield	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
ROCKY RUN (Lebanon)—Entire length	FW2-TP(C1)
ROUND VALLEY RESERVOIR (Clinton)	FW2-TP
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	
(Old Bridge)—Duhernal Lake to intake of the Sayreville Water Department.	FW2-NT
(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	FW2-NT/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
TEPEHEMUS BROOK (Manalapan)—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)
TROUT BROOK (Hacklebarney)—Entire length	FW2-TP(C1)
TURKEY BROOK (Mt. Olive)—Entire length	FW2-TP(C1)
TURTLEBACK BROOK (Middle Valley)—Entire length	FW2-NT
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

(g) The surface water classifications in Table 5 are for waters of the Wallkill River Basin:

TABLE 5

Waterbody	Classification
BEARFORT WATERS (Wawayanda)	FW2-NT(C1)
BEAVER RUN (Wantage)—Entire length	FW2-NT
BLACK CREEK	
(McAfee)—Source to Rt. 94 bridge, except those tributaries described separately, below	FW2-TM
(Vernon)—Rt. 94 bridge to Pochuck Creek	FW2-NT
TRIBUTARIES	
(Hamburg)—Three tributaries to Black Creek which originate in the Hamburg Mtn. Wildlife Management Area from their sources to the Management Area boundaries	FW1(tm)
(Rudeville)—Tributaries within the Hamburg Mtn. Wildlife Management Area 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 portion of the two northern-most tributaries located entirely within High Point State Park boundaries, immediately east of Lake Marcia	FW1(tp)
FRANKLIN POND CREEK	
(Hardyston)—Source to, but not including, Franklin Pond	FW2-TP(C1)
(Hamburg Mtn.)—Tributaries within the Hamburg Mtn. Wildlife Management Area	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. Wildlife Management Area	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 holdings, through the Wawayanda State Park, to confluence with the outlet stream from Lake Wawayanda	FW1
LAKE RUTHERFORD (Wantage)—The Lake and its tributaries	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)

LIVINGSTON PONDS BROOK (Wawayanda State Park)—Source downstream to State line	FW2-TP(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. Wildlife Management Area	FW2-NT(C1)
PAPAKATING CREEK MAIN STEM (Frankford)—Source to Rt. 629 bridge	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. Wildlife Management Area	FW1
(Hamburg)—Brook and tributaries beyond Management Area 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-TP(C1)
SPRING BROOK (Maple Grange)—Entire length	FW2-TP(C1)
TOWN BROOK (Vernon)—Entire length	FW2-TM
WALLKILL RIVER (Sparta)—Source to confluence with Sparta Glen Brook	FW2-NT
(Franklin)—Sparta Glen Brook to, but not including, Franklin Pond	FW2-TM
(Wantage)—Outlet of Franklin Pond to State line	FW2-NT
TRIBUTARIES (Hamburg Mtn.)—The first tributary, just south of Hamburg Mtn., flowing toward the Wallkill River and located entirely within the Hamburg Mtn. Wildlife Management Area	FW1(tm)
(Ogdensburg)—Tributary from the outlet of Heaters Pond to the confluence with the Wallkill River	FW2-TP(C1)
WANTAGE BROOK (Wantage)—Entire length	FW2-NT
WAWAYANDA CREEK (Vernon)—State line to Pochuck Creek, except unnamed tributary described below	FW2-TM
TRIBUTARIES (Wawayanda)—Source to State line	FW2-NT
(Wawayanda State Park)—Segments within State Park boundaries, except Livingston Ponds Brook as noted above	FW2-NT(C1)
WAWAYANDA LAKE (Wawayanda)	FW2-TM(C1)
WHITE LAKE (Sparta)	FW2-TM
WILDCAT BROOK (Franklin)—Entire length	FW2-NT
WILLOW (QUARRYVILLE) BROOK (Wantage)—Entire length	FW2-TM

(h) FW1 waters are listed in Table 6 by tract within basins:

TABLE 6

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 Mill Run upstream of Brisbane Lake, located entirely within the boundaries of Allaire State Park

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
WILDLIFE MANAGEMENT
AREA

CEDAR CREEK WATERSHED

Webbs Mill Branch and tributaries, located entirely within the Greenwood Forest Wildlife Management Area boundaries

Chamberlain's Branch from its origins to a point 1000 feet west of Route 539

Those portions of the tributaries to Chamberlain's Branch originating and wholly contained within the boundaries of the Greenwood Forest Wildlife Management Area

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 Wildlife Management Area

ISLAND BEACH STATE PARK

BARNEGAT BAY WATERSHED

All freshwater ponds in Island Beach State Park

LESTER G. MACNAMARA
WILDLIFE MANAGEMENT
AREA

GREAT EGG HARBOR RIVER WATERSHED

Hawkins Creek and tributaries and the next adjacent, northern stream and tributaries that enter the Great Egg Harbor River, from their origins downstream to where the influence of impoundment begins

TUCKAHOE PUBLIC FISHING
AND HUNTING GROUNDS

See LESTER G. MACNAMARA WILDLIFE MANAGEMENT AREA

WHARTON STATE FOREST

MULICA 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 (Bulltown-Hawkins) Rd., Hampton Gate (Tuckerton) Rd., and Sandy Ridge Rd.

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

Brooks and tributaries to the Mullica 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 upstream to the confluence with Skit Branch

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

DELAWARE RIVER BASIN
ALLAMUCHY STATE PARK

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

PEQUEST RIVER WATERSHED

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

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

**COLLIERS MILLS
WILDLIFE MANAGEMENT
AREA**

**DELAWARE WATER GAP
NATIONAL RECREATION
AREA**

**DIX WILDLIFE
MANAGEMENT AREA**

**EDWARD G. BEVAN
WILDLIFE MANAGEMENT
AREA**

**FLATBROOK-ROY WILDLIFE
MANAGEMENT AREA**

**GLASSBORO WILDLIFE
MANAGEMENT AREA**

**HIGH POINT STATE PARK
AND STOKES STATE FOREST**

A 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 the stream which enter West Creek approximately 0.5 miles upstream of Hoffman's Mill and which are located entirely within the boundaries of Belleplain State Forest

CROSSWICKS CREEK WATERSHED

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

DELAWARE RIVER WATERSHED

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

Rundle Brook upstream of Sussex County Route 615

Smith Ferry Brook

Donkey's Corner Brook

Sambo Island Brook and Pond

Coppermine Brook in Pahaquarry

Dunnfield Creek to Route I-80

MIDDLE MARSH CREEK WATERSHED

All fresh waters which originate in and are located entirely within the boundaries of the Dix Wildlife Management Area

MAURICE RIVER WATERSHED

Joshua and Pine Branches of Buckshutem Creek to their confluences with Buckshutem Creek

Gravelly Run downstream to the boundaries of the Edward G. Bevan Wildlife Management Area

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 located entirely within the boundaries of the Edward G. Bevan Wildlife Management Area

Those portions of tributaries to Dividing Creek, located entirely within the boundaries of the Edward G. Bevan Wildlife Management Area

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 Flat Brook which originate along Struble Rd. in Stokes State Forest, downstream to the confluence with Flat Brook within Flatbrook-Roy Wildlife Management Area boundaries

MAURICE RIVER WATERSHED

The portion of a branch of Little Ease Run situated immediately north of Stanger Avenue, and entirely within the Glassboro Wildlife Management Area

First and second easterly tributaries to Little Ease Run north of Academy Road

CLOVE BROOK WATERSHED

The second and third northerly tributaries to Clove Brook, those tributaries to Steeny Kill Lake, 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

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 to the confluence with Flat Brook;
- (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 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 that are located within the boundaries of High Point State Park

JOHNSONBURG NATURAL AREA PEQUEST RIVER WATERSHED

Mud Pond and its outlet stream, Bear Creek, 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 Coopers 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, from their sources to the forest boundary

Jade Run located entirely within the boundaries of Lebanon State Forest

MacDonalds Branch and tributaries located entirely within the boundaries of Lebanon State Forest, from their sources to the forest boundary

MILLVILLE FISH AND GAME TRACT

See EDWARD G. BEVAN WILDLIFE MANAGEMENT AREA

PASADENA WILDLIFE MANAGEMENT AREA**RANCOCAS CREEK WATERSHED**

The two easterly branches of the South Branch of Mount Misery Brook, located entirely within the boundaries of the Pasadena Wildlife Management Area

PEASELEE WILDLIFE MANAGEMENT AREA**MAURICE RIVER WATERSHED**

Middle Branch of Muskee Creek from its origin to the boundaries of the Peaselee Wildlife Management Area

Cedar Branch of the Manumuski River, from its origin to the boundaries of the Peaselee Wildlife Management Area

Those portions of tributaries to Slab Branch located entirely within the boundaries of the Peaselee Wildlife Management Area

WASHINGTON CROSSING STATE PARK**STEELE RUN WATERSHED**

That portion of Steele Run, located within the boundaries of Washington Crossing State Park, to the confluence with the westerly tributary

WHITTINGHAM WILDLIFE MANAGEMENT AREA**PEQUEST RIVER WATERSHED**

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

WORTHINGTON STATE FOREST**DELAWARE RIVER WATERSHED**

Sunfish Pond and its outlet stream to the Delaware River. All unnamed waters located entirely within the boundaries of the Worthington State Forest

DUNNFIELD CREEK WATERSHED

Dunnfield Creek to I-80

PASSAIC RIVER, HACKENSACK RIVER, NY HARBOR COMPLEX BASIN**A.S. HEWITT STATE FOREST****WANAQUE RIVER WATERSHED**

Portions of Cooley Brook and tributaries which originate and are located entirely within the boundaries of Hewitt State Forest

	Surprise Lake Portions of Green Brook and tributaries which originate and are located entirely within the boundaries of Hewitt State Forest West Pond
BERKSHIRE VALLEY WILDLIFE MANAGEMENT AREA	ROCKAWAY RIVER WATERSHED Stephens Brook north of the boundaries of the Berkshire Valley Wildlife Management Area
CITY OF NEWARK HOLDINGS AND WAWAYANDA STATE PARK	PEQUANNOCK RIVER WATERSHED Cedar Pond and all tributaries Hanks Pond and all tributaries Tributary to Pequannock River at Green Pond Junction from its origin downstream to Route 23 Tributary joining the main stem of the Pequannock River 3,500± feet southeast of the Sussex-Passaic County line, near Jefferson from its origin to about 2,000 feet upstream of the pond Pacack Brook and its tributaries upstream of Canistear Reservoir, located entirely within the boundaries of the Newark watershed and Wawayanda State Park 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 Pacack Brook The northwestern tributary to Oak Ridge Reservoir The portion of the westerly tributary to Lake Stockholm Brook, from its origins to about 1,000 feet south of the Route 23 Bridge, located entirely within the boundaries of the Newark watershed Lud-Day Brook downstream to its confluence with the southwestern outlet stream from Clinton Reservoir just upstream of the confluence of the outlet stream and a tributary from Camp Garfield Brook between Hamburg Turnpike and Vernon-Stockholm Road, downstream to its confluence with Lake Stockholm Brook, north of Rt. 23
RARITAN RIVER BASIN	NONE
WALLKILL RIVER BASIN	
CITY OF NEWARK HOLDINGS AND WAWAYANDA STATE PARK	LAKE LOOKOUT BROOK WATERSHED Lake Lookout, Lake Lookout Brook and tributaries from its headwaters in the Newark City holdings, downstream through the State-owned Wawayanda State Park to the confluence with the outlet stream from Lake Wawayanda
HAMBURG MOUNTAIN WILDLIFE MANAGEMENT AREA	SAND HILLS BROOK WATERSHED The upstream portion of Sand Hills Brook located entirely within the boundaries of the Hamburg Mtn. Wildlife Management Area
	BLACK CREEK WATERSHED All those portions of three tributaries to Black Creek originating in the Hamburg Mtn. Wildlife Management Area, from their origin downstream to the Management Area 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. Wildlife Management Area
	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. Wildlife Management Area
HIGH POINT 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 Lake Marcia
	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 STATE PARK	LAUREL POND WATERSHED Laurel Pond, and its outlet stream and tributaries downstream to the outlet stream from Lake Wawayanda

(i) The following are the Outstanding National Resource Waters of the State:

1. FW1 Waters; and

2. PL Waters.

New Rule, R.1989 d.420, effective August 7, 1989.
See: 20 N.J.R. 1597(a), 21 N.J.R. 2302(b).

Petition for Rulemaking: Exxon petitioning for reclassification to less restrictive uses for portion of Morses Creek.

21 N.J.R. 3791(c).

Notice of denial of Petition for Rulemaking for Surface Water Quality Standards Tidal Portion of Morses Creek.

See: 23 N.J.R. 129(a).

Amended by R.1993 d.415, effective August 16, 1993.

See: 25 N.J.R. 405(a), 25 N.J.R. 3775(a).

Amended by R.1993 d.610, effective December 6, 1993.

See: 24 N.J.R. 3983(a), 24 N.J.R. 4471(a), 25 N.J.R. 5569(a).

Amended by R.1994 d.84, effective February 22, 1994.

See: 25 N.J.R. 405(a), 26 N.J.R. 1124(a).

Administrative Corrections.

See: 26 N.J.R. 1226(a).

INDEXES A through G (Reserved)

Amended by R.1985 d.466, effective September 3, 1985.

See: 17 N.J.R. 1625(a), 17 N.J.R. 2109(a).

Index D has been amended.

Repealed by R.1989 d.420, effective August 7, 1989.

See: 20 N.J.R. 1597(a), 21 N.J.R. 2302(b).

Indexes and guide reorganized at N.J.A.C. 7:9-4.15.

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