

(b) Any activity that would adversely impact on the natural functioning of marine fish, including the reproductive, spawning and migratory patterns or species abundance or diversity of marine fish, is discouraged. In addition, any activity that would adversely impact any New Jersey based marine fisheries or access thereto is discouraged, unless it complies with (c) below.

(c) The following coastal activities are conditionally acceptable provided that the activity complies with the appropriate general water area rule(s) at N.J.A.C. 7:7E-4;

1. Construction of submerged cables and pipelines;
2. Sand and gravel mining to obtain material for beach nourishment, provided:
  - i. The beach nourishment project is in the public interest;
  - ii. There are no alternative borrow sites that would result in less impact to marine fish and fisheries;
  - iii. Any alteration of existing bathymetry within Prime Fishing areas, as defined at N.J.A.C. 7:7E-3.4, does not reduce the high fishery productivity of these areas; and
  - iv. Measures are implemented to minimize and compensate for impacts to marine fish and fisheries; and
3. The establishment of Aquaculture Development Zones in accordance with N.J.S.A. 4:27-1 et seq. and any rules developed and adopted pursuant thereto.

(d) Rationale: See the OAL Note at the beginning of this subchapter.

Amended by R.1985 d.715, effective February 3, 1986.  
See: 17 N.J.R. 1466(a), 17 N.J.R. 1797(b), 17 N.J.R. 1797(c), 18 N.J.R. 314(a).

Deleted "policy" from (a).  
Amended by R.1990 d.413, effective August 20, 1990.  
See: 22 N.J.R. 1188(a), 22 N.J.R. 2542(b).

Stylistic changes.  
Amended by R.2003 d.60, effective February 3, 2003.  
See: 34 N.J.R. 74(a), 35 N.J.R. 632(a).

Rewrote section.

### 7:7E-8.3 (Reserved)

Amended by R.1985 d.715, effective February 3, 1986.  
See: 17 N.J.R. 1466(a), 17 N.J.R. 1797(b), 17 N.J.R. 1797(c), 18 N.J.R. 314(a).

(b) deleted; recodified (b)1.-3. as (b)-(d); old (c) now (e).  
Repealed by R.1994 d.380, effective July 18, 1994 (operative July 19, 1994).

See: 26 N.J.R. 943(a), 26 N.J.R. 1561(a), 26 N.J.R. 2990(a).  
Section was "Shellfisheries".

### 7:7E-8.4 Water Quality

(a) As required by Section 307(f) of the Federal Coastal Zone Management Act (P.L. 92-583), Federal, State and local water quality requirements established under the Clean Water Act (33 U.S.C. § 1251) shall be the water resource standards of the coastal management program. These requirements include not only the minimum requirements

imposed under the Clean Water Act but also the additional requirements adopted by states, localities, and interstate agencies pursuant to Section 510 of the Clean Water Act and such statutes as the New Jersey Water Pollution Control Act. In the Delaware River Basin, the requirements include the prevailing "Basin Regulations-Water Quality" adopted by the Delaware River Basin Commission as part of its Comprehensive Plan. In the waters under the jurisdiction of the Interstate Environmental Commission in the New Jersey-New York metropolitan area, the requirements include the Interstate Environmental Commission's Water Quality Regulations. Department rules related to water pollution control and applicable throughout the entire coastal zone include, for example, the Surface Water Quality Standards (N.J.A.C. 7:9-4), the rules concerning Wastewater Discharge Requirements (N.J.A.C. 7:9-5), the Ground-Water Quality Standards (N.J.A.C. 7:9-6), and the Regulations Concerning the New Jersey Pollutant Discharge Elimination System (N.J.A.C. 7:14A).

(b) Coastal development which would violate the Federal Clean Water Act, or State laws, rules and regulations enacted or promulgated pursuant thereto, is prohibited. In accordance with N.J.A.C. 7:15 concerning the Water Quality Management Planning and Implementation process, coastal development that is inconsistent with an approved Water Quality Management (208) Plan under the New Jersey Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., is prohibited.

(c) Rationale: See the OAL Note at the beginning of this subchapter.

Amended by R.1985 d.715, effective February 3, 1986.  
See: 17 N.J.R. 1466(a), 17 N.J.R. 1797(b), 17 N.J.R. 1797(c), 18 N.J.R. 314(a).

(a): Deleted text "In the Delaware ... (see N.J.A.C. 7:9-4.5 and 6)." and added "These requirements include ... (system N.J.A.C. 7:14A)."; Old (b) deleted and new (b) substituted.  
Amended by R.1990 d.413, effective August 20, 1990.  
See: 22 N.J.R. 1188(a), 22 N.J.R. 2542(b).

Stylistic changes.  
Administrative change.  
See: 34 N.J.R. 1902(a).

### 7:7E-8.5 Surface water use

(a) Surface water is water in lakes, ponds, streams, rivers, bogs, wetlands, bays, and ocean that is visible on land.

(b) Coastal development shall demonstrate that the anticipated surface water demand of the facility will not exceed the capacity, including phased planned increases, of the local potable water supply system or reserve capacity, and that construction of the facility will not cause unacceptable surface water disturbances, such as drawdown, bottom scour, or alteration of flow patterns.

1. Coastal development shall conform with all applicable Department and, in the Delaware River Area, Delaware River Basin Commission requirements for surface water diversions.

(c) Rationale: See the OAL Note at the beginning of this subchapter.

Amended by R.1985 d.715, effective February 3, 1986.  
 See: 17 N.J.R. 1466(a), 17 N.J.R. 1797(b), 17 N.J.R. 1797(c), 18 N.J.R. 314(a).  
 "Policy:" deleted from (b).  
 Amended by R.1990 d.413, effective August 20, 1990.  
 See: 22 N.J.R. 1188(a), 22 N.J.R. 2542(b).  
 Stylistic changes.  
 Amended by R.1994 d.380, effective July 18, 1994 (operative July 19, 1994).  
 See: 26 N.J.R. 943(a), 26 N.J.R. 1561(a), 26 N.J.R. 2990(a).  
 Amended by R.2003 d.60, effective February 3, 2003.  
 See: 34 N.J.R. 74(a), 35 N.J.R. 632(a).

### 7:7E-8.6 Groundwater Use

(a) Groundwater is all water within the soil and subsurface strata that is not at the surface of the land. It includes water that is within the earth that supplies wells and springs.

(b) Coastal development shall demonstrate, to the maximum extent practicable, that the anticipated groundwater withdrawal demand of the development, alone and in conjunction with other groundwater diversions proposed or existing in the region, will not cause salinity intrusions into the groundwaters of the zone, will not degrade groundwater quality, will not significantly lower the water table or piezometric surface, or significantly decrease the base flow of adjacent water sources. Groundwater withdrawals shall not exceed the aquifer's safe yield.

1. Coastal development shall conform with all applicable DEP and, in the Delaware River Basin, Delaware River Basin Commission requirements for groundwater withdrawal and water diversion rights.

(c) Rationale: See the OAL Note at the beginning of this subchapter.

Amended by R.1985 d.715, effective February 3, 1986.  
 See: 17 N.J.R. 1466(a), 17 N.J.R. 1797(b), 17 N.J.R. 1797(c), 18 N.J.R. 314(a).  
 Added text in (b) "alone and in . . . in the region."  
 Amended by R.1990 d.413, effective August 20, 1990.  
 See: 22 N.J.R. 1188(a), 22 N.J.R. 2542(b).  
 Stylistic changes.  
 Amended by R.1994 d.380, effective July 18, 1994 (operative July 19, 1994).  
 See: 26 N.J.R. 943(a), 26 N.J.R. 1561(a), 26 N.J.R. 2990(a).

### 7:7E-8.7 Stormwater management

(a) Stormwater runoff is the flow of water on the surface of the ground, resulting from precipitation.

(b) Coastal development shall employ a site design which, to the extent feasible, minimizes the amount of impervious coverage on a project site. In addition, the development shall use the best available technology to minimize the amount of stormwater generated, minimize the rate and volume of off-site stormwater runoff, maintain existing on-site infiltration, simulate natural drainage systems and minimize the discharge of pollutants to ground or surface waters. Consistent with the provisions of the Stormwater Management rule, the overall goal of the post-construction stormwater management system design shall be the reduction from the predevelopment level of total suspended solids (TSS) and soluble contaminants in the stormwater.

1. Non-structural management practices, including, but not limited to, cluster land use development, minimum site disturbance, open space acquisition, use of sheet flow from streets and parking areas, and the protection of wetlands, steep slopes and vegetation shall be incorporated into project designs. These non-structural management practices shall be utilized, unless it is demonstrated that these practices are not feasible, from an engineering perspective, on a particular site.

2. In determining the appropriate stormwater management system design for a particular project, the existing physical site conditions must be carefully considered. Slopes, depth to seasonal high water table, soil type and texture, watershed area, and property areas are all critical to the selection of a suitable stormwater management technique or combination of techniques.

(c) Standards relevant to stormwater management system design are as follows:

1. All stormwater management systems shall be designed in accordance with this section, and shall be consistent with the Standards for Soil Erosion and Sediment Control in New Jersey (N.J.A.C. 2:90). The use of control techniques not specifically listed in this section will be evaluated on a case-by-case basis, and may be permitted in conjunction with the techniques discussed in this section. Alternative techniques may be acceptable, provided that it can be demonstrated that they satisfy the design standards of this section. Complete justification for selection of a particular stormwater management technique, including the engineering basis for exclusion of Department's preferred techniques, shall be provided as part of a complete permit application submission.

2. The following apply to development proposed in tidal areas:

i. The construction of stormwater outfalls into tidal waters may require the incorporation of a tide check or similar valve depending on the physical conditions of the site, including, but not limited to, land elevation, drainage area, bulkhead elevation, tidal elevation and 100-year flood elevation.

ii. Because tidal flooding is the result of higher than normal tides, the 100-year tidal flood elevation is not affected by development. Therefore, development activities that are located along or adjacent to tidal water bodies and segments of tidal water bodies, as specified below, are not required to comply with the flood control requirements of (c)3 below. These affected tidal waters include:

- (1) Atlantic Ocean;
- (2) All water bodies named on the U.S. Geological Survey 7.5' topographic maps as "bays," "canals," "coves," "gulfs," "harbors," "inlets," "sounds," "thorofares," and "channels," except for the portion of the Delaware River near Camden called "Back Channel";
- (3) All man-made lagoons and canals discharging into the water bodies listed in (c)2ii(2) above;
- (4) All sections of the "Intracoastal Waterway";
- (5) Arthur Kill (entire reach); Hackensack River (Newark Bay to the Pulaski Skyway); Hudson River; Manasquan River (Atlantic Ocean to Route 70); Metedeconk River (Barnegat Bay to Route 70); Navesink River (Shrewsbury River to Coopers Bridge); Passaic River (Newark Bay to the Pulaski Skyway); Raritan River (Raritan Bay to the New Jersey Turnpike); Shark River (Atlantic Ocean to confluence with Laurel Gully Brook); Shrewsbury River (Sandy Hook Bay to Seven Bridge Road); Waretown Creek (Atlantic Ocean to Route 9); Whale Brook (Raritan Bay to Route 35); Wreck Pond (Atlantic Ocean to Route 71); and
- (6) Along watercourses not specifically identified in (c)2ii(1) through (5) above, that flow into tidal water bodies listed above, the reach between the mouth and either the first bridge or culvert upstream or the point upstream where the regulatory flood (as per N.J.A.C. 7:13) exceeds the 100-year tidal elevation, whichever is closest to the mouth.

3. The following apply to flood control design:

i. If a regional stormwater management plan has been developed for the watershed, the applicant shall meet the flood control requirement of the Stormwater Management rule by conforming to the regional man-

agement plan. If no regional stormwater management plan has been developed then the applicant shall design the stormwater system so that the post-development peak runoff rate for the two year storm event is 50 percent of the pre-development peak runoff rate and the post-development peak runoff rates for the 10- and 100-year storm events are 75 percent of the pre-development peak runoff rate.

ii. The design storms used to achieve the required level of site runoff control described in (c)3i above shall be defined as either the 24-hour storm using the rainfall distribution recommended by the U.S. Department of Agriculture Soil Conservation Service, or as the total rainfall uniformly distributed throughout the critical storm duration as determined by the Modified Rational Method (T.J. Mulvaney, 1851, On the Use of Self-registering Rain and Flood Gages in Making Observations of the Relations of Rainfall and Flood Discharges in a Given Catchment, Proc. Inst. Civil Engineering, Ireland, vol. 4, pp. 18-31). A 20 acre drainage area limit shall be used for the Modified Rational Method unless otherwise approved by the Department.

iii. For the purposes of computing runoff, all lands in the site shall be assumed, prior to development, to be in good hydrologic condition if the lands are pastures, lawns or parks, with good cover if the lands are woods, or with conservation treatment if the land is cultivated, regardless of conditions existing at the time of computation. For lands to be considered cultivated, they must have been used for such purposes without interruption for a period of at least 5 years prior to the time of computation. If such use has not occurred or cannot be satisfactorily documented, woods shall be assumed to be the predeveloped land condition. In computing pre-development runoff, all significant land features, such as ponds, depressions or hedgerows which increase the ponding factors shall be accounted for.

iv. Plans and calculations shall be provided to show that the discharge will not cause erosion along the flow path between the outfall and the receiving waterbody. All stormwater discharge paths shall be stabilized in accordance with the criteria in N.J.A.C. 2.90, Standards for Soil Erosion and Sediment Control in New Jersey.

4. The following apply to water quality control design:

i. The water quality control standard shall be the maximum feasible reduction of the total suspended solids (TSS) loading after construction has been completed, up to and including the water quality design storm. At a minimum, post-construction loadings of TSS shall match the predevelopment loadings of TSS for the water quality design storm.

(d) Stormwater management is vital to protecting and improving New Jersey's water quality and control techniques, and information about their effectiveness in different situations is evolving. The Department has prepared the following hierarchy of the stormwater management techniques based on its experience to date. The goal of the hierarchy is to avoid the use of techniques that have not been successful in previous similar situations and to guide permit applicants toward techniques that are likely to be successful. At the same time, the Department is open to innovative proposals or additional information that may help better manage stormwater on a particular site or in a particular region. For each of the techniques identified in this rule, the Department has included conditions that shall be considered, but the Department recognizes that this is an evolving technology and will evaluate individual proposals on a case by case basis. The Land Use Regulation Program has assigned to the following stormwater management techniques a hierarchy of preferences for use in project design categorized as either "Conditionally Acceptable" or "Discouraged." If an applicant cannot make maximum use of "Conditionally Acceptable" stormwater management techniques, based on physical or engineering constraints, the Department encourages the use of a combination of techniques. If use of a particular technique on a property can be designed to meet a majority of that technique's normal requirements, then an applicant may still be required to use that stormwater management technique, if use of that technique on that property remains environmentally preferable to alternative techniques. In addition, none of the techniques listed in this section may be constructed "on-stream" unless the stormwater management system is part of a Departmental-approved regional stormwater plan.

1. Conditionally Acceptable: The following list represents the stormwater management techniques which may be incorporated into project design, subject to the specified conditions. The six "Conditionally Acceptable" techniques in this section are not listed in any order of preference, and shall be equally evaluated on a case-by-case basis.

i. The use of newly constructed wetlands is conditionally acceptable, provided that the following conditions are satisfied:

(1) The water depth in the wetlands is less than one foot (six inches is optimal), with the exception of the 25 percent area discussed at (d)1i(6) below;

(2) The perimeter of the water area shall be graded to form a 10 to 20 foot wide shallow bench for aquatic emergents, for at least half of the water area perimeter;

(3) The surface area of the wetland shall constitute about two to three percent of the total area of the contributing watershed;

(4) Wetland vegetation shall be commercial wetland plant stock (either live plants or dormant rhizomes), as opposed to transplants or seeding;

(5) At least two primary native or non-aggressive exotic wetlands species, which are hardy and rapid colonizers, shall be planted over about 30 percent of the total shallow water area. Each primary species shall be planted in three or four monospecific stands, with individual plants about two to three feet apart. Up to three secondary wetland species, that are not as aggressive in colonizing a pond, shall be randomly distributed in clumps around the perimeter of the wetlands;

(6) If a basin is exclusively designed to act as a shallow wetland, at least 25 percent of the total surface area of the inundated area shall be reserved for open water areas that are two or more feet deep, to provide habitat for waterfowl and marsh birds;

(7) The use of native fish stocks in constructed wetlands is encouraged, as a means to control mosquitos;

(8) The use of a clay liner in the system design may be required, depending on site conditions, in order to ensure adequate hydrology in the system; and

(9) The surface and drainage shall be sufficient so that the inflow of dry weather flow into the wetlands will be large enough to sustain sufficient water during dry periods and prevent stagnation.

ii. The use of wet ponds/retention basins is conditionally acceptable, provided that the following conditions are satisfied:

(1) The ratio of permanent pool or basin volume to the runoff volume for the water quality storm runoff shall be greater than three to one;

(2) The pool must be shallow enough to avoid thermal stratification, and deep enough to minimize algal blooms and resuspension of decomposing organics and other previously deposited materials;

(3) The pond shall be designed so that the inflow of dry weather flow either from the contributing drainage area or ground water base flow, into the wet pond will be large enough to sustain sufficient water during dry periods and prevent stagnation;

(4) Wet ponds shall be configured so as to promote maximum sedimentation;

(5) The use of native fish stocks in wet ponds is strongly encouraged, as a means to control mosquitos; and

(6) The use of a clay liner in the system design may be required, depending on site conditions, to ensure adequate hydrology in the system.

iii. The use of detention basins is conditionally acceptable, provided that the following conditions are satisfied:

(1) The water quality design for detention will require prolonged detention of the water quality design storm which is a one-year frequency 24-hour storm using the rainfall distribution recommended for New Jersey by the U.S. Department of Agriculture, Soil Conservation Service, or a storm of 1.25 inches of rainfall in two hours. Provisions shall be made for the water quality design storm to be retained and released so as to evacuate 90 percent or less in 18 hours in the case of residential developments, and 36 hours in the case of other developments. This is usually accomplished by a small outlet orifice at the lowest level of detention storage, with a large outlet or outlets above the level sufficient to control the water quality design storm. The minimum allowable orifice diameter shall be three inches. If the above detention time requirement would result in a pipe smaller than three inches in diameter, then additional methods shall be employed to remove the TSS prior to discharge into the basin. The retention time shall be considered brim-drawdown time, and therefore begin at the time of peak storage;

(2) The bottom of the basin shall be at an elevation above the seasonal high water table. Where possible, at least three feet of vertical separation between the bottom of the basin and the seasonal high water table shall be provided to promote infiltration. If the seasonal high water table is one foot or less below the bottom of the basin, then the use of constructed wetlands or a wet pond shall be considered;

(3) Native and non-aggressive exotic vegetation for use in detention basins shall be the approved species as determined by the appropriate Soil Conservation District; and

(4) All low-flow channels shall be constructed of rip-rap, grass paver blocks or similar material that will allow for the growth of vegetation. The use of underdrains below the low flow channel will be allowed if necessary to dry out the soil to allow vehicular access for maintenance, such as tractors to cut the vegetation.

iv. The use of vegetated swales is conditionally acceptable, provided that the following conditions are satisfied:

(1) The bottom of the swale shall be above the elevation of the seasonal high water table;

(2) Swales shall be used in conjunction with other stormwater management techniques (detention basins, wet ponds, constructed wetlands, underground infiltration) as internal conveyances within a stormwater collection system, receiving only overland flow (that is, as replacements for curb and gutter flow or on highway medians);

(3) The use of vegetated swales shall be limited to sites where impervious cover is present on less than five percent of the site, unless combined with other stormwater management techniques;

(4) Swales accepting concentrated discharges from pipes at the end of the stormwater system will not be accepted for water quality treatment unless there are no other viable methods available to remove the TSS prior to discharge and the length of the swale is the maximum achievable in relation to the site conditions;

(5) The swales shall be designed to provide the maximum feasible vegetation contact time ranging from five to 20 minutes where feasible, for the water quality storm;

(6) The slope of the swale shall not be less than 0.5 percent nor greater than 5 percent;

(7) Vegetated swales shall only be used where the expected velocity of flow does not exceed 1.5 feet per second;

(8) The use of rip-rap, or other stabilization material that will allow vegetative growth, in conjunction with appropriate vegetation, may be incorporated into the design of the swale, if a stable condition using vegetation alone cannot be achieved;

(9) Vegetation for use in the swales shall include native species, of sufficient height to extend above the expected elevation of the water quality design storm in the swale and shall be coordinated with the local Soil Conservation District to determine the suitability for use on the site; and

(10) In addition to the standards in (d)2i(1) through (9) above, all swales must be designed in accordance with the "Standards for Soil Erosion and Sediment Control in New Jersey," N.J.A.C. 2:90.

v. The use of infiltration basins is conditionally acceptable, provided that the following conditions are satisfied:

(1) There shall be at least two feet of vertical separation between the bottom of the proposed infiltration basin and the seasonal high water table;

(2) The soil texture shall be sand, loamy sand or sandy loam, as defined by the U.S. Department of Agriculture;

(3) No topsoil may be placed in the basin bottoms;

(4) The basin bottom shall be scarified after the basin is formed, after which no other construction within the basin may occur;

(5) All of the water quality storm shall be stored and recharged within 72 hours of the storm; and

(6) There is an adequate back-up drainage system provided, in the event that the infiltration capacity of the infiltration basin fails.

vi. The use of perforated pipe for the purpose of underground recharge of stormwater is conditionally acceptable, provided the following conditions are satisfied:

(1) The soil texture shall be sand, loamy sand or sandy loam, as defined by the U.S. Department of Agriculture;

(2) Runoff shall be filtered through a basin and/or vegetated swale, to enhance water quality, prior to discharge into a perforated pipe system;

(3) There shall be at least three feet of vertical separation between the bottom of the perforated pipe trench and the seasonal high water table;

(4) All underground recharge pipes shall be 360 degree perforated;

(5) The required pipe size shall be determined based on the peak discharge for the required post-development design storm; and

(6) In addition to the standards set forth above, all underground infiltration systems shall be designed in accordance with the "Standards for Soil Erosion and Sediment Control in New Jersey," N.J.A.C. 2:90.

2. Discouraged: The following list represents techniques which are not likely to be approved, unless it can be clearly documented that the use of other "Conditionally Acceptable" techniques has been maximized or is infeasible for engineering reasons.

i. Underground storage is not effective and cannot be utilized as a means to provide water quality treatment of stormwater. Underground storage for the purpose of controlling stormwater volume is discouraged, but may be acceptable in limited cases, provided that the following conditions are satisfied:

(1) The use of other "Conditionally Acceptable" stormwater management techniques, as described in (d)1 above, has been maximized, or can be documented as infeasible. Complete justification for the exclusion of "Conditionally Acceptable" techniques must be provided as part of the permit application submission; and

(2) Water quality treatment shall be provided prior to stormwater discharge to the underground storage system.

ii. The use of sediment traps and oil/grease separators is generally discouraged because they have proven ineffective, but they may be acceptable in limited cases, provided that the following conditions are satisfied:

(1) The use of other "Conditionally Acceptable" techniques, as described in (d)1 above, has been maximized, or can be documented as infeasible. Complete justification for the exclusion of "Conditionally Acceptable" techniques must be provided as part of the permit application submission;

(2) The use of sediment traps and oil/grease separators shall be limited to drainage areas less than 0.1 acre in size; and

(3) For drainage areas greater than 0.1 acre in size, the use of sediment traps and oil/grease separators shall be combined with other stormwater management techniques as described in this subsection.

iii. The use of porous asphalt pavement is discouraged, due to the problems associated with continued maintenance and functioning of these types of infiltration systems. As set forth in this subparagraph, the surface of porous asphalt pavement shall be cleaned regularly to avoid becoming clogged by fine grained material. Porous pavement does not include gravel, crushed shell or paver blocks (non-grout). The use of porous pavement may be acceptable in limited cases, provided that the following conditions are satisfied:

(1) The use of other "Conditionally Acceptable" techniques, as described in (d)1 above, has been maximized, or can be documented as infeasible. Complete justification for the exclusion of "Conditionally Acceptable" techniques must be provided as part of the permit application submission;

(2) The soil texture shall be sand, loamy sand or sandy loam, as defined by the U.S. Department of Agriculture;

(3) The use of porous asphalt pavement shall be limited to light traffic areas only, such as parking areas;

(4) The areas of porous asphalt pavement shall be adequately buffered, through vegetative screening, to avoid adjacent sources of aeolian sand and silt;

(5) The application shall include a strict maintenance schedule, which may be required to include, but not be limited to, vacuum sweeping on a weekly basis and high pressure water washing of the pavement on a monthly basis;

(6) The paving uses no asphalt sealers; and

(7) The use of sand during periods of snow is prohibited on porous asphalt areas.

(e) The species and quantity of native or non-invasive exotic vegetation used as part of a stormwater management system design shall be consistent with the standards and specifications of the local Soil Conservation District. In general, the use of vegetation shall be limited to low maintenance native species, shall be pest resistant, and shall be drought or water tolerant, depending on the specific application. The use of native species is encouraged for all vegetated swales.

(f) Standards relevant to stormwater management system maintenance are as follows:

1. The long-term maintenance of stormwater management systems is a critical factor in the ongoing functioning of these systems. In cases where these existing systems have failed, the most common cause is inadequate maintenance of the system. Therefore, the following maintenance requirements shall be included as part of all stormwater management plans; shall be specifically identified on the site plans and in a stormwater system maintenance report for any proposed project; and, if required by the Program, shall be recorded with the deed for the property in question:

i. All information regarding the long-term maintenance of proposed stormwater management systems shall be provided as part of the initial permit application submission;

ii. The party or parties responsible for long-term maintenance of the system shall be clearly designated, and documentation of the assumption of this responsibility shall be provided as part of the permit application submission;

iii. All maintenance records shall be written, maintained and provided to the Department upon request;

iv. Maintenance of detention basins shall include, but not be limited to, the following activities:

(1) Visual inspection of all components of the stormwater management system at least twice each year;

(2) Removal of silt, soil, litter and other debris from all catch basins, inlets and drainage pipes, on a twice-yearly basis;

(3) Maintenance, including grass cutting, and replacement (if necessary) of all landscape vegetation within the basins, at least once each year;

(4) Removal of silt from within the basins at least once each year, or more frequently if noticeable buildup occurs, for disposal in an acceptable location; and

(5) The basin bottoms shall be aerated at least once each year, and shall be scraped and replanted at least once every five years, to prevent the sealing of the basin bottom by silt deposits.

v. Maintenance of constructed wetlands shall include, but not be limited to, the following:

(1) Visual inspection of all components of the system at least once every six months;

(2) Removal of silt, litter and other debris from all catch basins, inlets and drainage pipes at least once every six months, or as required;

(3) Vegetation harvesting at least once each year; and

(4) The approval of a stormwater management system which involves newly constructed wetlands on an upland site will automatically include the issuance of a Freshwater Wetlands General Permit 1 for maintenance of the wetlands, which shall be renewed by the permittee every five years.

vi. Maintenance of wet ponds/retention basins shall include, but not be limited to, annual monitoring of water quality, dissolved oxygen, vegetative growth and fish population.

vii. Maintenance of infiltration facilities shall include, but not be limited to:

(1) Annual tilling operation to maintain infiltration capacity, with revegetation as necessary; and

(2) Sediment removal shall be followed by retilling, at a time when the facility is thoroughly dry.

viii. Maintenance of swales, including, but not limited to, removal of grass clippings and leaves, shall be performed so that the facilities remain in working order.

ix. Maintenance of underground perforated pipe infiltration systems shall include, but not be limited to:

(1) Visual inspection of all system components at least twice each year;

(2) Vacuuming of all storm sewer inlets once every six months (frequency of vacuuming may be adjusted if first year maintenance records indicate that sediment and debris accumulation is insignificant; and

(3) Reverse flushing and vacuuming shall be required if system inspections indicate significant accumulation of sediment in the pipes.

(g) Rationale: See the OAL Note at the beginning of this subchapter.

Amended by R.1985 d.715, effective February 3, 1986.

See: 17 N.J.R. 1466(a), 17 N.J.R. 1797(b), 17 N.J.R. 1797(c), 18 N.J.R. 314(a).

(c)-(h) added; old (c) now (i).

Amended by R.1990 d.413, effective August 20, 1990.

See: 22 N.J.R. 1188(a), 22 N.J.R. 2542(b).

Text added at (c)li.

Amended by R.1994 d.380, effective July 18, 1994 (operative July 19, 1994).

See: 26 N.J.R. 943(a), 26 N.J.R. 1561(a), 26 N.J.R. 2990(a).

Amended by R.1996 d.391, effective August 19, 1996.

See: 28 N.J.R. 324(a), 28 N.J.R. 3924(a).

Amended by R.2000 d.45, effective February 7, 2000.

See: 31 N.J.R. 2042(a), 32 N.J.R. 503(a).

Rewrote (d)liv(3).

**7:7E-8.8 Vegetation**

(a) Vegetation is the plant life or total plant cover that is found on a specific area, whether indigenous or introduced by humans.

(b) Coastal development shall preserve, to the maximum extent practicable, existing vegetation within a development site. Coastal development shall plant new vegetation, particularly appropriate coastal species, native to New Jersey to the maximum extent practicable.

(c) Rationale: See the OAL Note at the beginning of this subchapter.

Amended by R.1985 d.715, effective February 3, 1986.  
See: 17 N.J.R. 1466(a), 17 N.J.R. 1797(b), 17 N.J.R. 1797(c), 18 N.J.R. 314(a).

Section 8.8 was "Soil erosion and sedimentation". The section was repealed.

Amended by R.2003 d.60, effective February 3, 2003.  
See: 34 N.J.R. 74(a), 35 N.J.R. 632(a).

In (b), substituted "coastal species, native to New Jersey" for "native coastal species".

**7:7E-8.9 (Reserved)**

Amended by R.1985 d.715, effective February 3, 1986.  
See: 17 N.J.R. 1466(a), 17 N.J.R. 1797(b), 17 N.J.R. 1797(c), 18 N.J.R. 314(a).

Deleted text in (a) "Definitions and maps ... Cape May County" and inserted "which identify these areas".

Amended by R.1990 d.413, effective August 20, 1990.  
See: 22 N.J.R. 1188(a), 22 N.J.R. 2542(b).

Stylistic changes.  
Repealed by R.1994 d.380, effective July 18, 1994 (operative July 19, 1994).

See: 26 N.J.R. 943(a), 26 N.J.R. 1561(a), 26 N.J.R. 2990(a).  
Section was "Important Wildlife Habitat".

**7:7E-8.10 Air quality**

(a) The protection of air resources refers to the protection from air contaminants that injure human health, welfare or property, and the attainment and maintenance of State and Federal air quality goals and the prevention of degradation of current levels of air quality.

(b) Coastal development shall conform to all applicable State and Federal regulations, standards and guidelines and be consistent with the strategies of New Jersey's State Implementation Plan (SIP). See N.J.A.C. 7:27 and New Jersey SIP for ozone, particulate matter, sulfur dioxide, nitrogen dioxide, carbon monoxide, lead, and visibility.

(c) Coastal development shall be located and designed to take full advantage of existing or planned mass transportation infrastructures and shall be managed to promote mass transportation services, in accordance with the traffic rule, N.J.A.C. 7:7E-8.14.

(d) Rationale: See the OAL Note at the beginning of this subchapter.

Amended by R.1985 d.715, effective February 3, 1986.

See: 17 N.J.R. 1466(a), 17 N.J.R. 1797(b), 17 N.J.R. 1797(c), 18 N.J.R. 314(a).

Substantially amended.

Amended by R.1990 d.413, effective August 20, 1990.

See: 22 N.J.R. 1188(a), 22 N.J.R. 2542(b).

Text added at (b)1, 2 and (c) to require developments to monitor and mitigate impact.

Amended by R.2003 d.60, effective February 3, 2003.

See: 34 N.J.R. 74(a), 35 N.J.R. 632(a).

In (c), substituted "in accordance with the traffic rule, N.J.A.C. 7:7E-8.14" for "as required under the Traffic Policy (N.J.A.C. 7:7E-8.14(b))".

**7:7E-8.11 Public access to the waterfront**

(a) Public access to the waterfront is the ability of all members of the community at large to pass physically and visually to, from and along the ocean shore and other waterfronts.

(b) Coastal development adjacent to all coastal waters, including both natural and developed waterfront areas, shall provide permanent perpendicular and linear access to the waterfront to the maximum extent practicable, including both visual and physical access. Development that limits public access and the diversity of the waterfront experiences is discouraged.

1. All development adjacent to water shall, to the maximum extent practicable, provide, within its site boundary, a linear waterfront strip accessible to the public. If there is a linear waterfront accessway on either side of the site and the continuation of which is not feasible within the boundaries of the site, a pathway around the site connecting to the adjacent parts, or potential parts of the waterfront path system in adjacent parcels shall be provided.

2. Municipalities that do not currently provide, or have active plans to provide, access to the water will not be eligible for Green Acres or Shore Protection funding.

3. Public access must be clearly marked, provide parking where appropriate, be designed to encourage the public to take advantage of the waterfront setting, and must be barrier free where practicable.

4. A fee for access, including parking where appropriate, to or use of publicly owned waterfront facilities shall be no greater than that which is required to operate and maintain the facility and must not discriminate between residents and non-residents except that municipalities may set a fee schedule that charges up to twice as much to non-residents for use of marinas and boat launching facilities for which local funds provided 50 percent or more of the costs.

5. All establishments, including marinas and beach clubs, which control access to tidal waters shall comply with the Law Against Discrimination, N.J.S.A. 10:5-1 et seq.