314 CMR 9.00: 401 WATER QUALITY CERTIFICATION FOR DISCHARGE OF DREDGED OR FILL MATERIAL, DREDGING, AND DREDGED MATERIAL DISPOSAL IN WATERS OF THE UNITED STATES WITHIN THE COMMONWEALTH

Section

9.01: Authority, Jurisdiction, and Purpose

(1) Authority. 314 CMR 9.00 is adopted pursuant to § 27 of the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26 through 53 and establishes procedures and criteria for the administration of Section 401 of the federal Clean Water Act, 33 U.S.C. 1251, for the discharge of dredged or fill material, dredging, and dredged material disposal in waters of the United States within the Commonwealth. 314 CMR 9.07 is also adopted pursuant to M.G.L. c. 21A § 14; M.G.L. c. 21C; M.G.L c. 21E; M.G.L. 21H; M.G.L. c. 91, §§ 52 through 56; and M.G.L. c. 111, §§ 150A through 150A½ relative to upland reuse and disposal of dredged materials.

(2) Jurisdiction. 314 CMR 9.00 applies to the discharge of dredged or fill material, dredging, and dredged material disposal activities in waters of the United States within the Commonwealth which require federal licenses or permits and which are subject to state water quality certification under 33 U.S.C. 1251. The federal agency issuing a permit initially determines the scope of geographic and activity jurisdiction. (e.g. the Corps of Engineers for Section 404 permits for the discharge of dredged or fill material). 314 CMR 9.07 also applies to any dredging project and the management of dredged material within the marine boundaries and at upland locations within the Commonwealth.

(3) Purpose. 314 CMR 9.00 is promulgated by the Department to carry out its statutory obligations to certify that proposed discharges of dredged or fill material, dredging, and dredged material disposal in waters of the United States within the Commonwealth will comply with the Surface Water Quality Standards and other appropriate requirements of state law. 314 CMR 9.00 implements and supplements 314 CMR 4.00: Massachusetts Surface Water Quality Standards and is a requirement of state law under 33 U.S.C. 1251. 314 CMR 9.00 implements and supplements 314 CMR 4.00: Massachusetts Surface Water Quality Standards by, without limitation:

(a) protecting the public health and restoring and maintaining the chemical, physical, and biological integrity of the water resources of the Commonwealth by establishing requirements, standards, and procedures for the following:

1. monitoring and control of activities involving discharges of dredged or fill material, dredging, and dredged material disposal or placement;
2. the evaluation of alternatives for dredging, discharges of dredged or fill material, and dredged material disposal or placement; and
3. public involvement regarding dredging, discharges of dredged or fill material, and dredged material placement, reuse or disposal.

(b) establishing a certification program for the Department to persons seeking to discharge dredged or fill material, conduct dredging, and place, reuse or dispose of dredged material.

9.02 : Definitions

Activity. Any proposed project, scheme or plan of action which will result in a discharge of dredged or fill material subject to jurisdiction under 33 U.S.C. 1251 or dredging and dredged material management. In determining thresholds for and conducting evaluations of applications, the entirety of the activity, including likely future expansions, shall be considered and not separate phases or segments thereof. The activity includes temporary and permanent, direct and indirect, and cumulative impacts from the construction and ongoing operation of a project. The calculation of square footage shall include the total of the applicable areas proposed to be lost from the impacts of the activity, without reduction for replication or restoration.

Aggrieved Person. Any person who, because of a 401 Water Quality Certification determination by the Department, may suffer an injury in fact which is different either in kind or magnitude from that suffered by the general public and which is within the scope of interests identified in 314 CMR 9.00.

Applicant. A person proposing any activity that will result in a discharge of dredged or fill material, or a discharge from dredging or dredged material disposal in any water of the United States within the Commonwealth.

Aquatic Ecosystem. Waters of the United States within the Commonwealth, including wetlands, that serve as habitat for interrelated and interacting communities and populations of plants and animals.

Area of Critical Environmental Concern. An area designated by the Secretary pursuant to M.G.L. c. 21A, § 2(7) and 301 CMR 12.00: *Areas of Critical Environmental Concern*.

Bedrock. Solid rock exposed at the surface or overlain by unconsolidated gravel, sand, silt and/or clay. Bedrock includes weathered or saprolitic components thereof.

Best Management Practices (BMPs). For purposes of stormwater management (314 CMR 9.06(6)(a)-(g)), construction period erosion and sedimentation control practices and post construction good housekeeping practices, including but not limited to: source controls; pollution prevention measures; operating procedures and practices to control site runoff; spillage or leaks; sludge or waste disposal; or drainage from raw material storage. For purposes of post-construction stormwater management, see 314 CMR 9.02, definition of Stormwater Control Measure. For purposes of forestry management, BMPs include those described in the Massachusetts Forestry Best Management Practices Manual, dated 2013.

Bordering Vegetated Wetlands (BVW). Any land or surface area so defined by the Massachusetts Wetlands Protection Act, M.G.L. c. 131, § 40 and 310 CMR 10.55(2): *Definition, Critical Characteristics and Boundary*.

Clean Water Act. The federal statute at 33 U.S.C. 1251 which contains §§ 401 and 404.

Cold-water Fisheries. Waters in which the mean of the maximum daily temperature over a seven day period generally does not exceed 68ºF (20ºC) and, when other ecological factors are favorable (such as habitat), are capable of supporting a year round population of cold-water stenothermal aquatic life. Waters designated as cold-water fisheries by the Department in 314 CMR 4.00: *Massachusetts Surface Water Quality Standards* and water designated as cold-water fishery resources by the Division of Fisheries and Wildlife are cold-water fisheries. Waters where there is evidence based on a fish survey that a cold-water fishery and habitat existare also cold-water fisheries. Cold-water fish include but are not limited to brook trout (*Salvelinus fontanlis*), rainbow trout (*Oncorhynchus mykiss*), brown trout (*Salmo trutta*), creekchubsucker (*Erimyzon oblongus*), and fallfish (*Semotilus corporalis*).

Combined Application. An application for a 401 Water Quality Certification pursuant to 314 CMR 9.00, and an application for a Chapter 91 license, permit or other written approval for a water-dependent use pursuant to 310 CMR 9.00: *Waterways*. Notwithstanding the foregoing, a Combined Application may not serve as an application for anannual permit for a mooring, float, raft or small structure accessory to a residence in accordancewith 310 CMR 9.07: *Activities Subject to Annual Permit*, an application for a Chapter 91

license for a small structure accessory to a residence in accordance with the simplified process set forth in 310 CMR 9.10: *Simplified Procedures for Small Structures Accessory to Residences*, or the certification submitted as an application for a General License in accordance with 310 CMR 9.29: *General License Certification*.

Combined Permit. A decision issued in response to a Combined Application that serves as a 401 Water Quality Certification issued pursuant to 314 CMR 9.00 and a Chapter 91 permit, license or other written approval issued pursuant to 310 CMR9.00: *Waterways*.

9.02 : continued

Commissioner means the Commissioner of the Department.

Compacted Gravel or Soil. For purposes of stormwater management (314 CMR 9.06(6)(a)-(g)), gravel roads, gravel parking lots, dirt roads, dirt parking lots, and unvegetated areas that have historically provided or have been designed to provide a compacted surface for use by vehicles, pedestrians, bicycles and/or animals. Compacted gravel and soil do not include lawns, roadway median strips, landscaped areas, and natural turf athletic fields. The presumption that a soil is compacted can be overcome by a showing that the soil strength is less than 10 bars of pressure (approximately 145 pounds per square inch or 10^6 pascals).

Confined Aquatic Disposal (CAD). A subaqueous facility (typically a constructed cell or natural depression) into which dredged sediment is placed and then isolated from the surrounding environment.

Confined Disposal Facility (CDF). A facility created in open water or wetlands consisting of confinement walls or berms built up against or extending into existing land.

Corps of Engineers. The United States Army Corps of Engineers, New England Division.

Critical Area. Outstanding Resources Waters as designated in 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*; Special Resource Waters as designated in 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*; recharge areas for public water supplies as defined in 310 CMR 22.02: *Definitions* (Zone Is, Zone IIs and Interim Wellhead Protection Areas for ground water sources and Zone As for surface water sources); bathing beaches as defined in 105 CMR 445.000: *State Sanitary Code: Chapter* VII: *Minimum Standards for Bathing Beaches;* Cold-water Fisheries; and Shellfish Growing Areas.

Dam. Any artificial barrier placed across a watercourse that raises or has the potential to raise the level of water or which impounds and/or diverts water.

Department. The Massachusetts Department of Environmental Protection.

Discharge of Dredged or Fill Material. Any addition of dredged or fill material into, including any redeposit of dredged material within, waters of the United States within the Commonwealth. The term includes, but is not limited to:

(a) direct placement of fill, including any material used for the primary purpose of replacing with dry land or of changing the bottom elevation of a wetland or water body,
(b) runoff from a contained land or water disposal area, and
(c) the placement of pilings when it has the effect of fill material.

Disposal Site. A structure, well, pit, pond, lagoon, impoundment, ditch, landfill or other place or area, excluding ambient air or surface water, where uncontrolled oil or hazardous material has come to be located as a result of any spilling, leaking, pouring, ponding, emitting, emptying, discharging, injecting, escaping, leaching, dumping, discarding, or otherwise disposing of such oil or hazardous material and is a "disposal site" as defined in M.G.L. c. 21E.

Dredged Material. Sediment and associated materials that are moved from below the mean high tide line for coastal waters and below the high water mark for inland waters during dredging activities.

Dredged Material Disposal. The transport, placement, or deposition of sediments or other material after dredging.

Dredging. The removal or repositioning of sediment or other material from below the mean high tide line for coastal waters and below the high water mark for inland waters. Dredging shall not include activities in Salt Marsh, Bordering Vegetated Wetlands or Isolated Vegetated Wetlands.

Ecological Restoration Project. A project whose primary purpose is to restore or otherwise improve the natural capacity of a Resource Area(s) to protect and sustain the interests identified in M.G.L. c. 131, § 40, when such interests have been degraded or destroyed by anthropogenic influences. The term Ecological Restoration Project shall not include projects specifically intended to provide mitigation for the alteration of a Resource Area authorized by a Final Order or Variance issued pursuant to 310 CMR 10.00: *Wetlands Protection* or a 401 Water Quality Certification issued pursuant to 314 CMR 9.00 other than projects implemented pursuant to a US Army Corps of Engineers-approved in-lien fee program.

Effective Impervious Cover Reduction. The reduction of impervious cover for accounting purposes from the total area of impervious surface on a Project Site for purposes of stormwater management (314 CMR 9.06(6)(a)-(g)) due to the use of practices that effectively disconnect stormwater from the drainage system. Impervious cover is deducted for accounting purposes when the following practices are utilized: tree canopy enhancement, rain barrels/cisterns, and green roofs, recognizing that these practices more closely mimic pervious surfaces. The impervious cover deducted for accounting purposes is the area of tree canopy or roof top. For example, if a 200 square foot roof has 50 square feet of green roof, then 50 square feet can be deducted from the size of the area that needs to be treated by the rest of the Stormwater Management System.

Environmental Impact Report. The report described in the Massachusetts Environmental Policy Act, M.G.L. c. 30, §§ 61 through 62H and 301 CMR 11.00: *MEPA Regulations*.

9.02: continued

Environmental Monitor. The publication described in 301 CMR 11.19(1).

Environmental Protection Agency Performance Removal Curve (EPA-PRC). The pollutant removal curves located in the BMP Accounting & Tracking Tool (BATT) published by the U.S. Environmental Protection Agency (EPA). These curves show percent reduction of various pollutants based on volume of stormwater runoff that is treated. The EPA-PRC results in the BATT tool are in tabular form. Graphical representations of the EPA-PRC are published in Appendix B of the *Massachusetts Stormwater Handbook* [2023 Edition] and may not reflect any future updates to the BATT. The BATT tool and user guide can be found at: https://www.epa.gov/npdes-permits/stormwater-tools-new-england#swbmp

Graphical representations of the EPA-PRC are published in Appendix B of the Massachusetts Stormwater Handbook [2023 Edition] and may not reflect any future updates to the BATT. Environmentally Sensitive Site Design (ESSD). A suite of practices using nature-based solutions to treat stormwater while reducing or eliminating structural Stormwater Control Measures needed to meet certain Stormwater Management Standards. More specifically, ESSD means designs that incorporate Low Impact Development techniques or practices to prevent the generation of stormwater and non-point source pollution by reducingImpervious Surfaces, disconnecting stormwater sheet flow paths, and treating stormwater at its source, maximizing open space, minimizing disturbance, protecting natural features andprocesses, and/or enhancing wildlife habitat.

Environmentally Sensitive Site Design Credit (ESSD Credit). A credit for the use of ESSD that counts toward compliance with requirements to: (i) attenuate the peak discharge rate pursuant to 314 CMR 9.06(6)(a)2.; (ii) recharge a depth of stormwater in inches pursuant to 314 CMR 9.06(6)(a)3.; or (iii) remove a percent of Total Suspended Solids and Total Phosphorus pursuant to 314 CMR 9.06(6)(a)4 and 314 CMR 9.06(6)(a)7.

Fastland. Land above mean high water formed by the placement of dredged or fill material into waters of the United States within the Commonwealth.

Final Order of Conditions. The Order of Conditions issued by the Commissioner of the Department after an adjudicatory hearing or, if no request for a hearing has been filed, the Superseding Order or, if no request for a Superseding Order has been filed, the Order of Conditions issued under M.G.L. c. 131, § 40 (the Wetlands Protection Act) and 310 CMR 10.05: *Procedures*.

Ground Water. Water below the land surface in a saturated zone including perched ground water.

High Water Mark. The present arithmetic mean of high water heights observed over a one-yearperiod using the best available data as determined by the Department.

Highway Specific Considerations. Design specifications and other measures that MassDOT may use to comply with or be presumed to comply with the Stormwater Management Standards. The Highway Specific Considerations include provisions in the *Massachusetts Stormwater Handbook* [2023 Edition] for use of linear SCMs for pollutant removal, recharge, and peak discharge rate reduction; specifications for deep sump catch basin inlet grates and hoods; and an operation and maintenance approach that will be presumed to meet the Stormwater Management Standards. Highway Specific Considerations also include use of the Macro-Approach and the Watershed-scale Accounting Method, as applicable, in order to meet the Stormwater Management Standards.

Hydrologic Unit Code 10 (HUC 10). A fifth level sub-watershed delineated by the U.S. Geological Survey using a national standard hierarchical system based on surface hydrologic features.

Hydrologic Unit Code 12 (HUC 12). A sixth level sub-watershed delineated by the U.S. Geological Survey using a national standard hierarchical system based on surface hydrologic features.

Illicit Discharge. Discharge that is not entirely comprised of stormwater, except pursuant to a National Pollutant Discharge Elimination System (NPDES) permit (other than the NPDES

permit for discharges from a municipal separate storm sewer) and discharges resulting from fire fighting activities Notwithstanding the foregoing, an illicit discharge does not include discharges from the following activities or facilities: firefighting, water line flushing, landscape irrigation, uncontaminated ground water, potable water sources, foundation drains, air conditioning condensation, footing drains, individual resident car washing, flows from riparian habitats and wetlands, dechlorinated waterfrom swimming pools, water used for street washing and water used to clean residential buildings without detergents.

Impervious Surface. For purposes of stormwater management (314 CMR 9.06(6)(a)-(g)), any surface that prevents or significantly impedes the infiltration of water into the underlying soil, including, but not limited to, artificial turf, Compacted Gravel or Soil, roads, building rooftops, solar arrays, parking lots, Public Shared Use Paths, bicycle paths, and sidewalks paved with concrete, asphalt, or other similar materials. For purposes of this definition, porous pavements are Impervious Surfaces for the purpose of sizing the depth of the underlying reservoir course to meet recharge and Total Suspended Solids/Total Phosphorus removal requirements pursuant to 314 CMR 9.06(6)(a)3. and 4.

Impracticable. For use in 314 CMR 9.06(6)(a)-(g) for purposes of stormwater management, impossible in practice to do or carry out based solely on physical constraints.

Improvement Dredging. Any dredging in an area which has not been previously dredged or which extends the original dredged width, depth, length or otherwise alters the original boundaries of a previously dredged area.

Improvement of an Existing Public Roadway. For purposes of Redevelopment stormwater management in 314 CMR 9.06(6)(a)7., activities undertaken to a roadway that increase the total impervious area by less than a single lane width. This can include activities such as widening roadways (less than a single lane), adding shoulders, correcting substandard intersections, expansion or making other structural changes to an existing drainage system, and installing new sidewalks. Improvement of an Existing Public Roadway may include New Stormwater Discharges.

Innovative Technology. Technology that has not been commercially deployed or is in limited deployment, and includes, but is not limited to, energy technology that obtains energy from the ocean, waterway, or conditions associated with the ocean or waterway, other forms of renewable energy technology.

Interim Wellhead Protection Area (IWPA). As defined in 310 CMR 22.00: *Drinking Water*.

Intermediate Facility. A site or location that is to be utilized, on either a project-specific temporary or permanent basis, to manage dredged material prior to its ultimate reuse or disposal (*e.g.*, barge unloading, stockpiling or storage, dewatering, processing or treatment, truck or train loading or unloading).

Isolated Vegetated Wetlands. Vegetated areas subject to jurisdiction under 33 U.S.C. 1251 that are not bordering vegetated wetlands subject to jurisdiction under M.G.L. c. 131, § 40 and 310 CMR 10.55(2): *Definition, Critical Characteristics and Boundary*.

Land Uses with Higher Potential Pollutant Loads. Land uses identified in 310 CMR 22.20B(2) and 22.20C(2)(a) through (k) and (m), 22.21(2)(a)1. through 8., and (b)1. through 6.; areas within a site that are the location of activities that are subject to an individual National Pollutant Discharge Elimination System (NPDES) Permit or the NPDES Multi-Sector General Permit; auto fueling facilities (gas stations); exterior fleet storage areas; exterior vehicle service and equipment cleaning areas; marinas and boatyards; parking lots with high intensity use; confined disposal facilities, and disposal sites.

9.02: continued

Lot. An area of land in one ownership, with definite boundaries.

Low Impact Development (LID). Innovative stormwater management systems that are modeled after natural hydrologic features. LID manages rainfall at the source using uniformly distributed, decentralized, micro-scale controls. LID uses small, cost-effective landscape features located at the lot level. LID takes the form of techniques (*e.g.*, porous pavement) or practices (*e.g.*, reduced front yard setback).

Macro-Approach. A compliance approach for new development or Redevelopment of highways where Stormwater Control Measures are implemented within the Project Locus rather than the Project Site.

Maintenance Dredging. Dredging in accordance with a valid license or permit in any previously authorized dredged area, which does not extend the originally dredged depth, width or length.

Maintenance Log. For purposes of 314 CMR 9.06(6)(a)9., a written log listing each Stormwater Management System maintenance activity and long-term pollution prevention plan measure that has occurred, with the corresponding date that the maintenance and pollution prevention measure occurred.

Maintenance of an Existing Public Roadway. Activities undertaken to a roadway that do not increase impervious area. Such activities include, but are not limited to, grinding, scarifying, repaving, resurfacing, replacing existing drainage pipes, or resetting curbs or catch basin frames. Maintenance of an Existing Public Roadway does not include widening, installing new shoulders, installing new sidewalks, or creating New Stormwater Discharges from existing roads.

Massachusetts Environmental Policy Act or MEPA. M.G.L. c. 30, §§ 61 through 62H and301 CMR 11.00: *MEPA Regulations*.*Massachusetts Erosion and Sediment Control Guidelines*. The *Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas* originally prepared by the Franklin, Hampden, and Hampshire Conservation Districts in 1997, for the Massachusetts Executive Office of Environmental Affairs State Commission for Conservation of Soil, Water and Related Resources, the Massachusetts Department of Environmental Protection, the U.S. Environmental Protection Agency, Region I, and the Natural Resources Conservation Service, United States Department of Agriculture, and reprinted in May 2003. The *Guidelines* can be found in Appendix C of the *Massachusetts Stormwater Handbook* [2023 Edition].

Massachusetts Oil and Hazardous Materials Release Prevention and Response Act or M.G.L. c. 21E. M.G.L. c. 21E, §§ 1 through 18 and implementing regulations at 310 CMR 40.0000: *Massachusetts Contingency Plan*.

Massachusetts River and Stream Crossing Standards or the Stream Crossing Standards. The standards developed by the River and Stream Continuity Partnership as corrected on March 8, 2012.

Maximum Extent Practicable. For purposes of stormwater management, 314 CMR 9.06(6)(a) - (g), as defined at 314 CMR 9.06(6)(e). For all other purposes, Maximum Extent Practicable means that all reasonable efforts are made to meet each requirement; a complete written evaluation is conducted analyzing alternatives to fully comply with each requirement; and if the analysis demonstrates full compliance with the requirement cannot be achieved, the highest practicable level of compliance is proposed.

Mean High Tide Line. The line where the arithmetic mean of the high water heights observed over a specific 19-year metonic cycle (the National Tidal Datum Epoch) meets the shore and shall be determined using hydrographic survey data of the National Ocean Survey of the U.S. Department of Commerce.

Mixing Zone. A mixing zone is the limited volume of water allowing for the initial dilution of a discharge, *e.g.*, from dredging or disposal in waters.

National Environmental Policy Act or NEPA. 42 U.S.C. §§ 4321 through 4345.

Near. For purposes of stormwater management (314 CMR 9.06(6)(a)(6)), where a stormwater discharge has a strong likelihood of causing a significant impact to a Critical Area, taking into account site-specific factors. Issuing authorities may use their discretion to determine if a discharge is Near a Critical Area except that Near always includes any untreated or increased stormwater discharge within a Buffer Zone, Riverfront Area or Bordering Land Subject to Flooding.

New Stormwater Conveyance. A new, confined and discrete manmade component of a Stormwater Management System, which directs stormwater run-off to wetland Resource Areas, and includes but is not limited to pipes, pipe outlets (outfalls), curbs, gutters, scuppers, storm drains, constructed channels, swales, tunnels, aqueducts, or inlets to storm drains, pipes or catch basins.

New Stormwater Discharge. New or increased runoff directed to a Resource Area from new Impervious Surface or through a New Stormwater Conveyance. Increased runoff means additional stormwater volume or higher discharge rate than currently exists. Stormwater discharges can be from public or privately owned Impervious Surfaces or conveyances.

Non-invasive Sampling Activities. Sampling activities, which include the collection of water, soil or sediment samples by techniques (*e.g.*, hand-held augers) that will not significantly disturb existing wetland resources areas as defined in M.G.L. c. 131, § 40 (the Massachusetts Wetland Protection Act and 33 U.S.C. § 1257 (the Federal Clean Water Act).

Notice of Intent. The document described in 310 CMR 10.05(4): *Notices of Intent*.

NRCS. The Natural Resources Conservation Service, an agency of the United States Department of Agriculture, formerly known as the Soil Conservation Service (SCS).

Offsite Mitigation for Redevelopment. For purposes of 314 CMR 9.06(6)(a)7., a compliance approach where Stormwater Control Measures are implemented at a location other than the Project Site to meet the recharge and pollutant removal requirements of 314 CMR 9.06(6)(a)7. and 11.

Oil and Hazardous Material (OHM). The definitions included in 310 CMR 40.0000: *Massachusetts Contingency Plan*.

Outstanding Resource Water. A surface water of the Commonwealth so designated in 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*.

Person. Any agency or political subdivision of the Commonwealth or the federal government, public or private corporation or authority, individual, partnership or association, or other entity, including any officer of a public or private agency or organization.

Practicable. Available and capable of being done after taking into consideration costs, existing

technology, proposed use, logistics and potential adverse consequences (*e.g.*, degradation of Rare Species Habitat, increased flood impacts to the built environment) in light of the overall project purposes and is permittable under existing federal and state statutes and regulations.

Pretreatment Practices. Structural and nonstructural practices used as part of a treatment train, designed, operated, and maintained to remove an initial amount of a pollutant such as Total Suspended Solids from stormwater runoff prior to discharge to a Terminal Treatment Practice. Examples of Pretreatment Practices are deep sump catch basins and proprietary manufactured separators (structural) and street cleaning (nonstructural). Pretreatment Practices are not Terminal Treatment Practices.

Project Locus. The lot on which an applicant proposes to perform an activity subject to regulation under 314 CMR 9.00.

Project Site. The area within the Project Locus that comprises the limit of work for activities, including but not limited to, the dredging, excavating, filling, grading, the erection, reconstruction or expansion of a building or structure, the driving of pilings, the construction or improvement of roads or other ways, and the installation of drainage, stormwater treatment, Environmentally Sensitive Site Design practices, sewage systems, and water systems.

Public Shared Use Paths. Accessible paved and unpaved paths restricted solely to pedestrian and non-motorized vehicle travel (with the exception of wheelchairs, other power-driven mobility devices by individuals with a mobility disability, electric bicycles and electric scooters, emergency vehicles, and vehicles performing periodic maintenance). They are located either on public property or on private property pursuant to an easement held by a public agency. Accessible means a surface that complies with the Americans with Disabilities Act regulations, 28 CFR Part 35 and Part 36. Public Shared Use Paths do not include sidewalks intended solely for pedestrian use and do not include parking areas for motorized vehicles.

Qualified Environmental Professional (QEP). An individual who is knowledgeable about the procedures and methods for characterizing dredged material and contaminated media; is familiar with Massachusetts and federal regulations applicable to the management of such materials; performs or oversees the management of sediment and/or contaminated soil as an integral part of his or her professional duties; and is professionally licensed or certified in a discipline related to environmental assessment (*i.e.*, engineering, geology, or soil science) by the state or a recognized professional organization.

Qualifying Pervious Areas. For purposes of stormwater management (314 CMR 9.06(6)(a)-(g)), fully stabilized natural or vegetated areas where stormwater discharge is directed via sheet flow and not as a point source discharge.

Rare Species. Those vertebrate and invertebrate animal species officially listed as endangered, threatened, or of special concern by the Massachusetts Division of Fisheries and Wildlife under 321 CMR 10.60: *Introduction*.

Rare Species Habitat. Areas identified as habitat for Rare, Endangered, or species of special concern by the Massachusetts Division of Fisheries and Wildlife's Natural Heritage Program as published in the Massachusetts Natural Heritage Atlas at the time an application is submitted.

Real Estate Subdivision. The division of a tract of land into two or more lots, including division where approval is required and where approval is not required under the Subdivision Control Law, M.G.L. c. 41, §§ 81K through 81GG.

Redevelopment. For purposes of the Stormwater Management Standards as provided in 314 CMR 9.06(6)(a) through (g), Redevelopment is defined to include the following projects:

(a) Improvement of an Existing Public Roadway;

(b) development, rehabilitation, expansion and phased projects on previously developed sites provided the Redevelopment results in no net increase in impervious area; and

(c) remedial projects specifically designed to provide improved stormwater management such as projects to separate storm drains and sanitary sewers.

Resource Area. Any of the areas specified in 310 CMR 10.25 through 10.36 and 310 CMR 10.54 through 10.58. It is used synonymously with Area Subject to Protection Under M.G.L. c. 131, § 40, each one of which is enumerated in 310 CMR 10.02(1): *Areas Subject to*

Protection Under M.G.L. c. 131, § 40.

Restoration Order of Conditions. The Order of Conditions issued pursuant to 310 CMR 10.14: *Restoration Order of Conditions* for a project that meets the eligibility criteria set forthin 310 CMR 10.13: *Eligibility Criteria for Restoration Order of Conditions*.

Retrofit Projects. For purposes of stormwater management (314 CMR 9.06(6)(a)-(g)), projects that make site specific changes designed solely to improve water quality, reduce peak discharge rates, increase recharge, or reduce or eliminate combined sewer overflows (CSO). Retrofit Projects are not new development or maintenance.

Salt Marsh. A coastal wetland as defined in M.G.L. c. 131, § 40 and 310 CMR 10.32(2): *Salt Marsh*.

SARA 312 Generator. A facility that is required by the Emergency Planning and Community right to Know Act (EPCRA) also known as Title III of the Superfund Amendments and Reauthorization Act of 1989 (SARA Title III) to submit an inventory of the location of hazardous chemicals which are located at the site.

Saturated Hydraulic Conductivity Test. A field test to determine the rate at which water percolates through saturated soils to transmit a volume of water per unit time in the vertical direction in a defined area as determined by one of the following methods: constant head Guelph permeameter - ASTM D5126-16e1 Method; Falling head permeameter – ASTM D5126-16e1 Method; Double ring permeameter or infiltrometer - ASTM D3385-18, D5093-15e1, D5126-16e1 Methods; or constant head Amoozemeter or Amoozegar permeameter. A Title 5 percolation test as defined at 314 CMR 15.002,, is not an acceptable Saturated Hydraulic Conductivity Test for purposes of stormwater management (314 CMR 9.06(6)(a)-(g)).

Seasonal High Groundwater Elevation. For purposes of stormwater management (314 CMR 9.06(6)(a)-(g)), the highest elevation of soil or rock that is seasonally or permanently saturated. The elevation shall be determined based on:

a. Soil color using the Munsell system, the abundance, size and contrast of redoximorphic features, if present; or
b. When redoximorphic features are not present, the following methods may be utilized:
    1. observation of actual water table during times of annual high water table (typically March or April) compared to long term USGS observation wells located within the same major river basin; or
    2. use of the USGS Frimpter method which is described in the following publications: 1) Frimpter, M.H. “Probable High Ground-Water Levels in Massachusetts,” Open File Report 80-1205, USGS; 2) Frimpter, M.H. and G.C. Belfit, 2006, “Estimation of High Ground-Water Levels for Construction and Land Use Planning – A Cape Cod, Massachusetts, Example,” Barnstable, MA, Cape Cod Commission Technical Bulletin 92-001, updated 2006; 3) Barclay, J.R., and Mullaney, J.R., 2020, “Updating Data Inputs, Assessing Trends, and Evaluating a Method to Estimate Probable High Groundwater Levels in Selected Areas of Massachusetts,” U.S. Geological Survey Scientific Investigations Report 2020–5036; 45 p.; and 4) Barclay, J.R., and Mullaney, J.R., 2020, “Data on Well Characteristics and Well-Pair Characteristics for Estimating High Groundwater Levels in Selected Areas of Massachusetts: U.S. Geological Survey data release.”

Secretary. The Secretary of the Executive Office of Energy and Environmental Affairs.

Sediment. For the purposes of dredging means all inorganic or organic matter, including detritus, situated under tidal waters below the mean high water line as defined in 310 CMR 10.23: *Additional Definitions for 310 CMR 10.21 through 10.37*; and for inland waters below the upper boundary of a bank, as defined in 310 CMR 10.54(2): *Definition, Critical Characteristics and Boundary*.

Setback. The distance of a structure, Impervious Surface or other developed feature from a wetland Resource Area or other feature (such as Critical Area, Water Supply Well, or septic system).

Shellfish Growing Area. Land under the ocean, tidal flats, rocky intertidal shores and marshes and land under salt ponds when any such land contains shellfish. Shellfish Growing Areas include

land that has been identified and shown on a map published by the Division of Marine Fisheriesas a Shellfish Growing Area including any area identified on such map as an area where shellfishharvesting is prohibited. Shellfish Growing Areas shall also include land designated by the Department in 314 CMR 4.00: *Massachusetts Surface Water Quality Standards* as suitable forshellfish harvesting with or without depuration. In addition, Shellfish Growing Areas shall includeShellfish Growing Areas designated by the local shellfish constable as suitable for shellfishing based on the density of shellfish, the size of the area, and the historical and current importanceof the area for recreational and commercial shellfishing.

Single and Complete Project. The total project proposed or accomplished by one or morepersons, including any multiphased activity.

9.02 : continued

Soil Absorption System. A system of trenches, galleries, chambers, pits, field(s) or bed(s) together with effluent distribution lines and aggregate which receives effluent from a septic tank or treatment system.

Special Aquatic Sites means those site identified in Subpart E of 40 CFR Part 230, 404(b)(1), including sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs, and riffle and pool complexes. They are geographical areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region.

Special Resource Water. A surface water of the Commonwealth so designated in 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*.

Stormwater Control Measure (SCM). Structural or nonstructural technique for managing stormwater to prevent or reduce point or non-point source pollutants from entering surface waters or ground waters. A Nonstructural Stormwater Control Measure includes but is not limited to source control, Environmentally Sensitive Site Design, some Low Impact Development techniques or practices, street cleaning and pollution prevention measures. A structural Stormwater Control Measure includes but is not limited to a basin, dischargeoutlet, swale, rain garden, filter, some Low Impact Development techniques or practices, or other stormwater treatment practice or measure either alone or in combination, including without limitation, any overflow pipe, conduit or weir control structure that:

(a) is not naturally occurring;
(b) is not designed as a wetland replication area; and
(c) has been designed, constructed and installed for the purpose of collecting, storing, discharging, recharging or treating stormwater.

Stormwater Management Standards. The regulations specified at 314 CMR 9.06(6)(a)1. to 11.

Stormwater Management System. System for conveying, collecting, storing, discharging, recharging or treating stormwater on-site including Stormwater Control Measures or Best Management Practices andany pipes and outlets intended to transport and discharge stormwater to the ground water, a surface water or a municipal separate storm sewer system.

Substitute EPA-PRC. A percent removal of Total Suspended Solids and Total Phosphorus that has been approved by MassDEP in instances where EPA has not listed an EPA-PRC in the BATT Tool. The percent removal is credited to SCMs pursuant to 310 CMR 10.05(6)(k)4 and 310 CMR 10.05(6)(k)7. All Substitute EPA-PRC approved by MassDEP are listed in Table 1 Crosswalk.

Surface Waters. All waters other than groundwaters within the jurisdiction of the Commonwealth, including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, wetlands, coastal waters, and vernal pools.

Terminal Treatment Practices. Structural and nonstructural practices used as part of a treatment train, designed, operated, and maintained to remove pollutants such as Total Suspended Solids and Total Phosphorus from stormwater runoff prior to discharge to a Resource Area or Waters of the Commonwealth. Examples of Terminal Treatment Practices are infiltration basins and constructed stormwater treatment wetlands (structural) and Environmental Sensitive Site Design (nonstructural). Terminal Treatment Practices are not Pretreatment Practices.

Test Project. Installation or deployment of water dependent Innovative Technology *in situ* forpurposes of evaluating its performance and environmental effects.

Time of Year Restriction means the date ranges established by the Massachusetts Department of Fish and Game, Division of Fisheries and Wildlife and Division of Marine Fisheries, to provide protection to resources including inland streams, rare species habitat and marine

resources in Massachusetts during times when there is a higher risk of known or anticipated significant lethal, sublethal, or behavioral impacts.

Total Impervious Area Reduction. The reduction of impervious area on a Project Site. For example, if 200 square feet of parking lot pavement is replaced with a vegetated surface then 200 square feet can be deducted from the size of the area that needs to be treated by the Stormwater Management System.

Total Maximum Daily Load (TMDL). The sum of a receiving water's individual waste load allocations and load allocations and natural background, which, together with a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality, represents the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards in all seasons. TMDLs are developed by MassDEP to meet the Surface Water Quality Standards at 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*, and are approved by EPA. Alternative TMDLs are pathways approved by MassDEP to attain and maintain Surface Water Quality Standards that may not be numerical.

Total Phosphorus (TP). The total phosphate content in stormwater including all particulate and dissolved phosphorus, in both organic and inorganic forms.

Total Suspended Solids (TSS). Solids suspended in stormwater, determined using EPA Method 160.2 (1971).

USDA. The United States Department of Agriculture.

USGS. The United States Geological Survey, within the United States Department of the Interior.

Vernal Pool. A waterbody that has been certified by the Massachusetts Division of Fisheries and Wildlife as a vernal pool. In the event of a conflict of opinion or the lack of a clear boundary delineation certified by the Division of Fisheries and Wildlife or the Department, the applicant may submit an opinion certified by a registered professional engineer, supported by engineering calculations, as to the boundary of the vernal pool. The maximum extent of the waterbody shall be based upon the total volume of runoff from the drainage area contributing to the vernal pool and shall be further based upon a design storm of 2.6 inches of precipitation in 24 hours.

Water-dependent. Uses and facilities which require direct access to, or location in, marine, tidal or inland waters and which therefore cannot be located away from those waters, including any uses and facilities defined as water-dependent in 310 CMR 9.00: *Waterways*.

Waters of the Commonwealth. All waters within the Commonwealth, including without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, wetlands, coastal waters and ground waters.

Waters of the United States within the Commonwealth. Navigable or interstate waters and their tributaries, adjacent wetlands, and other waters or wetlands within the borders of the Commonwealth where the use, degradation, or destruction could affect interstate or foreign commerce as determined by the Corps of Engineers. Bordering and isolated vegetated wetlands and land under water are waters of the United States within the Commonwealth when they meet the federal jurisdictional requirements defined at 33 CFR 328 through 329.

Water Supply Well. Any public or private source of groundwater used for human consumption, including but not limited to, a source approved for such use by the local board of health or the Department.

Watershed. Any region or area measured in a horizontal topographic divide which directs water runoff from precipitation, normally by gravity, into a stream, a body of impounded surface water, or a coastal embayment, or any region or area measured by a groundwater divide which directs groundwater into a stream, a body of impounded surface water, or a coastal embayment.

Watershed-scale Accounting Method. A Highway Specific Consideration under which MassDOT Redevelopment may comply with the Stormwater Management Standards by implementing Stormwater Control Measures within the HUC 10, rather than or in addition to meeting them on the Project Site. The Watershed-scale Accounting Method may be used only when the Macro-Approach and Offsite Mitigation for Redevelopment are not practicable. Under the Watershed-scale Accounting Method, Stormwater Control Measures must be implemented within a three-year period from issuance of the final Water Quality Certification.

Wetlands Protection Act. M.G.L. c. 131, § 40 and 310 CMR 10.00: *Wetlands Protection*.

Zone I. The protective radius required around a public water supply well or wellfield, as defined in 310 CMR 22.00: *Drinking Water*.

Zone II. That area of an aquifer which contributes water to a well under the most severe pumping and recharge conditions that can realistically be anticipated, as defined in 310 CMR 22.00: *Drinking Water*.

Zone A. As defined in 310 CMR 22.00: *Drinking Water*, (a) the land area between the surface water source and the upper boundary of the bank; (b) the land area within a 400 foot lateral distance from the upper boundary of the bank of a Class A surface water used as a drinking water source, as defined in 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*; and (c) the land area within a 200 foot lateral distance from the upper boundary of the bank of a tributary or associated surface water body.

9.02: continued

401 Water Quality Certification or Certification. The document issued by the Department to the applicant and the appropriate federal agency under 33 U.S.C. 1251, M.G.L. c. 21, § 27 and 314 CMR 9.00 certifying, conditioning, or denying an activity.

9.03: Activities Not Requiring an Application

The Department certifies the activities identified in 314 CMR 9.03(1) through (10) and therefore they do not require an individual 401 Water Quality Certification application provided the specified conditions are met. For activities meeting these specified conditions, the Final Order of Conditions or final Restoration Order of Conditions issued pursuant to 310 CMR 10.00: Wetlands Protection, as applicable, serves as the Water Quality Certification for the project.

(1) Less than 5000 Sq. Ft. with an Order of Conditions. Activities conducted in compliance with the Wetlands Protection Act and receiving a Final Order of Conditions which meets all applicable performance standards under 310 CMR 10.00: *Wetlands Protection*, provided that:

(a) the Final Order of Conditions permits work that results in the loss of up to 5,000 square feet cumulatively of bordering and isolated vegetated wetlands and land under water. Both bordering and isolated vegetated wetlands must be delineated on the plans contained in the Notice of Intent and described on a form prescribed by the Department; and

(b) the Final Order of Conditions includes conditions requiring at least 1:1 replacement of bordering vegetated wetlands under 310 CMR 10.55(4)(b);

(c) if applicable, the activity conforms to the stream crossing provisions of 310 CMR 10.24(10) and 10.53(8); and

(d) the proposed work is not subject to 314 CMR 9.04.

(2) Beach Nourishment. Beach nourishment activities with a Final Order of Conditions issued under M.G.L. c. 131, § 40.

(3) Dredging Less than 100 C.Y. Dredging and dredged material disposal of less than 100 cubic yards, provided that a Final Order of Conditions has been issued and the proposed work is not subject to 314 CMR 9.04 and the work is not subject to an individual 404 permit by the Corps of Engineers. Dredged sediment generated from such activities shall be managed in accordance with the provisions of 314 CMR 9.07(9) through (11) and may be used for beach nourishment activities or reuse within the shoreline under a Final Order of Conditions issued under M.G.L. c. 131, § 40.

(4) Agriculture or Aquaculture Exempt under M.G.L. c. 131, § 40 (the Wetlands Protection Act). Normal maintenance and improvement of land in agricultural or aquacultural use that is exempt from the Wetlands Protection Act, as defined and performed in accordance with 310 CMR 10.04: *Definitions*: Agriculture including the alternatives analysis, as applicable, performed by the USDA Natural Resources Conservation Service (formerly Soil Conservation Service) or 310 CMR 10.04: *Definitions*: Agriculture. The provisions of 314 CMR 9.04 do not apply.

(5) Less than 5000 Sq. Ft. of Isolated Vegetated Wetlands. Any activity in an area not subject to jurisdiction of the Wetlands Protection Act which is subject to 33 U.S.C. 1251 (*i.e.*, isolated vegetated wetlands) which will result in the loss of up to 5000 square feet cumulatively of bordering and isolated vegetated wetlands and land under water, provided there is no discharge of dredged or fill material to any Rare Species Habitat or to any Outstanding Resource Water.

(6) Planning and Design Activities. Activities that are temporary in nature, have negligible impacts, and are necessary for planning and design purposes such as the installation of monitoring wells, exploratory borings, sediment sampling, and surveying. The applicant shall notify the Department and conservation commission at least ten days prior to commencing the activity. Notification is not required if a valid, unexpired Final Negative Determination of Applicability has been issued for the work as described 310 CMR 10.05(3)(b). Notification shall include a description of the activity, the location of the proposed activity and measures to be taken to avoid or minimize impacts. The site shall be substantially restored to its condition prior to the activity.

The Department will notify the persons to whom an Order of Conditions is issued not later than ten business days of its receipt by the Department that based on the information available to the

Department the criteria of 314 CMR 9.03 have not been met. If the impacts to Resource Areas, as defined in the Massachusetts Wetland Protection Act and the Federal Clean Water Act, or the project size increases from the description filed with the Notice of Intent, or there are any inaccuracies therein, the applicant must notify the Department in writing and request a determination that the criteria of 314 CMR 9.03 have been met before the activity begins.

(7) Test Projects. A Test Project authorized by and conducted in accordance with a final Order of Conditions provided that the project: does not require an individual Section 404 permit from the U.S. Army Corps of Engineers; is not located in Outstanding Resource Waters; and does not exceed any of the impact thresholds set forth in 314 CMR 9.03(1), (3), and (5).

The Department will notify the persons to whom an Order of Conditions is issued not later than ten business days of its receipt by the Department if, based on the information available to the Department, the project is not exempt from the requirement to submit an individual 401 Water Quality Certification application pursuant to 314 CMR 9.03(7). If the applicant discovers that the project or its impacts on Resource Areas and waters of the United States within the Commonwealth differ from the project and impacts presented in the Notice of Intent, the applicant shall notify the Department in writing within 72 hours of such discovery and request a written determination from the Department as to whether the project is exempt from the requirement to submit an individual 401 Water Quality Certification pursuant to 314 CMR 9.03(7). In that event, the applicant shall not commence the project until s/he obtains a written determination from the Department that the project is exempt from the requirement to obtain an individual 401 Water Quality Certification pursuant to 314 CMR 9.03(7) or an individual 401 Water Quality Certification authorizing the project.

(8) Ecological Restoration Project. Discharge of dredged or fill material in association with an Ecological Restoration Project provided that the discharge of dredged or fill material is in compliance with a valid final Restoration Order of Conditions issued pursuant to 310 CMR 10.11: *Actions Required Before Submitting a Notice of Intent for an Ecological Restoration Project* through 310 CMR 10.14: *Restoration Order of Conditions followed by a Certificate of Compliance*, unless the project involves dredging or dredged material disposal as described in 314 CMR 9.04(12). Ecological Restoration Projects that include the activities described in 314 CMR 9.04(12) require a 401 Water Quality Certification application pursuant to 314 CMR 9.04.

(9) Scientific Research Project. Discharge of dredged or fill material in association with a scientific research project provided that the discharge of dredged or fill material is in compliance with an Order of Conditions issued pursuant to 310 CMR 10.05(12).

(10) Public Shared Use Paths of the minimum practical width within the footprint of a railbed, or the minor improvement, repair and/or replacement of an existing Public Shared Use Path within the footprint of the rail bed carried out in accordance with 310 CMR 10.24(7)(c)8. or 310 CMR 10.53(3)(u).

9.04: Activities Requiring an Application

The activities identified in 314 CMR 9.04(1) through (13) require a 401 Water Quality Certification application and are subject to the Criteria for Evaluation of Applications for the Discharge of Dredged or Fill Material in 314 CMR 9.06 and/or 9.07:

(1) More than 5000 Sq. Ft. Any activity in an area subject to 310 CMR 10.00: *Wetlands Protection* which is also subject to 33 U.S.C. 1251, *et seq*. and will result in the loss of more than 5000 square feet cumulatively of bordering and isolated vegetated wetlands and land under water, except for an Ecological Restoration Project not requiring a Water Quality Certification application pursuant to 314 CMR 9.03(8).

(2) Outstanding Resource Waters. Dredging in, or any activity resulting in any discharge of dredged or fill material to any Outstanding Resource Water.

(3) Real Estate Subdivision - Any discharge of dredged or fill material associated with the creation of a real estate subdivision, unless there is a valid, unexpired Final Order of Conditions, followed by a Certificate of Compliance, and a recorded deed restriction providing notice to subsequent purchasers limiting the amount of fill for the single and complete project to less than 5000 square feet cumulatively of bordering and/or isolated vegetated wetlands and land under water and the discharge is not to an Outstanding Resource Water. Real estate subdivisions include divisions where approval is required and where approval is not required under the Subdivision Control Law, M.G.L. c. 41, §§ 81K through 81GG. Discharges of dredged or fill material to create the real estate subdivision include but are not limited to discharges resulting

from the construction of roads, drainage, sidewalks, sewer systems, buildings, septic systems, wells, and accessory structures.

(4) Activities Exempt under M.G.L. c. 131, § 40. Any activity not subject to M.G.L. c. 131, § 40 and which is subject to 33 U.S.C. 1251 and will result in any discharge of dredged or fill material to bordering vegetated wetlands or land under water.

(5) Routine Maintenance. Routine maintenance of existing channels, such as mosquito control projects or road drainage maintenance, that will result in the annual loss of more than 5000 square feet cumulatively of bordering and isolated vegetated wetland and land under water will be evaluated under the criteria of 314 CMR 9.06. A single application may be submitted and a single certification may be issued for repeated routine maintenance activities on an annual or multi-year basis not to exceed five years.

(6) More than 5000 Sq. Ft. of Isolated Vegetated Wetlands. Any activity in an area not subject to jurisdiction of M.G.L. c. 131, § 40 but which is subject to 33 U.S.C. 1251 (*i.e.*, isolated vegetated wetlands) and which will result in the loss of more than 5000 square feet cumulatively of bordering and isolated vegetated wetlands and land under water.

(7) Rare Species Habitat in Isolated Vegetated Wetlands. Any activity resulting in the discharge of dredged or fill material to an isolated vegetated wetland that has been identified as Rare Species Habitat.

(8) Salt Marsh. Any activity resulting in the discharge of dredged or fill material in any salt marsh, except for an Ecological Restoration Project not requiring a Water Quality Certification application pursuant to 314 CMR 9.03(8).

(9) Individual 404 Permit. Any activity subject to an individual Section 404 permit by the Corps of Engineers, except for an Ecological Restoration Project not requiring a Water Quality Certification application pursuant to 314 CMR 9.03(8).

(10) Agricultural Limited Project. Agricultural work, not exempt under M.G.L. c. 131, § 40, referenced in and performed in accordance with 310 CMR 10.53(5). Provided the activity does not result in any discharge of dredged or fill material to an Outstanding Resource Water, such work will be presumed to meet the criteria of 314 CMR 9.06 where a comparable alternatives analysis is performed or approved by the USDA Natural Resources Conservation Service and included in the Notice of Intent.

(11) Discretionary Authority. Any activity where the Department invokes discretionary authority to require an application based on cumulative effects of multiphased activities, cumulative effects of dredging, or from the discharge of dredged or fill material to bordering or isolated vegetated wetlands or land under water, or other impacts which may jeopardize water quality. The Department will issue a written notice of and statement of reasons for its determination to invoke this discretionary authority not later than ten business days after its receipt of an Order of Conditions.

(12) Dredging 100 Cubic Yards or More. Any dredging or dredged material re-use or disposal of 100 cubic yards or greater.

(13) Any activity not listed in 314 CMR 9.03 or 9.04 is an activity requiring an application subject to the requirements of 314 CMR 9.05 and 9.06 through 9.13 as applicable.

9.05: Submission of an Application

(1) Application Requirements. An applicant for 401 Water Quality Certification shall submit an application on the forms in the 401 Water Quality Certification application package currently available from the Department. If the project is a water-dependent use project that requires a Chapter 91 license, permit or other written approval pursuant to 310 CMR 9.00: *Waterways*, the applicant may submit a Combined Application. The application shall be prepared in accordance with instructions contained in the Department's application and submitted to the appropriate address(es). Failure to complete an application where required, to provide additional information by the requested deadline when an application is deficient, to provide public notice in the form specified, to notify other agencies where required, or to submit information for a single and complete project shall be grounds for denial of certification. The applicant has the burden of demonstrating that the criteria of 314 CMR 9.06, 9.07, or 9.08 have been met.

For projects permitted under 314 CMR 9.07, the applicant may request in writing a pre-application meeting with the Department. The Department has the discretion to grant such a request.

Demonstration or Pilot Projects. Any person who wishes to establish a demonstration or pilot sediment management project, related to activities within the jurisdiction of the 401 Certification, for the purpose of demonstrating the effectiveness and utility of an alternative or innovative management technology shall submit an application to the Department for a demonstration project permit/certification, notify the applicable board(s) of health and conservation commission(s) of the municipality(ies) where the project is proposed and consult with appropriate wildlife and/or fisheries agencies. The Department shall not approve a demonstration or pilot project unless it determines that the project will not cause or contribute to significant pollution of the air, water, or other natural resources of the Commonwealth; the project has merit and seeks to improve operational aspects of dredged materials management, produce significant cost savings, or serves to increase protection of human health and the environment; and, the applicant has provided adequate proof of financial assurance. The Department may approve a demonstration or pilot project for a limited time, with renewal contingent upon satisfactorily achieving project objectives and adequately protecting public health, safety, and the environment.

(2) Fee and Review Schedule. The fee and regulatory review schedule for actions by the Department in the review of a 401 Water Quality Certification application are set forth in 310 CMR 4.00: *Timely Action Schedule and Fee Provisions.*

(3) Public Notice of an Application: A public notice of an application for 401 Water Quality Certification shall be published by the applicant within ten days of submitting an application at the applicant's expense in a newspaper of general circulation within the area of the proposed activity, including, as applicable, the area where the following activities will occur: the discharge of dredged or fill material, the dredging activity, the location of any intermediate facilities, the site of any upland or in-water sediment placement. The public notice shall contain:

(a) the name and address of the applicant and property owner;
(b) the location of the proposed activity;
(c) a brief description of the activity;
(d) the name and address of the person from whom additional information may be obtained;
(e) the 21 day time period within which the public may comment;
(f) the office and address within the Department to which comments should be addressed; and
(g) a statement that any ten persons of the Commonwealth, any aggrieved person, or any governmental body or private organization with a mandate to protect the environment that has submitted written comments may also appeal the Department's Certification and that failure to submit comments before the end of the public comment period may result in the waiver of any right to an adjudicatory hearing.

A person submitting an application for 401 Water Quality Certification who is also subject to M.G.L. c. 131, § 40, 310 CMR 10.00: Wetlands Protection and/or M.G.L. c. 91 and 310 CMR 9.00: Waterway may provide joint public notice by appending to the applicable notice required by 310 CMR 10.05(4): Notices of Intent and/or 310 CMR 9.13: Public Notice and Participation Requirements a statement that an application for 401 Water Quality Certification is pending before the Department, provided that the joint notice contains the information in 314 CMR 9.05(3)(a) through (g). A person may provide joint public notice even if the application is not a Combined Application. A person submitting

an application for a dredging project shall concurrently file a copy of this public notice with the Board(s) of Health in the community(ies) in which each of the dredging or dredged material management activities, sites and/or facilities is to be located. A person submitting an application for the discharge of dredged or fill material to, or dredging within, an Outstanding Resource Water shall also publish a notice in the Environmental Monitor, and the 21 day time period within which the public may comment shall extend from the later of the date of publication of the newspaper or Environmental Monitor notice. All written comments providing relevant information shall be considered.

(4) The Department will conduct a site visit, providing notice to the applicant, the conservation commission of the city or town where the activity will occur, and any persons or groups which have submitted written comments prior to the date the site visit is scheduled. If the Department has previously inspected the site prior to issuing a Superseding Order of Conditions, receives no public comments in writing, or otherwise determines a site visit is not necessary or useful to its evaluation, it shall set forth its reasons in writing.

9.06: Criteria for the Evaluation of Applications for Discharge of Dredged or Fill Material

(1) No discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge that would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.

(a) Where the activity associated with the discharge does not require access or proximity to or siting within wetlands and waters to fulfill its basic purpose (i.e., is not "water dependent"), practicable alternatives that do not involve the discharge of dredged or fill material are presumed to be available, unless clearly demonstrated otherwise. In addition, all practicable alternatives to the proposed activity, which do not involve a discharge, are presumed to have less adverse impact on the aquatic ecosystem unless clearly demonstrated otherwise.

(b) The scope of alternatives to be considered shall be commensurate with the scale and purpose of the proposed activity, the impacts of the proposed activity, and the classification, designation and existing uses of the affected wetlands and waters in the Surface Water Quality Standards at 314 CMR 4.00: Massachusetts Surface Water Quality Standards.

1. For activities associated with access for one dwelling unit, the area under consideration for practicable alternatives will be limited to the lot. For activities associated with the creation of a real estate subdivision, the area under consideration will be limited to the subdivided lots and any adjacent lots the applicant formerly owned, presently owns, or can reasonably obtain an ownership interest.

2. For any activity resulting in the loss of more than one acre cumulatively of bordering and isolated vegetated wetlands and land under water, alternative sites not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed will be considered by the Department, but only if such information is required in an Environmental Impact Report or in an alternatives analysis conducted by the Corps of Engineers for an individuals 404 permit.

(c) For discharges of dredged or fill material associated with an Ecological Restoration Project, the alternatives analysis shall include a consideration of the following:

1. Any time of year restrictions or other conditions recommended by the Division of Marine Fisheries for coastal waters and the Division of Fisheries and Wildlife for inland waters.

2. The condition of the existing ecosystem and the wetlands and waters contained therein.

3. The magnitude and significance of the benefits of the Ecological Restoration Project in improving the capacity of the affected ecosystem and the waters and wetlands contained therein to sustain their designated uses, as identified in 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*.

4. The magnitude and significance of the impacts of the Ecological Restoration Project on the existing ecosystem and the wetlands and waters contained therein and the extent to which the applicant will:
a. avoid adverse impacts to the existing ecosystem that can be avoided without impeding the achievement of the project's ecological restoration goals;
b. minimize adverse impacts to the existing ecosystem that are necessary to the achievement of the project's ecological restoration goals; and
c. utilize best management practices such as erosion and siltation controls and proper construction sequencing to avoid and minimize adverse construction impacts to the existing ecosystem and the waters and wetlands contained therein.

(2) No discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will avoid and minimize potential adverse impacts to the bordering or isolated vegetated wetlands, land under water or ocean, or the intertidal zone. However, no such project may be permitted which will have any adverse effect on specified habitat sites of Rare Species.

(a) For discharges to bordering or isolated vegetated wetlands, such steps shall include a minimum of 1:1 restoration or replication. The Department may waive the requirement for 1:1 restoration or replication for Ecological Restoration Projects and for maintenance or repair (but not replacement, reconstruction, or substantial enlargement) of existing and lawfully located dams.

(b) An applicant proposing a discharge of dredged or fill material in connection with the construction, repair, replacement or expansion of a stream crossing shall be presumed to be taking appropriate and practicable steps to avoid and minimize potential adverse impacts to the bordering or isolated vegetated wetlands, land under water or ocean or the intertidal zone provided that:

1. The applicant demonstrates to the satisfaction of the Department that he or she has developed and will implement an operation and maintenance plan to ensure that the crossing will function as designed;
2. If the project includes the construction of a new non-tidal crossing, the applicant demonstrates to the satisfaction of the Department that the crossing complies with the Massachusetts Stream Crossing Standards;
3. If the project includes the construction of a new tidal crossing, the applicant demonstrates to the satisfaction of the Department that the project is designed in a manner that does not restrict tidal flow over the full natural tidal range;
4. If the project includes work on an existing non-tidal crossing, the applicant demonstrates to the satisfaction of the Department that the crossing complies with the Massachusetts Stream Crossing Standards to the Maximum Extent Practicable; and
5. If the project includes work on an existing tidal crossing that restricts tidal flow, the applicant demonstrates to the satisfaction of the Department that tidal restriction will be eliminated to the Maximum Extent Practicable.

This presumption may be overcome by credible evidence from a competent source showing that based on site considerations, impact on the resource, or cost considerations, compliance with all applicable provisions of 314 CMR 9.06(2)(b)1. through 5. is not practicable.

(3) Except as otherwise provided in 314 CMR 9.06(3), no discharge of dredged or fill material shall be permitted to Outstanding Resource Waters. The discharge of dredged or fill material to an Outstanding Resource Water in association with an activity listed in 314 CMR 9.06(3)(a) through (k) may be permitted without requiring the applicant to obtain a variance in accordance with 314 CMR 9.08 provided that the Department determines that the discharge of dredged or fill material may be permitted in accordance with 314 CMR 9.06(1), (2), (4), (5), and (7), and is not identified in 314 CMR 9.06(4) as a discharge of dredged or fill material that requires a variance.

(a) Projects conducted or approved by public or private water suppliers in the performance of their responsibilities and duties to protect the quality of the water in the watersheds, or to maintain, operate and improve the waterworks system, provided that such projects are implemented in accordance with applicable federal and state laws, regulations, and requirements;

(b) Ecological Restoration Projects;

(c) Maintenance, repair, replacement or reconstruction but not substantial enlargement of existing and lawfully located structures or facilities including buildings, roads, railways, utilities, dams, and coastal engineering structures;

(d) Where the designation was for public water supply purposes, activities subject to the comprehensive public water supply protection program enacted by the legislature for the Ware, Quabbin, and Wachusett watersheds in the Watershed Protection Act, St. 1992 c. 36 and M.G.L. c. 92. Any activity for which an applicant has been granted a variance by the Department of Conservation and Recreation pursuant to 350 CMR 11.06(3): *Variances* or for a discharge of dredged or fill material into a tributary that the Department of Conservation and Recreation has exempted pursuant to 350 CMR 11.06(4): *Exemption of a Tributary.* A span or other bridging technique shall be presumed to be a practicable alternative. This presumption may be overcome by credible evidence from a competent source. The Department will consult with the Department of Conservation and Recreation in reviewing the alternatives.

(e) Access for the construction of dwelling units and associated utilities:

1. For the loss of more than 5,000 square feet cumulatively of bordering and isolated vegetated wetland and land under water for access to any number of dwelling units, a span or other bridging technique is presumed to be practicable.

2. For the loss of less than 5,000 square feet cumulatively of bordering and isolated vegetated wetland and land under water for access to any number of dwelling units, an embedded culvert, span or other bridging technique is presumed to be practicable.

These presumptions may be overcome upon a showing of credible evidence from a competent source that based on site considerations, impact on the resource, or cost considerations, a span or other bridging technique is or is not practicable.

(f) Construction of utilities, public or private roadways or other access except as specified in 314 CMR 9.06(3)(e), railroad track and rail beds and facilities directly related to their operation. These activities require use of a span or other bridging technique, unless the Department determines, based on information contained in a Department 401 alternatives analysis, a Corps of Engineers Section 404 alternatives analysis, or an Environmental Impact Report and the Secretary's certificate, that this alternative is not practicable, would not have less adverse impact on the aquatic ecosystem, or would have other significant adverse environmental consequences.

(g) Operations to clean up, prevent, assess, monitor, contain, or mitigate releases of hazardous materials or wastes, including landfill closures and activities undertaken in accordance with M.G.L. c. 21E and 310 CMR 40.0000*: Massachusetts Contingency Plan.*

(h) Projects which have received a variance under 310 CMR 10.05(10): *Variance* provided that consideration has been given to the Outstanding Resource Water designation in the variance analysis.

(i) Access to land in agricultural or aquacultural use, of a nature suitable to the use as defined in 310 CMR 10.04: *Definitions*.

(j) Operations to clean up, prevent, assess, monitor, contain, or mitigate releases of oil or hazardous materials or wastes, including landfill closures under M.G.L. c. 111, § 150A through 150A½ and 310 CMR 16.00: *Site Assignment Regulations for Solid Waste Facilities* and 19.000: *Solid Waste Management* and activities undertaken in accordance with M.G.L. c. 21E and 310 CMR 40.0000*: Massachusetts Contingency Plan.*

(k) Maintenance, repair, replacement, or reconstruction of structures or facilities for water-dependent uses. In addition, the enlargement of structures or facilities for water-dependent uses is allowed only in following limited circumstances:

1. in an Outstanding Resource Water that is designated for purposes other than a public water supply; or

2. in an Outstanding Resource Water that is located within an Area of Critical Environmental Concern provided that if there is a resource management plan for the ACEC that has been adopted by the municipality and approved by the Secretary, the Department determines that: the enlargement of structures or facilities is consistent with said plan and the fill or structure associated with the enlargement activity is located entirely within an area of previously filled tidelands.

9.06: continued

(4) The discharge of dredged or fill material into wetlands or Waters of the Commonwealth within 400 feet of the high water mark of a Class A surface water (exclusive of tributaries) requires a variance issued by the Department pursuant to 314 CMR 9.08 unless the discharge ofdredged or fill material is associated with an activity conducted by a public water system under310 CMR 22.00: *Drinking Water* or by a public agency or authority for the maintenance or repair of existing public roads or railways. The discharge of dredged or fill material to a vernalpool certified by the Division of Fisheries and Wildlife requires a variance pursuant to 314 CMR9.08.

(5) No discharge of dredged or fill material is permitted for the impoundment or detention of stormwater for purposes of controlling sedimentation or other pollutant attenuation. Discharge of dredged or fill material may be permitted to manage stormwater for flood control purposes only where there is no practicable alternative and provided that best management practices are implemented to prevent sedimentation or other pollution. No discharge of dredged or fill material is permitted for the impoundment or detention of stormwater in Outstanding Resource Waters for any purpose.

(6) (a) Except as otherwise provided in 314 CMR 9.06, stormwater runoff from all industrial, commercial, institutional, office, residential and transportation projects and all point and non-point source stormwater discharges from said projects, shall be provided with Environmentally Sensitive Site Design (ESSD) and Low Impact Development (LID) techniques or practices to attenuate pollutants unless Impracticable, and a Setback from the receiving water and wetlands. Other types of Stormwater Control Measures (SCMs) and related stormwater Best Management Practices (BMPs) shall only be used to meet those portions of the Stormwater Management Standards that cannot be fully met by ESSD or LID to attenuate pollutants and by providing a Setback. ESSD, LID, SCMs, and related stormwater BMPs will be presumed to meet the Stormwater Management Standards if they are designed, constructed and maintained to the specifications listed in the *Massachusetts Stormwater Handbook* [2023 Edition] and its appendices (*e.g.*, *SCM Specifications* – Appendix A, *Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas* – Appendix C). All components of ESSD, LID, SCMs, BMPs, and stormwater discharges shall be set back from waters and wetlands in accordance with 314 CMR 9.06(g), however, a Setback reduced in accordance with the *Massachusetts Stormwater Handbook* [2023 Edition] will be presumed to meet the Setback requirement. Soil evaluation must be performed to meet 314 CMR 9.06(6)(a)2. through 4, and 7. The soil evaluation shall include a site investigation and shall consist of identifying the U.S. NRCS Soil Series, NRCS soil texture, the Hydrologic Soil Group, depth to the Seasonal High Groundwater Elevation, and the saturated hydraulic conductivity of the soil. A soil evaluation conducted in accordance with the *Massachusetts Stormwater Handbook* [2023 Edition] shall be presumed to meet this requirement. MassDOT may use the Highway Specific Considerations, including the Macro-Approach and the Watershed-scale Accounting Method, to comply or be presumed to comply with applicable Stormwater Management Standards. MassDOT will be presumed to comply with appliable Stormwater Management Standards when applicable Highway Specific Considerations are implemented in accordance with Section 5.7 of the *Massachusetts Stormwater Handbook* [2023 Edition]. MassDOT-funded municipal roadway projects where MassDOT has approved the design may use the Special Considerations except for the operation and maintenance approach and the Watershed-scale Accounting Method. All projects shall be designed, constructed and operated to comply with the following Stormwater Management Standards:

1. No New Stormwater Conveyances (*e.g.*, outfalls) may discharge untreated stormwater directly to or cause erosion or scour to wetlands or Waters of the Commonwealth.

2. Stormwater Management Systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates. This standard is to be met on the Project Site at each point of discharge. The post-development peak discharge rate must be designed to be equal to or less than the pre-development rate from the 2-year, 10-year, and 100-year 24-hour storms to avoid an increase in peak discharge rate from the Project Site. The peak discharge rate computations must be conducted using the NRCS Technical Release WinTR20 Project Formulation Method (Version 3.20 or later versions are permissible) or WinTR55 Small Watershed Hydrology Method (Version 1.00.10 or later versions are permissible). When calculating the peak discharge rate, the upper confidence of the precipitation frequencies listed in the National Oceanic and Atmospheric Administration (NOAA)

Atlas 14 Volume 10 (Version 3.0 or later versions are permissible) multiplied by 0.9 shall be utilized. The NOAA Type C or D storm distribution (NRCS Engineering Field Handbook Chapter 2, National Engineering Handbook Part 650, Massachusetts Supplement for the Implementation of NOAA Atlas 14, Volume 10 Rainfall Data, dated June 17, 2016) or a customized storm distribution developed using the NOAA Atlas 14 upper confidence multiplied by 0.9 shall be utilized. This Standard maybe waived for discharges to coastal Waters of the United States within the Commonwealth unless the discharge is to a coastal Water of the United States within the Commonwealth located up-gradient of an existing or proposed stream crossing, culvert or bridge.

3. Loss of annual recharge to ground water shall be avoided or minimized through the use of infiltration measures including ESSD, LID techniques or practices, SCMs, BMPs, and good operation and maintenance practices. To meet this recharge standard, ESSD or LID techniques or practices must be used unless demonstrated to be Impracticable based on a written alternatives analysis to be submitted with the application. Other types of SCMs shall only be used to meet those portions of the recharge standard that cannot be fully met by ESSD and LID. ESSD, LID and, where necessary, SCMs, should be dispersed throughout a Project Site. This recharge standard must be met on the Project Site. At a minimum, the annual recharge from the post-development site shall approximate the annual recharge from pre-development conditions. This standard is met when underlying soils have a saturated hydraulic conductivity rate of at least 0.01 inch/hour, the recharge practice is designed to infiltrate the runoff into the ground fully within 72 hours, and a volume of at least one inch of runoff multiplied by the impervious area is designed to infiltrate the runoff into the ground. Mounding analysis is required when the vertical separation from the bottom of an exfiltration system to seasonal high groundwater is less than four feet and the recharge system is proposed to attenuate the peak discharge from a 10-year or higher 24-hour storm (*e.g.*, 10-year, 25-year, 50-year, or 100-year 24-hour storm). The mounding analysis must demonstrate that the Seasonal High Groundwater does not elevate into the infiltration practice, rise above the ground surface, or elevate the water surface of any Resource Areas over a 72-hour period. The 1-inch volume of infiltration is presumed to be provided when the recharge system is sized using one or more of the following methods described in the *Massachusetts Stormwater Handbook* [2023 Edition]:

a. The Static Method;
b. The Simple Dynamic or Dynamic Field Methods using in-situ Saturated Hydraulic Conductivity Tests;
c. The Continuous Simulation Method using the in-situ Saturated Hydraulic Conductivity Tests where the static volume designed to be infiltrated represents at least 70% of the average annual precipitation at the three closest weather stations for which annual precipitation data is available through the NOAA National Centers for Environmental Information (formerly the National Climatic Data Center) within the same major river basin using a weighted average method, for the climate normal period 1991-2020, demonstrated through continuous simulation by using an automated spreadsheet provided by MassDEP in; the *Massachusetts Stormwater Handbook* [2023 Edition]; or
d. When Project Sites are composed entirely of NRCS Hydrologic Soil Group D Soil, bedrock within 2-feet of the existing ground surface, hazardous waste sites or solid waste landfill closures, the standard is met when oneinch to the Maximum Extent Practicable is provided.

4. Stormwater management systems for new development shall be designed to remove 90% of the average annual post-construction load of Total Suspended Solids (TSS) and 60% of the average annual post-construction load of Total Phosphorus (TP). To meet this TSS/TP removal standard, ESSD or LID must be used unless demonstrated to be Impracticable based on a written alternatives analysis to be submitted with the application. Other SCMs and related stormwater Best Management Practices shall only be used to meet those portions of this TSS/TP removal standard that cannot be fully met by ESSD and LID. ESSD, LID and where necessary SCMs and related stormwater Best Management Practices should be dispersed throughout a Project Site. A long-term pollution prevention plan (LTPPP) shall be prepared to eliminate or reduce the generation of runoff of TSS, TP, pathogens, nutrients and other contaminants. This standard is to be met on the Project Site. This standard is met when:

a. Suitable practices for source control and pollution prevention are identified in a

LTPPP that is submitted with the application and thereafter are implemented and maintained;

b. The LTPPP incorporates source reduction measures to eliminate or reduce the generation and runoff of TSS, TP, pathogens, nutrients and other contaminants such as polycyclic aromatic hydrocarbons. Furthermore, the LTPPP must address measures to properly dispose of snow outside of Waters of the Commonwealth. Source reductions and pollution prevention measures to be incorporated into the LTPPP include, but are not limited to, restricting fertilizer use, properly covering any solid waste stored exterior to a building so it does not comingle with runoff, prohibiting use of coal tar-based pavement sealants which contain polycyclic aromatic hydrocarbons, restricting use of winter sand application to paved surfaces, and prohibiting use of oil application to unpaved roads and automotive parking areas. To reduce further nutrient loading, the LTPPP shall prohibit fertilizers that contain phosphorus, in accordance with 330 CMR 31.00: *Plant Nutrient Application Requirements for Agricultural Land and Non-Agricultural Turf and Lawns*; and shall prohibit fertilizers to be applied when precipitation greater than 0.5 inches is forecast in the next 48 hours. The LTPPP shall be presumed to meet these requirements when it includes the source control and pollution prevention measures specified in this regulation and the additional measures listed in the *Massachusetts Stormwater Handbook* [2023 Edition].

c. ESSD, LID techniques or practices, SCMs and related stormwater BMPs are sized:

i. to capture the volume required to meet the 90% TSS and 60% TP pollutant reduction standard using the EPA-PRC or other Substitute EPA-PRC approved by MassDEP listed in 314 CMR 9.06(6)(a)4. Table 1 MassDEP Crosswalk;

ii. to capture the required one-inch water quality volume when discharges are Near or to Critical Areas; from Land Uses with Higher Potential Pollutant Loads; or when no EPA-PRC or other Substitute EPA-PRC approved by MassDEP is listed in 314 CMR 9.06(6)(a)4. Table 1 MassDEP Crosswalk, except for ESSD; or

iii. to meet the TSS and TP pollutant removal reduction standard for the ESSD Credits listed in 314 CMR 9.06(6)(a)4. Table 1 MassDEP Crosswalk. The credits are presumed to be provided when the ESSD is sized in accordance with the dimensional specifications of the *Massachusetts Stormwater Handbook* [2023 Edition] Appendix A.

d. Pretreatment for TSS removal is provided in accordance with 314 CMR 9.06(6)(a)4.d.i. through iii. Use of EPA-PRC requires that pretreatment be provided, however, the credit for the pretreatment is already incorporated into the EPA-PRC. Therefore, pretreatment must be provided but no additional TSS pretreatment credits shall be applied to meet the 90% TSS removal for those SCMs that have an EPA-PRC. For other SCMs listed in 314 CMR 9.06(6)(a)4. Table 1 MassDEP Crosswalk that require pretreatment, TSS removal credit shall be provided and applied to meet the 90% TSS removal.

i. At least 44% TSS pretreatment is required prior to discharge to an infiltration structure if the discharge is: within a Zone II or Interim Wellhead Protection Area; Near an Outstanding Resource Water or Special Resource Water; Near a Shellfish Growing Area, Cold-water Fishery, or bathing beach; from Land Uses with Higher Potential Pollutant Loads; or within an area with a rapid infiltration rate (greater than 2.4 inches per hour).

ii. At least 25% TSS pretreatment is required for all other discharges to structural treatment SCMs, including infiltration structures, except for rooftop runoff directed to a dry well or roof dripline filters.

iii. Metals pretreatment is provided for runoff from metal roofs located within Zone II or the Interim Wellhead Protection Area of a public water supply and/or an industrial site by a SCM capable of removing metals, such as a sand filter, organic filter or filtering bioretention area. Metal roofs are galvanized steel or copper, regardless if they are coated or painted.

e. When a proprietary manufactured separator, proprietary media filter, or other treatment practice is proposed for which no TSS or TP removal credit has been designated at 314

CMR 9.06(6)(a)4. Table 1 MassDEP Crosswalk, written documentation shall be submitted to the Issuing Authority with the application substantiating the removal percentages being claimed and that the structure will treat the 1-inch water quality volume through submission of a computation converting the 1-inch water quality volume to a peak flow rate. The peak flow rate for the computations must be based on the upper confidence of the precipitation frequencies listed in the National Oceanic and Atmospheric Administration (NOAA) Atlas 14 Volume 10 (Version 3.0 or later versions are permissible) multiplied by 0.9. Computations based on the U.S. Weather Bureau Technical Paper 40 are not acceptable. Storm distribution must be based on National Oceanic and Atmospheric Administration (NOAA) Atlas 14 Volume 10 (Version 3.0 or later versions are permissible) multiplied by 0.9. Use of the NRCS Type III storm is not acceptable to meet the computation requirement. Computations converting the 1-inch water quality volume to a peak flow rate that are performed in accordance with Appendix D of the Massachusetts Stormwater Handbook [2023 Edition] will be presumed to demonstrate that the structure can treat the 1-inch water quality volume. The Department shall review the written documentation on a case-by-case basis and determine whether the use of the proposed Stormwater Control Measure will meet or partially meet the TSS and TP pollutant requirements specified at 314 CMR 9.06(6)(a)4. Or 9.06(6)(a)7.c., and for proprietary manufactured pretreatment practices, 314 CMR 9.06(6)(a)4.d. However, proprietary manufactured practices designated as pretreatment practices shall only be used for pretreatment. Said proprietary manufactured practices shall be sized to treat at least the first 1 inch of runoff multiplied by the impervious area. The written documentation to be submitted to the Department shall consist of scientific studies that adhere to the *Technology Acceptance Reciprocity Partnership (TARP) Protocol for Stormwater Best Management Practices Demonstrations,* August 2001, updated July 2003 published on MassDEP's website

(https://www.mass.gov/files/documents/2016/08/rd/swprotoc.pdf). All studies must be conducted in the field. Laboratory studies are not acceptable. The procedures specified in the *Massachusetts Stormwater Handbook* [2023 Edition] for review of Proprietary Manufactured Stormwater Control Measures provide guidance to Issuing Authorities about how to review scientific studies conducted pursuant to the *Technology Acceptance Reciprocity Partnership (TARP) Protocol for Stormwater Best Management Practices Demonstrations.*

314 CMR 9.06(6)(a)4. Table 1 MassDEP Crosswalk (Note that all EPA Performance Removal Curves (EPA-PRCs) referenced in this Table can be found at the EPA-PRC BATT Tool and Appendix B of the *Massachusetts Stormwater Handbook* [2023 Edition]. See 314 CMR 9.02: Definitions). In certain cases where an EPA-PRC is not available, MassDEP has approved Substitute EPA-PRCs in 314 CMR 9.06(6)(a)4 and 310 CMR 10.05(6)(k)7., Table 1 MassDEP Crosswalk (below). The credits are presumed to be provided when the SCM or ESSD is sized in accordance with the dimensional specifications of the *Massachusetts Stormwater Handbook* [2023 Edition] Appendix A.

MassDEP SCM	Credit Method	Does SCM Require Pretreatment?	Pollutant Removal Credit	
			TSS	TP
Non-Structural				
Street Cleaning	MassDEP	No	3% to 16% depending on type of cleaner and frequency	2% to 7% depending on type of cleaner and frequency
ESSD Credits				
Credit 1: General ESSD	MassDEP	No	90%	60%
Credit 2: Solar ESSD	MassDEP	No	90%	60%
Credit 3: Roof Runoff to Qualifying Pervious Area for Hydrologic Soil Group A, B and C soils	EPA-PRC	No	90% when Impervious Area (IA) to Pervious (PA) Ratio for HSG A is 1:1 to 1:50; for HSG B is 1:1 to 1:50; and HSG C 1:2 to 1:50.	60% when Impervious Area (IA) to Pervious (PA) Ratio for HSG A is 1:1 to 1:50; for HSG B is 1:1 to 1:50; and HSG C 1:2 to 1:50.
Credit 4: Road Runoff to Qualifying Pervious Area for Hydrologic Soil Group A, B and C soils	EPA-PRC	No	90% when Impervious Area (IA) to Pervious (PA) Ratio for HSG	60% when Impervious Area (IA) to Pervious (PA) Ratio for HSG A is 1:1 to 1:50; for HSG B is

MassDEP SCM	Credit Method	Does SCM Require Pretreatment?	Pollutant Removal Credit	
			TSS	TP
			A is 1:1 to 1:50; for HSG B is 1:1 to 1:50; and HSG C 1:2 to 1:50.	1:1 to 1:50; and HSG C 1:2 to 1:50.
Credit 5: Tree Canopy	MassDEP	No	Effective Impervious Cover Reduction	Effective Impervious Cover Reduction
Credit 6: Reduce Impervious Area	MassDEP	No	Total Impervious Area Reduction	Total Impervious Area Reduction
Credit 7: Buffer Zone Improvement	EPA-PRC	No	90% when Impervious Area (IA) to Pervious (PA) Ratio for HSG A is 1:1 to 1:50; for HSG B is 1:1 to 1:50; and HSG C 1:2 to 1:50.	60% when Impervious Area (IA) to Pervious (PA) Ratio for HSG A is 1:1 to 1:50; for HSG B is 1:1 to 1:50; and HSG C 1:2 to 1:50.
Structural Pretreatment				
Deep Sump Catch Basin	MassDEP	No	25%	No Treatment
Oil/Grit Separator	MassDEP	No	25%	No Treatment
Proprietary Manufactured Separator	MassDEP	No	44% minimum, higher credit at discretion of Department in accordance with 314 CMR 9.06(6)(a)4.e.	No Treatment minimum, higher credit at discretion of Department in accordance with 314 CMR 9.06(6)(a)4.e.
Sediment Forebay	MassDEP	No	25%	No Treatment
Vegetated Filter Strip (≥ 25-ft length)	MassDEP	No	25%	No Treatment
Vegetated Filter Strip (≥ 50-ft length)	MassDEP	No	45%	No Treatment
Pea Gravel Diaphragm	MassDEP	No	45% Pretreatment, only used for Bioretention Areas, Infiltration Trenches, ESSD Credit 3, ESSD Credit 4, and ESSD Credit 7	No Treatment
Grass / Gravel Combination	MassDEP	No	45% Pretreatment, only used for Bioretention Areas, Infiltration Trenches, ESSD Credit 3, ESSD Credit 4, and ESSD Credit 7	No Treatment
Structural Treatment				
Bioretention Area (Exfiltrating)	Substitute EPA-PRC	Yes	EPA infiltration Basin Curve	EPA infiltration Basin Curve
Bioretention Area (Filtering)	Substitute EPA-PRC	Yes	EPA Biofiltration Curve	EPA Biofiltration Curve
Constructed Stormwater Wetland	Substitute EPA-PRC	Yes	EPA Gravel Wetland Curve	EPA Gravel Wetland Curve
Extended Dry Detention Basin	EPA-PRC	Yes	EPA Dry Pond Curve	EPA Dry Pond Curve
Gravel Wetland	EPA-PRC	Yes	EPA Gravel Wetland Curve	EPA Gravel Wetland Curve
Proprietary Media Filter	MassDEP	Yes	60% minimum, higher credit at discretion of Department in accordance with 314 CMR 9.06(6)(a)4.e.	30% minimum, higher credit at discretion of Department in accordance with 314 CMR 9.06(6)(a)4.e.
Sand/Organic Filter	EPA-PRC	Yes	EPA Sand Filter Curve	EPA Sand Filter Curve
Tree Box Filter (Exfiltrating)	Substitute EPA-PRC	No	EPA Infiltration Trench Curve	EPA Infiltration Trench Curve
Tree Box Filter (Filtering)	Substitute EPA-PRC	No	EPA Biofiltration Curve	EPA Biofiltration Curve
Wet Basin	EPA-PRC	Yes	EPA Wet Pond Curve	EPA Wet Pond Curve
Roof Dripline Filter (exfiltrating type)	Substitute EPA-PRC	No, except for metal roofs in industrial sites in Zone II	EPA Infiltration Trench Curve	EPA Infiltration Trench Curve

MassDEP SCM	Credit Method	Does SCM Require Pretreatment?	Pollutant Removal Credit	
			TSS	TP
Roof Dripline Filter (filtering type)	Substitute EPA-PRC	No, except for metal roofs in industrial sites in Zone II	EPA Infiltration Trench Curve	EPA Infiltration Trench Curve
Structural Conveyance				
Drainage Channel	MassDEP	No	No Treatment	No Treatment
Grass Channel (Biofilter Swale)	SubstituteEPA-PRC	Yes	EPA Grass Swale Curve	EPA Grass Swale Curve
Water Quality Swale (Dry/Wet)	MassDEP	Yes	70%	No Treatment
Structural Infiltration				
Dry Well	SubstituteEPA-PRC	Varies	EPA Infiltration Trench Curve	EPA Infiltration Trench Curve
Infiltration Basin	EPA-PRC	Yes	EPA Infiltration Basin Curve	EPA Infiltration Basin Curve
Infiltration Trench	EPA-PRC	Yes	EPA Infiltration Trench Curve	EPA Infiltration Trench Curve
Leaching Catch Basin	Substitute EPA-PRC	Yes	EPA infiltration Basin Curve	EPA infiltration Basin Curve
Porous pavement	EPA-PRC	Yes	EPA Porous Pavement Curve	EPA Porous Pavement Curve
Subsurface Infiltrator	Substitute EPA-PRC	Yes	EPA infiltration Basin Curve	EPA infiltration Basin Curve
Structural Other				
Dry Detention Basin	MassDEP	No	No Treatment	No Treatment
Green Roof	MassDEP	No	Effective Impervious Cover Reduction	Effective Impervious Cover Reduction
Rain Barrels & Cisterns	MassDEP	No	Effective Impervious Cover Reduction	Effective Impervious Cover Reduction

5. For Land Uses with Higher Potential Pollutant Loads, source control and pollution prevention shall eliminate or reduce the discharge of stormwater runoff from such land uses to the Maximum Extent Practicable. The written LTPPP required by 314 CMR 9.06(6)(a)4.a. shall address source controls and pollution measures. This standard will be presumed to be met if source control and pollution prevention measures listed in the LTPPP are proposed to be implemented in accordance with the *Massachusetts Stormwater Handbook* [2023 Edition].All Land Uses with Higher Potential Pollutant Loads must be completely protected from exposure to rain, snow, snow melt and stormwater runoff through source control and pollution prevention measures. This standard shall be presumed to be met when the proponent uses the specific source control and pollution prevention practices determined by the Department to be suitable for such use as provided in the *Massachusetts Stormwater Handbook* [2023 Edition]. Stormwater discharges from Land Uses with Higher Potential Pollutant Loads shall also comply with the requirements of the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26 through 53, and 314 CMR 3.00: *Surface Water Discharge Permit Program*, 4.00: *Massachusetts Surface Water Quality Standards* and 5.00: *Ground Water Discharge Permit Program*.

9.06: continued

6. When stormwater discharges are within the Zone II or Interim Wellhead Protection Area of a public water supply or Near or to any other Critical Area, structural and non-structural SCMs shall be implemented to remove pathogens and reduce the temperature of the stormwater being discharged. The written LTPPP required by 314 CMR 9.06(6)(a)4.a. shall address source controls and pollution prevention measures to prevent direct and indirect alterations to Critical Areas. When SCMs and BMPs specifically described in the *Massachusetts Stormwater Handbook* [2023 Edition] as appropriate for Critical Areas are provided, this portion of the standard is presumed to be met. and 2023Stormwater discharges and all components of structural and non-structural SCMs, located Near or that discharge to Critical Areas, shall be removed and set back from the receiving water or wetland in accordance with 314 CMR 9.06(6)(g) and receive the highest and best practical method of treatment. Unless a discharge to a Cold-water Fishery is infiltrated or an ESSD practice is used, the temperature of the stormwater shall not exceed 68 degrees F at the discharge point to ensure that there will be no thermal impact to the existing ambient temperature of the receiving water. A "storm water discharge" as defined in 314 CMR 3.04(2)(a) Or (b) to an Outstanding Resource Water or Special Resource Water shall comply with 314 CMR 3.00: *Surface Water Discharge Permit Program* and 4.00: *Massachusetts Surface Water Quality Standards*. Stormwater Management Systems located in and stormwater discharges to a Zone I or Zone A are prohibited, unless essential to the operation of the public water supply.

7. Redevelopment Projects shall be subject to the following:

a. A Redevelopment project is required to meet the following *Stormwater Management Standards* only to the Maximum Extent Practicable: 314 CMR 9.06(6)(a)2., 314 CMR 9.06(6)(a)3., the pretreatment and structural Stormwater Control Measures (SCMs) and related stormwater Best Management Practice requirements of 314 CMR 9.06(6)(a)5. and 6, and the Setback requirements at 314 CMR 9.06(6)(g). Existing stormwater discharges shall comply with 314 CMR 9.06(6)(a)1. only to the Maximum Extent Practicable.

b. Redevelopment projects shall also comply with all other requirements of the *Stormwater Management Standards* and improve existing conditions by reducing the peak discharge rate, increasing stormwater recharge and removing pollutants such as Total Suspended Solids (TSS) and Total Phosphorus (TP) from the discharge.

c. All provisions of 314 CMR 9.06(6)(a)4. apply to Redevelopment Projects, except that Stormwater Management Systems for Redevelopment shall be designed to remove 80% of the average annual post-construction load of TSS and 50% of the average annual post-construction load of TP. This standard is to be met on the Project Site unless Impracticable as demonstrated by a written alternatives analysis, in which case Offsite Mitigation for Redevelopment must be implemented to achieve the removal standard of 80% TSS and 50% TP. Offsite Mitigation for Redevelopment may be used to fully meet the 80% TSS and 50% TP removal standard, or to meet the portion of the 80% TSS and 50% TP removal standard that cannot be fully met on the Project Site. Offsite Mitigation for Redevelopment may also be allowed for 314 CMR 9.06(6)(a)3 and 314 CMR 9.06(6)(a)11d. when a written alternatives analysis demonstrates Maximum Extent Practicable cannot be achieved on the Project Site.

d. Offsite Mitigation for Redevelopment shall be evaluated in the following order: same Project Site, same Project Locus, adjacent site, same Water of the Commonwealth, same municipality, and the same stream reach within the Hydrologic Unit Code (HUC) 12 sub-watershed. All instances of Offsite Mitigation for Redevelopment shall be within the same HUC 12 sub-watershed. MassDOT may use the Watershed-scale Accounting Method within the HUC 10 within a three-year period after the final Water Quality Certification is issued to meet the requirements of 314 CMR 9.06(6)(a)7. The Watershed-scale Accounting Method may be used rather than or in addition to meeting 314 CMR 9.06(6)(a)7. on the Project Site, through the Macro-Approach, or by using Offsite Mitigation for Redevelopment, if these options are Impracticable. The implementation of SCMs through the Watershed-scale Accounting Method must be tracked by an annual report available to MassDEP.

e. Retrofit Projects shall comply with 314 CMR 9.06(6)(a)1., 5., 6., 8., 9., and 10.

Retrofit Projects shall not have to comply with 314 CMR 9.06(6)(a)2., 3., 4., and 11., except they must improve existing conditions for at least peak discharge rate, recharge, or water quality treatment.

8. A plan to control construction related impacts including erosion, sedimentation andother pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation and pollution prevention plan) shall be developed and implemented. This standard shall be presumed to be met when the construction period erosion, sedimentation and pollution prevention plan is prepared in accordance with the *Massachusetts Stormwater Handbook* [2023 Edition]. No construction period runoff may be directed to the post construction SCMs or other BMPs. The construction period erosion, sedimentation and pollution prevention plan shall be submitted with the application for review and approval by the Department. A condition shall be included in the 401 Water Quality Certification that specifies that failure to comply with the construction period erosion, sedimentation and pollution prevention plan as approved in the 401 Water Quality Certification shall be deemed to be noncompliance. Field inspections of construction period BMPs identified in the construction period erosion, sedimentation and pollution prevention plan shall be performed at least once every seven calendar days during the construction period and maintenance or corrective actions shall be taken to ensure compliance. Inspections and maintenance or corrective actions shall be documented in a report and made available to the Department upon request.

9. A long-term operation and maintenance plan shall be developed and implemented to ensure that the stormwater management system functions as designed. This standard is presumed to be met when the maintenance proposed in the long-term operation and maintenance plan occurs with the frequencies listed in Appendix A of the *Massachusetts Stormwater Handbook* [2023 Edition] and when the plan is otherwise prepared in accordance with the *Handbook*. The long-term operation and maintenance plan shall be submitted with the application, for review and approval by the Department. After a 401 Water Quality Certification has expired, a Maintenance Log shall list the maintenance activities and LTPPP measures that have occurred and the specific dates of the maintenance and pollution prevention activities. The Maintenance Log shall be kept up-to-date. The Maintenance Log shall be made available to the Department no later than 5 business days after any request.

10. All Illicit Discharges to Waters of the Commonwealth or the Stormwater Management System are prohibited.

11. If the project will discharge stormwater to a surface water or wetland for which a TMDL has been approved by EPA, or an alternative TMDL has been accepted by EPA, for phosphorus, nitrogen, pathogens, and/or metals, Source Control Measures shall be identified in the LTPPP required by 314 CMR 9.06(6)(a)4. to eliminate or reduce such pollution and shall thereafter be implemented. The Stormwater Management System, including ESSD and LID, shall be presumed to meet this standard when:

a. SCMs listed in the *Massachusetts Stormwater Handbook* [2023 Edition] that specifically address any applicable TMDL or Alternative TMDL are implemented;
b. A LTPPP is implemented;
c. For new development, the Stormwater Management System is designed to comply with 314 CMR 9.06(6)(a)3. and 4.; and
d. For Redevelopment, the Stormwater Management System is designed to comply with 314 CMR 9.06(6)(a)7. for recharge to the Maximum Extent Practicable, and the SMS provides water quality treatment for 80% TSS and 50% TP removal and adequate pretreatment.

(b) The *Stormwater Management Standards* set forth in 314 CMR 9.06(6)(a)1. through 11. shall not apply to the following:

1. A single-family house;
2. Housing development and Redevelopment projects comprised of detached single-family dwellings with four or fewer lots provided that there are no stormwater discharges that may affect a critical area;
3. Multi-family housing development and Redevelopment projects, with four or fewer units, including condominiums, cooperatives, apartment buildings, and townhouses, provided that there are no stormwater discharges that may potentially affect a critical area;

4. Emergency repairs to roads or drainage systems; provided that Emergency Certification is obtained pursuant to 314 CMR 9.12; and
5. Gardens; provided that there are no new Impervious Surfaces. Gardens do not include greenhouses.

(c) The Stormwater Management Standards shall apply to the Maximum Extent Practicable to the following:

1. Housing development and Redevelopment projects comprised of detached single-family dwellings with four or fewer lots that have a stormwater discharge that may potentially affect a critical area;

2. Multi-family housing development and Redevelopment projects with four or fewer units, including condominiums, cooperatives, apartment buildings and townhouses, that have a stormwater discharge may potentially affect a critical area;

3. Housing development and Redevelopment projects comprised of detached single-family dwellings, with five to nine lots, provided there is no stormwater discharge that

may potentially affect a critical area; and

4. Multi-family housing development and Redevelopment projects of five to nine units, including condominiums, cooperatives, apartment buildings, and townhouses, provided there is no stormwater discharge that may potentially affect a critical area.

5. Marinas and boatyards provided that the hull maintenance, painting, and service areas are protected from exposure to rain, snow, snow melt, and stormwater runoff; and

6. Unpaved footpaths, unpaved and paved bicycle paths, and other unpaved or paved paths for pedestrian and/or nonmotorized vehicle access (with the exception of wheelchairs, other power-driven mobility devices by individuals with a mobility disability, electric bicycles and electric scooters), not including paved sidewalks located near or adjacent to private or public roads.

7. Maintenance of an Existing Public Roadway.

9.06 : continued

(d) For phased projects the determination of whether the *Stormwater Management Standards* apply is made on the single and complete project including all phases. When proposing a development or Redevelopment project subject to the *Stormwater Management Standards*, proponents shall utilize ESSD and LID techniques or practices unless Impracticable. Other SCMs and related stormwater BMPs shall only be used to meet those portions of the *Stormwater Management Standards* that cannot be fully met by ESSD or LID.

(e) Project proponents seeking to demonstrate compliance with some or all of the *Stormwater Management Standards* to the Maximum Extent Practicable shall demonstrate that:

1. They have made all reasonable efforts to meet each of the standards;
2. They have made a written alternatives analysis of possible stormwater management measures including ESSD and LID techniques or practices that minimize land disturbance and Impervious Surfaces, structural SCMs, BMPs, pollution prevention, erosion and sedimentation control, proper operation and maintenance of stormwater BMPs, physical constraints (*e.g.*, high groundwater), and costs; and
3. If full compliance with the standards cannot be achieved, the written alternatives analysis makes a clear showing that they are implementing the highest practicable level of treatment.

(f) Compliance with the *Stormwater Management Standards* set forth in 314 CMR 9.06(6)(a)1. – 11. to the extent that they are applicable in accordance with 314 CMR 9.06(6)(b) through (d) does not relieve a discharger of the obligation to comply with all applicable Federal, State and local laws, regulations, and permits including without limitation all applicable provisions of 310 CMR 10.00: *Wetlands Protection*, 314 CMR 3.00: *Surface Water Discharge Permit Program*, 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*,and 314 CMR 9.00, local land use controls adopted to comply with 310 CMR 22.21: *Ground WaterSupply Protection* or the NPDES General Permit for Small Municipal Separate Storm SewerSystems, and the terms and conditions of NPDES General Stormwater Permits such as theConstruction General Permit and the Multi-sector General Permit.

(g) The following minimum Setbacks from any component of a Stormwater Management System shall be met. Horizontal Setbacks for purposes of stormwater management (314 CMR 9.06(6)(a)-(g)), must be measured from the outermost portions of the Stormwater Control Measures to the Resource Area boundary. Vertical Setbacks must be measured from the lowest engineered portion of a Stormwater Control Measure to the Seasonal High Groundwater Elevation. However, a Setback reduced in accordance with the *Massachusetts Stormwater Handbook* [2023 Edition] shall be presumed to meet this minimum Setback requirement:

Resource	**Minimum Setback from any component of a Stormwater Management System to Resource (all Setbacks horizontal except as otherwise stated)**
Zone I, Interim Wellhead Protection Area (IWPA) to a Public Water Supply Well, Zone A, ORW, Special Resource Waters	Setback at least 10 feet outside Zone I, IWPA, Zone A, ORW, and Special Resource Waters, except with Zone I and Zone A when essential to operation of public water supply.
Certified Vernal Pools, Shellfish Growing Areas, bathing beaches, and Cold-water Fisheries	100 feet
All Waters of the Commonwealth	Setback at least 10 feet outside of all Waters of the Commonwealth
Surface Waters (including but not limited to BVW, salt marsh, land under water bodies and waterways, and land under ocean)	50 feet (additional Setback may be necessary to prevent groundwater mound from breaking upward into recharge practice, ground outside of recharge practice, or Surface Waters)
Property Line	10 feet
Soil Absorption System and any component of septic system	50 feet
Building Foundation	10 feet, except for roof drip line filter.

Resource	**Minimum Setback from any component of a Stormwater Management System to Resource (all Setbacks horizontal except as otherwise stated)**
Seasonal High Groundwater Elevation	2 feet vertical separation from lowest engineered portion of SCM (includes media), except for constructed stormwater wetlands, wet basins and wet water quality swales
Bedrock (only applies to structural infiltration practices)	2 feet vertical separation from lowest engineered portion of SCM (includes media)
Well that is not a Public Water Supply	100 feet
Slope	100 feet from any slope greater than 5% to an infiltration basin, surface exposed or underground infiltration trench, or infiltrating bioretention area.

(7) No discharge of dredged or fill material shall be permitted in the rare circumstances where the activity meets the criteria for evaluation but will result in substantial adverse impacts to the physical, chemical, or biological integrity of surface Waters of the Commonwealth.

9.07: Criteria for the Evaluation of Applications for Dredging and Dredged Material Management

(1) General.

(a) No dredging shall be permitted unless appropriate and practicable steps have been taken which will first avoid, and if avoidance is not possible then minimize, or if neither avoidance or minimization are possible, then mitigate, potential adverse impacts to land under water or ocean, intertidal zone and special aquatic sites. No dredging shall be permitted if there is a practicable alternative that would have less impact on the aquatic ecosystem. However, no such dredging may be permitted which will have any adverse effect on specified habitat sites of Rare Species unless the work is subject to a Conservation and Management Permit or Determination of No Take issued by the Division of Fisheries and Wildlife. An applicant shall be presumed to be taking appropriate and practicable steps to avoid and minimize potential adverse impacts to the aquatic ecosystem as a result of dredging proposed in connection with the construction, repair, replacement or expansion of a stream crossing provided that:

1. The applicant demonstrates to the satisfaction of the Department that he or she has developed and will implement an operation and maintenance plan to ensure that the crossing will function as designed;
2. If the project includes the construction of a new non-tidal crossing, the applicant

demonstrates to the satisfaction of the Department that the crossing complies with the Massachusetts Stream Crossing Standards;

3. If the project includes the construction of a new tidal crossing, the applicant demonstrates to the satisfaction of the Department that the project is designed in a manner that does not restrict tidal flow over the full natural tidal range;

4. If the project includes work on an existing non-tidal crossing, the applicant demonstrates to the satisfaction of the Department that the crossing complies with the Massachusetts Stream Crossing Standards to the Maximum Extent Practicable; and

5. If the project includes work on an existing tidal crossing that restricts tidal flow, the applicant demonstrates to the satisfaction of the Department that tidal restriction will be eliminated to the Maximum Extent Practicable.

This presumption may be overcome by credible evidence from a competent source that compliance with all applicable criteria set forth in 314 CMR 9.07(1)(a) is not practicable.

(b) All applications, except for maintenance projects, shall include a comprehensive analysis of practicable alternatives as defined in 314 CMR 9.07(1)(a). The scope of alternatives to be considered shall be commensurate with the scale and purpose of the proposed activity, the impacts of the proposed activity, and the classification, designation and existing uses of the affected wetlands and waters in the Surface Water Quality Standards at 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*. The scope of the alternatives analysis for dredging in association with an Ecological Restoration Project shall include the following:

1. Any time of year restrictions or other conditions recommended by the Division of Marine Fisheries for coastal waters and the Division of Fisheries and Wildlife for inland waters;

2. the condition of existing waters and wetlands proposed for restoration including evidence of the extent and severity of the impairment(s) that reduce the capacity of waters and wetlands to sustain their designated uses;

3. the magnitude and significance of the benefits of the Ecological Restoration Project in improving the capacity of the affected waters and wetlands to protect and sustain their designated uses; and

4. the magnitude and significance of the impacts of the Ecological Restoration Project on waters and wetlands that may be affected by the Ecological Restoration Project and the extent to which the applicant will:

   a. avoid adverse impacts to wetlands and waters that can be avoided without impeding the achievement of the project's ecological restoration goals;

   b. minimize adverse impacts to wetlands and waters that are necessary to the achievement of the project's ecological restoration goals; and

   c. utilize best management practices such as erosion and siltation controls and proper construction sequencing to avoid and minimize adverse construction impacts to wetlands and waters and their designated uses

(c) Dredging and dredged material management shall be conducted in a manner that ensures the protection of human health, public safety, public welfare and the environment. Dredging for an Ecological Restoration Project shall be conducted in a manner that will not reduce or alter the habitat functions of the affected waters and wetlands of the Commonwealth.

(d) Applications submitted to the Department shall meet the criteria and performance standards of 314 CMR 9.07. If the project submitted by the applicant does not meet a particular provision of 314 CMR 9.07 and criteria of 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*, the applicant shall demonstrate to the Department's satisfaction that the project will provide an equivalent level of environmental protection.

(e) Dredged material shall not be disposed if a feasible alternative exists that involves the reuse, recycling, or contaminant destruction and/or detoxification. An evaluation of whether such an alternative is feasible shall consider:

1. the volume and physical characteristics of the dredged material;
2. the levels of oil and/or hazardous materials present within the dredged material;
3. the relative public health and environmental impacts of management alternatives; and
4. the relative costs of management alternatives.

(f) The Department may consider any additional information including but not limited to that submitted under MEPA or NEPA on impacts from the dredging activity, management of the dredged material, the alternatives available for reuse or disposal techniques, alternative sites for the various management activities, or information related to other Department

programs.

[NOTE TO REVIEWERS; MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 314 CMR 9.00 IN REDLINE AND STRIKEOUT FORMAT. REDLINES SHOW ADDITIONS TO THE CURRENT REGULATORY TEXT AND STRIKEOUTS SHOW PROPOSED DELETIONS. SINCE THE REGULATION IS VERY LONG, MassDEP IS PUBLISHING ONLY THOSE PORTIONS OF THE REGULATION FOR WHICH THE AGENCY IS PROPOSING TO MAKE AMENDMENTS. MassDEP HAS INCLUDED TEXT JUST PRIOR TO (and in some cases text just after) NEW INSERTED TEXT TO MAKE IT CLEAR WHERE THE NEW TEXT IS PROPOSED TO BE INSERTED INTO THE CURRENT REGULATIONS. ***THERE ARE NO EDITS TO SECTIONS 314 CMR 9.07(1)(g) through (k), 9.07(2) through 9.07(16), and 9.08 and the EXISTING REGULATION LANGUAGE FOR THESE SECTIONS WILL REMAIN THE SAME.***

9.09: 401 Water Quality Certification

(1) The Department will certify in writing to the appropriate federal agency and to the applicant whether or not the proposed project will meet applicable water quality standards and minimize environmental impacts through compliance with 314 CMR 4.00: *Massachusetts Surface Water Quality Standards* as implemented and supplemented by 314 CMR 9.00. Certification will be denied if the criteria of 314 CMR 9.06, 9.07, or 9.08 as applicable are not met. The Department shall send copies of the 401 Water Quality Certification or denial concurrently to the conservation commission, any person who submits written comments during the public comment period and any others who submit a written request. The certification or denial will contain:

(a) the name and address of the applicant, the address of the proposed activity, and the date of the Department's determination;

(b) the federal permit number, the 401 Water Quality Certification Transmittal Number and the Wetlands Protection Act File Number, if applicable and available;

(c) a statement that there is or is not reasonable assurance that the activity will be conducted in a manner which will not violate applicable Surface Water Quality Standards at 314 CMR 4.00: *Massachusetts Surface Water Quality Standards* as implemented by 314 CMR 9.00 and a statement of reasons if certification is denied;

(d) any conditions deemed necessary by the Department to insure maintenance or attainment of water quality, minimization of any damage to the environment that may result from the project, or compliance with any applicable provisions of Massachusetts law that the Department is authorized to administer. As a condition of certification of subdivisions or other phased activities, applicants may be required to record a deed restriction which would limit subsequent discharges of dredged or fill material to ensure that the criteria for the evaluation of applications have been applied to a single and complete project, including all components of multi-phased activities;

(e) the date the work may begin. No activity may begin prior to the expiration of the appeal period or until a final decision is issued by the Department if an appeal is filed;

(f) a statement that the certification does not relieve the applicant of the duty to comply with any other statutes or regulations;

(g) notification of the right to request an adjudicatory hearing as described in 314 CMR 9.10; and

(h) where applicable, other state law determinations or approvals, including but not limited to a Chapter 91 dredging permit under 310 CMR 9.05(2): *Activities Requiring a Permit Application*.

(2) Written applications may be made to amend existing, valid 401 Water Quality Certifications and are subject to the Department's review and approval or denial.

(3) Written applications may be made to extend an existing, valid 401 Water Quality Certifications and are subject to the Department's review and approval or denial.

(4) If the applicant has submitted a Combined Application, the Department may issue a Combined Permit that serves as the 401 Water QualityCertification issued pursuant to 314 CMR 9.00, and for a water-dependent use project, the Chapter 91 license, permit or other written approval issued pursuant to 310 CMR9.00: *Waterways*. Alternatively, the Department may issue a 401 Water Quality Certificationthat is separate from the Chapter 91 license, permit, or other written approval issued pursuant to 310 CMR 9.00.

9.10: Appeals

(1) Right to Appeal. Certain persons shall have a right to request an adjudicatory hearing concerning certifications by the Department when an application is required:

(a) the applicant or property owner;

(b) any person aggrieved by the decision who has submitted written comments during the public comment period;

(c) any ten persons of the Commonwealth pursuant to M.G.L. c. 30A where a group member has submitted written comments during the public comment period; and

(d) any governmental body or private organization with a mandate to protect the environment that has submitted written comments during the public comment period.

Any person aggrieved, any ten persons of the Commonwealth, or a governmental body or private organization with a mandate to protect the environment may appeal without having submitted written comments during the public comment period only when the claim is based on new substantive issues arising from material changes to the scope or impact of the activity and not apparent at the time of public notice.

(2) Notice of Claim. Any notice of claim for an adjudicatory hearing must be accompanied by a filing fee as specified in 310 CMR 4.06: *Adjudicatory Hearing Filing Fee* and be sent by certified mail or hand delivered to the Department of Environmental Protection, postmarked within 21 days of the date of the certification.

(3) Contents of Claim. Any notice of claim for an adjudicatory hearing must include the following information:

(a) the 401 Certification Transmittal Number and Wetlands Protection Act Number, the name of the applicant and address of the project;

(b) the complete name, address, and telephone number of the party filing the request; the name, address and telephone number of any authorized representative; and, if claiming to be a person aggrieved, the specific facts that demonstrate that the party satisfies the definition of "aggrieved person" found in 314 CMR 9.02;

(c) a clear statement that an adjudicatory hearing is being requested;

(d) a clear and concise statement of facts which are grounds for the proceeding, the specific objections to the Department's written certification, and the relief sought through the adjudicatory hearing, including specifically the changes desired in the final written certification; and

(e) a statement that a copy of the request has been sent by certified mail or hand delivered to:

1. the applicant;
2. for projects in Outstanding Resource Waters, the public or private water supplier where the project is located, the Department of Conservation and Recreation for projects in Areas of Critical Environmental Concern, or other entity with responsibility for the resource;
3. the owner, if different from the applicant;
4. the appropriate regional office of the Department; and
5. the conservation commission of the city or town where the activity will occur.

(4) Coordination of Appeals. The Department may coordinate adjudicatory appeals under 314 CMR 9.00, 310 CMR 10.00: *Wetlands Protection*, 310 CMR 9.00: *Waterways* or other administrative appeals.

(a) If a final order has been issued pursuant to 310 CMR 10.00: *Wetlands Protection*, the Department may exclude issues solely within the jurisdiction of 310 CMR 10.00 at an

adjudicatory hearing held under 314 CMR 9.00.

(b) If a Chapter 91 license, permit or other approval has been issued pursuant to 310 CMR 9.00: *Waterways*, the Department may exclude issues solely within the jurisdiction of 310 CMR 9.00 at an adjudicatory hearing held under 314 CMR 9.00.

(c) If an adjudicatory hearing has been requested under 314 CMR 9.00, 310 CMR9.00: *Waterways*, 310 CMR 10.00: *Wetlands Protection*, or another administrative appeal,the Department may consolidate the proceedings.

9.10: continued

(d) In the event that the Department has issued a Combined Permit that serves as a 401 Water Quality Certification pursuant to 314 CMR 9.00 and a Chapter 91 license, permit or otherwritten approval issued pursuant to 310 CMR 9.00: *Waterways*, the appeal may include issues solely within the jurisdiction of 310 CMR 9.00 only if theappeal has been requested in accordance with the requirements of 310 CMR 9.17: *Appeals*.

9.11: Orders, Violations and Penalties

(1) Orders. The Department may issue orders as necessary to aid in the implementation and enforcement of M.G.L. c. 21, §§ 26 through 53, M.G.L. c. 21A § 14; and M.G.L. c. 91, §§ 52 through 56. Such orders may include, but shall not be limited to, orders requiring persons to cease any activity which is in violation of 314 CMR 9.00 or any certification, permit, or other approval issued or required thereunder, and to take any action, or to cease and desist, as required by 314 CMR 9.00 or any certification, permit, or other approval issued or required thereunder.

(2) Violations. Without limitation, it shall be a violation of M.G.L. c. 21, §§ 26 through 53, and 314 CMR 9.00 to:

(a) fail to comply with any order of the Department;
(b) make a discharge or engage in any other activity that is contrary to the terms and conditions of M.G.L. c. 21, §§ 26 through 53, 314 CMR 9.00, or of any certification, permit, or other approval issued thereunder;
(c) fail to submit a timely application for a certification, permit, or other approval, or an application for renewal thereof, in accordance with 314 CMR 9.00;
(d) make any false, inaccurate, incomplete or misleading statement in any document submitted to the Department or required to be kept by M.G.L. c. 21, §§ 26 through 53, 314 CMR 9.00, or any certification, permit, or other approval issued thereunder;
(e) make any false, inaccurate, incomplete or misleading statement in any record, report, plan, file, log, register or other document which the person submits to the Department or is required to be kept by the terms of a certification, permit, or other approval issued pursuant to 314 CMR 9.00;
(f) fail to provide any information requested by the Department pursuant to 314 CMR 9.00 or any certification, permit, or other approval issued pursuant to 314 CMR 9.00.
(g) otherwise violate any other provision of 314 CMR 9.00.

(3) Penalties. Any person violating M.G.L. c. 21, §§ 26 through 53, or 314 CMR 9.00 shall be subject to the full range of legal actions authorized by M.G.L. c. 21, §§ 26 through 53, M.G.L. c. 21A, § 16, 310 CMR 5.00: *Administrative Penalty*, and any other applicable law or regulation, including, without limitation, criminal fines, imprisonment, and civil and administrative orders and penalties.

9.12: Authorization of Emergency Action

In the rare situation where immediate action is essential to avoid or eliminate a serious and immediate threat to the public health or safety or to the environment, a person may act without a certification, provided that the person obtains prior approval of the Department or authorization under M.G.L. c. 131, § 40. Any emergency authorization issued by the Department shall not relieve such person from compliance with other applicable federal, state, and local requirements and approvals, including approval by the Corps of Engineers. The Corps of Engineers' emergency provisions for Section 404 permits are located at 33 CFR 325.2(e)(4).

(1) Any activity subject to the jurisdiction of 310 CMR 10.00: *Wetlands Protection* which has been certified as an emergency by a conservation commission conducted in accordance with 310 CMR 10.06: *Emergencies*, or by the Department under 310 CMR 10.06(5), or is authorized under 310 CMR 10.06(6)(a)4., and any oil or hazardous material "Immediate Response Action" undertaken in accordance with the provisions of 310 CMR 10.06(7), is also authorized under 314 CMR 9.00.

(2) Absent authorization under 310 CMR 10.00: *Wetlands Protection*, a written request shall be submitted to the Department which describes the location, the work to be performed, and why the project is necessary for the protection of the environment or the health or safety of the public. Emergency approval shall be issued in writing and shall specify the limits of activities necessary to abate the emergency. When the necessity for undertaking the emergency action no longer

exists, any emergency action shall cease until compliance with the provisions of 314 CMR 9.00. In any event, the time limit for performance of emergency work shall not exceed 30 days, unless a written extension is approved by the Department. The emergency authorization may require the submission of an application. No work may be undertaken without emergency authorization under M.G.L. c. 131, § 40, M.G.L. c. 91, and M.G.L. c. 30, §§ 61 through 62H, where applicable.

(3) Any activity subject to the jurisdiction of 310 CMR 9.00: *Waterways* which is eligible for authorization by the Department under 310 CMR 9.20: *Authorization of Emergency Actions* may

receive emergency authorization under 314 CMR 9.12, provided that the applicant submits sediment data or other information if requested by the Department.

9.12 : continued

(4) "Immediate Response Actions" not subject to the jurisdiction of 310 CMR 10.00: *Wetlands Protection*, which receive oral approval from the Department pursuant to 310 CMR 40.0420(2), or are initiated 24 hours prior to notification and oral approval pursuant to 310 CMR 40.0420(7) and (8), may commence before a written request under 314 CMR 9.12(2) is submitted to the Department, provided the request is made within 24 hours after the Department's oral approval. Once a request for emergency certification has been made pursuant to 314 CMR 9.12(2), work that commenced prior to such filing may continue pending a decision on the request by the Department.

9.13 : Effective Date, Transition Rule, and Severability

(1) The amendments to 314 CMR 9.00 concerning stormwater management at 314 CMR 9.06(6)(a) – (g) shall apply to applications filed six months after the effective date of these regulations. Any application submitted to the Department prior to six months after the effective date shall be considered under the standards and criteria in effectprior to the effective date.

(2) Transition Rule. When an applicant has filed a Notice of Intent under M.G.L. c. 131, § 40 prior to March 1, 1995 for which a Final Order is subsequently issued and the planning board approves a definitive subdivision plan pursuant to M.G.L. c. 41, §§ 81K through 81GG or determines that approval is not required based on plans that substantially conform to the Notice of Intent, activities related to a real estate subdivision shall be subject to the substantive standards as previously in effect under 314 CMR 9.00 dated December 31, 1983. Such activities shall be subject to the application provisions of the revised 314 CMR 9.00 effective March 1, 1995, but not including 314 CMR 9.06 through 9.10.

(3) Severability. If any provision of any part of 314 CMR 9.00, or the application thereof, is held to be invalid, such invalidity shall not affect any other provision of 314 CMR 9.00.

REGULATORY AUTHORITY

314 CMR 9.00: M.G.L. c. 21, §§ 26 through 53, c. 21A § 14; c.21C; c. 21E; c. 21H; c. 91, §§ 52 through 56; and c. 111, §§ 150A through 150A½.