

New Jersey Department of Environmental Protection

Bureau of Release Prevention

**ENVIRONMENTALLY SENSITIVE
AREAS GUIDANCE DOCUMENT**

Revised October 2017

Introduction

This guidance on environmentally sensitive areas is intended for use as a reference and a guide when gathering information to be used in preparing the topographical maps for Discharge Prevention, Containment and Countermeasure (DPCC), and Discharge Cleanup and Removal (DCR) Plans. It gathers in one place all the citations listed in N.J.A.C. 7:1E-1.8, which establishes the definition of environmentally sensitive areas (ESA) for the purpose of developing the DPCC/DCR plan. The areas described in this document are by no means the only ESA in New Jersey, but represent those most likely to be adversely affected by a discharge of a hazardous substance. When used in conjunction with the requirements of N.J.A.C. 7:1E-4.10, Mapping criteria, it will prove useful in preparing the topographical maps and the offsite response measures that are required as part of the DCR plan. Additional information concerning the certification of ESA information is available in *A Guide to the Preparation of Discharge Prevention, Containment and Countermeasure (DPCC) and Discharge Cleanup and Removal (DCR) Plans and Plan Renewals*, available on the Bureau of Release Prevention website at <http://www.nj.gov/dep/enforcement/dp/dpdown.htm>.

N.J.A.C. 7:1E-4.2(b)9 requires that topographical maps be included in the DPCC plan, while N.J.A.C. 7:1E-4.10(d) requires that these maps cover all surrounding areas which could be affected by a discharge from the facility, including ESA. In addition, off-site response measures covering ESA are to be submitted as a part of the DCR plan, under N.J.A.C. 7:1E-4.3(b)8. N.J.A.C. 7:1E-1.8 sets forth geographical areas which are considered ESA for the purposes of designing and implementing the DPCC and DCR plans.

The definition of "environmentally sensitive areas" at N.J.A.C. 7:1E-1.8 has been developed for planning and use in the prevention and control of discharges of hazardous substances. The term is referred to in the Spill Compensation and Control Act (N.J.S.A. 58:10-23.11 *et seq.*), but is not defined therein.

In 1991, a task force drawn from the diverse programs within the Department used a number of factors in order to define ESA. These factors included importance to the quality of life in New Jersey, scarcity of the resource, importance placed on the area by other State and Federal legislation, and the ecology of the area. The areas the task force determined should be given the highest priority in protection from discharges, based on the above factors, and revised over the years to reflect changes in other Departmental rules, are included in the section defining "environmentally sensitive areas" in N.J.A.C. 7:1E.

The resulting definition, at N.J.A.C. 7:1E-1.8, describes those areas which would be most likely to be adversely affected by the discharge of a hazardous substance. In many cases, these areas overlap or are co-located. The owner or operator of a major facility is responsible for determining whether these areas would be affected by a discharge from their facility. Environmentally sensitive areas may need special protection in the event of a discharge. By identifying and mapping such areas, owners or operators of major facilities will be better able to prioritize their responses to a discharge.

The following document describes each area considered environmentally sensitive pursuant to N.J.A.C. 7:1E-1.8, giving a brief summary of what this area encompasses and the pertinent text of the citation(s) referenced. Any specific information listed was drawn from the

relevant regulations or program at the date of this document. Where available, links are provided to the information, and all information should be verified as being the most current.

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SURFACE WATERS, N.J.A.C. 7:7-12.1(a)1



AREA: Surface waters, including without limitation the following: large rivers, medium rivers, streams, creeks, ponds, lakes and reservoirs as defined in N.J.A.C. 7:7-12.1(b), canals as defined in N.J.A.C. 7:7-9.8(a), estuaries, as defined in 33 U.S.C. 1330(k), and bays, including without limitation open bays, semi-enclosed bays and back bays, as defined in N.J.A.C. 7:7-12.1(b).

ENVIRONMENTAL IMPORTANCE: Surface waters include all types of open water, such as rivers, streams, ponds, lakes, bays, canals, and estuaries. These must be protected to prevent birds, animals, and fish from being adversely affected by a discharge. Adverse effects may be seasonal in nature, due to the life cycles and migratory habits of the birds, animals and fish that utilize a given area of surface water. In addition, waters important for recreational activities, such as boating and fishing, are included in this category and must be protected for their cultural and economic value. Freshwater waterways serving as passages to and from spawning areas are important for the survival of numerous varieties of fish. Water areas are wintering points for birds, such as the Canada Goose and other waterfowl, and breeding areas for colonial waterbirds and aquatic furbearers, such as otter, muskrat, beaver, and mink.

INFORMATION FROM CITATIONS: N.J.A.C. 7:7-12.1(b)3 defines large rivers as waterways with watersheds greater than 1,000 square miles, which means the Delaware, Hudson, and Raritan Rivers.

1. The Delaware River is a tidal river from the Bridge Street Bridge in Trenton to its mouth at Delaware Bay, defined as a line between Alder Cover, Lower Alloways Creek Township and the Delaware River Basin Commission River and Bay Memorial at Liston Point, Delaware.
2. The Hudson River is a tidal river from the New York State Line to its mouth at Upper New York Bay at the Morris Canal, Jersey City.
3. The Raritan River is a tidal river from a point approximately 1.1 miles upstream from the Landing Lane Bridge between Piscataway and Franklin Townships to its mouth at Raritan Bay and the Arthur Kill.

N.J.A.C. 7:7-12.1(b)4 defines medium rivers, streams and creeks as those with a watershed area of less than 1,000 square miles. This includes watercourses such as the

Hackensack, Passaic, Oldmans, Big Timber, Pennsauken, Navesink, Manasquan, Toms, Wading, Mullica, Great Egg, Maurice, Cohansey, Salem and Rancocas.

Ponds, lakes and reservoirs are defined by N.J.A.C. 7:7-12.1(b)2 as relatively small water bodies with no tidal influence or salinity. Many are groundwater fed, while others serve as surface aquifer recharge areas. Lakes that are the result of former mining operations are not included, but are defined separately as wet borrow pits.

N.J.A.C. 7:7-9.8(a) states that canals are navigation channels for boat traffic through land areas which are created by cutting and dredging or other human construction technique sometimes enlarging existing natural surface water channels. The Cape May, Point Pleasant, and Delaware and Raritan Canals are the principal examples in the New Jersey Coastal zone.

In accordance with 33 U.S.C. 1330(k), the term estuary means all or part of a river, stream, or other body of water having an unimpaired natural connection with the open sea and within which the sea water is measurably diluted with fresh water derived from land drainage. An estuarine zone mean an environmental system consisting of an estuary and those transitional areas which are consistently influenced or affected by water from the estuary such as, but not limited to, salt marshes, coastal and intertidal areas, bays, harbors, lagoons, inshore waters, and channels, and also includes associated aquatic ecosystems and those portions of tributaries draining into the estuary up to the historic height of migration of anadromous fish or the historic head of tidal influence, whichever is higher.

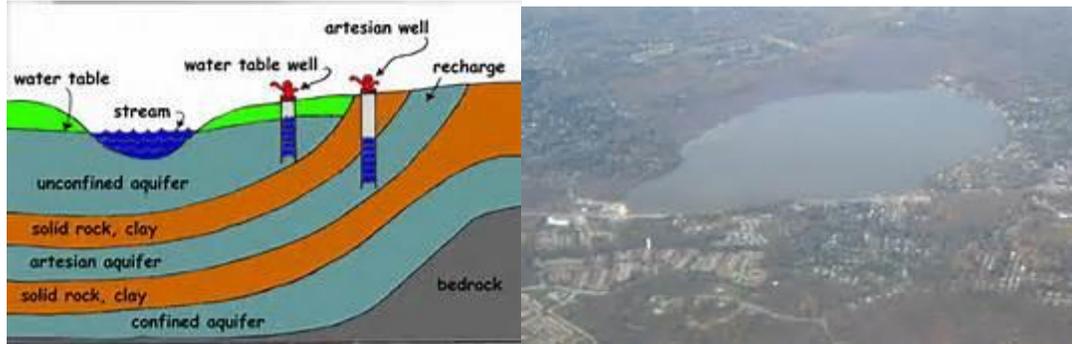
According to N.J.A.C. 7:7-12.1(b)6, an open bay is defined as a large, semi-confined estuary with a wide unrestricted inlet to the ocean and with a major river mouth discharging directly into its upper portion. Delaware Bay, Raritan Bay, Sandy Hook Bay, and Upper New York Bay are the only representatives of this waterbody type in New Jersey.

Semi-enclosed bays and back bays are defined at N.J.A.C. 7:7-12.1(b)7 as partially confined estuaries with direct inlet connections and some inflow of freshwater. Semi-enclosed bays differ from back bays in depth, degree of restriction of inlet and level of freshwater inflow. Great Bay and Great Egg Harbor are examples of semi-enclosed bays; Barnegat Bay, Little Egg Harbor, the Shark River estuary and other bays in Atlantic and Cape May Counties are back bays.

CITATIONS:

All N.J.A.C. citations: http://www.nj.gov/dep/rules/rules/njac7_7.pdf
33 U.S.C. 1330(k): <https://www.govregs.com/uscode/33/1330>

SOURCES OF WATER SUPPLY, N.J.A.C. 7:1E-1.8(a)2



AREA: Any water resource, as defined at N.J.A.C. 7:19-1.3, which is utilized by a public water system, nonpublic water system, or water system, as defined in N.J.A.C. 7:10-1.3.

ENVIRONMENTAL IMPORTANCE: Water resources include any river, stream, lake, pond, aquifer, other underground source, or other water body which may be diverted to a water supply system. Water resources used to provide potable water must be protected to prevent contamination of drinking water supplies and widespread and long lasting contamination of aquifers. Contamination of water resources can result in costly remediation efforts, including treatment of the water to return it to its previous condition and provision of alternate sources of potable water for the people affected.

INFORMATION FROM CITATIONS: Water resource as defined at N.J.A.C. 7:19-1.3 includes any river, stream, lake, pond, aquifer, other underground source, or other water body which may be diverted. These include feeder streams entering a water supply reservoir, reservoirs and buffer zones, and the aquifers utilized by water supply wells with their attendant wellhead protection areas. Aquifer is defined by N.J.A.C. 7:19-1.3 as any subsurface water-saturated zone which is significantly permeable so that it may yield sufficient quantities of water from wells or springs in order to serve as a practical source of water supply. A confined aquifer is an aquifer which contains groundwater under pressure between or below relatively impermeable or significantly less permeable material so that the water surface rises above the top of the aquifer in a well which derives its water from that aquifer. Finally, an unconfined or semi-confined aquifer is an aquifer that is either exposed to atmospheric pressure or bounded by layers of materials which do not serve as an effective barrier to water migration.

According to N.J.A.C. 7:10-1.3, a water system is a system for providing potable water to any person. A system can be public or nonpublic. A public water system is a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least 15 service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. It includes any collection, treatment, storage and distribution facilities under control of the operator of such system and used primarily in connection with such system, and any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. A public water system is either a public community water system, which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents, a public nontransient

noncommunity water system that regularly serves at least 25 of the same persons for more than six months in any given calendar year, or a public transient noncommunity water system that serves at least 25 transient individuals for at least 60 days in any given calendar year. A nonpublic water system is not a public water system. It includes any water system providing potable water to individual dwellings, and any water system regularly serving fewer than 15 service connections and fewer than 25 individuals.

CITATIONS:

N.J.A.C. 7:19-1.3: http://www.nj.gov/dep/rules/rules/njac7_19.pdf

N.J.A.C. 7:10-1.3: http://www.nj.gov/dep/rules/rules/njac7_10.pdf

BAY ISLANDS AND BARRIER ISLAND CORRIDORS, N.J.A.C. 7:1E-1.8(a)3



AREA: Bay islands as defined at N.J.A.C. 7:7-9.21(a), and barrier island corridors as defined at N.J.A.C. 7:7-9.20(a).

ENVIRONMENTAL IMPORTANCE: Bay islands are non-oceanfront islands surrounded by tidal waters. Barrier island corridors are those portions of oceanfront barrier islands lying upland of wetlands and beaches including the filled water's edge. Bay islands and barrier island corridors provide valuable wildlife habitat and potential habitat for colonial nesting birds and threatened and endangered species. Also, barrier island corridors provide protection to inland areas from ocean surges and other extreme weather events.

INFORMATION FROM CITATIONS: N.J.A.C. 7:7-9.21(a) states that bay islands are islands or filled areas surrounded by tidal waters, wetlands, beaches or dunes, lying between the mainland and barrier islands. They may be connected to the mainland or barrier island by elevated or fill supported roads. Existing lagoon edges are not bay islands. In addition, the following are not considered bay islands:

OCEAN COUNTY

- Bonnett Island, Stafford Township
- Chadwick Island, Dover Township
- Channel Island, Mantoloking Borough
- Osborne Island, Little Egg Harbor Township
- Pelican Island, Dover/Berkeley Townships
- West Point Island, Lavallette Borough

ATLANTIC COUNTY

- Bader Field, Atlantic City
- Chelsea Heights, Atlantic City
- Venice Heights, Atlantic City
- Ventnor Heights, Ventnor City

CAPE MAY COUNTY

- Princeton Harbor, Avalon Borough
- Shawcrest/Hildreth Island, Lower and Middle Townships. The areas mapped as Shawcrest/Hildreth Island are identified in the Department's Geographic

Information System(GIS) coverage, titled “Shawcrest/Hildreth Island.”

This coverage is available as a download at the CAFRA layers webpage:

www.nj.gov/dep/gis/CAFRAlayers.htm

West Wildwood, Wildwood City

West 17th Street, Ocean City

Barrier island corridors are defined by N.J.A.C. 7:7E-9.20(a) as being the interior portions of oceanfront barrier islands, spits, and peninsulas. The oceanfront barrier island corridor encompasses that portion of barrier islands, spits and peninsulas (narrow land areas surrounded by both bay and ocean waters and connected to the mainland) that lies upland of wetlands, beach and dune systems, filled water's edges, and existing lagoon edges. Barrier island corridor does not include the headlands of northern Ocean County, Monmouth County, and the southern tip of Cape May County, which are part of the mainland.

CITATIONS:

All citations: http://www.nj.gov/dep/rules/rules/njac7_7.pdf

BEACHES, N.J.A.C. 7:1E-1.8(a)4



AREA: Beaches, as defined in N.J.A.C. 7:7-9.22(a).

ENVIRONMENTAL IMPORTANCE: Beaches are migratory stopover areas and wintering areas for a great variety of migratory birds and are, therefore, ecologically important. They also support numerous other types of plant and animal life on a year-round basis, some of which are endangered. In addition, contamination of beaches in tourist areas could cause severe economic repercussions to the tourism industry in New Jersey.

INFORMATION FROM CITATION: According to N.J.A.C. 7:7-9.22(a), beaches include both natural and man-made features. Beaches are gently sloping areas of sand or other unconsolidated material that extend landward from the mean high water line to either: (1) a man-made feature generally parallel to the ocean, inlet, or bay waters, such as a retaining structure, seawall, bulkhead, road or boardwalk, except that sandy areas that extend fully under and landward of an elevated boardwalk are considered beach areas, or (2) the seaward or bayward foot of dunes, whichever is closest to the bay, inlet or ocean waters.

Beaches can be found on all tidal shorelines, including ocean, bay and river shorelines.

CITATION:

http://www.nj.gov/dep/rules/rules/njac7_7.pdf

DUNES, N.J.A.C. 7:1E-1.8(a)5



AREA: Dunes, as defined in N.J.A.C. 7:7-9.16(a).

ENVIRONMENTAL IMPORTANCE: Dunes, both natural and man-made, are a dynamic migrating natural phenomenon that helps protect lives and property in adjacent landward areas, and buffers barrier islands and barrier beach spits from the effects of major natural coastal hazards such as hurricanes, storms, flooding and erosion. They are migratory stopover areas and wintering areas for a great variety of migratory birds and are, therefore, ecologically important. They also support numerous other types of plant and animal life on a year-round basis, some of which are endangered. Natural dune systems also help promote wide sandy beaches.

INFORMATION FROM CITATION: N.J.A.C. 7:7-9.16(a) defines a dune as a wind or wave deposited or man-made formation of sand, consisting of a mound or ridge, that lies generally parallel to, and landward of, the beach, and the foot of the most inland dune slope. "Dune" includes the foredune, secondary or tertiary dune ridges and mounds, and all landward dune ridges and mounds, as well as man-made dunes, where they exist.

Formations of sand immediately adjacent to beaches that are stabilized by retaining structures, snow fences, planted vegetation, or other measures are considered to be dunes regardless of the degree of modification of the dune by wind or wave action or disturbance by development.

A small mound of loose, windblown sand found in a street or on a part of a structure as a result of storm activity is not considered to be a "dune".

CITATION:

http://www.nj.gov/dep/rules/rules/njac7_7.pdf

WETLANDS AND WETLAND TRANSITION AREAS, N.J.A.C. 7:1E-1.8(a)6



AREA: Wetlands and wetland transition areas, including without limitation the following: freshwater wetlands and transition areas, as defined in N.J.A.C. 7:7A-1.4; wetlands, as defined in N.J.A.C. 7:7-9.27(a); and wetland buffers and transition areas, as defined in N.J.A.C. 7:7-9.28(a).

ENVIRONMENTAL IMPORTANCE: Wetlands and wetland transition areas, including coastal wetlands and a buffer of 150 feet from the wetland edge, freshwater wetlands and a buffer of 300 feet from the wetland edge, and current or former cranberry bogs, are host to a great variety of plant and animal life and are both economically and ecologically important resource areas. They also provide recreational and tourism opportunities.

Wetlands contribute to the physical stability of the coastal zone by serving as a transitional area between forces of the open sea and upland areas. They absorb and dissipate wind-driven storm waves and storm surges, act as a flood water storage area, and as a sediment and pollution trap. Also, wetlands naturally perform the wastewater treatment process of removing phosphorous, nitrogenous and other water pollutants.

The biological productivity of New Jersey's wetlands is enormous and critical to the functioning of estuarine and marine ecosystems. They provide nutrients for bacteria and protozoan, which in turn provide food for larger invertebrates. Finfish, shellfish, and other resources feed on these invertebrates. Approximately two-thirds of marine finfish and shellfish are known to be estuarine, and, therefore, wetlands dependent. New Jersey's wetlands are prime wintering habitat annually for hundreds of thousands of migratory waterfowl.

Inland herbaceous wetlands, such as bogs and marshes, play an important role in regulating the quality of the water in streams. They retard runoff and store storm waters. They are critical habitats and movement corridors for several species of plants and animals that are endangered or threatened. They are productive habitats for game and non-game animals, such as fur bearers and song birds. These wetlands also serve as fire breaks and may limit the spread of forest, brush, or grass fires.

Forested wetlands play a critical role in coastal and other ecosystems. Roots and trunks stabilize shorelines and trap sediment. They are physical and biochemical water filter areas

maintaining stream water quality. White cedar stands, as well as other lowland swamp forests, play an important role in purifying water in coastal streams, retarding runoff, providing scenic value, and serving as a rich habitat for many endangered plant and animal species, as well as game species, such as deer. White cedars also act as forest fire breaks. White cedar is New Jersey's most valuable timber species. The wood has a long tradition of maritime and local craft uses. Unfortunately, white cedars have been eliminated from much of their previous range in New Jersey.

INFORMATION FROM CITATIONS: Wetlands are regulated and protected under the Wetlands Act of 1970 (N.J.S.A. 13:9A-1 *et seq.*) or the Freshwater Wetlands Protection Act of 1987 (N.J.S.A. 13:9B-1 *et seq.*).

N.J.A.C. 7:7A-1.4 defines "freshwater wetland" to mean an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation. The Department, in designating a wetland, uses the three-parameter approach (hydrology, soils and vegetation) as established in the current edition of the "Federal Manual for Identifying and Delineating Jurisdictional Wetlands," initially published in 1989. These include tidally influenced wetlands which have not been included on a promulgated map pursuant to the Wetlands Act of 1970, N.J.S.A. 13:9A-1 *et seq.* A "transition area" is an area of upland adjacent to a freshwater wetland which minimizes adverse impacts on the wetland or serves as an integral component of the wetlands ecosystem.

"Wetland" or "wetlands" is defined at N.J.A.C. 7:7-9.27(a) to mean an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

Tidal wetlands, are delineated on maps listed in Appendix D to N.J.A.C. 7:7. Generalized locations of both coastal and inland wetlands can be found at a scale of 1:24,000 on maps produced for the National Wetlands Inventory by the U.S. Fish and Wildlife Service. The Department also has location maps available for coastal wetlands, at a scale of 1:2,400, and generalized location maps for freshwater wetlands, at a scale of 1:12,000. The Department's coastal wetlands maps are available from the Division of Land Use Regulation by emailing TidelandsMapService@dep.state.nj.us. The freshwater wetlands maps are available from NJ-GeoWeb at <http://www.nj.gov/dep/gis/geoweb splash.htm>. While these maps are useful in the as an indicator in the preliminary determination of the presence or absence of wetlands, they have been determined to be unreliable for the purposes of locating the actual wetlands boundary on a specific site.

N.J.A.C. 7:7-3.28(a) defines "wetlands buffer" or "wetlands transition area" as an area of land adjacent to a wetland which minimizes adverse impacts on the wetlands or serves as an integral component of the wetlands ecosystem. A wetlands buffer or transition area of up to 150 feet in width is to be established adjacent to all wetlands defined and regulated under the Freshwater Wetlands Protection Act. For all other wetlands, including wetlands regulated under the Wetlands Act of 1970, a wetlands buffer of up to 300 feet is to be established.

CITATIONS:

all citations to N.J.A.C. 7:7: http://www.nj.gov/dep/rules/rules/njac7_7.pdf

N.J.A.C. 7:7A-1.4: http://www.nj.gov/dep/rules/rules/njac7_7a.pdf

N.J.S.A. 13:9A-1 *et seq.*:

<http://lis.njleg.state.nj.us/nxt/gateway.dll?f=templates&fn=default.htm&vid=Publish:10.1048/Enu>

N.J.S.A. 13:9B-1 *et seq.*:

<http://lis.njleg.state.nj.us/nxt/gateway.dll?f=templates&fn=default.htm&vid=Publish:10.1048/Enu>

CRITICAL WILDLIFE HABITAT, N.J.A.C. 7:1E-1.8(a)7



AREA: Critical wildlife habitats, as defined in N.J.A.C. 7:7-9.37.

ENVIRONMENTAL IMPORTANCE: Critical wildlife habitats include breeding areas for various types of wildlife, migratory stopover areas for migrant shorebirds, raptors, and passerines, and wildlife wintering areas. All of these areas are essential for maintaining a varied and healthy wildlife population in New Jersey, some of which are endangered species.

Breeding areas for forest area nesting species include large tracts of contiguous forest with populations of one or more neotropical migrant species. Breeding areas for colonial waterbirds are areas occupied by one or more of fifteen species of colonially nesting birds (from one of the last 5 census counts). Breeding areas for aquatic furbearers include those areas which provide food, water or cover, or sites to rear young, for any of the following species: otter, muskrat, beaver, or mink. Breeding areas are of vital importance to the survival of all species of birds and animals in New Jersey.

The migratory stopover areas for migrant shorebirds include all beaches and tidal marsh habitats along the Delaware Bay and Atlantic Coast from Cape May Point north to the Cohansey River and Cape May Point north to Sea Isle City. The migratory stopover areas for migrating raptors and passerines include the lower 10 kilometers of Cape May Peninsula. The contamination of a migratory stopover area during the migration season could result in death or injury for thousands of birds that do not make their permanent homes in New Jersey. This could seriously damage the population of some species.

Wintering areas include coastal tidal marshes and water areas (sounds, bays, rivers) from Raritan Bay South to Cape May and from Cape May North to Rancocas; waterfowl concentration areas, which include all water areas (streams, ponds, lakes), estates, municipal and county parks, corporate lands, and Fort Dix; and Atlantic white cedar stands. This is another area where contamination during a specific time of year could be disastrous. For instance, about one-third of the entire continent's black ducks and two-thirds of its Atlantic brant use New Jersey tidal wetlands as wintering areas.

INFORMATION FROM CITATION: N.J.A.C. 7:7-9.37(a) defines critical wildlife habitats as specific areas known to serve an essential role in maintaining wildlife, particularly in wintering, breeding, and migrating. These include rookeries for colonial nesting birds, such as herons, egrets, ibis, terns, gulls, and skimmers; stopovers for migratory birds, such as the Cape May Point region; and natural corridors for wildlife movement. In addition, ecotones, or edges

between two types of habitats, are a particularly valuable critical wildlife habitat. Many critical wildlife habitats, such as salt marsh water fowl wintering areas, and muskrat habitats, are singled out as water or water's edge areas.

One resource for information on critical wildlife habitat is the Division of Fish and Wildlife's Landscape Project, which can be accessed at <http://www.nj.gov/dep/fgw/ensp/landscape/index.htm>.

CITATION:

http://www.nj.gov/dep/rules/rules/njac7_7.pdf

PRIME FISHING AREAS, N.J.A.C. 7:1E-1.8(a)8



AREA: Prime fishing areas, as defined in N.J.A.C. 7:7-9.4(a).

ENVIRONMENTAL IMPORTANCE: Fishing and shellfishing are important recreational and commercial activities in New Jersey. Prime fishing areas provide many benefits to the citizens of the state, ranging from subsistence fishing to recreational fishing to commercial oystering and clamming. An abundance and diversity of fish and shellfish is a sign of a healthy aquatic ecosystem.

INFORMATION FROM CITATION: According to N.J.A.C. 7:7-9.4(a), prime fishing areas include tidal water areas and water's edge areas which have a demonstrable history of supporting a significant local intensity of recreational or commercial fishing activity. These areas include all coastal jetties and groins and public fishing piers or docks, and artificial reefs. Included in prime fishing areas are features such as rock outcroppings, sand ridges or lumps, rough bottoms, aggregates such as cobblestones, coral, shell and tubeworms, slough areas and offshore canyons. Prime fishing areas also include features such as rock outcroppings, sand ridges or lumps, rough bottoms, aggregates such as cobblestones, coral, shell and tubeworms, slough areas and offshore canyons. Prime fishing areas also include areas identified in "New Jersey's Recreational and Commercial Fishing Grounds of Raritan Bay, Sandy Hook Bay and Delaware Bay and The Shellfish Resources of Raritan Bay and Sandy Hook Bay" Figley and McCloy (1988) and those areas identified on the map titled, "New Jersey's Specific Sport Ocean Fishing Grounds." This map is available through the Coastal Management Program's website at http://www.state.nj.us/dep/cmp/nj_sport_ocean_fishing_grounds.pdf. As of 2017, seventeen artificial reefs have been created along the Jersey Coast. Information on their location is available from the Division of Fish and Wildlife at <http://www.state.nj.us/dep/fgw/refloc00.htm>. While these information sources apply only to the Delaware, Sandy Hook and Raritan Bays and Atlantic Ocean shorefronts, prime fishing areas do occur throughout the coastal zone.

CITATION:

http://www.nj.gov/dep/rules/rules/njac7_7.pdf

FINFISH MIGRATORY PATHWAYS, N.J.A.C. 7:1E-1.8(a)9



AREA: Finfish migratory pathways, as defined in N.J.A.C. 7:7-9.5(a).

ENVIRONMENTAL IMPORTANCE: Finfish migratory pathways are necessary for the propagation of the species using the migratory pathways. The three most important species in New Jersey are striped bass, shad and herring, although there are others. Important New Jersey industries, such as the charter fishing boat industry, rely on these species thriving in State waters.

INFORMATION FROM CITATION: N.J.A.C. 7:7-9.5(a) states that finfish migratory pathways are waterways (rivers, streams, creeks, bays, inlets) which can be determined to serve as passageways for diadromous fish to or from seasonal spawning areas, including juvenile anadromous fish which migrate in autumn and those listed by H.E. Zich (1977) "New Jersey Anadromous Fish Inventory" NJDEP Miscellaneous Report No. 41, and including those portions of the Hudson and Delaware Rivers within the coastal zone boundary. This information can be found in the report "Locations of Anadromous American Shad and River Herring During Their Spawning Period in New Jersey's Freshwaters Including Known Migratory Impediments and Fish Ladders" available from the Division of Fish and Wildlife at <http://www.state.nj.us/dep/fgw/pdf/anadromouswaters.pdf>

Species of concern include: alewife or river herring (*Alosa pseudoharengus*), blueback herring (*Alosa sapidissima*), American shad (*Alosa aspidissima*), striped bass (*Monroe saxatilis*), Atlantic sturgeon (*Acipenser oxyrhynchus*), Shortnose sturgeon (*Acipenser brevirostrum*) and American eel (*Anguilla rostrata*).

CITATION:

http://www.nj.gov/dep/rules/rules/njac7_7.pdf

SUBMERGED VEGETATION HABITAT, N.J.A.C. 7:1E-1.8(a)10



AREA: Submerged vegetation habitat, as defined in N.J.A.C. 7:7-9.6(a).

ENVIRONMENTAL IMPORTANCE: Water areas supporting various species of submerged plants include shipwrecks, artificial reefs, sites of known vessel remains, or similar structures, and shallow water. New Jersey's estuarine waters are relatively shallow, rich in nutrients and highly productive. The submerged vegetation of these shallow habitats serve important functions as suspended sediment traps, important winter forage for migratory waterfowl, and nursery areas for juvenile finfish, bay scallops and blue crabs. In addition, seagrasses absorb wave energy and their root networks help stabilize silty bay bottoms.

INFORMATION FROM CITATION: N.J.A.C. 7:7-9.6(a) states that a submerged vegetation special area consists of water areas supporting or documented as previously supporting rooted, submerged vascular plants such as widgeon grass (*Ruppia maritima*), sago pondweed (*Potamogeton pectinatus*), horned pondweed (*Zannichellia palustris*) and eelgrass (*Zostera marina*). In New Jersey, submerged vegetation is most prevalent in the shallow portions of the Navesink, Shrewsbury, Manasquan and Metedeconk Rivers, and in Barnegat, Manahawkin and Little Egg Harbor Bays. Other submerged vegetation species in lesser quantities include, but are not limited to, the following: water weed (*Elodea nuttalli*), *Eriocaulon parkeri*, *Liaeopsis chinesis*, *Naja flexilis*, *Nuphar variegatum*, *Potamogeton crispus*, *Potamogeton epihydrus*, *Potamogeton perfoliatus*, *Potamogeton pusillus*, *Scripus subterminalis* and *Vallisneria americana*. Detailed maps of the distribution of these species for New Jersey, and a method of delineation, are available from the Department in the New Jersey Submerged Aquatic Vegetation Distribution Atlas (Final Report), February, 1980, conducted by Earth Satellite Corporation and also on "Eelgrass Inventory" maps prepared by the Division of Fish and Wildlife, Bureau of Shellfisheries, 1983. Maps of submerged aquatic vegetation are available from the Division of Land Use Regulation at <http://www.state.nj.us/dep/landuse/sav.html>.

CITATION:

http://www.nj.gov/dep/rules/rules/njac7_7.pdf

SHELLFISH WATERS, N.J.A.C. 7:1E-1.8(a)11



AREA: Shellfish waters as defined in N.J.A.C. 7:9B-1.4.

ENVIRONMENTAL IMPORTANCE: Shellfish waters are estuarine bay and river bottoms which are potentially productive for important species, including those that are commercially valuable, recreationally valuable, threatened or endangered, critical to the organization and/or maintenance of the ecosystem, or other species necessary in the food web. These species include hard clams, soft clams, eastern oysters, bay scallops, or blue mussels. These areas are of economic importance in New Jersey. Maps showing the distribution of various shellfish species are available on the Division of Land Use Regulation's web site at <http://www.nj.gov/dep/landuse/shellfish.html> .

INFORMATION FROM CITATIONS: N.J.A.C. 7:9B-1.4 defines shellfish waters to mean waters classified as Approved, Seasonally Approved, Special Restricted, Seasonally Special Restricted or Condemned in accordance with the Shellfish Growing Water Classification rules N.J.A.C. 7:12. Under N.J.A.C. 7:12, the Department classifies the shellfish waters of the state for the purpose of harvesting shellfish. The classification of all shellfish waters adhere to the guidance and criteria contained within the National Shellfish Sanitation Program publication "Guide for the Control of Molluscan Shellfish" (2007), published by the Interstate Shellfish Sanitation Conference (209-2 Dawson Drive, Columbia, SC 29223, (803) 788-7559, www.issc.org) in cooperation with the U.S. Food and Drug Administration. Current classifications for shellfish waters can be found at N.J.A.C. 7:12-2, 3, 4 and 5.

CITATIONS:

N.J.A.C. 7:9B-1.4: http://www.nj.gov/dep/rules/rules/njac7_9b.pdf

N.J.A.C. 7:12: http://www.nj.gov/dep/rules/rules/njac7_12.pdf

FOREST AREAS, N.J.A.C. 7:1E-1.8(a)12



AREA: Forest areas, including prime forestland and unique forestland.

ENVIRONMENTAL IMPORTANCE: Prime forestland is land capable of growing 85 cubic feet of timber per acre per year. Unique forestland is land not qualifying as prime on the basis of cubic foot growth but that is growing sustained yields of specific high value species.

These areas are of economic, cultural, and ecological importance. They provide habitat for a wide variety of species, absorb carbon dioxide and other pollutants from the air, and generate oxygen. Also, some forest species, such as balsam fir, redbud, and shingle oak, are endangered species.

HABITAT FOR FEDERAL AND STATE ENDANGERED OR THREATENED PLANT AND ANIMAL SPECIES, N.J.A.C. 7:1E-1.8(a)13



AREA: Habitat for Federal and State endangered or threatened plant and animal species, as defined in N.J.A.C. 7:7-9.36.

ENVIRONMENTAL IMPORTANCE: These species and their habitat must be protected in the event of a discharge, since contamination could result in the loss of the entire population of a given species in New Jersey. Extinction represents a loss of biodiversity, which would adversely affect education, research and the interrelationship of all living creatures within the ecosystem.

The Department has mapped areas as endangered or threatened wildlife species habitat on the Department's Landscape Maps of Habitat for Endangered, Threatened and Other Priority Wildlife (known as Landscape Maps). Buffer areas, which are part of the endangered or threatened wildlife species habitat, may extend beyond the mapped areas. These Landscape Maps, with a listing of the endangered and threatened species within a specific area, are available from the Department's Division of Fish and Wildlife, Endangered and Nongame Species Program at the Division's web address <http://www.nj.gov/dep/fgw/ensp/landscape/index.htm>. Information on the areas mapped as endangered or threatened plant species habitat on the Department's Landscape Maps and the occurrence of endangered or threatened plant species habitat is available from the Department's Natural Heritage Program at PO Box 420, Mail Code 501-04, Trenton, New Jersey 08625-0420.

INFORMATION FROM CITATIONS: N.J.A.C. 7:7-9.36 describes endangered species habitat as those terrestrial and aquatic (marine, estuarine or freshwater) areas known to be inhabited on a seasonal or permanent basis by or to be critical at any stage in the life cycle of any wildlife or plant identified as "endangered" or "threatened" species on official Federal or State lists of endangered or threatened species, or under active consideration for State or Federal listing. It also includes a sufficient buffer area to insure survival of the population of the species as well as areas that serve an essential role as corridors for movement of endangered or threatened wildlife. This buffer is dependent on the range of the species.

The federal definition of "endangered species" is any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined to constitute a pest whose protection would present an overwhelming and overriding risk to man. The full federal endangered and threatened wildlife list can be found at 50 CFR 17.11(h).

The State definition of "wildlife" from the New Jersey Endangered and Nongame Species Conservation Act, N.J.S.A. 23:2A, is any wild mammal, bird, reptile, amphibian, fish, mollusk,

crustacean or other wild animal or any part, product, egg or offspring or the dead body or parts thereof. The term “plant” means any member of the plant kingdom, including seeds, roots and other parts thereof. The term “species” includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature.

As for “endangered”, it is defined as any species or subspecies of wildlife whose prospects of survival or recruitment are in jeopardy or are likely within the foreseeable future to become so due to any of the following factors:

1. the destruction, drastic modification, or severe curtailment of its habitat,
2. its over-utilization for scientific, commercial or sporting purposes,
3. the effect on it of disease, pollution, or predation,
4. other natural or manmade factors affecting its prospects of survival or recruitment within the State, or
5. any combination of the foregoing factors. The term also includes any species or subspecies of wildlife appearing on any Federal endangered species list.

The term “threatened species” means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

The Department is responsible for the promulgation of the official Endangered and Threatened Wildlife lists pursuant to N.J.S.A. 23:2A. These lists include wildlife species that are endangered and threatened in New Jersey as well as wildlife species officially listed as endangered or threatened pursuant to the federal Endangered Species Act of 1973, 16 U.S.C. 1531 *et seq.* These lists are included in this guidance document. However, the most current Endangered and Threatened Wildlife lists are available at <http://www.nj.gov/dep/fgw/tandespp.htm>.

The Department is also responsible for promulgation of the official Endangered Plant Species List pursuant to the Endangered Plant Species List Act, N.J.S.A. 13:1B-15.151. The Endangered Plant Species List, adopted at N.J.A.C. 7:5C, includes plant species determined by the Department to be endangered in the State as well as plant species officially listed as endangered or threatened or under active consideration for Federal listing as Endangered or Threatened. This list is also included in this guidance document. However, the most current Endangered Plant Species List can be obtained on line at <http://www.nj.gov/dep/parksandforests/natural/heritage/spplant.html>.

CITATIONS:

- N.J.A.C. 7:5C: http://www.nj.gov/dep/rules/rules/njac7_5c.pdf
N.J.A.C. 7:7-9.36 http://www.nj.gov/dep/rules/rules/njac7_7.pdf

N.J.S.A. 13:1B-15.151:

<http://lis.njleg.state.nj.us/nxt/gateway.dll?f=templates&fn=default.htm&vid=Publish:10.1048/Enu>

N.J.S.A. 23:2A:

<http://lis.njleg.state.nj.us/nxt/gateway.dll?f=templates&fn=default.htm&vid=Publish:10.1048/Enu>

50 CFR 17.11(h): <https://www.gpo.gov/fdsys/pkg/CFR-2010-title50-vol2/pdf/CFR-2010-title50-vol2-sec17-11.pdf>

16 U.S.C. 1531: <https://www.gpo.gov/fdsys/pkg/USCODE-2012-title16/html/USCODE-2012-title16-chap35-sec1531.htm>

STATE LIST OF ENDANGERED WILDLIFE SPECIES (8/31/17)

Federal endangered or threatened species below have been marked with an asterisk (*).

Common Name

Scientific Name

FISH

Shortnose Sturgeon*	<i>Acipenser brevirostrum</i>
Atlantic Sturgeon*	<i>Acipenser oxyrinchus oxyrinchus</i>

AMPHIBIANS

Blue-spotted Salamander	<i>Ambystoma laterale</i>
Eastern Tiger Salamander	<i>Ambystoma tigrinum</i>
Southern Gray Treefrog	<i>Hyla chrysocelis</i>

REPTILES

Atlantic Loggerhead Turtle*	<i>Caretta caretta</i>
Timber Rattlesnake	<i>Crotalus h. horridus</i>
Atlantic Leather-back Turtle*	<i>Dermochelys coriacea</i>
Corn Snake	<i>Elaphe g. guttata</i>
Atlantic Hawksbill Turtle*	<i>Eretmochelys imbricata</i>
Bog Turtle*	<i>Glyptemys muhlenbergii</i>
Atlantic Ridley Turtle*	<i>Lepidochelys kempii</i>
Queen Snake	<i>Regina septemvittata</i>

BIRDS

Northern Goshawk	<i>Accipiter gentilis</i>
Henslow's Sparrow	<i>Ammodramus henslowii</i>
Short-eared Owl	<i>Asio flammeus</i>
Upland Sandpiper	<i>Batramia longicauda</i>
American Bittern	<i>Botaurus lentiginosus</i>
Red-shouldered Hawk	<i>Buteo lineatus</i>
Red Knot	<i>Calidris canutus</i>
Piping Plover*	<i>Charadrius melodus</i>
Northern Harrier	<i>Circus cyaneus</i>
Sedge Wren	<i>Cistothorus platensis</i>
Peregrine Falcon	<i>Falco peregrinus</i>
Bald Eagle	<i>Haliaeetus leucocephalus</i>
Loggerhead Shrike	<i>Lanius ludovicianus</i>
Black Rail	<i>Laterallus jamaicensis</i>
Pied-billed Grebe	<i>Podilymbus podiceps</i>
Vesper Sparrow	<i>Pooecetes gramineus</i>
Black Skimmer	<i>Rynchops niger</i>
Least Tern	<i>Sternula antillarum</i>
Roseate Tern*	<i>Sterna dougallii</i>
Golden-winged Warbler	<i>Vermivora chrysoptera</i>

MAMMALS

Blue Whale*	<i>Balaenoptera musculus</i>
Fin Whale*	<i>Balaenoptera physalus</i>
Sei Whale*	<i>Balaenoptera borealis</i>
North Atlantic Right Whale*	<i>Eubalaena glacialis</i>
Bobcat	<i>Lynx rufus</i>
Humpback Whale*	<i>Megaptera novaeangliae</i>
Indiana Bat*	<i>Myotis sodalis</i>
Allegheny Woodrat	<i>Neotoma magister</i>
Sperm Whale*	<i>Physeter macrocephalus</i>

INVERTEBRATES

Dwarf Wedgemussel*	<i>Alasmidonta heterodon</i>
Brook Floater (mussel)	<i>Alasmidonta varicosa</i>
Arogos Skipper (butterfly)	<i>Atrytone arogos arogos</i>
Northeastern Beach Tiger Beetle*	<i>Cincindela d. dorsalis</i>
Green Floater (mussel)	<i>Lasmigona subviridis</i>
Bronze Copper	<i>Lycaena hyllus</i>
Mitchell's Satyr (butterfly)*	<i>Neonympha m. mitchellii</i>
American Burying Beetle*	<i>Nicrophorus americanus</i>
Appalachian Grizzled Skipper (butterfly)	<i>Pyrgus wyandot</i>
Gray Petaltail (dragonfly)	<i>Tachopteryx thoreyi</i>

STATE LIST OF THREATENED WILDLIFE SPECIES (3/1/12)

Federal endangered or threatened species below have been marked with an asterisk (*).

Common Name

Scientific Name

AMPHIBIANS

Long-tailed Salamander	<i>Eurycea longicauda</i>
Pine Barrens Treefrog	<i>Hyla andersonii</i>
Eastern Mud Salamander	<i>Pseudotriton montanus</i>

REPTILES

Wood Turtle	<i>Glyptemys insculpta</i>
Atlantic Green Turtle*	<i>Chelonia mydas</i>
Northern Pine Snake	<i>Pituophis m. melanoleucus</i>

BIRDS

Grasshopper Sparrow	<i>Ammodramus savannarum</i>
Long-eared Owl	<i>Asio otus</i>
Cattle Egret	<i>Bubulcus ibis</i>
Bobolink	<i>Dolichonyx oryzivorus</i>
Horned Lark	<i>Eremophila alpestris</i>
American Kestrel	<i>Falco sparverius</i>
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>
Yellow-crowned Night Heron	<i>Nyctanassa violacea</i>
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>
Osprey	<i>Pandion haliaetus</i>
Savannah Sparrow	<i>Passerculus sandwichensis</i>
Barred Owl	<i>Strix varia</i>

INVERTEBRATES

Triangle Floater (mussel)	<i>Alasmidonta undulata</i>
Silver-bordered Fritillary (butterfly)	<i>Bolaria selene myrina</i>
Frosted Elfin (butterfly)	<i>Callophrys irus</i>
Yellow Lampmussel (mussel)	<i>Lampsilis cariosa</i>
Eastern Lampmussel (mussel)	<i>Lampsilis radiata</i>
Tidewater Mucket (mussel)	<i>Leptodea ochracea</i>
Eastern Pondmussel (mussel)	<i>Ligumia nasuta</i>
Checkered White (butterfly)	<i>Pontia protodice</i>
Robust Baskettail (dragonfly)	<i>Epitheca spinosa</i>
Banner Clubtail (dragonfly)	<i>Gomphus apomyius</i>
Harpoon Clubtail (dragonfly)	<i>Gomphus descriptus</i>
Kennedy's Emerald (dragonfly)	<i>Somatochlora kennedyi</i>
Superb Jewelwing (dragonfly)	<i>Calopteryx amata</i>
Brook Snaketail (dragonfly)	<i>Ophiogomphus asperses</i>

STATE LIST OF ENDANGERED PLANT SPECIES (6/16)

Scientific Name	Common Name
<i>Abies balsamea</i>	balsam fir
<i>Aeschynomene virginica</i>	sensitive joint-vetch
<i>Alisma triviale</i>	large water-plantain
<i>Amaranthus pumilus</i>	seabeach amaranth
<i>Amelanchier sanguinea</i> var. <i>sanguinea</i>	round-leaf service-berry
<i>Ammannia latifolia</i>	Koehn's toothcup
<i>Andromeda polifolia</i> var. <i>glaucophylla</i>	bog rosemary
<i>Anemone cylindrica</i>	long-head anemone
<i>Antennaria howellii</i> ssp. <i>canadensis</i>	Canada pussytoes
<i>Aplectrum hyemale</i>	puttyroot
<i>Arabis drummondii</i>	Drummond's rockcress
<i>Arabis missouriensis</i>	Missouri rockcress
<i>Arceuthobium pusillum</i>	dwarf mistletoe
<i>Aristida lanosa</i>	woolly three-awn grass
<i>Arnoglossum atriplicifolium</i>	pale wild caraway
<i>Asimina triloba</i>	pawpaw
<i>Asplenium bradleyi</i>	Bradley's spleenwort
<i>Asplenium pinnatifidum</i>	lobed spleenwort
<i>Aster borealis</i>	rush aster
<i>Aster praealtus</i> var. <i>praealtus</i>	willow-leaf aster
<i>Aster radula</i>	low rough aster
<i>Atriplex subspicata</i>	saline orache
<i>Bidens eatonii</i>	Eaton's beggar-ticks
<i>Bidens mitis</i>	small-fruit beggar-ticks
<i>Blephilia ciliata</i>	downy woodmint
<i>Boltonia asteroides</i> var. <i>glastifolia</i>	southern boltonia
<i>Boltonia montana</i>	Appalachian Mountain boltonia
<i>Botrychium multifidum</i>	leathery grape fern
<i>Bouteloua curtipendula</i> var. <i>curtipendula</i>	side-oats grama grass
<i>Brickellia eupatorioides</i> var. <i>eupatorioides</i>	false boneset
<i>Calamagrostis pickeringii</i>	Pickering's reed grass
<i>Calystegia sepium</i> ssp. <i>erratica</i>	occluded bindweed
<i>Calystegia spithamea</i> ssp. <i>spithamea</i>	erect bindweed
<i>Cardamine longii</i>	Long's bittercress
<i>Cardamine maxima</i>	large toothwort
<i>Cardamine rotundifolia</i>	round-leaf bittercress
<i>Carex alopecoidea</i>	foxtail sedge
<i>Carex aquatilis</i>	water sedge
<i>Carex arctata</i>	drooping wood sedge
<i>Carex backii</i>	Back's sedge
<i>Carex brunnescens</i> var. <i>sphaerostachya</i>	round-spike brownish sedge
<i>Carex bushii</i>	Bush's sedge

<i>Carex crawei</i>	Crawe's sedge
<i>Carex cumulata</i>	clustered sedge
<i>Carex deweyana</i> var. <i>deweyana</i>	Dewey's sedge
<i>Carex formosa</i>	handsome sedge
<i>Carex haydenii</i>	cloud sedge
<i>Carex jamesii</i>	James' sedge
<i>Carex jorii</i>	cypress-swamp sedge
<i>Carex laxiculmis</i> var. <i>copulata</i>	coupled sedge
<i>Carex leptonevia</i>	fine-nerve sedge
<i>Carex limosa</i>	mud sedge
<i>Carex louisianica</i>	Louisiana sedge
<i>Carex lupuliformis</i>	hop-like sedge
<i>Carex meadii</i>	Mead's sedge
<i>Carex oligocarpa</i>	few-fruit sedge
<i>Carex peckii</i>	Peck's white-tinged sedge
<i>Carex planispicata</i>	narrow-leaf sedge
<i>Carex plantaginea</i>	plantain-leaf sedge
<i>Carex polymorpha</i>	variable sedge
<i>Carex pseudocyperus</i>	cyperus-like sedge
<i>Carex siccata</i>	hillside sedge
<i>Carex stipata</i> var. <i>maxima</i>	large awl-fruit sedge
<i>Carex tuckermanii</i>	Tuckerman's sedge
<i>Carex woodii</i>	Wood's sedge
<i>Castanea pumila</i>	chinquapin
<i>Centrosema virginianum</i>	spurred butterfly-pea
<i>Ceratophyllum echinatum</i>	spiny coontail
<i>Cercis canadensis</i> var. <i>canadensis</i>	redbud
<i>Chenopodium rubrum</i>	red goosefoot
<i>Cinna latifolia</i>	slender wood-reed
<i>Cirsium virginianum</i>	Virginia thistle
<i>Claytonia virginica</i> var. <i>hammondiae</i>	Hammond's yellow spring beauty
<i>Cleistes divaricata</i>	spreading pogonia
<i>Clitoria mariana</i>	butterfly-pea
<i>Coelorachis rugosa</i>	wrinkled jointgrass
<i>Comarum palustre</i>	marsh cinquefoil
<i>Commelina erecta</i> var. <i>erecta</i>	slender dayflower
<i>Conioselinum chinense</i>	hemlock-parsley
<i>Corema conradii</i>	broom crowberry
<i>Cornus amomum</i> var. <i>schuetzeana</i>	pale dogwood
<i>Crataegus calpodendron</i>	pear hawthorn
<i>Crataegus holmesiana</i>	Holmes' hawthorn
<i>Crataegus succulenta</i>	fleshy hawthorn
<i>Cryptogramma stelleri</i>	slender rockbrake
<i>Cuscuta cephalanthi</i>	buttonbush dodder
<i>Cuscuta indecora</i> var. <i>indecora</i>	collared dodder
<i>Cynoglossum virginianum</i> var. <i>boreale</i>	northern wild comfrey

<i>Cyperus hystricinus</i>	bristly flat sedge
<i>Cyperus lancastris</i>	Lancaster flat sedge
<i>Cyperus plukenetii</i>	Plukenet's flat sedge
<i>Cyperus polystachyos</i> var. <i>texensis</i>	coast flat sedge
<i>Cyperus pseudovegetus</i>	marsh flat sedge
<i>Cyperus refractus</i>	reflexed flat sedge
<i>Cyperus retrofractus</i>	rough flat sedge
<i>Cyperus schweinitzii</i>	Schweinitz's flat sedge
<i>Cypripedium candidum</i>	small white lady's-slipper
<i>Cypripedium reginae</i>	showy lady's-slipper
<i>Dalibarda repens</i>	robin-run-away
<i>Desmodium humifusum</i>	trailing tick-trefoil
<i>Desmodium pauciflorum</i>	few-flower tick-trefoil
<i>Desmodium sessilifolium</i>	sessile-leaf tick-trefoil
<i>Dicentra canadensis</i>	squirrel-corn
<i>Dicentra eximia</i>	wild bleeding-heart
<i>Diodia virginiana</i> var. <i>virginiana</i>	larger buttonweed
<i>Diplazium pycnocarpon</i>	glade fern
<i>Draba reptans</i>	Carolina whitlow-grass
<i>Dryopteris celsa</i>	log fern
<i>Eleocharis brittonii</i>	Britton's spike-rush
<i>Eleocharis compressa</i>	flat-stem spike-rush
<i>Eleocharis equisetoides</i>	knotted spike-rush
<i>Eleocharis melanocarpa</i>	black-fruit spike-rush
<i>Eleocharis olivacea</i> var. <i>reductiseta</i>	pine barren spike-rush
<i>Eleocharis quinqueflora</i>	few-flower spike-rush
<i>Eleocharis tenuis</i> var. <i>verrucosa</i>	warty spike-rush
<i>Eleocharis tortilis</i>	twisted spike-rush
<i>Elephantopus carolinianus</i>	Carolina elephant-foot
<i>Ellisia nyctelea</i>	Aunt Lucy
<i>Elymus trachycaulus</i>	slender wheatgrass
<i>Equisetum pratense</i>	meadow horsetail
<i>Equisetum variegatum</i> var. <i>variegatum</i>	variegated horsetail
<i>Eragrostis hirsuta</i>	stout love grass
<i>Eriophorum gracile</i> var. <i>gracile</i>	slender cotton-grass
<i>Eriophorum tenellum</i>	rough cotton-grass
<i>Eriophorum vaginatum</i> var. <i>spissum</i>	sheathed cotton-grass
<i>Eupatorium capillifolium</i>	dog-fennel thoroughwort
<i>Eupatorium resinosum</i>	pine barren boneset
<i>Euphorbia purpurea</i>	Darlington's glade spurge
<i>Fraxinus profunda</i>	pumpkin ash
<i>Galactia volubilis</i>	downy milk-pea
<i>Galium hispidulum</i>	coast bedstraw
<i>Galium labradoricum</i>	Labrador marsh bedstraw
<i>Gaultheria hispidula</i>	creeping-snowberry
<i>Gentiana linearis</i>	narrow-leaf gentian

<i>Glyceria borealis</i>	small floating manna grass
<i>Glyceria grandis</i> var. <i>grandis</i>	American manna grass
<i>Gnaphalium helleri</i> var. <i>micradenium</i>	small everlasting
<i>Gnaphalium macounii</i>	winged cudweed
<i>Gymnopogon brevifolius</i>	short-leaf skeleton grass
<i>Helonias bullata</i>	swamp-pink
<i>Hieracium kalmii</i> var. <i>fasciculatum</i>	Canada hawkweed
<i>Honckenya peploides</i> var. <i>robusta</i>	seabeach sandwort
<i>Hottonia inflata</i>	featherfoil
<i>Hybanthus concolor</i>	green violet
<i>Hydrastis canadensis</i>	golden seal
<i>Hydrocotyle ranunculoides</i>	floating marsh-pennywort
<i>Hydrophyllum canadense</i>	broad-leaf waterleaf
<i>Hypericum adpressum</i>	Barton's St. John's-wort
<i>Hypericum gymnanthum</i>	clasping-leaf St. John's-wort
<i>Hypericum majus</i>	larger Canadian St. John's-wort
<i>Hypericum prolificum</i>	shrubby St. John's-wort
<i>Ilex montana</i>	large-leaf holly
<i>Isanthus brachiatus</i>	false pennyroyal
<i>Isoetes lacustris</i>	lake quillwort
<i>Isoetes melanopoda</i>	black-base quillwort
<i>Isoetes tuckermanii</i>	Tuckerman's quillwort
<i>Isotria medeoloides</i>	small whorled pogonia
<i>Jeffersonia diphylla</i>	twinleaf
<i>Juncus brachycarpus</i>	short-fruit rush
<i>Juncus caesariensis</i>	New Jersey rush
<i>Juncus coriaceus</i>	awl-leaf rush
<i>Juncus diffusissimus</i>	slim-pod rush
<i>Juncus torreyi</i>	Torrey's rush
<i>Kalmia polifolia</i>	pale-laurel
<i>Krigia dandelion</i>	potato dwarf-dandelion
<i>Kyllinga pumila</i>	low spike sedge
<i>Lathyrus ochroleucus</i>	cream vetchling
<i>Lechea tenuifolia</i>	narrow-leaf pinweed
<i>Ledum groenlandicum</i>	Labrador tea
<i>Lemna perpusilla</i>	minute duckweed
<i>Lemna valdiviana</i>	pale duckweed
<i>Liatris scariosa</i> var. <i>novae-angliae</i>	northern blazing-star
<i>Limnobium spongia</i>	American frog's-bit
<i>Limosella australis</i>	awl-leaf mudwort
<i>Linnaea borealis</i> var. <i>americana</i>	twinflower
<i>Linum intercursum</i>	sandplain flax
<i>Linum sulcatum</i> var. <i>sulcatum</i>	grooved yellow flax
<i>Lipocarpa micrantha</i>	small-flower halfchaff sedge
<i>Listera cordata</i> var. <i>cordata</i>	heartleaf twayblade
<i>Listera smallii</i>	Appalachian twayblade

<i>Lobelia boykinii</i>	Boykin's lobelia
<i>Lobelia dortmanna</i>	water lobelia
<i>Lonicera canadensis</i>	American fly-honeysuckle
<i>Luzula acuminata</i> var. <i>acuminata</i>	hairy wood-rush
<i>Lycopodium annotinum</i>	stiff club-moss
<i>Lysimachia lanceolata</i>	lance-leaf loosestrife
<i>Maianthemum canadense</i> var. <i>interius</i>	western false lily-of-the-valley
<i>Maianthemum trifolium</i>	three-leaf false Solomon's-seal
<i>Malaxis bayardii</i>	Bayard Long's adder's-mouth
<i>Malaxis brachypoda</i>	white adder's-mouth
<i>Malaxis unifolia</i>	green adder's-mouth
<i>Megalodonta beckii</i>	water-marigold
<i>Melanthium virginicum</i>	Virginia bunchflower
<i>Micranthemum micranthemoides</i>	Nuttall's mudwort
<i>Milium effusum</i>	tall millet grass
<i>Minuartia michauxii</i> var. <i>michauxii</i>	rock sandwort
<i>Monarda clinopodia</i>	basil beebalm
<i>Muhlenbergia capillaris</i> var. <i>capillaris</i>	long-awn smoke grass
<i>Myriophyllum pinnatum</i>	cutleaf water-milfoil
<i>Myriophyllum sibiricum</i>	common water-milfoil
<i>Myriophyllum tenellum</i>	slender water-milfoil
<i>Myriophyllum verticillatum</i>	whorled water-milfoil
<i>Narthecium americanum</i>	bog asphodel
<i>Nelumbo lutea</i>	American lotus
<i>Neobekia aquatica</i>	lake water-cress
<i>Nuphar microphyllum</i>	small yellow pond-lily
<i>Onosmodium virginianum</i>	Virginia false-gromwell
<i>Ophioglossum vulgatum</i>	southern adder's-tongue
<i>Oryzopsis asperifolia</i>	white-grained mountain-rice grass
<i>Oryzopsis pungens</i>	slender mountain-rice grass
<i>Panicum aciculare</i>	bristling panic grass
<i>Panicum boreale</i>	northern panic grass
<i>Panicum dichotomum</i> var. <i>yadkinense</i>	spotted-sheath panic grass
<i>Panicum flexile</i>	wiry panic grass
<i>Panicum hirstii</i>	Hirst Brothers' panic grass
<i>Panicum longiligulatum</i>	coastal-plain panic grass
<i>Panicum xanthophysum</i>	slender panic grass
<i>Penstemon laevigatus</i>	smooth beardtongue
<i>Phacelia bipinnatifida</i>	fern-leaf scorpion-flower
<i>Phlox divaricata</i> var. <i>divaricata</i>	wild blue phlox
<i>Phlox pilosa</i> var. <i>pilosa</i>	downy phlox
<i>Phyla lanceolata</i>	fogfruit
<i>Picea rubens</i>	red spruce
<i>Pinus pungens</i>	table mountain pine
<i>Pinus resinosa</i>	red pine
<i>Plantago pusilla</i>	dwarf plantain

<i>Platanthera flava</i> var. <i>flava</i>	southern rein orchid
<i>Platanthera hookeri</i>	Hooker's orchid
<i>Platanthera integra</i>	yellow fringeless orchid
<i>Platanthera nivea</i>	snowy orchid
<i>Platanthera orbiculata</i>	round-leaf orchid
<i>Platanthera peramoena</i>	purple fringeless orchid
<i>Pluchea foetida</i> var. <i>foetida</i>	stinking fleabane
<i>Poa autumnalis</i>	flexuous spear grass
<i>Poa saltuensis</i>	old-pasture spear grass
<i>Poa sylvestris</i>	woodland spear grass
<i>Polemonium reptans</i>	Greek-valerian
<i>Polygala curtissii</i>	Curtiss' milkwort
<i>Polygala incarnata</i>	pink milkwort
<i>Polygala senega</i>	Seneca snakeroot
<i>Polygonum densiflorum</i>	dense-flower knotweed
<i>Polygonum glaucum</i>	sea-beach knotweed
<i>Polypremum procumbens</i>	juniper-leaf
<i>Potamogeton illinoensis</i>	Illinois pondweed
<i>Potamogeton obtusifolius</i>	blunt-leaf pondweed
<i>Potamogeton praelongus</i>	white-stem pondweed
<i>Potamogeton zosteriformis</i>	eel-grass pondweed
<i>Prenanthes racemosa</i> var. <i>racemosa</i>	smooth rattlesnake-root
<i>Prunus pumila</i> var. <i>depressa</i>	low sand cherry
<i>Ptelea trifoliata</i> var. <i>trifoliata</i>	wafer-ash
<i>Pycnanthemum clinopodioides</i>	basil mountain-mint
<i>Pycnanthemum torrei</i>	Torrey's mountain-mint
<i>Pyrola chlorantha</i>	greenish-flower wintergreen
<i>Pyrrhopappus carolinianus</i>	Carolina desert-chicory
<i>Quercus imbricaria</i>	shingle oak
<i>Quercus lyrata</i>	overcup oak
<i>Quercus macrocarpa</i> var. <i>macrocarpa</i>	mossy-cup oak
<i>Quercus nigra</i>	water oak
<i>Ranunculus allegheniensis</i>	Allegheny mountain buttercup
<i>Ranunculus cymbalaria</i>	seaside buttercup
<i>Ranunculus fascicularis</i>	early buttercup
<i>Ranunculus flammula</i> var. <i>filiformis</i>	creeping spearwort
<i>Rhexia aristosa</i>	awned meadow-beauty
<i>Rhexia mariana</i> var. <i>ventricosa</i>	showy meadow-beauty
<i>Rhododendron canadense</i>	rhodora
<i>Rhynchospora capillacea</i>	capillary beaked-rush
<i>Rhynchospora filifolia</i>	thread-leaf beaked-rush
<i>Rhynchospora glomerata</i>	clustered beaked-rush
<i>Rhynchospora grayi</i>	Gray's beaked-rush
<i>Rhynchospora knieskernii</i>	Knieskern's beaked-rush
<i>Rhynchospora microcephala</i>	small-head beaked-rush
<i>Rhynchospora rariflora</i>	rare-flower beaked-rush

<i>Rhynchospora recognita</i>	coarse grass-like beaked-rush
<i>Ribes glandulosum</i>	skunk currant
<i>Ribes missouriense</i>	Missouri gooseberry
<i>Rubus canadensis</i>	smooth blackberry
<i>Rubus novocaesarius</i>	New Jersey dewberry
<i>Rudbeckia fulgida</i> var. <i>fulgida</i>	orange coneflower
<i>Ruellia caroliniensis</i>	Carolina petunia
<i>Rumex hastatulus</i>	Engelmann's Sorrel
<i>Saccharum alopecuroidum</i>	silver plume grass
<i>Sacciolepis striata</i>	American cupscale
<i>Sagittaria australis</i>	southern arrowhead
<i>Sagittaria cuneata</i>	arum-leaf arrowhead
<i>Sagittaria filiformis</i>	narrow-leaf arrowhead
<i>Sagittaria teres</i>	slender arrowhead
<i>Salix pedicellaris</i>	bog willow
<i>Sanicula trifoliata</i>	large-fruit black-snakeroot
<i>Scheuchzeria palustris</i> var. <i>americana</i>	arrow-grass
<i>Schizachne purpurascens</i>	purple oat
<i>Schoenoplectus maritimus</i>	saltmarsh bulrush
<i>Schoenoplectus torreyi</i>	Torrey's bulrush
<i>Schwalbea americana</i>	chaffseed
<i>Scirpus longii</i>	Long's woolgrass
<i>Scirpus microcarpus</i>	barberpole bulrush
<i>Scirpus pedicellatus</i>	stalked woolgrass
<i>Scleria verticillata</i>	whorled nut-rush
<i>Scutellaria leonardii</i>	small skullcap
<i>Sibbaldiopsis tridentata</i>	three-toothed cinquefoil
<i>Silene nivea</i>	snowy catchfly
<i>Smallanthus uvedalius</i>	bear's-foot
<i>Solidago rigida</i> var. <i>rigida</i>	prairie goldenrod
<i>Sparganium angustifolium</i>	narrow-leaf burr-reed
<i>Sparganium natans</i>	small burr-reed
<i>Sphagnum angustifolium</i>	sphagnum
<i>Sphagnum centrale</i>	sphagnum
<i>Sphagnum contortum</i>	sphagnum
<i>Sphagnum cribrosum</i>	sphagnum
<i>Sphagnum majus</i> ssp. <i>norvegicum</i>	sphagnum
<i>Sphagnum quinquefarium</i>	sphagnum
<i>Sphagnum riparium</i>	sphagnum
<i>Sphagnum strictum</i>	sphagnum
<i>Sphagnum subfulvum</i>	sphagnum
<i>Sphagnum subsecundum</i>	sphagnum
<i>Spiranthes laciniata</i>	lace-lip ladies'-tresses
<i>Sporobolus neglectus</i>	small rush-grass
<i>Stachys pilosa</i> var. <i>pilosa</i>	hairy hedge-nettle
<i>Stellaria borealis</i> var. <i>borealis</i>	boreal starwort

<i>Stellaria pubera</i>	star chickweed
<i>Streptopus amplexifolius</i> var. <i>amplexifolius</i>	white twisted-stalk
<i>Streptopus lanceolatus</i>	rosy twisted-stalk
<i>Stylisma pickeringii</i> var. <i>pickeringii</i>	Pickering's morning-glory
<i>Suaeda rolandii</i>	Roland's seablite
<i>Thuja occidentalis</i>	arborvitae
<i>Tiarella cordifolia</i> var. <i>cordifolia</i>	foamflower
<i>Tofieldia racemosa</i>	false asphodel
<i>Triadenum walteri</i>	Walter's St. John's-wort
<i>Trichomanes intricatum</i>	weft fern
<i>Tridens flavus</i> var. <i>chapmanii</i>	Chapman's redtop
<i>Triglochin maritima</i>	seaside arrow-grass
<i>Trillium grandiflorum</i>	large-flower trillium
<i>Triosteum angustifolium</i>	narrow-leaf horse-gentian
<i>Triphora trianthophora</i>	three birds orchid
<i>Trollius laxus</i> ssp. <i>laxus</i>	spreading globe flower
<i>Utricularia biflora</i>	two-flower bladderwort
<i>Utricularia minor</i>	lesser bladderwort
<i>Utricularia olivacea</i>	dwarf white bladderwort
<i>Utricularia resupinata</i>	reversed bladderwort
<i>Uvularia puberula</i> var. <i>nitida</i>	pine barren bellwort
<i>Valerianella chenopodiifolia</i>	goose-foot cornsalad
<i>Valerianella radiata</i>	beaked cornsalad
<i>Valerianella umbilicata</i>	navel cornsalad
<i>Verbena simplex</i>	narrow-leaf vervain
<i>Vernonia glauca</i>	broad-leaf ironweed
<i>Veronica catenata</i>	sessile water-speedwell
<i>Viburnum lantanooides</i>	witch-hobble
<i>Vicia americana</i> var. <i>americana</i>	American purple vetch
<i>Vicia caroliniana</i>	Carolina wood vetch
<i>Viola canadensis</i> var. <i>canadensis</i>	Canadian violet
<i>Viola septentrionalis</i>	northern blue violet
<i>Vulpia elliottea</i>	squirrel-tail six-weeks grass
<i>Wolffiella gladiata</i>	sword bogmat
<i>Xyris caroliniana</i>	sand yellow-eyed grass
<i>Xyris fimbriata</i>	fringed yellow-eyed grass
<i>Xyris montana</i>	northern yellow-eyed grass
<i>Zigadenus leimanthoides</i>	death-camus

FEDERAL AND STATE WILDERNESS AREAS, N.J.A.C. 7:1E-1.8(a)14



AREA: Federal and State wilderness areas, including areas included within the Natural Areas System, as designated in N.J.A.C. 7:5A-1.13, or in the State Register of Natural Areas pursuant to the Natural Areas System Act, N.J.S.A. 13:1B-15.12a *et seq.* and 15.4 *et seq.* and N.J.A.C. 7:5A-1.4, and preserved land held by the New Jersey Natural Lands Trust pursuant to the New Jersey Natural Lands Trust Act, N.J.S.A. 13:1B-15.119 *et seq.*

ENVIRONMENTAL IMPORTANCE: Federal and State wilderness areas are those that have retained their natural character, although not necessarily completely undisturbed, or have rare or vanishing species of plant and animal life, or have similar features of interest, which are worthy of preservation for present and future residents of the State. They provide recreational opportunities and are of both cultural and ecological importance.

INFORMATION FROM CITATIONS: The Natural Areas System Act states that for inclusion in the natural areas system, it is not necessary that an area be wholly unmarked by man, but that the impact of man be not permanent, not seriously destructive of the area's potential for developing natural values, and not obtrusively apparent to the casual observer, and is of such character that the lessening of human impact will allow the land or water to recover natural values of interest. Lands subject to the noise of vehicular traffic and of commercial and industrial operations, and subject to air and water pollution as the result of the activities of man, may be designated as parts of the system if they lie on the perimeters of primary natural areas within the system, and if the purpose of their inclusion within the system is to protect or buffer the primary natural areas.

N.J.S.A. 13:1B-15.4 defines "natural areas" as areas of land or water which have retained their primeval character, although not necessarily completely natural and undisturbed, or having rare or vanishing species of plant and animal life or having similar features of interest which are worthy of preservation for the use of present and future residents of the State.

N.J.A.C. 7:5A-1.3 contains the following definitions:

"Natural area" means an area of land or water, owned in fee simple or held as a conservation easement by the Department, which has retained its natural character, although not necessarily completely undisturbed, or having rare or vanishing species of plant and animal life, or having similar features of interest, which are worthy of preservation for present and future residents of the State.

"Natural Areas System" means those lands designated as natural areas pursuant to the Natural Areas System rules, identified at N.J.A.C. 7:5A-1.13, and consisting of lands that serve as habitat for rare plant species or animal species, or both, or ecological communities representative of the State of New Jersey or the nation.

To be placed on the Register of Natural Areas, a site must be an endangered species habitat, a natural community, or a wildlife habitat. An endangered species habitat must be verified as supporting a significant, viable natural occurrence of one or more plant or animal species, or both, determined to be rare, threatened, or endangered in the State or the United States. A natural community supports a significant, viable example of a rare natural community or is an extremely high quality representative of other natural communities of New Jersey. Quality includes, but is not limited to, characteristics of structure, composition, age, size and degree of disturbance. A wildlife habitat provides spawning, breeding, nesting, resting, or feeding habitat which is highly significant for supporting resident or migratory wildlife, or both, of the State, the United States, or the world. Designated areas are drawn from the list contained in the Register of Natural Areas.

Interim classifications for natural areas, as found in N.J.A.C. 7:5A-1.7, fall into one of two categories:

1. Ecological reserve: an area managed to allow natural processes to proceed with little or no habitat manipulation;
2. Conservation preserve: an area where habitat manipulation is permissible in order to preserve a plant or animal species, community type, or ecosystem;

There is a management objective for each area in the Natural Areas System. This objective is the stated purpose or goal of designating an area to which management of the area is to be directed.

The following are designated in N.J.A.C. 7:5A-1.13 as components of the Natural Areas System:

Absegami Natural Area

Location: Bass River State Forest, Bass River Township, Burlington County

Management Objective: preservation of Atlantic white cedar and pine/oak communities, southern swamp habitat, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Bass River State Forest

Allamuchy Natural Area

Location: Allamuchy State Park, Allamuchy Township, Warren County, and Byram Township, Sussex County

Management Objective: preservation of a hardwood forest of significant size and successional fields and protection of a rare plant community

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Hopatcong State Park

Batsto Natural Area

Location: Wharton State Forest, Mullica Township and Hammonton Town, Atlantic County, and Washington and Shamong Townships, Burlington County

Management Objective: preservation of pitch pine lowland, Atlantic white cedar swamp, Pine Barrens bog, mixed pine-shrub oak barrens, savanna and other habitats, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Wharton State Forest

Bearfort Mountain Natural Area

Location: Wawayanda State Park, West Milford Township, Passaic County

Management Objective: preservation of scrub oak and hardwood swamp forests, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Wawayanda State Park

Bear Swamp East Natural Area

Location: Downe Township, Cumberland County

Management Objective: preservation of ecological communities and relationships, management of bald eagle nesting site and other known and potential endangered species habitat

Interim Classification: ecological reserve

Administering Agency: Division of Fish and Wildlife, through Millville Wildlife Management Area

Black River Natural Area

Location: Black River Wildlife Management Area, Chester and Washington Townships, Morris County

Management Objective: preservation of mesic, marsh, floodplain habitat, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Fish and Wildlife, through Whittingham Wildlife Management Area

Bull's Island Natural Area

Location: Bull's Island Recreation Area, Delaware Township, Hunterdon County

Management Objective: preservation of a northern floodplain habitat, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Delaware and Raritan Canal State Park

Bursch Sugar Maple Natural Area

Location: Hope and Knowlton Townships, Warren County

Management Objective: preservation of a northeastern hardwoods forest, and sugar maple/mixed hardwood community

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Jenny Jump State Forest

Cape May Point Natural Area

Location: Cape May Point State Park, Cape May Point Borough and Lower Township, Cape May County

Management Objective: preservation of freshwater marsh behind a coastal dune, habitat diversity for migratory birds, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Cape May Point State Park

Cape May Wetlands Natural Area

Location: Avalon Borough, Dennis and Middle Townships, Cape May County

Management Objective: preservation of tidal salt marsh ecosystem and rare species habitat

Interim Classification: ecological reserve

Administering Agency: Division of Fish and Wildlife, through Cape May Coastal Wetlands Wildlife Management Area

Cedar Swamp Natural Area

Location: Brendan T. Byrne State Forest, Woodland Township, Burlington County

Management Objective: preservation of southern swamp and floodplain habitat, Atlantic white cedar, red maple and pine/oak forest communities, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Brendan T. Byrne State Forest

Cheesequake Natural Area

Location: Cheesequake State Park, Old Bridge Township, Middlesex County

Management Objective: preservation of habitat diversity including hardwood forest, cedar swamp, mature white pine stand, freshwater swamp, Pine Barren outlier and salt marsh, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Cheesequake State Park

Cook Natural Area

Location: South Brunswick Township, Middlesex County

Management Objective: preservation of freshwater nontidal flood plain forest habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Delaware and Raritan Canal State Park

Dryden Kuser Natural Area

Location: High Point State Park, Montague and Wantage Townships, Sussex County

Management Objective: preservation of an inland high elevation Atlantic white cedar swamp, chestnut oak forest and associated forest communities, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through High Point State Park

Dunnfield Creek Natural Area

Location: Worthington State Forest, Pahaquarry Township, Warren County

Management Objective: preservation of a hemlock ravine, chestnut oak forest, and rare

species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Worthington State Forest

East Plains Natural Area

Location: Stafford Forge Wildlife Management Area, Little Egg Harbor, Stafford and Eagleswood Townships, Ocean County

Management Objective: preservation and management of a globally rare dwarf pine plains community in the East Plains, a large occurrence of the state endangered broom crowberry, as well as other rare plant and animal species

Interim Classification: conservation preserve

Administering Agency: Division of Fish and Wildlife, through Stafford Forge Wildlife Management Area

Farny Natural Area

Location: Farny State Park, Rockaway Township, Morris County

Management Objective: preservation of northern mixed oak-hardwood forest, hardwood swamp forest, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Ringwood State Park

Great Bay Natural Area

Location: Little Egg Harbor Township, Ocean County

Management Objective: preservation of tidal salt marsh ecosystem and rare species habitat

Interim Classification: ecological reserve

Administering Agency: Division of Fish and Wildlife, through Assunpink Wildlife Management Area

Hacklebarney Natural Area

Location: Hacklebarney State Park, Chester and Washington Townships, Morris County, Tewksbury Township, Hunterdon County and Bedminster Township, Somerset County

Management Objective: preservation of a river ravine and northern hemlock/mixed hardwood forest, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Spruce Run Recreation Area

Island Beach Northern Natural Area

Location: Island Beach State Park, Berkeley Township, Ocean County

Management Objective: preservation of barrier island dune system, plant community associations, and rare species habitat

Interim Classification: ecological reserve

Administering Agency: Division of Parks and Forestry, through Island Beach State Park

Island Beach Southern Natural Area

Location: Island Beach State Park, Ocean and Berkeley Townships, Ocean County

Management Objective: preservation of barrier island dune system, saltwater marsh, freshwater bogs, and rare species habitat

Interim Classification: conservation preserve
Administering Agency: Division of Parks and Forestry, through Island Beach State Park

Johnsonburg Natural Area

Location: Frelinghuysen Township, Warren County
Management Objective: preservation of a mixed hardwood forest
Interim Classification: ecological reserve
Administering Agency: Division of Parks and Forestry, through Jenny Jump State Forest

Ken Lockwood Gorge Natural Area

Location: Ken Lockwood Gorge Wildlife Management Area, Lebanon Township, Hunterdon County
Management Objective: preservation of hemlock/mixed hardwood forest with highly varied understory, and rare species habitat
Interim Classification: conservation preserve
Administering Agency: Division of Fish and Wildlife, through Whittingham Wildlife Management Area

Manahawkin Natural Area

Location: Manahawkin Wildlife Management Area, Stafford Township, Ocean County
Management Objective: preservation of a mature bottomland hardwood forest, and rare species habitat
Interim Classification: ecological reserve
Administering Agency: Division of Fish and Wildlife, through Assunpink Wildlife Management Area

North Brigantine Natural Area

Location: City of Brigantine, Atlantic County
Management Objective: preservation of salt marsh habitat, coastal dune, and rare species habitat
Interim Classification: conservation preserve
Administering Agency: Division of Parks and Forestry, through Bass River State Forest

Osmun Forest Natural Area

Location: Knowlton Township, Warren County
Management Objective: preservation of a northeastern mixed hardwood forest
Interim Classification: ecological reserve
Administering Agency: Division of Parks and Forestry, through Jenny Jump State Forest

Oswego River Natural Area

Location: Wharton State Forest, Washington and Bass River Townships, Burlington County
Management Objective: preservation of hardwood swamp, pitch pine lowland, pine-oak, Atlantic white cedar, and bog communities, which serve as rare species habitat
Interim Classification: ecological reserve
Administering Agency: Division of Parks and Forestry, through Wharton State Forest

Parvin Natural Area

Location: Parvin State Park, Pittsgrove Township, Salem County

Management Objective: preservation of mixed oak and pine forest on the Pine Barrens fringe with a diversity of plant and animal species, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Parvin State Park

Ramapo Lake Natural Area

Location: Ramapo Mountain State Forest, Wanaque and Ringwood Boroughs, Passaic County, and Oakland Borough, Bergen County

Management Objective: preservation of northern upland habitats and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Ringwood State Park

Rancocas Natural Area

Location: Rancocas State Park, Westampton Township, Burlington County

Management Objective: preservation of freshwater marsh and southern floodplain habitat, including one of the largest stands of wild rice in the State

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Brendan T. Byrne State Forest

Readington Natural Area

Location: Readington Township, Hunterdon County

Management Objective: preservation of mixed hardwood forest, floodplain habitat and early stages of secondary field succession

Interim Classification: conservation preserve

Administering Agency: New Jersey Natural Lands Trust

Richard J. Sullivan Natural Area

Location: Liberty State Park, Jersey City, Hudson County

Management Objective: preservation of a salt marsh in Upper New York Bay and created uplands

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Liberty State Park

Strathmere Natural Area

Location: Corson's Inlet State Park, Upper Township, Cape May County

Management Objective: preservation of a dune habitat, plant community associations, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Belleplaine State Forest

Sunfish Pond Natural Area

Location: Worthington State Forest, Pahaquarry Township, Warren County

Management Objective: preservation of a lake of glacial origin surrounded by a hardwood forest, and rare species habitat

Interim Classification: ecological reserve

Administering Agency: Division of Parks and Forestry, through Worthington State Forest

Swan Point Natural Area

Location: Brick Township, Ocean County

Management Objective: preservation of tidal salt marsh ecosystem and Atlantic white cedar swamp

Interim Classification: ecological reserve

Administering Agency: Division of Parks and Forestry, through Island Beach State Park

Swartswood Natural Area

Location: Swartswood State Park, Stillwater and Hampton Townships, Sussex County

Management Objective: preservation of rare species and plant communities in sinkhole pond ecosystems

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Swartswood State Park

Swimming River Natural Area

Location: Borough of Tinton Falls, Monmouth County

Management Objective: preservation of habitat diversity including freshwater marsh, saltwater marsh, woodlands, fields and estuary

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Allaire State Park

Tillman Ravine Natural Area

Location: Stokes State Forest, Walpack and Sandyston Townships, Sussex County

Management Objective: preservation of a hemlock ravine and associated geologic forms, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Stokes State Forest

Troy Meadows Natural Area

Location: East Hanover and Parsippany-Troy Hills Townships, Morris County

Management Objective: preservation of freshwater marsh habitat northern swamp and floodplain habitat, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Ringwood State Park

Washington Crossing Natural Area

Location: Washington Crossing State Park, Hopewell Township, Mercer County

Management Objective: preservation of natural succession and mixed hardwood forests, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Washington Crossing State Park

Wawayanda Hemlock Ravine Natural Area

Location: Wawayanda State Park, Vernon Township, Sussex County

Management Objective: preservation of hemlock/mixed hardwood forest and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Wawayanda State Park

Wawayanda Swamp Natural Area

Location: Wawayanda State Park, Vernon Township, Sussex County, and West Milford Township, Passaic County

Management Objective: preservation of extensive northern swamp and forest habitats, glacially formed, spring-fed pond, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Wawayanda State Park

West Plains Natural Area

Location: Bass River State Forest, Woodland Township, Burlington County

Management Objective: preservation of globally rare ecological communities within the West Plains Fireshed, including dwarf pine plains, pitch pine-shrub oak barrens, pitch pine-reedgrass savanna and hydric pine plains, as well as numerous rare plant and animal species

Interim Classification: conservation preserve

Administering Agency: Division of Parks and Forestry, through Bass River State Forest

Whittingham Natural Area

Location: Whittingham Wildlife Management Area, Fredon and Green Townships, Sussex County

Management Objective: preservation of a northern swamp and floodplain forest on a limestone cliff, rare and exemplary natural communities, and rare species habitat

Interim Classification: conservation preserve

Administering Agency: Division of Fish and Wildlife, through Whittingham Wildlife Management Area

The New Jersey Natural Lands Trust Act, N.J.S.A. 13:1B-15.119, created and established in but not of the Division of Parks and Forestry, a body corporate and politic with corporate succession, to be known as the New Jersey Natural Lands Trust. The statutory goals of the trust include the preservation of land in its natural state for enjoyment by the public and to protect elements of natural diversity. This is accomplished through the acquisition of open space.

Information about the size and boundaries of lands currently owned or held by the New Jersey Natural Lands Trust can be obtained at <http://www.njnlt.org/>. The current list of such lands is as follows:

ATLANTIC COUNTY

Allen's Woods Preserve, Hamilton Township
Babcock Creek Preserve, Hamilton Township
Bearshead Preserve, Hamilton and Buena Vista Townships
Cape May Pond Preserve, Hamilton Township
Catawba Preserve, City of Estell Manor and Weymouth Township
Clarks Landing Preserve, Galloway Township
Collings Pines Preserve, Folsom Boro
Danenhauer Preserve, Hamilton Township
Dr. Charles Breedis Preserve, Hamilton Township
Folsom Preserve, Folsom Borough
Hamilton Preserve, Egg Harbor and Hamilton Townships
Heathercroft Preserve, Egg Harbor Township
Hirst Pond Preserve, Galloway Township
Holiday Preserve, Hamilton Township
John's Woods Preserve, Hamilton Township
Little Mill Preserve, Mullica Township
Makepeace Preserve, Mullica Township
Mankiller Preserve, Hamilton Township
Nacote Creek Preserve, City of Port Republic
Oakwoods Preserve, Hamilton Township
Pancoast Preserve, Buena Vista Township
Panther Branch Preserve, Buena Vista Township and City of Vineland, Cumberland County
Pleasant Mills Preserve, Mullica Township
Pomona Woods, Hamilton Township
Pruchnicki Preserve, Hamilton Township
Risley's Channel Preserve, Egg Harbor Township
Silver Preserve, Buena Vista and Hamilton Townships
Thompsontown Preserve, Hamilton Township
Three Rivers Preserve, Hamilton Township
Unexpected Wildlife Refuge, Buena
Waldhausen Preserve, Folsom Boro
Watering Race Preserve, Hamilton Township

BERGEN COUNTY

Bellemead Preserve, Lyndhurst Township

BURLINGTON COUNTY

Barton's Run Preserve, Evesham Township
Bear Swamp at Red Lion Preserve, Medford and Southampton Townships
Five Pines, Bass River Township
Holly Ford Ice Preserve, Mount Holly Township
Moorestown Preserve, Moorestown and Mount Laurel Township
Retreat Preserve, Southampton Township
South Valley Woods Preserve, Moorestown
Sooy Place Preserve, Woodland Township
Taylor Preserve, Cinnaminson Township
Wading River Marsh Preserve, Washington Township

CAMDEN COUNTY

Four Mile Branch, Winslow Township
Long-A-Coming Preserve, Winslow Township
Penny Pot Preserve, Winslow Township
Petty's Island Preserve, Pennsauken Township

CAPE MAY COUNTY

Bennet Bogs Preserve, Lower Township
Frye Preserve, Middle Township
Miller Creek Marsh Preserve, Upper Township
Stacherski Preserve, Ocean City
Shorebird Preserves:
Cape May County Agreement, Middle and Lower Townships
Reeds Beach Douglas, Middle Township
Carl and Evelyn Foster property, Middle Township
Charles and Lida Foster property, Middle Township
Hand, Middle Township
John Jarvis property, Middle Township
Shivers Agreement, Middle Township
Skills Beach, Lower Township
Tolz Beach, Lower Township

CUMBERLAND COUNTY

Kings End Preserve, Fairfield Township
Maple Hollow Preserve, Fairfield Township
Richard Buhlman Preserve, Fairfield Township
Sharps Branch, City of Vineland
Shorebird Preserves:
Environmental Concern, Maurice River Township
Moores Beach, Maurice River Township
Orr property, Maurice River Township

ESSEX COUNTY

Iris Construction Preserve, Fairfield Township

GLOUCESTER COUNTY

Big Timber Creek Preserve, Deptford Township
Black Acres Preserve, Franklin Township
Collings Pines, Monroe Township
Four Mile Branch Preserve, Monroe Township
Manaway Branch Preserve, Franklin Township and Newfield Borough
Monroe Preserve, Monroe Township
Nehonsey Brook Preserve, Greenwich Township
Racoon Creek Preserve, Swedesboro Borough and Woolwich Township
Squankum Branch Preserve, Monroe Township
Tuckahoe Preserve, Franklin Township
Unexpected Wildlife Refuge, Franklin Township

HUNTERDON COUNTY

Arbraity's Pine Stand Preserve, Delaware Township
Collins Easement, Stockton Township
Gravel Hill Preserve, Holland Township
Hagedorn Preserve, Lebanon Township and Glen Gardner Borough
Isenburger Preserve, Lebanon Township
Mulhockaway Creek Preserve, Union Township
Musconetcong Ridge Preserve, Bethlehem Township
Readington Preserve, Readington Township
Sweet Hollow Preserve, Alexandria and Holland Townships
Thomas F. Breden Preserve at Milford Bluffs, Holland Township and Borough of Milford
Wolock at Sweet Preserve, Alexandria Township

MERCER COUNTY

Highfields Preserve, Hopewell Township and East Amwell Township, Hunterdon County

MIDDLESEX COUNTY

Cemetery Bend Preserve, Monroe Township
Soldiers and Sailors Preserve, Edison and Woodbridge Townships
Stevens Easement, Edison Township

MONMOUTH COUNTY

Whale Pond Brook Preserve, Ocean Township

MORRIS COUNTY

Black Meadows Preserve, Hanover Township and Florham Park Borough

Budd Lake Bog Preserve, Mount Olive Township
Craighmont Farms Preserve, Boonton Township
Great Piece Meadows Preserve, Lincoln Park Borough and Montville Township, and
Fairfield Township, Essex County
Primrose Brook Preserve, Harding Township

OCEAN COUNTY

Audubon Easement, Berkeley Township
Barnegat Preserve, Barnegat Township
Beaverdam Preserve, Brick Township
Cedar Bridge Preserve, Lakewood and Brick Townships
Clamming Creek Preserve, Berkeley Township
Crossley Preserve, Berkeley and Manchester Townships
Double Trouble Preserve, Lacey Township
Hampton Pines Preserve, Lakewood Township
Kislow Preserve, Stafford Township
Lacey Project Area, Lacey Township
Lazarus Preserve, Stafford Township
Lin Lee Preserve, Barnegat Township
Mystic Island Preserve, Little Egg Harbor Township
Sands Point Harbor Preserve, Ocean Township
Tilton Creek Preserve, Toms River Township
Warren Grove Bogs Preserve, Stafford Township
West Plains Preserve, Barnegat Township

PASSAIC COUNTY

Preakness Mountain Preserve, Wayne Township

SALEM COUNTY

Game Branch Preserve, Carneys Point and Oldmans Townships

SOMERSET COUNTY

Flemer Preserve, Franklin Township
Lincoln Grove Preserve, Franklin Township

SUSSEX COUNTY

Blair Creek Preserve, Stillwater Township
Bufanio, Stillwater Township
Congleton Preserve, Hardyston, Wantage and Lafayette Townships
Crooked Swamp Cave Preserve, Lafayette Township
Elm Spring Preserve, Wantage Township
First Time Fen Preserve, Green Township
Hainseville Woods Preserve, Sandyston Township

Hyper Hummus Easement, Hampton, Andover and Lafayette Townships and Town of
Newton
Lubbers Run Preserve, Byram Township
McCarthy Preserve, Hopatcong
Papakating Creek Preserve, Frankford and Wantage Townships
Quarryville Brook Preserve, Wantage Township
Reinhardt Preserve, Montague Township
Straders Pond Preserve, Andover Township
Wallkill Preserve, Sparta Township and Franklin and Ogdensburg Boroughs
Wilcat Branch Preserve, Sparta and Hardyston Townships

WARREN COUNTY

Bear Creek Preserve, Allamuchy and Frelinghuysen Townships
Beech Ridge Preserve, Blairstown Township
Buckhorn Creek Preserve, White Township
Buttermilk Bridge Preserve, Franklin Township
Earl Brugler Preserve, Blairstown Township
Hardwick Meadows Preserve, Hardwick and Blairstown Townships
High Rock Mountain Preserve, Liberty Township
Limestone Ridge Marsh Preserve, Blairstown Township
Mt. Rascal Preserve, Independence Township
Mountain Lake Bog Preserve, White and Liberty Townships

CITATIONS:

N.J.A.C. 7:5A: http://www.nj.gov/dep/rules/rules/njac7_5a.pdf

N.J.S.A. 13:1B-15.4

<http://lis.njleg.state.nj.us/nxt/gateway.dll?f=templates&fn=default.htm&vid=Publish:10.1048/Enu>

N.J.S.A. 13:1B-15.119

<http://lis.njleg.state.nj.us/nxt/gateway.dll?f=templates&fn=default.htm&vid=Publish:10.1048/Enu>

WILD AND SCENIC RIVER CORRIDORS, N.J.A.C. 7:1E-1.8(a)15



AREA: Wild or scenic river corridors, as defined in N.J.A.C. 7:7-9.44(a), which includes all such areas designated pursuant to the National Wild and Scenic Rivers Act, 16 U.S.C. 1271-1278, or the New Jersey Wild and Scenic Rivers Act, N.J.S.A. 13:8-45 *et seq.*

ENVIRONMENTAL IMPORTANCE: The National Wild and Scenic Rivers Act recognizes outstandingly remarkable scenic, recreational, fish and wildlife, historic, cultural and similar values of certain rivers. It also has the goal of reducing loss of life and property resulting from the over development of floodplains. These free-flowing rivers are resources of extreme value. They are culturally and ecologically important.

INFORMATION FROM CITATIONS: Pursuant to N.J.A.C. 7:7-9.44(a), wild and scenic river corridors are all rivers designated into the National Wild and Scenic Rivers System and any rivers or segments thereof being studied for possible designation into that system in accordance with the National Wild and Scenic Rivers Act. For rivers designated into the national system, the wild and scenic river corridor includes the river and adjacent areas located within one-quarter mile from the mean high water line on each side of the river until a Federal River Management Plan has been adopted, after which time the wild and scenic corridor is the area defined in the adopted plan. For rivers under study for possible designation into the national system, the wild and scenic river corridor includes the river and adjacent areas extending one-quarter mile from the mean high water line on each side of the river.

The National Wild and Scenic Rivers Act states that certain selected rivers of the Nation which, with their immediate environments, possess outstanding remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values, shall be preserved in free flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. Such rivers can include endangered species habitat, archeological sites, migratory fish and wildlife corridors and groundwater recharge areas.

A wild, scenic or recreational river area eligible to be included in the system is a free-flowing stream and the related adjacent land area that possesses one or more of the values referred to above. Every wild, scenic or recreational river in its free-flowing condition, or upon restoration to this condition, is considered eligible for inclusion in the national wild and scenic rivers system and, if included, is classified, designated, and administered as one of the following:

- (1) Wild river areas - Those rivers or sections of rivers that are free of impoundments and

generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

- (2) Scenic river areas - Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
- (3) Recreational river areas - Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

The following rivers and the land adjacent thereto are designated as components of the national wild and scenic rivers system as of 2017:

Middle Delaware River, Pennsylvania and New Jersey - The segment from the point where the river crosses the northern boundary of the Delaware Water Gap National Recreation Area to the point where the river crosses the southern boundary of such recreation area. Of this segment, 35 miles are classified as scenic and 5 miles are classified as recreational.

Lower Delaware River and associated tributaries, New Jersey and Pennsylvania - 65.6 miles of river segments in New Jersey and Pennsylvania, with the following classifications:

- (A) the segment from river mile 193.8 to the northern border of the city of Easton, Pennsylvania, approximately 10.5 miles, as a recreational river;
- (B) the segment from a point just south of the Gilbert Generating Station to a point just north of the Point Pleasant Pumping Station, approximately 14.2 miles, as a recreational river;
- (C) the segment from the point just south of the Point Pleasant Pumping Station to a point 1,000 feet north of the Route 202 bridge, approximately 6.3 miles, as a recreational river;
- (D) the segment from a point 1,750 feet south of the Route 202 bridge to the southern border of the town of New Hope, Pennsylvania, approximately 1.9 miles, as a recreational river;
- (E) the segment from the southern boundary of the town of New Hope, Pennsylvania, to the town of Washington Crossing, Pennsylvania, approximately 6 miles, as a recreational river;
- (F) Tinicum Creek, approximately 14.7 miles, as a scenic river;
- (G) Tohickon Creek from the Lake Nockamixon Dam to the Delaware River, approximately 10.7 miles, as a scenic river; and
- (H) Paunacussing Creek in Solebury Township, approximately 3 miles, as a recreational river.

Great Egg Harbor River, New Jersey - 129.0 miles of the main stem and tributaries with the following classifications:

- (A) from the mouth of the Patcong Creek to the mouth of Perch Cove Run, approximately 10 miles, as a scenic river;
- (B) from Perch Cove Run to the Mill Street Bridge, approximately 5.5 miles, as a recreational river;

- (C) from Lake Lenape to the Atlantic City Expressway, approximately 21 miles, as a recreational river;
- (D) from Williamstown-New Freedom Road to the Pennsylvania Railroad right-of-way, approximately 3 miles, as a recreational river;
- (E) Squankum Branch from its confluence with Great Egg Harbor River to Malaga Road, approximately 4.5 miles, as a recreational river;
- (F) Big Bridge Branch, from its confluence with Great Egg Harbor River to headwaters, approximately 2.2 miles, as a recreational river;
- (G) Penny Pot Stream Branch, from its confluence with Great Egg Harbor River to 14th Street, approximately 4.1 miles, as a recreational river;
- (H) Deep Run, from its confluence with Great Egg Harbor River to Pancoast Mill Road, approximately 5.4 miles, as a recreational river;
- (I) Mare Run, from its confluence with Great Egg Harbor River to Weymouth Avenue, approximately 3 miles, as a recreational river;
- (J) Babcock Creek, from its confluence with Great Egg Harbor River to headwaters, approximately 7.5 miles, as a recreational river;
- (K) Gravelly Run, from its confluence with Great Egg Harbor River to Pennsylvania Railroad Right-of-Way, approximately 2.7 miles, as a recreational river;
- (L) Miry Run, from its confluence with Great Egg Harbor River to Asbury Road, approximately 1.7 miles, as a recreational river;
- (M) South River, from its confluence with Great Egg Harbor River to Main Avenue, approximately 13.5 miles, as a recreational river;
- (N) Stephen Creek, from its confluence with Great Egg Harbor River to New Jersey Route 50, approximately 2.3 miles, as a recreational river;
- (O) Gibson Creek, from its confluence with Great Egg Harbor River to First Avenue, approximately 5.6 miles, as a recreational river;
- (P) English Creek, from its confluence with Great Egg Harbor River to Zion Road, approximately 3.5 miles, as a recreational river;
- (Q) Lakes Creek, from its confluence with Great Egg Harbor River to the dam, approximately 2.2 miles, as a recreational river;
- (R) Middle River, from its confluence with Great Egg Harbor River to the levee, approximately 5.6 miles, as a scenic river;
- (S) Patcong Creek, from its confluence with Great Egg Harbor River to Garden State Parkway, approximately 2.8 miles, as a recreational river;
- (T) Tuckahoe River (lower segment) from its confluence with Great Egg Harbor River to the Route 50 bridge, approximately 9 miles, as a scenic river;
- (U) Tuckahoe River, from the Route 50 Bridge to Route 49 Bridge, approximately 7.3 miles, as a recreational river; and
- (V) Cedar Swamp Creek, from its confluence with Tuckahoe River to headwaters, approximately 6 miles, as a scenic river.

Maurice River, New Jersey - 35.4 miles of the main stem and tributaries with the following classifications:

- (A) Middle Segment, from Route 670 Bridge at Mauricetown to 3.6 miles upstream (at drainage ditch just upstream of Fralinger Farm), approximately 3.8 miles as a scenic river.
- (B) Middle Segment, from the drainage ditch just upstream of Fralinger Farm to one-half mile upstream from the United States Geological Survey Station at Burcham

- Farm, approximately 3.1 miles, as a recreational river.
- (C) Upper Segment, from one-half mile upstream from the United States Geological Survey Station at Burcham Farm to the south side of the Millville sewage treatment plant, approximately 3.6 miles, as a scenic river.
 - (D) Menantico Creek, Lower Segment, from its confluence with the Maurice River to the Route 55 Bridge, approximately 1.4 miles, as a recreational river.
 - (E) Menantico Creek, Upper Segment, from the Route 55 Bridge to the base of the impoundment at Menantico Lake, approximately 6.5 miles, as a scenic river.
 - (F) Manumuskin River, Lower Segment, from its confluence with the Maurice River to a point 2.0 miles upstream, a recreational river.
 - (G) Manumuskin River, Upper Segment, from a point 2.0 miles upstream from its confluence with the Maurice River to its headwaters near Route 557, approximately 12.3 miles, as a scenic river.
 - (H) Muskee Creek, from its confluence with the Maurice River to the Pennsylvania Seashore Line Railroad Bridge, approximately 2.7 miles, as a scenic river.

Musconetcong River, New Jersey – 24.2 miles of the main stem with the following classifications:

- (A) the segment from the Saxton Falls to the Route 46 Bridge, approximately 3.5 miles, as scenic river.
- (B) the segment from King's Highway Bridge to the railroad tunnels at Musconetcong Gorge, approximately 20.7 miles, as recreational river.

When the Secretary of the Interior designates a river as wild, scenic or recreational, notice is published in the Federal Register.

The New Jersey Wild and Scenic Rivers Act states that the New Jersey Wild and Scenic Rivers System shall comprise river areas classified, designated and administered as wild, scenic, recreational or developed recreational rivers. These areas are delineated as follows:

Wild rivers areas, which are those rivers, or sections thereof, that are free of impoundment and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and undeveloped and waters unpolluted. Wild river areas are also consistent with Natural Areas.

Scenic river areas, which are those rivers, or sections thereof, that are free of impoundment, with watersheds or shorelines still largely primitive and undeveloped, but accessible in places by road.

Recreational river areas, which are those rivers, or sections thereof, that are readily accessible, that may have some development along their shorelines, and that may have undergone some impoundment or diversion.

Developed recreational rivers, which are those rivers, or sections thereof, that are readily accessible, that may have substantial development along their shorelines, that may have undergone substantial impoundment or diversion, but which remain suitable for a variety of recreational uses.

Each classification has a unique set of standards which specify the type of land and water uses permitted or prohibited in order to maintain the quality of the designated river area.

The Lower Atsion segment of the Mullica River is designated as a Wild River Component to the New Jersey Wild and Scenic Rivers System. This designated river area includes the delineated flood prone area and adjacent state owned lands as presented on the Official Map of the Lower Atsion Wild River Segment. The segment begins at the Central Railroad of New Jersey bridge downstream of Route 206 near Atsion, and ends at the nature trail footbridge near Batsto Village, including a portion of the Great Swamp Segment of the Batsto Natural Area.

Upon designation of a river area into the New Jersey Wild and Scenic Rivers System, notice, including a map portraying the boundaries of the river area, is published in the New Jersey Register.

CITATIONS:

N.J.A.C. 7:7-9.44(a): http://www.nj.gov/dep/rules/rules/njac7_7.pdf

16 U.S.C. 1271-1278: <http://www.law.cornell.edu/uscode/text/16/chapter-28>

N.J.S.A. 13:8-45 *et seq.*:

<http://lis.njleg.state.nj.us/nxt/gateway.dll?f=templates&fn=default.htm&vid=Publish:10.1048/Enu>