

DRAFT – SUBJECT TO REVISION

**Preface for Reviewers to the Proposed 2023 Revisions to the Wetlands Protection and Water Quality Certification Regulations for Stormwater Management**

The Department is proposing for public comment the following major revisions to the Stormwater Management Standards in the Wetlands Protection Act (WPA) regulations (310 CMR 10.00), the Water Quality Certification (WQC) regulations (314 CMR 9.00), and the associated Massachusetts Stormwater Handbook (Stormwater Handbook): 1) promote nature-based Environmentally Sensitive Site Design (ESSD) and Low Impact Development (LID) in project designs; 2) revise the WPA/WQC Stormwater Management Standards and Stormwater Handbook to more closely align with the EPA General Permits for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems in Massachusetts (MS4 Permit); 3) replace outdated precipitation frequency estimates used for design storms with more recent and accurate precipitation estimates to reflect more current, higher precipitation associated with extreme storms; and 4) add a new standard for achievement of Total Maximum Daily Loads (TMDLs).

Updating the Massachusetts WPA/WQC regulations will allow the Commonwealth to further the eight interests of the WPA (the eight interests of the WPA are to (1) protect private or public water supply, (2) protect ground water, (3) provide flood control, (4) prevent storm damage, (5) prevent pollution, (6) protect land containing shellfish, (7) protect wildlife habitat, and (8) protect fisheries); restore and maintain the chemical, physical and biological integrity of water resources as required by the WQC regulations; improve climate resilience and protection of water quality that is afforded by wetland Resource Areas; and strengthen compliance with TMDLs. The proposed updates to the WPA/WQC Stormwater Management Standards (310 CMR 10.05(6)(k) and 314 CMR 9.06(6)(a)) pertain to new discharges, peak discharge rate, recharge, and pollutant removal for new development and Redevelopment (as defined in 310 CMR 10.04). The proposed updates will also affect other wetland Resource Area performance standards that rely on design storms such as bordering land subject to flooding. Projects subject to WPA and WQC jurisdiction require approval by local Conservation Commissions and/or MassDEP.

The joint EPA/MassDEP MS4 Permit authorizes approximately 260 municipalities in Massachusetts as well as MassDOT highways and other non-traditional MS4s (such as certain state universities and colleges), approximately 242 Department of Conservation and Recreation facilities (including certain state parks and parkways), and Department of Correction facilities (including certain state prisons), to discharge stormwater to the waters of the United States. The MS4 Permit requires compliance with the Massachusetts WQC regulations and design specifications in the Stormwater Handbook. However, the WPA/WQC regulations and the MS4 Permit's stormwater standards currently differ in some instances. This amendment will increase consistency to the extent possible as described in more detail below. In particular, the MS4 Permit's focus is on removal of pollutants including Total Suspended Solids and Total Phosphorus and discharges subject to requirements related to an approved TMDL. The WPA/WQC regulations require removal of different amounts of Total Suspended Solids, and currently do not require removal of Total Phosphorus. Although MassDEP does require

compliance with TMDLs, more emphasis is needed in this area. Municipalities that are classified as MS4s by EPA are required to adopt a local ordinance or bylaw to require compliance with the MS4 Permit's stormwater standards. Additionally, as MassDOT Highway is a regulated MS4 entity, its stormwater discharges to waters of the U.S. will be regulated through an EPA issued Transportation Separate Storm Sewer System permit.

MassDEP's stormwater standards and associated Stormwater Handbook have wide-reaching implications across the Commonwealth. For example, the standards are directly incorporated into the WPA/WQC regulations and the Handbook is frequently referenced in the regulations. Both are referenced in the MS4 Permit and they are expected to be referenced in the Transportation Separate Storm Sewer System Permit. Additionally, an Underground Injection Control registration may need to be obtained for certain subsurface stormwater infiltration wells. Also, MassDEP is proposing a new stormwater standard that will require a higher level of stormwater treatment to meet the load allocations where a TMDL has been established due to water quality impairment, and project proponents will be obligated to reduce pollutant loads to those waterbodies. Whether specific load allocations are assigned in TMDL watersheds or not, specific standards for stormwater management will assist in attaining higher water quality and increased climate resilience.

The WPA/WQC regulations and Stormwater Handbook currently require ESSD that incorporates LID to be "considered" as part of the Redevelopment design. MassDEP proposes to require that ESSD/LID design strategies be incorporated unless such practices are infeasible for both new development and Redevelopment. This is similar to EPA's requirement in its MS4 Permit. ESSD involves identifying important natural features, placing buildings and roadways in areas less sensitive to disturbance, and designing stormwater management systems that create relationships between development and natural hydrology. LID includes landscaping and design techniques to maintain the natural, pre-developed ability of a site to manage rainfall, and to capture water on site, filter it through vegetation, and let it soak into the ground. This standard is proposed to be strengthened since sites designed with nature-based solutions better handle increases in runoff and associated pollutants expected from increasing precipitation.

To better align with the MS4 Permit, MassDEP is proposing to incorporate the use of EPA Performance Removal Curves to determine pollutant removal efficiency credits. However, because some commonly used stormwater control measures do not have an EPA Performance Removal Curve, the MassDEP method currently used to award pollutant removal credits will continue to exist, parallel to the EPA curves. Where there is no established EPA Pollutant Removal Curve, the MassDEP water quality volume (*e.g.*, first 1-inch of runoff) will be used for sizing of stormwater control measures, to determine the pollutant removal credit. Further, MassDEP proposes to amend the WPA/WQC regulations to adopt the EPA MS4 Permit's numeric criteria to require removal of 90% Total Suspended Solids and 60% Total Phosphorus from the average annual pollutant loads, and no additional water quality volume would be required with certain exceptions.

The WPA/WQC regulations' Stormwater Management Standards and other standards (such as for Bordering Land Subject to Flooding), and the Stormwater Handbook currently specify design storms that rely on precipitation data from the 1961 U.S. Weather Bureau Technical Paper 40

(TP40). MassDEP proposes to require that the National Oceanic and Atmospheric Administration Precipitation Atlas 14 Volume 10 (NOAA Atlas 14), most recently updated in 2019, be used in place of the outdated TP40. This change would be reflected in the Stormwater Handbook (*e.g.*, peak rate discharge) as well as in other parts of the WPA regulations, such as 310 CMR 10.57, where design storms are specified. TP40 substantially underrepresents current conditions. Use of the NOAA Atlas 14 will bring Massachusetts up to date with current conditions. A scaling factor is also proposed to be incorporated to account for uncertainty in extreme precipitation represented by larger currently observed storms documented in the NOAA Atlas 14 data, and which are predicted to occur more often in the future. The scaling factor to account for larger currently observed storms is the NOAA Atlas 14 upper (90%) confidence interval multiplied by 0.9. The scaling factor accounts for most of the uncertainty in the NOAA Atlas 14 precipitation frequency estimates and provides resiliency in sizing stormwater management systems and determining the extent of lands subject to flooding. In addition, MassDEP is proposing to require attenuation of runoff from the 1% chance (100-year) storm.

The current numerical recharge targets based on Hydrologic Soil Groups (HSG) are failing to approximate the annual recharge volume lost as a result of new development. To offset the loss of recharge from the post-development site, when using the static design method, MassDEP proposes that recharge systems need to be sized to a minimum of at least 1-inch multiplied by the impervious area for new development for all HSGs, except for HSG D which will remain a Maximum Extent Practicable (MEP) standard. Other methods will be allowed including the simple dynamic and dynamic field methods, and the continuous simulation method. The proposed increased recharge requirement will, in part, help achieve minimum reduction requirements for Total Suspended Solids and Total Phosphorus, in addition to maintaining wetland levels, baseflow that supports streams and rivers, water supply, and reducing stormwater runoff volumes/peak flows.

For Redevelopment projects, the MS4 Permit requires that, to improve existing conditions on site, stormwater treatment systems must be designed to retain the volume of runoff equivalent to, or greater than, 0.80 inch multiplied by the total post-construction impervious surface area on the site or remove 80% of the average annual post-construction load of Total Suspended Solids and 50% of the average annual load of Total Phosphorus generated from the total postconstruction impervious surface area on the site. MassDEP proposes to adopt the MS4 Permit requirements for pollution reduction on Redevelopment sites to replace the current Maximum Extent Practicable (MEP) requirement in the WPA/WQC regulations (Stormwater Management Standard 7 for Redevelopment) for pollutant removal. Using the MS4 Permit's numeric criteria for pollutant removal will result in greater water quality protection in wetland areas and downstream locations and will facilitate achievement of TMDLs. Water quality improvements that are sufficient to meet TMDLs may not be achieved with the current MEP standard for water quality in Redevelopment. Redevelopment projects will still have to meet the other standards to the MEP as defined under the existing Stormwater Management Standard 7. Further, MassDEP proposes that existing stormwater exemptions and projects subject to the MEP standard as defined in 310 CMR 10.05(6)(l) and (m) will not change, however there are additional categories of projects that will be subject to the MEP standard (including Stormwater Management Standard 7) such as existing public roadway maintenance. MassDEP also proposes to allow the applicant to meet the Redevelopment pollutant removal and recharge standards off-site when the

issuing authority determines that on-site mitigation cannot be fully provided or can only be partially provided.

Finally, MassDEP proposes to add a new Stormwater Management Standard 11 for projects that discharge to waters designated with a TMDL for phosphorus, nitrogen, metals, or pathogens. While the existing Stormwater Handbook contains language to facilitate TMDL achievement, the inclusion of this proposed standard will add emphasis to that goal. Stormwater runoff is a leading cause of water quality impairments in the Commonwealth's rivers, lakes, ponds, and marine waters. Point and non-point discharges of pollution to watersheds for which TMDLs have been approved are required to reduce pollutant loads to their waterbodies based, in part, on standards outlined in the Stormwater Handbook. These recommended changes are a key component of meeting pollutant reduction goals set by TMDLs and for improving wetlands water quality. It is part of MassDEP's core mission to protect public health and enhance the quality and value of the water resources of the Commonwealth. MassDEP is also directed (MGL c. 21, §§ 26 through 53) to take all action necessary or appropriate to secure to the Commonwealth the benefits of the federal Clean Water Act, 33 U.S.C. § 1251 *et. seq.* the objective of which is the restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters. Inclusion of this specification as a standard will improve success in meeting TMDL goals and ultimately removal of impaired waters from the 303(d) list.

### **Preface For Reviewers to the 2023 Revisions to the Wetlands Protection Act Regulations for Land Subject to Coastal Storm Flowage**

The Department is proposing for public comment revisions to its regulations under the Wetlands Protection Act to add provisions for Land Subject to Coastal Storm Flowage. This Resource Area extends from the mean low water line to the farthest landward extent of the coastal floodplain, typically described as the area that has a 1% annual chance of flooding in a coastal storm. The other coastal Resource Areas, such as Dune, Barrier Beach, and Coastal Bank, are sometimes found within Land Subject to Coastal Storm Flowage and have been subject to performance standards since the late 1970s. Land Subject to Coastal Storm Flowage varies depending on topography, geomorphology, and exposure to the predominant storms - Nor'easters and hurricanes. There is often extensive development within this Resource Area, which is increasingly at risk as climate change leads to sea level rise and more frequent and intense storms. Land Subject to Coastal Storm Flowage buffers the effects of coastal storms, reducing damage to property, infrastructure, and the environment. Inappropriate construction and other human modifications can adversely impact its ability to reduce storm damage, resulting in threats to public health and safety, government-subsidized flood insurance claims, and reoccurring public expenditures to address damage to private and public property.

These regulations implement recommendations of the Massachusetts State Hazard Mitigation and Climate Adaptation Plan (September 2018). Municipalities regulate development in the floodplain through planning and zoning that meet the minimum requirements for participation in the National Flood Insurance Program (NFIP), and the Massachusetts State Building Code sets construction standards conforming to the NFIP. The NFIP program is based on Flood Insurance Rate Maps (FIRM) produced by the Federal Emergency Management Administration (FEMA),

which show the boundaries of the 1% annual chance floodplain and other zones within it based on past conditions. The regulations for Land Subject to Coastal Storm Flowage are based on FEMA's maps, which depict the information necessary for permitting activities in this Resource Area. Applicants are also encouraged to supplement the required evaluations by consulting the Massachusetts Coast Flood Risk Model Maps, referenced in the Massachusetts State Hazard Mitigation and Climate Adaptation Plan, which show probability and depth of inundation under projected future conditions for various scenarios of sea level rise and changing climate conditions.

While projects within Land Subject to Coastal Storm Flowage are typically subject to the Building Code or other regulations with different objectives, the purpose of the Wetlands Protection Act review is to ensure that activities affecting Resource Areas contribute to identified public interests. Land Subject to Coastal Storm Flowage is either *per se* or presumed significant to the public interests of flood control and storm damage prevention. Flood control is defined as the prevention or reduction of flooding and storm damage. Storm damage prevention is defined as the prevention of damage caused by water from storms, including erosion and sedimentation, damage to vegetation, property or buildings, or damage caused by flooding and water-borne debris. The regulations promote resilience by preserving and restoring natural floodplain functions that Land Subject to Coastal Storm Flowage provides.

The Department's regulations are not concerned with the standards for construction or materials of buildings, which are governed by the state Building Code, but do address the adverse effects of proposed buildings, other structures, or alterations on the floodplain functions of the Resource Area. The Department has designed its regulations for Land Subject to Coastal Storm Flowage to coordinate requirements to the extent possible with other state and federal law, but its role is distinct and unambiguous. The purpose of review under the Wetlands Regulations for Land Subject to Coastal Storm Flowage is the same as for other Resource Areas: to protect the interests of the Act when proposed work sited there could affect its capacity to contribute to flood control and storm damage prevention.

Land Subject to Coastal Storm Flowage is divided into zones that reflect the magnitude of wave energy of flood waters in the 1% annual chance storm event and are shown on the FIRM. The Velocity Zone, or V-Zone, is generally the most seaward zone and contains wave heights three feet or greater. Buildings and infrastructure along the Massachusetts coastline damaged or destroyed during storms are typically located in the V-Zone, resulting in significant and often repetitive private and public costs. The siting of buildings in the V-Zone diminishes the capacity of the V-Zone and other Resource Areas to prevent storm damage. Roads built in the V-Zone are also being inundated by rising seas, resulting in the need for reconstruction or elevation, which can further impair Resource Areas. Under these proposed regulations, activities in the V-Zone are therefore limited. New buildings, even on piles, are not allowed in the V-Zone, because the turbulent wave action causes scour around the piles and erosion beneath structures, decreasing the ability of these Resource Areas to recover after storm events. As this occurs, the V-Zone becomes less effective at absorbing wave energy – a critical floodplain function even more important with sea level rise. This requirement is consistent with the Department's Title 5 regulations, which prohibit new septic tanks and soil absorption systems in the V-Zone.

The Moderate Wave Action (MoWA) Zone is inland of the V-Zone and contains wave heights equal to or greater than 1.5 feet but less than 3 feet. Damage to buildings has also been documented to occur in the MoWA Zone, attributable to siting and alterations within the Resource Area. Buildings on solid foundations and elevated structures below flood elevation can redirect waves and obstruct flows during storms, increasing flood velocity, elevation, and volume to other properties. Where buildings are damaged during storms, debris can further obstruct flows and damage Land Subject to Coastal Storm Flowage and other Resource Areas, reducing their ability to perform the functions of flood control and storm damage prevention. Therefore, new buildings in the MoWA must be elevated on Open Piles to allow flood water to flow across the floodplain and preserve the Resource Area's ability to reduce impacts to landward areas. To protect Land Subject to Coastal Storm Flowage and other Resource Areas, these regulations require buildings in the MoWA Zone to be elevated an additional two feet above the base flood elevation, which provides a margin of error due to the effects of climate change and for uncertainty in determining flood elevations. Such additional elevation (sometimes called "freeboard") is used by many states to account for sea level rise, shoreline erosion, topographic and bathymetric changes, and changes in land use that may increase flood elevations and are not reflected in the base flood elevation shown on the FIRM. Although other coastal Resource Areas are generally governed by their own performance standards, the elevation requirements are to apply across all coastal Resource Areas. Within the V-Zones and MoWA Zones, where wave energy poses the greatest potential for damage to buildings and to Resource Areas, the performance standards are designed to ensure that any activities will have no adverse effect on the Resource Area.

Land Subject to Coastal Storm Flowage also includes the landward coastal floodplain called the Minimum Wave Action (MiWA) Zone where waves are less than 1.5 feet and flooding occurs at varying depths. In this area, NFIP standards require elevation of new buildings above the base flood elevation, but solid foundations may be allowed. Elevating structures in this area as required by the Building Code and these wetlands regulations accounts for the effects of climate change and uncertainty in determining flood elevations in the MiWA Zone to ensure protection of the flood control and storm damage interests in the future. Additional elevation or an open foundation may be required when a building is proposed where wave action may occur within the Buffer Zone of another Resource Area. The performance standards for the MiWA Zone are designed to minimize adverse effects on the Resource Area by preserving soils and vegetation and reducing impervious surfaces to decrease the velocity of flood waters and increase infiltration. Structures or changes in topography must not increase flood velocities, volume, or elevations causing damage to other properties. Applicants must provide mitigation for alterations that would redirect flood waters or would increase flood velocity, volume, or elevations within a topographic depression or confined basin where a manmade or natural feature significantly impedes or prevents the return flow of flood waters to the ocean.

Much of Land Subject to Coastal Storm Flowage along the Massachusetts coast is developed, including areas within several cities. The regulations contain provisions for Redevelopment, similar to those for Riverfront Area, recognizing that Redevelopment may raise different concerns than new construction in undisturbed areas. In fact, existing development often exacerbates storm damage or flooding. The provisions require, at a minimum, an improvement in existing conditions to promote resiliency as part of any Redevelopment. Elevation, with the exception of Historic Structures, is a

primary means of preserving, protecting, or improving the function of the Resource Area and is required for buildings with new foundations, substantial improvement, or repair of substantial damage. Determinations as to the condition of buildings under the State Building Code are to be made by the building official rather than the Issuing Authority, as building officials have jurisdiction for their decisions under the Code. Specific provisions allow flood control projects.

Finally, the draft regulations include a provision intended to enable Salt Marsh and Coastal Dune migration into Land Subject to Coastal Storm Flowage. Salt Marsh is widely considered the most important of the Commonwealth's wetland Resource Areas, and the most at risk from sea level rise. Coastal Dunes will naturally tend to migrate inland, and both Salt Marsh and Coastal Dunes protect inland areas from storm damage. The Department is proposing a provision which would allow owners of Land Subject to Coastal Storm Flowage, particularly when adjacent to these other Resource Areas, to prepare or set aside land for landward migration. Although the area of land on individual parcels may be small, the pace of migration slow, and knowledge of how best to accommodate migration currently limited, the Department seeks to provide a pathway that will be available to interested landowners to participate in this resource protection effort. The provision for ecological restoration projects remains available for applicants proposing work in other Resource Areas.

**[NOTE TO REVIEWERS:**

*MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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. REVIEWERS CAN FIND THE FULL UNOFFICIAL TEXT OF 310 CMR 10.00 IN ITS CURRENT FORM ON MassDEP'S WEBSITE AND THE OFFICIAL VERSION CAN BE PURCHASED THROUGH THE STATE HOUSE LIBRARY.]*

**310 CMR 10.00: WETLANDS PROTECTION**

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### **10.01: Introduction and Purpose**

(1) Introduction. 310 CMR 10.00 is promulgated by the Commissioner of the Massachusetts Department of Environmental Protection pursuant to the authority granted under The Wetlands Protection Act, M.G.L. c. 131, § 40. 310 CMR 10.00 shall complement M.G.L. c. 131, § 40, and shall have the force of law.

310 CMR 10.01 through 10.10 provide definitions and procedures. 310 CMR 10.01 through 10.10 pertains to both inland and coastal areas subject to protection under M.G.L. c. 131, § 40. 310 CMR 10.21 through 10.60 provide standards for work within those areas. 310 CMR 10.21 through 10.37 pertains only to coastal areas and 310 CMR 10.51 through 10.57 and 10.60 pertains only to inland areas. Riverfront Area at 310 CMR 10.58 may be coastal or inland. A project may be subject to regulation under 310 CMR 10.00 in which case compliance with all applicable regulations is required.

(2) Purpose. M.G.L. c. 131, § 40 sets forth a public review and decision-making process by which activities affecting Areas Subject to Protection under M.G.L. c. 131, § 40 are to be regulated in order to contribute to the following interests:

- protection of public and private water supply
- protection of ground water supply
- flood control
- storm damage prevention

- prevention of pollution
- protection of land containing shellfish
- protection of fisheries
- protection of wildlife habitat

The purpose of 310 CMR 10.00 is to define and clarify that process by establishing standard definitions and uniform procedures by which conservation commissions and the Department may carry out their responsibilities under M.G.L. c. 131, § 40. Applicants and issuing authorities shall use forms provided by the Department to implement 310 CMR 10.00.

310 CMR 10.00 is intended solely for use in administering M.G.L. c. 131, § 40; nothing contained in 310 CMR 10.00 should be construed as preempting or precluding more stringent protection of wetlands or other natural resource areas by local by-law, ordinance or regulation.

#### **10.02: Statement of Jurisdiction**

(1) Areas Subject to Protection under M.G.L. c. 131, § 40. The following areas are subject to protection under M.G.L. c. 131, § 40:

- |     |                         |           |             |
|-----|-------------------------|-----------|-------------|
| (a) | Any bank,               |           | the ocean   |
|     | any freshwater wetland, |           | any estuary |
|     | any coastal wetland,    |           | any creek   |
|     | any beach,              | bordering | any river   |
|     | any dune,               | on        | any stream  |
|     | any flat,               |           | any pond    |
|     | any marsh,              |           | or any lake |
|     | or any swamp            |           |             |
- (b) Land under any of the water bodies listed above
- (c) Land subject to tidal action
- (d) Land subject to coastal storm flowage
- (e) Land subject to flooding
- (f) Riverfront area.

(2) Activities Subject to Regulation under M.G.L. c. 131, § 40.

(a) Activities Within the Areas Subject to Protection under M.G.L. c. 131, § 40.

Any activity proposed or undertaken within an area specified in 310 CMR 10.02(1), which will remove, fill, dredge or alter that area, is subject to Regulation under M.G.L. c. 131, § 40 and requires the filing of a Notice of Intent except:

1. minor activities within the Riverfront Area meeting the requirement of 310 CMR 10.02(2)(b)1. and 2.;
2. activities conducted to maintain, repair or replace, but not substantially change or enlarge an existing and lawfully located structure or facility used in the service of the public and used to provide electric, gas, water, sewer, telephone, telegraph and other communication services, provided

said work utilizes the Best Practical Measures to avoid or minimize impacts to wetland Resource Areas outside the footprint of said structure or facility. A project proponent claiming that work to remove, fill, dredge or alter an area specified in 310 CMR 10.02(1) does not require the filing of a Notice of Intent has the burden of establishing that the work is not subject to Regulation under M.G.L. c. 131, § 40; and

**[INSERT NEW SUBSECTION 3. AS FOLLOWS:]** 3. minor activities in the Minimum Wave Action Zone of Land Subject to Coastal Storm Flowage as prescribed in 310 CMR 10.02(2)(a)3.a. through f.; provided that such minor activities are located outside any other areas subject to protection specified in 310 CMR 10.02(1)(a), (b), (c), (e), or (f) and any Buffer Zone:

- a. fencing with a minimum of 50% opening;
- b. sheds less than 100 sq. ft. in size;
- c. planting of native species of trees, shrubs or ground cover;
- d. vista pruning;
- e. conversion of impervious surfaces to pervious surfaces; or
- f. conversion of lawn to another vegetated use, such as a vegetable garden.

Any other work in Land Subject to Coastal Storm Flowage, and any work in any other coastal Resource Area, requires compliance with the procedures at 310 CMR 10.05 and any applicable performance standards.

(b) Activities Within the Buffer Zone. Any activity other than minor activities identified in 310 CMR 10.02(2)(b)2. proposed or undertaken within 100 feet of an area specified in 310 CMR 10.02(1)(a) (hereinafter called the Buffer Zone) which, in the judgment of the issuing authority, will alter an Area Subject to Protection under M.G.L. c. 131, § 40 is subject to regulation under M.G.L. c. 131, § 40 and requires the filing of a Notice of Intent. (See also 310 CMR 10.05(3)(a)2.). The areas subject to jurisdiction identified in 310 CMR 10.02(1)(b) through (f) do not have a buffer zone.

1. Minor activities, as described in 310 CMR 10.02(2)(b)2., within the buffer zone and outside any areas specified in 310 CMR 10.02(1)(a) through (e) are not otherwise subject to regulation under M.G.L. c. 131, § 40 provided that the work is performed: solely within the buffer zone, as prescribed in 310 CMR 10.02(2)(b)2.a. through r., in a manner so as to reduce the potential for any adverse impacts to the resource area during construction, and with post-construction measures implemented to stabilize any disturbed areas. Factors to consider when measuring the potential for adverse impacts to resource areas include the extent of the work, the proximity to the resource area, the need for erosion controls, and the measures employed to prevent adverse impacts to resource areas during and following the work.

2. The following minor activities, provided that they comply with 310 CMR 10.02(2)(b)1., are not otherwise subject to regulation under M.G.L. c. 131, § 40:

- a. Unpaved pedestrian walkways less than 30 inches wide for private use and less than three feet wide for public access on conservation property;
- b. Fencing, provided it will not constitute a barrier to wildlife movement; stonewalls; stacks of cordwood;
- c. Vista pruning, provided the activity is located more than 50 feet from the mean annual high water line within a Riverfront Area or from Bordering Vegetated Wetland, whichever is farther. (Pruning of landscaped areas is not subject to jurisdiction under 310 CMR 10.00.);
- d. Plantings of native species of trees, shrubs, or groundcover, but excluding turf lawns;
- e. The conversion of lawn to uses accessory to residential structures such as decks, sheds, patios, pools, replacement of a basement bulkhead and the installation of a ramp for compliance with accessibility requirements, provided the activity, including material staging and stockpiling is located more than 50 feet from the mean annual high-water line within the Riverfront Area, Bank or from Bordering Vegetated Wetland, whichever is farther, and erosion and sedimentation controls are implemented during construction. The conversion of such uses accessory to existing single family houses to lawn is also allowed. (Mowing of lawns is not subject to jurisdiction under 310 CMR 10.00);
- f. The conversion of impervious to vegetated surfaces, provided erosion and sedimentation controls are implemented during construction;
- g. Activities that are temporary in nature, have negligible impacts, and are necessary for planning and design purposes (e.g., installation of monitoring wells, exploratory borings, sediment sampling and surveying and percolation tests for septic systems provided that resource areas are not crossed for site access);
- h. Installation of directly embedded utility poles and associated anchors, push braces or grounding mats/rods along existing paved or unpaved roadways and private roadways/driveways, and their existing maintained shoulders, or within existing railroad rights-of-way, provided that all work is conducted within ten feet of the road or driveway shoulder and is a minimum of ten feet from the edge of the Bank or Bordering Vegetated Wetland and as far away from resource areas as practicable, with no additional tree clearing or substantial grading within the buffer zone, and provided that all vehicles and machinery are located within the roadway surface during work;

- i. Installation of underground utilities (e.g., electric, gas, water) within existing paved or unpaved roadways and private roadways/driveways, provided that all work is conducted within the roadway or driveway and that all trenches are closed at the completion of each workday;
- j. Installation and repair of underground sewer lines within existing paved or unpaved roadways and private roadways/driveways, provided that all work is conducted within the roadway or driveway and that all trenches are closed at the end of completion of each workday;
- k. Installation of new equipment within existing or approved electric or gas facilities when such equipment is contained entirely within the developed/disturbed existing fenced yard;
- l. Installation of access road gates at public or private road entrances to existing utility right-of-way access roads, provided that all vehicles and machinery are located within the roadway surface during work;
- m. Removal of existing utility equipment (poles, anchors, lines) along existing or approved roadways or within existing or approved electric, water or gas facilities, provided that all vehicles and machinery are located within the roadway surface during work;
- n. Vegetation cutting for road safety maintenance, limited to the following:
  - i. Removal of diseased or damaged trees or branches that pose an immediate and substantial threat to driver safety from falling into the roadway;
  - ii. Removal of shrubbery or branches to maintain clear guardrails; such removal shall extend no further than six feet from the rear of the guardrail;
  - iii. Removal of shrubbery or branches to maintain sight distances at existing intersections; such removal shall be no farther than five feet beyond the "sight triangles" established according to practices set forth in American Association of State Highway and Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets, 2011, 6th edition, and such removal is a minimum of ten feet from a resource area, other than Riverfront Area; and
  - iv. Removal of shrubbery, branches, or other vegetation required to maintain the visibility of road signs and signals.Cuttings of shrubs and branches from mature trees will be performed with suitable horticultural equipment and

methods that do not further damage the trees. To prevent the possible export of invasive plants, cut vegetation should be chipped and evenly spread on site, provided the chips are spread outside the buffer zone, and raked to a depth not to exceed three inches, clear of all drainage ways.

Alternatively, all cuttings and slash shall be removed from the site and properly disposed;

- o. Installation, repair, replacement or removal of signs, signals, sign and signal posts and associated supports, braces, anchors, and foundations along existing paved roadways and their shoulders, provided that work is conducted as far from resource areas as practicable, and is located a minimum of ten feet from a resource area, any excess soil is removed from the project location, and any disturbed soils are stabilized as appropriate;
- p. Pavement repair, resurfacing, and reclamation of existing roadways within the right-of-way configuration provided that the roadway and shoulders are not widened, no staging or stockpiling of materials, all disturbed road shoulders are stabilized within 72 hours of completion of the resurfacing or reclamation, and no work on the drainage system is performed, other than adjustments and/or repairs to respective structures within the roadway;
- q. The repair or replacement of an existing and lawfully located driveway servicing not more than two dwelling units provided that all work remains within the existing limits of the driveway and all surfaces are permanently stabilized within 14 days of final grade.
- r. Public Shared Use Path vegetation cutting for public safety and pavement repair and resurfacing in the Buffer Zone and Riverfront Area, limited to the following:
  - i. Removal of diseased or damaged trees or branches that pose an immediate and substantial threat to public safety from falling into the Public Shared Use Path;
  - ii. Removal of shrubbery or branches to maintain vertical clearances and horizontal trail edges and shoulders by trimming vegetation as needed to provide for public safety. Trimming and removal may occur up to six feet beyond the outer edge of the shoulder; and
  - iii. Removal of shrubbery, branches, or other vegetation required to maintain the visibility of Public Shared Use Path signs.
  - iv. For activities described in 310 CMR 10.02(2)(b)2.r.i. through iii., cutting of shrubs and branches from mature trees will be performed with hand methods that do not further damage the trees. To prevent the possible export of

invasive plants, cut vegetation may be chipped and evenly spread on the Project Site; provided that the chips are spread outside the Buffer Zone and not within a Resource Area, and raked to a depth not to exceed three inches, clear of all drainage ways, or alternatively, all cuttings and slash shall be removed from the Project Site and properly disposed.

v. Pavement repair, resurfacing, and reclamation of existing paved Public Shared Use Paths and bicycle paths; provided that the Public Shared Use Paths and bicycle paths are not widened, measures are implemented during milling and grinding to prevent any sidecast of asphalt or concrete dust to Resource Areas, no asphalt mulch is utilized, coal tar-based pavement sealants are not utilized, there is no staging or stockpiling of materials, all disturbed surfaces are fully stabilized within 72 hours of completion of the resurfacing or reclamation, and no work on any component of a Stormwater Management System is performed, including but not limited to drainage swales.

3. Activities within the buffer zone which do not meet the requirements of 310 CMR 10.02(2)(b)1. and 2. are subject to preconstruction review through the filing of a Determination of Applicability to clarify jurisdiction or a Notice of Intent under the provisions of 310 CMR 10.05(4) and 10.53(1).

(c) Notwithstanding the provisions of 310 CMR 10.02(1) and (2)(a) and (b), stormwater management systems designed, constructed, installed, operated, maintained, and/or improved as defined in 310 CMR 10.04 in accordance with the *Stormwater Management Standards* as provided in the *Stormwater Management Policy (1996)* or 310 CMR 10.05(6)(k)1. through 11. do not by themselves constitute Areas Subject to Protection under M.G.L. c. 131, § 40, or Buffer Zone provided that:

1. the system was designed, constructed, installed, and/or improved as defined in 310 CMR 10.04 on or after November 18, 1996; and
2. if the system was constructed in an Area Subject to Protection under M.G.L. c. 131, § 40, or Buffer Zone, the system was designed, constructed, and installed in accordance with all applicable provisions in 310 CMR 10.00.

(d) Activities Outside the Areas Subject to Protection under M.G.L. c. 131, § 40, and the Buffer Zone. Any activity proposed or undertaken outside the areas specified in 310 CMR 10.02(1) and outside the Buffer Zone is not subject to regulation under M.G.L. c. 131, § 40, and does not require the filing of a Notice of Intent unless and until that activity actually alters an Area Subject to Protection under M.G.L. c. 131, § 40. In the event that the issuing authority determines that such activity has in fact altered an Area Subject to Protection under M.G.L. c. 131, § 40, it may require the filing of a Notice of Intent and/or issuance of an

Enforcement Order and shall impose such conditions on the activity or any portion thereof as it deems necessary to contribute to the protection of the interests identified in M.G.L. c. 131, § 40.

(3) Notwithstanding the provisions of 310 CMR 10.02(1) and (2), the maintenance of a stormwater management system constructed and/or improved as defined in 310 CMR 10.04 from November 18, 1996 through January 1, 2008, in accordance with the *Stormwater Management Standards*, as provided in the *Massachusetts Stormwater Policy*, issued by the Department on November 18, 1996 or on or after January 2, 2008, in accordance with the *Stormwater Management Standards* as provided in 310 CMR 10.05(6)(k)1. through 11. is not subject to regulation under M.G.L. c. 131, § 40, provided that:

- (a) if the system was constructed in an Area Subject to Protection under M.G.L. c. 131, § 40, or associated Buffer Zone, the system was constructed in accordance with all applicable provisions of 310 CMR 10.00;
- (b) the work to maintain the stormwater management system is limited to maintenance of a stormwater management system as defined in 310 CMR 10.04; and
- (c) said work utilizes Best Practical Measures to avoid and minimize impacts to wetland resource areas outside the footprint of the stormwater management system.

Notwithstanding the provisions of 310 CMR 10.02(1) and (2), any bordering vegetated wetland, bank, land under water, land subject to flooding, or riverfront area created solely for the purpose of stormwater management shall not require the filing of a Notice of Intent to maintain the stormwater management system, provided that:

- 1. the work to maintain the stormwater management system is limited to the maintenance of a stormwater management system as defined in 310 CMR 10.04;
- 2. the stormwater management system was proposed in a Notice of Intent filed before January 2, 2008, and conforms to an Order of Conditions issued after April 1, 1983;
- 3. the area is not altered for other purposes; and
- 4. said work utilizes Best Practical Measures to avoid and minimize impacts to wetland resource areas outside the footprint of the stormwater management system.

(4) Notwithstanding anything to the contrary in 310 CMR 10.00, work other than maintenance that may alter or affect a stormwater management system (including work to repair or replace the stormwater management system, and any change to the site that increases the total or peak volume of stormwater managed by the system, directs additional stormwater to the system, and/or increases the volume of stormwater exposed to land uses with higher potential pollutant loads) that was designed, constructed, installed and/or improved after November 18, 1996, as defined in 310 CMR 10.04, and if constructed in an Area Subject to Protection under M.G.L. c. 131, § 40, or Buffer Zone, as described in 310 CMR 10.02(1) and (2)(a) through (d), the system was constructed in accordance with all applicable provisions of 310 CMR 10.00, solely for the purpose of stormwater management, in accordance with the *Stormwater Management Standards* as provided in the *Stormwater Management Policy (1996)* or 310 CMR 10.05(6)(k)1. through 11., may be permitted through an Order of Conditions, or Negative Determination of Applicability provided that the work:

- (a) at a minimum provides the same capacity as the original design to attenuate peak



- discharge rates, recharge the ground water, and remove Total Suspended Solids;
- (b) complies with the Stormwater Management Standards as provided in 310 CMR 10.05(6)(k)1. through 11.; and
- (c) meets all the applicable performance standards for any work that expands the existing stormwater management system into an Area Subject to Protection under M.G.L. c. 131, § 40, or Buffer Zone as described in 310 CMR 10.02(1) and (2)(a) through (d).

(5) For purposes of 310 CMR 10.02(2)(c) and (4), the applicant has the burden of proving that the proposed project involves a stormwater management system designed, constructed, installed, operated, maintained and/or improved as defined at 310 CMR 10.04 in accordance with the Stormwater Management Standards as provided in the *Stormwater Management Policy (1996)* or 310 CMR 10.05(6)(k)1. through 11. and that the system was designed, constructed, installed and/or improved on or after November 18, 1996. The applicant also has the burden of establishing whether said stormwater management system was installed in an Area Subject to Protection under M.G.L. c. 131, § 40, or associated Buffer Zone, and, if so, that the system was constructed in accordance with all applicable provisions of 310 CMR 10.00. An applicant shall use the best evidence available to meet the burden of proof required. For purposes of 310 CMR 10.02(2)(c) and (4), the best evidence is the Order of Conditions, Order of Resource Area Delineation or Determination of Applicability for the project served by the stormwater management system together with the plans referenced in and accompanying such Order or Determination, and, if applicable, the Certificate of Compliance. If the best evidence is available, the date the system was designed shall be the date the Notice of Intent, Request for Determination or Notice of Resource Area Delineation was filed. If the best evidence is not available, the applicant shall rely on other credible evidence to meet the required burden of proof such as local approval of the stormwater management system along with the plans referenced in and accompanying said approval and any wetland conservancy maps and wetland change maps for the relevant time period published by the Department on MassGIS.

#### Commentary

The Department has determined that activities within Areas Subject to Protection under M.G.L. c. 131, § 40 are so likely to result in the removing, filling, dredging or altering of those areas that preconstruction review is always justified, and that the issuing authority shall therefore always require the filing of a Notice of Intent for said activities.

The Department has determined that activities within 100 feet of those areas specified in 310 CMR 10.02(1)(a) are sufficiently likely to alter said areas that preconstruction review may be necessary. Therefore, a request for a Determination of Applicability must be filed for some activities within the Buffer Zone. The issuing authority shall then make a determination as to whether the activity so proposed will alter an Area Subject to Protection under M.G.L. c. 131, § 40 and, if so, shall require the filing of a Notice of Intent for said activities. The issuing authority shall not require the filing of a Notice of Intent if it determines that the activity proposed within the Buffer Zone will not alter an Area Subject to Protection under M.G.L. c. 131, § 40.

The Department has determined that activities outside the Areas Subject to Protection under M.G.L. c. 131, § 40 and outside the Buffer Zone are so unlikely to result in the altering of Areas Subject to Protection under M.G.L. c. 131, § 40 that preconstruction review is not required, and therefore the issuing authority shall not regulate said activities unless and until they actually result in the altering of an Area Subject to Protection under M.G.L. c. 131, § 40.

### **10.03: General Provisions**

(1) **Burden of Proof.**

(a) Any person who files a Notice of Intent to perform any work within an Area Subject to Protection under M.G.L. c. 131, § 40 or within the Buffer Zone has the burden of demonstrating to the issuing authority:

1. that the area is not significant to the protection of any of the interests identified in M.G.L. c. 131, § 40; or
2. that the proposed work within a resource area will contribute to the protection of the interests identified in M.G.L. c. 131, § 40 by complying with the general performance standards established by 310 CMR 10.00 for that area.
3. that proposed work within the buffer zone will contribute to the protection of the interests identified in M.G.L. c. 131, § 40, except that proposed work which lies both within the riverfront area and within all or a portion of the buffer zone to another resource area shall comply with the performance standards for riverfront areas at 310 CMR 10.58. For minor activities as specified in 310 CMR 10.02(2)b.1. within the riverfront area or the buffer zone to another resource area, the Department has determined that additional conditions are not necessary to contribute to the protection of the interests identified in M.G.L. c. 131, § 40.

(b) Any person who requests the issuing authority to regulate work taking place outside an Area Subject to Protection under M.G.L. c. 131, § 40 and outside the Buffer Zone has the burden of demonstrating to the satisfaction of the issuing authority that the work has in fact altered an Area Subject to Protection under M.G.L. c. 131, § 40.

(2) **Burden of Going Forward.** The burden of going forward means having to produce at least some credible evidence from a competent source in support of the position taken. This burden shall be upon the person contesting the Department's position when the Department has been requested to hold an adjudicatory hearing. In the event that under the provisions of 310 CMR 10.03 two or more persons have the burden of going forward, said burden may be placed on all or any number of them, in the discretion of the hearing officer.

(3) **Presumption Concerning 310 CMR 15.000: *The State Environmental Code, Title 5: Standard Requirements for the Siting, Construction, Inspection, Upgrade and Expansion of On-site Sewage Treatment and Disposal Systems and for the Transport and Disposal of Septage.*** A subsurface sewage disposal system that is to be constructed in compliance with the requirements of 310 CMR 15.000: *The State Environmental Code, Title 5: Standard Requirements for the Siting, Construction, Inspection, Upgrade and Expansion of On-site Sewage Treatment and Disposal Systems and for the Transport and Disposal of Septage*, or more stringent local board of health requirements, shall be presumed to protect the eight interests identified in M.G.L. c. 131, § 40, but only if none of the components of said system is located within the following resource areas:

(a) Coastal.

1. coastal bank;
2. coastal beach;
3. coastal dune;
4. salt marsh.

(b) Inland.

- |                |           |         |
|----------------|-----------|---------|
| 1. wet meadows |           | creek;  |
| 2. marsh       | bordering | river;  |
| 3. swamp       | on any    | stream; |
| 4. bog pond;   |           | lake.   |

and only if the soil absorption system of said system is set back at least 50 feet horizontally from the boundary of said areas, as required by 310 CMR 15.211: *Minimum Setback Distances*, or a greater distance as may be required by more stringent local ordinance, by-law or regulation. To protect wildlife habitat within riverfront areas, the soil absorption system shall not be located within 100 feet of the mean annual high-water line unless there is no alternative location on the lot which conforms to 310 CMR 15.000: *The State Environmental Code, Title 5: Standard Requirements for the Siting, Construction, Inspection, Upgrade and Expansion of On-site Sewage Treatment and Disposal Systems and for the Transport and Disposal of Septage* without requiring a variance as determined by the local Board of Health, with less adverse effects on resource areas.

This presumption, however, shall apply only to impacts of the discharge from a sewage disposal system, and not to the impacts from construction of that system, such as erosion and siltation from the excavation, placement of fill, or removal of vegetation. Impacts from construction shall be minimized by the placement of erosion and sedimentation controls during excavation, limiting the placement of fill, confining the removal of vegetation to that necessary for the footprint of the system, and taking other measures deemed necessary by the issuing authority.

The setback distance specified above shall be determined by measuring from the boundary of the area in question, from the contour at the mean annual flood elevation in inland areas, or from the top of a coastal bank or the contour at the highest spring tide elevation in coastal areas, whichever is further from the water body.

The setback distance specified above shall not be required for the renovation or replacement (but is required for the substantial enlargement) of septic systems constructed prior to the effective date of 310 CMR 10.00, provided no alternative location is available on the lot and such work has been approved by the local board of health or the Department, as required by law.

This presumption may be overcome only by credible evidence from a competent source that compliance with 310 CMR 15.000: *The State Environmental Code, Title 5: Standard Requirements for the Siting, Construction, Inspection, Upgrade and Expansion of On-site Sewage Treatment and Disposal Systems and for the Transport and Disposal of Septage* or more stringent local requirements will not protect the interests identified in M.G.L. c. 131, § 40.

(4) Presumption Concerning Point-source Discharges. If the Department has issued a permit pursuant to M.G.L. c. 21, § 43, or the U.S. Environmental Protection Agency has issued a federal NPDES (National Pollutant Discharge Elimination System) permit for any new point-source discharge of pollutants, or either entity will issue such a permit(s) prior to commencement of the discharge, the effluent limitations established in the permit(s) shall be presumed to protect the eight interests identified in M.G.L. c. 131, § 40, with respect to the effects of the discharge on water quality. The permit(s) and any subsequent modification(s) thereto shall be referenced in the Order and deemed incorporated therein.

This presumption shall apply only to impacts of the discharge from the source, and not to impacts from construction of the source.

This presumption may be overcome only by credible evidence from a competent source that said effluent limitations will not protect the interests identified in M.G.L. c. 131, § 40.

(5) Presumption of Significance. Each Area Subject to Protection under M.G.L. c. 131, § 40 is presumed to be significant to one or more of the interests identified in M.G.L. c. 131, § 40. These presumptions are rebuttable and are set forth in 310 CMR 10.21 through 10.60.

For riverfront areas, the issuing authority may find that the presumptions of significance are partially rebutted as provided in 310 CMR 10.58(3).

(6) Presumption Concerning Application of Herbicides.

(a) Any application of herbicides within any Area Subject to Protection under M.G.L. c. 131, § 40 or the Buffer Zone associated with a structure or facility which is:

1. existing and lawfully located;
2. used in the service of the public; and
3. used to provide electric, gas, water, sewer, telephone, telegraph and other telecommunication services

shall be presumed to constitute work performed in the course of maintaining such structure or facility, and shall be accorded the exemption of such work under M.G.L. c. 131, § 40, only if the application of herbicides to that structure or facility is performed in accordance with such plans as are required by the Department of Food and Agriculture pursuant to 333 CMR 11.00: *Rights of Way Management*, effective July 10, 1987.

(b) Any application of herbicides within the Buffer Zone, other than as provided in 310 CMR 10.03(6)(a), shall be presumed not to alter an Area Subject to Protection under M.G.L. c. 131, § 40, only if the work is performed in accordance with such plans as are required by the Department of Food and Agriculture pursuant to 333 CMR 11.00: *Rights of Way Management*, effective July 10, 1987. This presumption shall apply only if the person proposing such activity has requested and obtained a determination of the boundaries of the Buffer Zone and Areas Subject to Protection under M.G.L. c. 131, § 40 in accordance with 310 CMR 10.05(3)(a)1. and 2.; and has submitted that determination as part of the Vegetation Management Plan.

(c) Any application of herbicides for management of rights of way within a riverfront area not subject to 310 CMR 10.03(6)(a) or (b), provided the area is outside any other resource area and qualifies under the provisions of 310 CMR 10.58(6)(a), shall be accorded an exemption of such work under M.G.L. c. 131, § 40, provided that the application of herbicides is performed in accordance with such plans as are required by the Department of Food and Agriculture pursuant to 333 CMR 11.00: *Rights of Way Management*.

(7) Fees.

(a) General Fee Provisions.

1. Notices of Intent. All Notices of Intent filed pursuant to 310 CMR 10.00 shall be accompanied by a filing fee, the amount of which shall be determined by 310 CMR 4.00: *Timely Action Schedule and Fee Provisions* and a brief statement indicating how the applicant calculated the fee. 50% of any filing fee in excess of \$25.00 shall be made payable, by check or money order, to the Commonwealth of Massachusetts and shall be sent to the DEP Lock Box accompanied by the Notice of Intent Fee Transmittal Form. The remainder of said fee shall be made payable, by check or money order, to the city or town in which the work is proposed.

2. Requests for Action by the Department. Any person who files a Request for a Superseding Determination of Applicability (310 CMR 10.05(3)(c)), a Request for Superseding Order of Conditions or superseding Order of Resource Area Delineation (310 CMR 10.05(7)(a)), a Request for Adjudicatory Hearing (310 CMR 10.05(7)(j)), a Request to Intervene in any Adjudicatory Hearing (310 CMR 1.01(9)(a)), or a Request for a Variance, (310 CMR 10.05(10)), (*see also* 310 CMR 10.03(7)(e)), shall simultaneously submit a filing fee, in the amount specified by 310 CMR 4.00: *Timely Action Schedule and Fee Provisions*. All such fees shall be paid by check or money order payable to the Commonwealth of Massachusetts and shall be sent to the DEP Lock Box, accompanied by the Request for Departmental Action Fee Transmittal Form. A copy of the Request for Departmental Action Fee Transmittal Form and a copy of the check shall accompany the request for Departmental action.

(b) Specific Provisions for Notice of Intent Fees. In accordance with General Instructions for Completing a Notice of Intent and Abbreviated Notice of Intent, the minimum submittal requirements shall include payment of the filing fee specified in 310 CMR 10.03(7)(c). A conservation commission shall notify, in writing, the appropriate Department Regional Office and the applicant when the correct filing fee has not been paid to the city or town and the filing is therefore incomplete. Said notification shall specify the correct fee amount. The Department shall also notify, in writing, the applicant and the conservation commission when the fee due to the Department has not been paid to the Department and the filing is therefore incomplete. Said notification shall specify the fee due to the Department. The fee will be based on the initial project design as proposed in the Notice of Intent.

1. Disputes over Notice of Intent Filing Fees. Whenever the conservation commission or the Department determines that an inadequate fee has been paid, the time period for the conservation commission or the Department to act shall be stayed until the balance of the fee is paid.

a. Where, in the opinion of the conservation commission or the Department, less than the full filing fee has been included with the Notice of Intent, the Notice shall be deemed complete (assuming all other minimum submittal requirements have been met), and the stay shall be lifted, upon payment of the additional fee specified by the Department or the conservation commission. If the applicant has disputed all or a part of the balance of the fee, after issuance of a Final Order which resolves the fee dispute, in favor of the applicant any disputed funds paid by the applicant in excess of the filing fee as determined in the Final Order shall be paid to the applicant by the Commonwealth and the city or town.

b. In *lieu* of paying any disputed amount of the filing fee, the applicant may file a Request for Determination of Applicability under 310 CMR 10.05(3)(a), with sufficient information to enable the conservation commission to determine the extent of the area, or the type and extent of the activity, subject to protection under M.G.L. c. 131, § 40.

When a Request for Determination of Applicability is filed by an Applicant to resolve a dispute over the filing fee, all proceedings under the Notice of Intent shall be stayed until all appeal periods for the Determination have elapsed or, if the Determination is appealed until all proceedings before the Department have been completed.

A Final Determination of Applicability as to the area, or the type and extent of the activity, subject to protection under M.G.L. c. 131, § 40 shall be binding on all parties and shall be used in calculating the fee.

(c) Activities Subject to Notice of Intent Fees. The following activity descriptions are intended to include all activities subject to filing of a Notice of Intent under M.G.L. c. 131, § 40. The fees imposed by 310 CMR 10.03 are applicable only to those activities subject to jurisdiction under M.G.L. c. 131, § 40. The fee for work proposed under a single Notice of Intent that involves more than one activity noted below, shall be determined by adding the fees for each of the proposed activities. When the work involves activities within the riverfront area as well as another resource area or the buffer zone, the fee shall be determined by adding an additional 50% of the fee calculated for activities in another resource area(s) or the buffer zone to another resource area for each of the proposed activities within the riverfront area. When the work involves activities within the riverfront area but no other resource area, the fee shall be determined by adding the fees for each of the proposed activities within the riverfront area.

1. Category 1.

- a. Any work on a single family residential lot including a house addition, deck, garage, garden, pool, shed, or driveway. Activities excluded from Category 1 include driveways reviewable under 310 CMR 10.53(3)(e) (*See* Category 2f.); construction of an unattached single family house; and construction of a dock, pier, or other coastal engineering structure.
- b. Site preparation of each single family house lot, including removal of vegetation, excavation and grading, where actual construction of the house is not proposed under the Notice of Intent.
- c. Control of nuisance vegetation by removal, herbicide treatment or other means, from a resource area, on each single family lot, as allowable under 310 CMR 10.53(4).
- d. Resource improvement allowed under 310 CMR 10.53(4), other than removal of aquatic nuisance vegetation, as allowed under 310 10.53(4).
- e. Construction, repair, replacement or upgrading of a subsurface septic system or any part of such a system.
- f. Activities associated with installation of a monitoring well, other than construction of an access roadway thereto.
- g. New agriculture, including forestry on land in forest use (310 CMR 10.53(3)(r) and (s)), and aquacultural projects.

2. Category 2.

- a. Construction of each single family house (including single family houses in a subdivision), any part of which is in a buffer zone or resource area. Any activities associated with the construction of said house(s), including associated site preparation and construction of retention/detention basins, utilities, septic systems, roadways and driveways other than those roadways or driveways reviewable under 310 CMR 10.53(3)(e) (*See* Category 2f.), shall not be subject to additional fees if all said activities are reviewed under a single Notice of Intent. (For apartment/condominium type buildings *See* Category 3.)
- b. Parking lot of any size.
- c. The placement of sand for purposes of beach nourishment.
- d. Any projects reviewable under 310 CMR 10.24(7)(a) through (c).
- e. Any activities reviewable under 310 CMR 10.53(3)(d) and (f) through (l), except for those subject to 310 CMR 10.03(7)(c)4.b. Where more than one activity is proposed within an identical footprint (*e.g.*, construction of a sewer within the footprint of a new roadway), only one fee shall be payable.
- f. Construction of each crossing for a driveway associated with an unattached single family house, reviewable under 310 CMR 10.53(3)(e).
- g. Any point source discharge.

- h. Control of nuisance vegetation, other than on a single family lot, by removal, herbicide treatment or other means, reviewable under 310 CMR 10.53(4).
- i. Raising or lowering of surface water levels for flood control or any other purpose.
- j. Any other activity not described in Categories 1, 3, 4, 5 or 6 (*e.g.*, the determination of whether a stream is perennial or intermittent).
- k. The exploration for (but not development, construction, expansion, maintenance, operation or replacement of) public water supply wells or wellfields derived from groundwater, reviewable under 310 CMR 10.53(3)(o).
- l. Test projects pursuant to 310 CMR 10.05(11) and Scientific Research Projects pursuant to 310 CMR 10.05(12).

3. Category 3.

- a. Site preparation, for any development other than an unattached single family house(s), including the removal of vegetation, excavation and grading, where actual construction is not proposed in the Notice of Intent.
- b. Construction of each building for any commercial, industrial, institutional, or apartment/condominium/townhouse-type development, any part of which is in a buffer zone or resource area. Any activities associated with the construction of said building, including associated site preparation and construction of retention/detention basins, septic systems, parking lots, utilities, point source discharges, package sewage treatment plants, and roadways and driveways other than those roadways or driveways reviewable under 310 CMR 10.53(3)(e), shall not be subject to additional fees if all said activities are reviewed under a single Notice of Intent.
- c. Construction of each roadway or driveway, not reviewable under 310 CMR 10.53(3)(e), and not associated with construction of an unattached single family house.
- d. Any activity associated with the clean up of hazardous waste, except as otherwise noted in Category 4, including excavation, destruction of vegetation, change in subsurface hydrology, placement of collection wells or other structures for collection and treatment of contaminated soil and/or water.
- e. The development, construction, expansion, maintenance, operation, or replacement of (but not exploration for) public water supply wells or wellfields derived from groundwater, reviewable under 310 CMR 10.53(3)(o).

4. Category 4.

- a. Construction of each crossing for a limited project access roadway or driveway reviewable under 310 CMR 10.53(3)(e) associated with a commercial, industrial, or institutional



development or with any residential construction (other than a roadway or driveway associated with construction of an unattached single family house).

b. Construction, modification, or repair of a flood control structure such as a dam, reservoir, tidegate, sluiceway, or appurtenant works.

c. Creation, operation, maintenance or expansion of a public or private landfill.

d. Creation, operation, maintenance or expansion of a public or private sand and/or gravel operation including but not limited to excavation, filling, and stockpiling.

e. Construction of new railroad lines or extensions of existing lines, including ballast area, placement of track, signals and switches and other related structures.

f. Construction, reconstruction, expansion, or maintenance of any bridge, except to gain access to a single family house lot.

g. Any alteration of a resource area(s) to divert water for the clean up of a hazardous waste site, for non-exempt mosquito control projects, or for any other purpose not expressly identified elsewhere in this fee schedule.

h. Any activities, including the construction of structures, associated with a dredging operation conducted on land under a waterbody, waterway, or the ocean. If the dredging is directly associated with the construction of a new dock, pier or other structure identified in Category 5, only the Category 5 fee shall apply.

i. Construction of, or the discharge from, a package sewage treatment plant.

j. Airport vegetation removal projects reviewable under 310 CMR 10.24(7)(c)5. and 10.53(3)(n).

k. Landfill closure projects reviewable under 310 CMR 10.24(7)(c)4. and 10.53(3)(p).

l. Any activities, including the construction of structures, associated with the assessment, monitoring, containment, mitigation, and remediation of, or other response to, a release or threat of release of oil and/or hazardous material reviewable under 310 CMR 10.24(7)(c)6. or 10.53(3)(q).

5. Category 5. Construction, reconstruction, repair or replacement of docks, piers, revetments, dikes, or other engineering structures on coastal or inland resource areas, including the placement of rip rap or other material on coastal or inland resource areas.

6. Category 6. The linear delineation (e.g. bordering vegetated wetland, riverfront area, bordering land subject to flooding) of each resource area under an Abbreviated Notice of Resource Area Delineation constitutes a separate activity. The fee associated with each resource area delineation proposed under an Abbreviated Notice of Resource Area Delineation shall

be determined by adding the fees for each type of resource area delineation.

(d) Requests for Action by the Department. Any person's request for action by the Department will not be deemed complete and time periods, if any, shall not commence, unless the person making the request has paid the appropriate filing fee specified in 801 CMR 4.02: *Fees of Licenses, Permits, and Services to Be Charged by State Agencies* (310).

(e) Fees for Requests for Action by Department. The following requests for action by the Department are subject to the fees established in 310 CMR 4.00: *Timely Action Schedule and Fee Provisions*.

1. Request for a Superseding Determination of Applicability.
2. Request for a Superseding Order of Conditions.
3. Request for an Adjudicatory Hearing or for a Variance which is necessary to avoid an unconstitutional taking.
4. Request to Intervene in an Adjudicatory Proceeding.
5. Request for a Variance, except where necessary to avoid an unconstitutional taking.

(f) Waivers and Exemptions. See 310 CMR 4.00: *Timely Action Schedule and Fee Provisions* for provisions concerning waivers or exemptions from the requirements of 310 CMR 10.03(7).

#### **10.04: Definitions**

**[NOTE TO REVIEWERS: MassDEP is proposing to amend, add or delete definitions in this section 310 CMR 10.04 as indicated by the redlining and strikeout in this document. If a definition is shown without any redlining or stricken text, then it is used in this document only to indicate the order of insertion of new definitions. Any definitions without redline or strikeout in this draft and all other definitions in the current regulations at 310 CMR 10.04 that are not included in this document are to remain the same as in the current document.]**

Abutter means the same as owner of land abutting the activity.

Act means the Wetlands Protection Act, M.G.L. c. 131, § 40.

Activity means any form of draining, dumping, dredging, damming, discharging, excavating, filling or grading; the erection, reconstruction or expansion of any buildings or structures; the driving of pilings; the construction or improvement of roads and other ways; the changing of run-off characteristics; the intercepting or diverging of ground or surface water; the installation of drainage, sewage and water systems; the discharging of pollutants; the destruction of plant life; and any other changing of the physical characteristics of land.

Aggrieved means the same as person aggrieved.

Agriculture. For the purposes of 310 CMR 10.04 the following words and phrases have the following meanings:

(a) Land in Agricultural Use means land within resource areas or the Buffer Zone presently and primarily used in producing or raising one or more of the following agricultural commodities for commercial purposes:

1. animals, including but not limited to livestock, poultry, and bees;
2. fruits, vegetables, berries, nuts, maple sap, and other foods for human consumption;
3. feed, seed, forage, tobacco, flowers, sod, nursery or greenhouse products, and ornamental plants or shrubs; and
4. forest products on land maintained in forest use, including but not limited to biomass, sawlogs, and cordwood, but not including the agricultural commodities described in 310 CMR 10.04: Agriculture(a)1. through 3.

Additionally, land in agricultural use means land within resource areas or the Buffer Zone presently and primarily used in a manner related to, and customarily and necessarily used in, producing or raising such commodities, including but not limited to: existing access roads and livestock crossings; windbreaks; hedgerows; field edges; bee yards; sand pits; landings for forest products; fence lines; water management projects such as reservoirs, farm ponds, irrigation systems, field ditches, cross ditches, canals/channels, grass waterways, dikes, sub-surface drainage systems, watering facilities, water transport systems, and water storage systems; agricultural composting sites; agricultural storage and work areas; and land under farm structures.

Land in agricultural use may lie inactive for up to five consecutive years unless it is under a United States Department of Agriculture (USDA) contract for a longer term pursuant to the Conservation Reserves Program (the Food Securities Act of 1985, as amended by the Food, Agriculture, Conservation and Trade Act of 1990; and 7 CFR 1410), or it is used for the forestry purposes described in 310 CMR 10.04: Agriculture(b)14. through 17. The issuing authority may require appropriate documentation, such as a USDA Farm Plan or aerial photography, to demonstrate agricultural use.

(b) Normal Maintenance of Land in Agricultural Use, which in all cases does not include placing substantial amounts of fill in Bordering Land Subject to Flooding or filling or dredging a Salt Marsh, means the following activities, without enlargement as to geographical extent, that are occurring on land in agricultural use, when directly related to production or raising of the agricultural commodities referenced in 310 CMR 10.04: Agriculture(a), when undertaken in such a manner as to prevent erosion and siltation of adjacent water bodies and wetlands, and when conducted in accordance with federal and state laws:

1. all crop management practices, not to include drainage in a Bordering Vegetated Wetland, customarily employed to enhance existing growing conditions, including but not limited to: tillage, trellising, pruning, mulching, shading, and irrigating; and all customary harvesting practices such as digging, picking, combining, threshing, windrowing, baling, curing, and drying;
2. the use of fertilizers, manures, compost materials, and other soil amendments; pesticides and herbicides; traps; and other such materials;
3. the repair or replacement of existing access roads and livestock crossings;
4. the maintenance of:
  - a. existing forest boundary lines up to five feet wide limited to cutting vegetation within the existing boundary lines;

- b. windbreaks;
- c. hedgerows; and
- d. fire breaks on land maintained in forest use and owned by the Metropolitan District Commission, the Department of Environmental Management, or the Department of Fisheries, Wildlife, and Environmental Law Enforcement;

5. the management of existing field edges, limited to within 100 feet from the land in production, including the following practices:

- a. mowing;
- b. burning;
- c. brush cutting; and
- d. removing trees.

The management of any field edge that falls within a Bordering Vegetated Wetland is not intended to allow the conversion of Bordering Vegetated Wetland into cropland. Therefore, the field management practices described in 310 CMR 10.04: Agriculture (b)(5)a. through d. may occur in a Bordering Vegetated Wetland provided that:

- i. the cutting or removal of trees and understory vegetation shall not occur within 25 feet of the bank of a water body that is not managed within the land in production (field ditches, cross ditches, grass waterways, irrigation systems, and farm ponds are examples of managed water bodies) unless the trees or understory vegetation are removed to control alternative hosts but no more than 50% of the canopy may be removed, or except to maintain existing dikes;
- ii. slash, branches, and limbs resulting from the cutting and removal operations shall not be placed within 25 feet of the bank of a water body that is not managed within the land in production; and
- iii. no tilling, filling, excavation, or other change in the existing topography shall occur within the field edge;

6. the maintenance and repair of existing fences and the management of temporary fence lines;

7. the cleaning, clearing, grading, repairing, dredging, or restoring of existing man-made or natural water management systems such as reservoirs, farm ponds, irrigation systems, field ditches, cross ditches, canals/channels, grass waterways, dikes, sub-surface drainage systems, watering facilities, water transport systems, vents, and water storage systems, all in order to provide drainage, prevent erosion, provide more effective use of water, or provide for efficient use of equipment, and all for the purpose of maintaining favorable conditions for ongoing growing or raising of agricultural commodities;

8. the maintenance and repair of ongoing agricultural composting sites, storage areas, and work areas and the storage of fertilizers, pesticides, manures, compost materials, and other soil amendments, provided that such storage occurs only in the Buffer Zone or Bordering Land Subject to Flooding;

9. the repair and maintenance of existing farm structures;

10. the seeding of eroded or disturbed areas;

11. maintaining the flow of existing natural waterways;
12. the keeping of livestock and poultry and the management of beehives;
13. the cultivation of cranberries, including the following practices:
  - a. the activities described in 310 CMR 10.04: Agriculture(b)1. through 11.;
  - b. the application of sand to existing bogs and the excavation of sand from sand pits;
  - c. the repair and reconstruction of water control structures including flumes, pumps, dikes, and piping above and below the ground;
  - d. the regrading, including modification of drainage, and replanting of existing cranberry bogs;
  - e. the repair and replacement of dikes;
  - f. water harvesting activities; and
  - g. flooding and flood release;
14. the cutting and removal of trees for the purpose of selling the trees or any products derived therefrom, when carried out in accordance with a Forest Cutting Plan approved by the Department of Environmental Management (DEM) under the provisions of M.G.L. c. 132, §§ 40 through 46, and subject to the following:
  - a. the cutting and removal of trees within Bordering Vegetated Wetland shall be limited to no more than 50% of the basal area of the area to be cut and the work shall be conducted when the soil is frozen, dry or otherwise stable to support the equipment used;
  - b. except for the construction or maintenance of access described in 310 CMR 10.04(b)16., there shall be no filling, excavation, or other change in topography or hydrology of resource areas;
  - c. all soils that are exposed during or after any work described in 310 CMR 10.04: Agriculture(b)14. shall be stabilized to prevent the soils from eroding into Bordering Vegetated Wetlands beyond the work area or into open water bodies, in accordance with the Massachusetts Forestry Best Management Practices Manual;
  - d. the person claiming the exemption shall submit by certified mail or hand delivery at the same time to the conservation commission and the appropriate DEM Regional Office not less than ten days prior to the commencement of the activity, a copy of the Forest Cutting Plan that describes the proposed cutting and removal of trees and any activity within resource areas or the Buffer Zone. The conservation commission shall have the opportunity to comment to DEM on the plan;
  - e. landings for forest products shall not be located in Bordering Vegetated Wetland or Bank; and
  - f. any Forest Cutting Plan that is not affirmatively approved by DEM under M.G.L. c. 132, §§ 40 through 46 but instead is deemed approved due to the expiration of some period of time following the submittal of the plan to DEM for approval shall not be considered "approved" by DEM for the purposes of 310 CMR 10.04.
15. notwithstanding the use of the words "for commercial purposes" in the first sentence of 310 CMR 10.04: Agriculture(a), the cutting of trees within resource

areas and the Buffer Zone by owners for their own use, not to exceed 5,000 board feet or ten cords of wood during any 12 month period without an approved Forest Cutting Plan or the cutting of trees within resources areas of greater than 5,000 board feet or ten cords but less than 10,000 board feet or 20 cords of wood during any 12 month period with an approved Forest Cutting Plan, provided that:

- a. after the cutting, the remaining trees in the resource area (and the Buffer Zone, if the activity is being conducted without an approved Forest Cutting Plan) shall be evenly distributed throughout the area where cutting occurred and the crown cover shall not be less than 50%. Crown cover is determined as the percent of the ground's surface that would be covered by a vertical projection of foliage from trees with a diameter at breast height of five inches or greater, where minor gaps between branches are disregarded and areas of overlapping foliage are counted only once;
- b. the cutting and removal of trees shall occur only during those periods when the ground is sufficiently frozen, dry, or otherwise stable to support the equipment used;
- c. the cutting, removal, or other destruction of trees and understory vegetation without a Forest Cutting Plan shall not occur within 25 feet of the Bank, except for the purpose of providing access for the activities described in 310 CMR 10.04: Agriculture(b)15.;
- d. the placement of slash, branches, and limbs resulting from the cutting and removal operations shall not occur within 25 feet of Bank;
- e. no filling, excavation, or other change shall occur in the existing topography or hydrology of a resource area;
- f. landings for forest products shall not be located in Bordering Vegetated Wetland or Bank; and
- g. any Forest Cutting Plan that is not affirmatively approved by DEM under M.G.L. c. 132, §§ 40 through 46, but instead is deemed approved due to the expiration of some period of time following the submittal of the plan to DEM for approval shall not be considered "approved" by DEM for the purposes of 310 CMR 10.04.

16. the construction of new temporary access or the maintenance of existing legally constructed access for forestry activities described in 310 CMR 10.04: Agriculture(b)14. or 15. provided that:

- a. every practicable effort shall be made to avoid access, including stream crossings, and the construction of landings through and in resource areas;
- b. where access, including stream crossings, through resource areas cannot be avoided, every practicable effort shall be made to minimize impacts resulting from construction of new access including, but not limited to, maintaining and improving (but not enlarging) existing access. Activities shall be conducted when the soil is frozen, dry, or otherwise stable to support the equipment used;
- c. where DEM has determined through its review and approval of the Forest Cutting Plan that access is impracticable without constructing new access or stream crossings:

- i. access shall be designed, constructed, and maintained in accordance with the Massachusetts Forestry Best Management Practices Manual;
- ii. stream crossings shall be stabilized to prevent erosion using methods described in the Massachusetts Forestry Best Management Practices Manual. When crossings involve fill, culverts or other structures that will obstruct flow, they shall be designed, constructed, and maintained in accordance with the Massachusetts Forestry Best Management Practices Manual to allow the unobstructed passage of existing flows for at least the 25 year storm;
- iii. access or stream crossings shall be removed within one year of completion of the work described in the approved Forest Cutting Plan;
- iv. following removal of access, the topography and site conditions shall be substantially restored to allow pre-existing vegetation to be reestablished; and
- v. activities shall be conducted when the soil is frozen, dry, or otherwise stable to support the equipment used.

17. non-harvest management practices for forest products on land maintained in forest use limited to pruning, pre-commercial thinning or planting of tree seedlings.

(c) Normal Improvement of Land in Agricultural Use, which in all cases does not include filling or dredging a Salt Marsh, includes but is not limited to:

1. the following activities when they occur on land in agricultural use or when they occur within the Buffer Zone or Bordering Land Subject to Flooding that is not land in agricultural use, when they are directly related to production or raising of the agricultural commodities referenced in 310 CMR 10.04: Agriculture(a), and when they are undertaken in such a manner as to prevent erosion and siltation of adjacent water bodies and wetlands and the activity is conducted in accordance with federal and state laws:

- a. the installation of permanent fencing, windbreaks, hedgerows, or the cutting of vegetation to create forest boundaries up to five feet wide;
- b. the installation of dikes within a cranberry bog;
- c. the construction of farm structures, not including habitable dwellings, provided that the footprint of the farm structure does not exceed 4,000 square feet and no filling of Bordering Land Subject to Flooding occurs beyond the footprint of the building;
- d. the squaring-off of fields and bogs, provided that the activity does not alter a Bordering Vegetated Wetland, there is no increase in the amount of land in production beyond the minimum increase necessarily resulting from making the boundary of any field or bog more regular, and no fill is placed within Bordering Land Subject to Flooding;
- e. the construction of by-pass canals/channels and tail water recovery systems;

f. a change in commodity other than from maple sap production or forest products to any other commodity, provided that there is no filling of Bordering Vegetated Wetland and drainage ditches or the subsurface drainage system are not increased or enlarged;

g. the construction of a water management system such as a reservoir, farm pond, irrigation system, field ditch, cross ditch, canal/channel, grass waterway, dike, sub-surface drainage system, watering facility, water transport system, vent, or water storage system, or of a livestock access; and

h. the construction of composting and storage areas.

For the activities described in 310 CMR 10.04: Agriculture(c)(1)d.

through h. there shall be no net loss of flood storage capacity; and

2. the reconstruction of existing dikes, the reconstruction and expansion of existing ponds and reservoirs, and the construction of tailwater recovery ponds and by-pass canals/channels occurring partly or entirely within a Bordering Vegetated Wetland, when directly related to production or raising of the agricultural commodities referenced in 310 CMR 10.04: Agriculture(a), in accordance with the following:

a. Prior to performing the work, the person claiming the exemption shall submit to the conservation commission for its review at a public meeting that portion of a certified farm Conservation Plan (CP) which relates to the work to be conducted in a Bordering Vegetated Wetland. The CP must be prepared in cooperation with the U.S.D.A. Natural Resource Conservation Service (NRCS), Memorandum of Understanding (MOU) between the Department and NRCS concerning CPs;

b. The conservation commission may, within 21 days of receiving the CP, provide the person claiming the exemption with written notification containing specific comments detailing the manner in which the CP has not been prepared in compliance with the terms of the MOU;

c. The person claiming the exemption shall provide SCS with a complete copy of the notification;

d. All revisions to the CP that relate to the delineation of Bordering Vegetated Wetlands shall be submitted to the conservation commission in accordance with 310 CMR 10.04: Agriculture(c)2.;

e. All work shall be done in accordance with the CP; and

f. The maximum amount of Bordering Vegetated Wetland which may be altered by the above activities is:

i. 5,000 square feet for reconstruction of an existing dike;

ii. 10,000 square feet for expansion of an existing pond or reservoir;

iii. 10,000 square feet for construction of a tailwater recovery pond; and

iv. 5,000 square feet for construction of a by-pass canal/channel.

Alter means to change the condition of any Area Subject to Protection under M.G.L. c. 131, § 40. Examples of alterations include, but are not limited to, the following:



- (a) the changing of pre-existing drainage characteristics, flushing characteristics, salinity distribution, sedimentation patterns, flow patterns and flood retention areas;
- (b) the changing of the water level or water table;
- (c) the destruction of vegetation;
- (d) the changing of water temperature, biochemical oxygen demand (BOD), and other physical, biological or chemical characteristics of the receiving water;
- (e) increasing of the volume of untreated stormwater runoff directed to a wetland Resource Area.

Provided, that when the provisions of 310 CMR 10.03(6) and 10.05(3) or 333 CMR 11.03(9) have been met, the application of herbicides in the Buffer Zone in accordance with such plans as are required by the Department of Food and Agriculture pursuant to 333 CMR 11.00: *Right of Way Management*, effective July 10, 1987, is not an alteration of any Area Subject to Protection under M.G.L. c. 131, § 40.

Applicant means any person who files a Notice of Intent, or on whose behalf such a notice is filed.

Aquaculture.

(a) Land in Aquacultural Use means land presently and primarily used in the growing of aquatic organisms under controlled conditions, including one or more of the following uses: raising, breeding or producing a specified type of animal or vegetable life including, but not limited to, municipal shellfish propagation, finfish such as carp, catfish, black bass, flatfishes, herring, salmon, shad, smelt, sturgeon, striped bass, sunfishes, trout, whitefish, eel, tilapia; shellfish such as shrimp, crabs, lobster, crayfish, oysters, clams, periwinkles, scallops, mussels, squid; amphibians such as frogs; reptiles such as turtles; seaweeds such as irish moss and dulse; and edible freshwater plants.

(b) Normal Maintenance or Improvement of land in aquacultural use means the following activities, when done in connection with the production of aquatic organisms as defined above: draining, flooding, heating, cooling, removing, filling, grading, compacting, raking, tilling, fertilizing, seeding, harvesting, filtering, rafting, culverting or applying chemicals in conformance with all state and federal laws; provided, however, that such activities are clearly intended to improve and maintain land in aquacultural use and that Best Available Measures are utilized to ensure that there will be no adverse effect on wetlands outside the area in aquacultural use, and further provided that removing, filling, dredging or altering of a salt marsh is not to be considered normal maintenance or improvement of land in aquacultural use.

Area Subject to Protection under M.G.L. c. 131, § 40 means any area specified in 310 CMR 10.02(1). It is used synonymously with Resource Area, each one of which is defined in greater detail in 310 CMR 10.21 through 10.66.

Bank (Coastal) is defined in 310 CMR 10.30(2).

Bank (Inland) is defined in 310 CMR 10.54(2).

Beach (Barrier) is defined in 310 CMR 10.29(2).

Beach (Coastal) is defined in 310 CMR 10.27(2).

Beach (Inland), a naturally occurring inland beach, means an unvegetated bank as defined in 310 CMR 10.54(2).

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

Best Available Measures means the most up-to-date technology or the best designs, measures or engineering practices that have been developed and that are commercially available.

Best Management Practices (BMPs) means, for purposes of stormwater management (310 CMR 10.05(6)(k)-(q)), 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 310 CMR 10.04, definition of Stormwater Control Measure. For purposes of forestry management, BMPs include those described in the Massachusetts Forestry Best Management Practices Manual, dated 2013.

Best Practical Measures means technologies, designs, measures or engineering practices that are in general use to protect similar interests.

Bordering means touching. An area listed in 310 CMR 10.02(1)(a) is bordering on a water body listed in 310 CMR 10.02(1)(a) if some portion of the area is touching the water body or if some portion of the area is touching another area listed in 310 CMR 10.02(1)(a) some portion of which is in turn touching the water body.

Bordering Vegetated Wetland is defined in 310 CMR 10.55(2).

Boundary means the boundary of an Area Subject to Protection under M.G.L. c. 131, § 40. A description of the boundary of each area is found in the appropriate section of 310 CMR 10.00. For coastal areas, *see* 310 CMR 10.21 through 10.37; for inland areas, *see* 310 CMR 10.51 through 10.60.

Breeding Areas mean areas used by wildlife for courtship, mating, nesting or other reproductive activity, and rearing of young.

Buffer Zone means that area of land extending 100 feet horizontally outward from the boundary of any area specified in 310 CMR 10.02(1)(a).

Certificate of Compliance means a written determination by the issuing authority that work or a portion thereof has been completed in accordance with an Order. It shall be made on Form 8. Coastal Wetlands are defined in M.G.L. c. 131, § 40, para. 7.

Cold-water Fishery means waters in which the mean of the maximum daily temperature over a seven day period generally does not exceed 68°F (20°C) and, when other ecological factors are favorable (such as habitat) are capable of supporting a year round population of cold-water stenothermal aquatic life such as trout. Waters designated as cold-water fisheries by the Department in 314 CMR 4.00: *Massachusetts Surface Water Quality Standards* and waters 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 fish population and habitat exist are also cold-water fisheries. Cold-water fish include but are not limited to brook trout (*Salvelinus fontinalis*), rainbow trout (*Oncorhynchus mykiss*), brown trout (*Salmo trutta*), creek chubsucker (*Erimyzon oblongus*) and fallfish (*semotilus corporalis*).

Commissioner means the Commissioner of the Department of Environmental Protection pursuant to St. 1989, c. 240, § 101.

Compacted Gravel or Soil means, for purposes of stormwater management (310 CMR 10.05(6)(k)-(q)), 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<sup>6</sup> pascals).

Conditions means those requirements set forth in a written Order issued by a conservation commission or the Department for the purpose of permitting, regulating or prohibiting any activity that removes, fills, dredges or alters an Area Subject to Protection under M.G.L. c. 131, § 40. (See also 310 CMR 10.05(6).)

Confined Disposal Facility means a facility created in open water or wetlands consisting of confinement walls or berms built up or extending into existing land and is a “confined disposal facility” as defined in 314 CMR 9.02: *Definitions*.

Conservation Commission means that body comprised of members lawfully appointed pursuant to M.G.L. c. 40, § 8C. For the purposes of M.G.L. c. 131, § 40 and 310 CMR 10.00, it shall also mean a mayor or board of selectmen, where no conservation commission has been established under M.G.L. c. 40, § 8C.

Creek means the same as a stream, as defined in 310 CMR 10.04.

Critical Areas mean Outstanding Resource 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 means for the purposes of 310 CMR 10.11 through 310 CMR 10.14, 310 CMR 10.24(8), and 10.53(4) 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.

Date of Issuance means the date an Order is mailed, as evidenced by a postmark, or the date it is hand delivered.

Date of Receipt means the date of delivery to an office, home or usual place of business by mail or hand delivery.

Densely Developed Area means a riverfront area that has been designated by the Secretary of the Executive Office of Energy and Environmental Affairs at the request of a city or town, limited to an area of ten acres or more that is being utilized, or includes existing vacant structures or vacant lots formerly utilized as of January 1, 1944 or sooner, for intensive industrial, commercial, institutional, or residential activities or combinations of such activities, including, but not limited to the following: manufacturing, fabricating, wholesaling, warehousing, or other commercial or industrial activities; retail trade and service activities; medical and educational institutions; residential dwelling structures at a density of three or more per two acres; and mixed or combined patterns of the above. Land which is zoned for intensive use but is not utilized for such use as of January 1, 1997 shall not be designated as a densely developed area. Rivers within the municipalities identified in 310 CMR 10.58(2)(a)3.a. also have 25 foot riverfront areas.

Department (or MassDEP) means the Department of Environmental Protection, and shall include the Commissioner and any other person employed by said Department, pursuant to St. 1989, c. 240, § 101.

Designated Port is defined in 310 CMR 10.26(2)

Determination.

(a) a Determination of Applicability means a written finding by a conservation commission or the Department as to whether a site or the work proposed thereon is subject to the jurisdiction of M.G.L. c. 131, § 40. It shall be made on Form 2.

(b) a Determination of Significance means a written finding by a conservation commission, after a public hearing, or by the Department, that the area on which the proposed work is to be done, or which the proposed work will alter, is significant to one or more of the interests identified in M.G.L. c. 131, § 40. It shall be made as part of the Order, on Form 5.

(c) a Notification of Non-significance means a written finding by a conservation commission, after a public hearing, or by the Department, that the area on which the proposed work is to be done, or which the proposed work will alter, is not significant to any of the interests of M.G.L. c. 131, § 40. It shall be made on Form 6.

Direct Case means the evidence that a party seeks to introduce in support of its position, as well as any legal argument the party wishes to provide. The Direct Case may include, but is not limited to, statements under oath by lay witnesses and expert witnesses, technical reports, studies, memoranda, maps, plans, and other information that a party seeks to have the Presiding Officer review as part of the adjudicatory proceeding.

Disposal Site means 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.

Dredge means to deepen, widen or excavate, either temporarily or permanently, land below the mean high tide line in coastal waters and below the high water mark for inland waters. The term dredge shall not include activities in Salt Marsh, Bordering Vegetated Wetlands or isolated vegetated wetlands.

Dune means coastal dune, as defined in 310 CMR 10.28(2).

Ecological Restoration Project means 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 or a 401 Water Quality Certification issued pursuant to 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* other than projects implemented pursuant to a US Army Corps of Engineers approved in-lieu fee program.

Ecological Restoration Limited Project means an Ecological Restoration Project that meets the eligibility criteria set forth in 310 CMR 10.24(8) or 10.53(4).

Effective Impervious Cover Reduction means the reduction of impervious cover for accounting purposes from the total area of impervious cover on a Project Site for purposes of stormwater management (310 CMR 10.05(6)(k)-(q)) due to the use of practices that effectively disconnect stormwater from the drainage system. Impervious cover is deducted for accounting purposes when the following 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 Protection Agency Performance Removal Curve (EPA-PRC) means 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. 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) means 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 reducing Impervious Surfaces, disconnecting stormwater sheet flow paths and treating stormwater at its source, maximizing open space, minimizing disturbance, protecting natural features and processes, and/or enhancing wildlife habitat.

Environmentally Sensitive Site Design Credit (ESSD Credit) means a credit for the use of ESSD that counts towards compliance with requirements to: (i) attenuate the peak discharge rate pursuant to 310 CMR 10.05(6)(k)2.; (ii) recharge a depth of stormwater in inches pursuant to 310 CMR 10.05(6)(k)3.; or (iii) remove a percent of Total Suspended Solids and Total Phosphorus pursuant to 310 CMR 10.05(6)(k)4 and 310 CMR 10.05(6)(k)7.

Estimated Habitat Map of State-listed Rare Wetlands Wildlife means the map of the estimated habitats of state-listed rare wetlands wildlife published by the Natural Heritage and Endangered Species Program (the Program or NHESP) in accordance with 321 CMR 10.12: *Delineation of Priority Habitat of State-listed Species*.

Estuary means:

- (a) any area where fresh and salt water mix and tidal effects are evident; or
- (b) any partially enclosed coastal body of water where the tide meets the current of any stream or river.

Extension Permit means a written extension of time within which the authorized work shall be completed. It shall be made on Form 7.

FEMA means the Federal Emergency Management Agency, an agency of the United States Department of Homeland Security whose primary purpose is to coordinate response to disasters.

Fill means to deposit any material so as to raise an elevation, either temporarily or permanently.

Final Order means the Order issued by the Commissioner after an adjudicatory hearing or, if no request for hearing has been filed, the Superseding Order or, if no request for a Superseding Order has been filed, the Order of Conditions.

Flat (Tidal) is defined in 310 CMR 10.27(2)(b).

Flood Control means the prevention or reduction of flooding and flood damage.

Formerly or Presently Owned means owned by the same owner at any time on or after August 1, 1996.

Freshwater Wetlands are defined in M.G.L. c. 131, § 40, para. 8.

General Performance Standards means those requirements established by 310 CMR 10.00 for activities in or affecting each of the Areas Subject to Protection under M.G.L. c. 131, § 40. They are found in 310 CMR 10.25 through 10.36, 10.37, and 10.54 through 10.60.

Ground Water Supply means water below the earth's surface in the zone of saturation.

Highway Specific Considerations are design specifications and other measures that the Massachusetts Department of Transportation (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.

Historic Mill Complex means the mill complexes in, but not limited to, Holyoke, Taunton, Fitchburg, Haverhill, Methuen, and Medford in existence prior to 1946 and situated landward of the waterside facade of a retaining wall, building, sluiceway, or other structure existing on August 7, 1996. An historic mill complex also means any historic mill included on the *Massachusetts Register of Historic Places*. An historic mill complex includes only the footprint of the area that is or was occupied by interrelated buildings (manufacturing buildings, housing, utilities, parking areas, and driveways) constructed before and existing after 1946, used for any type of manufacturing or mechanical processing and including associated structures to provide water for processing, to generate water power, or for water transportation.

Hydrologic Unit Code 10 (HUC 10) means 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) means 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 means a 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 water from swimming pools, water used for street washing and water used to clean residential buildings without detergents.

Impervious Surface means, for purposes of stormwater management (310 CMR 10.05(6)(k)-(q)), 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 in order to size the depth of the underlying reservoir course to meet recharge and Total Suspended Solids/Total Phosphorus removal requirements pursuant to 310 CMR 10.05(6)(k)3. and 4.

Important Wildlife Habitat Functions means important food, shelter, migratory or overwintering areas, or breeding areas for wildlife.

Impracticable for use in 310 CMR 10.05(6)(k)-(q) for purposes of stormwater management means impossible in practice to do or carry out based solely on physical constraints.

Improvement of an Existing Public Roadway means, for purposes of Redevelopment stormwater management in 310 CMR 10.05(6)(k)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 means technology that has not been commercially deployed or is in limited deployment in Massachusetts, and includes, but is not limited to, energy technology that obtains energy from the ocean, waterway, or conditions associated with the ocean or waterway, or other forms of renewable energy technology.

Interests Identified in M.G.L. c. 131, § 40 means public or private water supply, ground water supply, flood control, storm damage prevention, prevention of pollution, protection of land containing shellfish, protection of fisheries, and protection of wildlife habitat.

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

Issuing Authority means a conservation commission, mayor, the selectmen or the Department, whichever is applicable.

Lake means any open body of fresh water with a surface area of ten acres or more, and shall include great ponds.



Land Containing Shellfish is defined in 310 CMR 10.34(2).

Land Subject to Coastal Storm Flowage means land subject to any inundation caused by coastal storms up to and including that caused by the 100-year storm, surge of record or storm of record, whichever is greater.

Land Subject to Flooding is defined in 310 CMR 10.57(2).

Land Subject to Tidal Action means land subject to the periodic rise and fall of a coastal water body, including spring tides.

Land under Salt Ponds is defined in 310 CMR 10.33(2).

Land under Water Bodies and Waterways means the bottom of, or land under, the surface of the ocean or any estuary, creek, river, stream, pond, or lake. Land under the ocean and estuaries is further defined in 310 CMR 10.25(2); land under inland water bodies is further defined in 310 CMR 10.56(2).

Land Uses with Higher Potential Pollutant Loads mean the following land uses: land uses identified in 310 CMR 22.20B(2), 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.

Landowner means the owner of record of land or an interest in land that is subject of a Reviewable Decision.

Linear-shaped Project, for purposes of 310 CMR 10.05(4), means a project that is substantially longer than it is wide and is a project for the construction, reconstruction, or substantial enlargement of facilities that will be used in the service of the public to provide electric, gas, sewer, water, telephone, telegraph and other communication services, a project by a public agency or authority for the construction, reconstruction, expansion, repair or maintenance of public roads, bike paths or other paths for pedestrians, or public railways.

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

Low Impact Development (LID) means 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 means 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 Log means, for purposes of 310 CMR 10.05(6)(k)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 a Stormwater Management System means the work required to keep a stormwater management system functional and in good repair so that it may continue to operate as originally designed. Maintenance of a stormwater management system does not include work that:

- (a) reduces the capacity of the system to treat stormwater, provide recharge or attenuate peak flow;
- (b) increases the total and peak volume of the stormwater managed by the system;
- (c) directs additional stormwater discharges to the system; or
- (d) results in reduced use of above ground Stormwater Control Measures or Best Management Practices.

Maintenance of an Existing Public Roadway means 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.

Major or Complex means an appeal of a Reviewable Decision issued for work in a resource area that will be so designated due to the complexity or novelty of the issues, the magnitude of the project, the potential for environmental harm or benefit, significant public interest or public financing or other relevant consideration, as determined by the Commissioner or a Presiding Officer.

Majority means more than half of the members of the conservation commission then in office.

Marsh is defined in M.G.L. c. 131, § 40, para. 11.

Massachusetts Erosion and Sediment Control Guidelines means 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. This is now incorporated as *Massachusetts Stormwater Handbook Appendix C* [2023 Edition].

Massachusetts River and Stream Crossing Standards or the Stream Crossing Standards means the standards developed by the River and Stream Continuity Partnership as corrected on March 8, 2012 (<https://www.mass.gov/doc/massachusetts-river-and-stream-crossing-standards/download>).

Maximum Extent Practicable, for purposes of stormwater management (310 CMR 10.05(6)(k)-(q)), is defined at 310 CMR 10.05(6)(o).

Meadow (or Wet Meadow) is defined in M.G.L. c. 131, § 40, para. 10.

Mean Annual High-water Line is defined at 310 CMR 10.58(2).

MEPA means the Massachusetts Environmental Policy Act, M.G.L. c. 30, §§ 6 through 62H, and 301 CMR 11.00: *General Application and Administration Environmental Code, Title 1*.

Migratory Areas mean those areas used by wildlife moving from one habitat to another, whether seasonally or otherwise.

Mitigation means rectifying an adverse impact by repairing, rehabilitating or restoring the affected Resource Area or compensating for an adverse impact by enhancing or providing replacement Resource Areas.

Near means, for purposes of stormwater management (310 CMR 10.05(6)(k)(6)), where a stormwater discharge has a strong likelihood of causing a significant impact to 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 means 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 means 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.

Notice of Intent means the written notice filed by any person intending to remove, fill, dredge or alter an Area Subject to Protection under M.G.L. c. 131, § 40. It shall be made on Form 3 or 4.

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

Ocean means the Atlantic Ocean and all contiguous waters subject to tidal action.

Offsite Mitigation for Redevelopment means, for purposes of 310 CMR 10.05(6)(k)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 310 CMR 10.05(6)(k)7. and 11.

Openness Ratio means the cross-sectional area of a structure opening divided by crossing length when measured in consistent units. For a box culvert, the openness ratio equals (height x width)/length. For crossing structures with multiple cells or barrels openness is calculated separately for each cell or barrel. The embedded portion of a culvert is not included in the calculation of the cross-sectional area.

Order means an Order of Conditions, Order of Resource Area Delineation, Superseding, Order or Final Order, whichever is applicable.

Order of Conditions means the document issued by a conservation commission containing conditions which regulate or prohibit an activity. It shall be made on Form 5.

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

Owner of Land Abutting the Activity means the owner of land sharing a common boundary or corner with the site of the proposed activity in any direction, including land located directly across a street, way, creek, river, stream, brook or canal.

Party to any proceeding before the Department means the applicant, the conservation commission and the Department, and pursuant to 310 CMR 10.05(7)(a) may include the owner of the site, any abutter, any person aggrieved, any ten residents of the city or town where the land is located and any ten persons pursuant to M.G.L. c. 30A, § 10A.

Person Aggrieved means any person who, because of an act or failure to act by the issuing authority, 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 the interests identified in M.G.L. c. 131, § 40. Such person must specify in writing sufficient facts to allow the Department to determine whether or not the person is in fact aggrieved.

Plans means such data, maps, engineering drawings, calculations, specifications, schedules and other materials, if any, deemed necessary by the issuing authority to describe the site and/or the work, to determine the applicability of M.G.L. c. 131, § 40 or to determine the impact of the proposed work upon the interests identified in M.G.L. c. 131, § 40. (See also General Instructions for Completing Notice of Intent (Form 3) and Abbreviated Notice of Intent (Form 4).)

Pond (Coastal) means Salt Pond as defined in 310 CMR 10.33(2).

Pond (Inland) means any open body of fresh water with a surface area observed or recorded within the last ten years of at least 10,000 square feet. Ponds may be either naturally occurring or human-made by impoundment, excavation, or otherwise. Ponds shall contain standing water except for periods of extended drought. Periods of extended drought for purposes of 310 CMR 10.00 shall be those periods, in those specifically identified geographic locations, determined to be at the “Level 1 – Mild Drought” or more severe drought level by the Secretary of Energy and Environmental Affairs, in accordance with the Massachusetts Drought Management Plan, dated September 2019.

Notwithstanding the above, the following human-made bodies of open water shall not be considered ponds:

- (a) basins or lagoons which are part of wastewater treatment plants;
- (b) swimming pools or other impervious human-made basins; and
- (c) individual gravel pits or quarries excavated from upland areas unless inactive for five or more consecutive years.

Practicable means 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 permissible under existing federal and state statutes and regulations.

Pretreatment Practices means 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.

Prevention of Pollution means the prevention or reduction of contamination of surface or ground water.

Primary Frontal Dune or Primary Dune means a continuous or nearly continuous mound or ridge of sediment with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during coastal storms. The Primary Frontal Dune is the dune closest to the beach. The inland limit of the Primary Frontal Dune occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope.

Private Water Supply means any source or volume of surface or ground water demonstrated to be in any private use or demonstrated to have a potential for private use.

Project Locus means the lot on which an applicant proposes to perform an activity subject to regulation under M.G.L. c. 131, § 40.

Project Purpose means the general, functional description of an activity proposed within the riverfront area (e.g., construction of a single family house, expansion of a commercial development).

Project Site means 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.

Protection of Fisheries means protection of the capacity of an Area Subject to Protection under M.G.L. c. 131, § 40:

- (a) to prevent or reduce contamination or damage to fish; and
- (b) to serve as their habitat and nutrient source. Fish includes all species of fresh and salt water finfish and shellfish.

*See also the definition of Marine Fisheries contained in 310 CMR 10.23(15).*

Protection of Land Containing Shellfish means protection of the capacity of an Area Subject to Protection under M.G.L. c. 131, § 40:

- (a) to prevent or reduce contamination or damage to shellfish; and
- (b) to serve as their habitat and nutrient source.

*See also the definitions of Shellfish and Land Containing Shellfish in 310 CMR 10.34(2).*

Public Shared Use Paths means 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 that provides for public access. 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.

Public Water Supply means any source or volume of surface or ground water demonstrated to be in public use or approved for water supply pursuant to M.G.L. c. 111, § 160 by the Drinking Water Program of the Department, or demonstrated to have a potential for public use.

Qualifying Pervious Areas (QPA) means, for purposes of stormwater management (310 CMR 10.05(6)(k)-(q)), fully stabilized natural or vegetated areas where stormwater discharge is directed via sheet flow and not as a point source discharge.

Rare Species mean 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.

Redevelopment means replacement, rehabilitation, or expansion of existing structures, Improvement of an Existing Public Roadway or reuse of previously developed areas for purposes

of 310 CMR 10.58, governing work in the Riverfront Area, and 310 CMR 10.36, governing work in Land Subject to Coastal Storm Flowage. For purposes of the Stormwater Management Standards as provided in 310 CMR 10.05(6)(k) through (q), 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.

Remove means to take away any type of material, thereby changing an elevation, either temporarily or permanently.

Request for Determination of Applicability means a written request made by any person to a conservation commission or the Department for a determination as to whether a site or work thereon is subject to M.G.L. c. 131, § 40. It shall be submitted on Form 1.

Resource Area means any of the areas specified in 310 CMR 10.25 through 10.36 and 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).

Restoration Order of Conditions means an Order of Conditions issued pursuant to 310 CMR 10.05(6) and 10.14 for a project that meets the eligibility criteria set forth in 310 CMR 10.13.

Retrofit Projects means, for purposes of stormwater management (310 CMR 10.05(6)(k)-(q)), 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.

Reviewable Decision means a Department decision that is a superseding order of condition or superseding denial of an order of conditions, a superseding determination of applicability, and/or a superseding order of resource area delineation, or a variance.

River means any natural flowing body of water that empties to any ocean, lake, pond, or other river and which flows throughout the year. River is defined further at 310 CMR 10.58(2).

Riverfront Area is defined at 310 CMR 10.58(2).

Rocky Intertidal Shore is defined in 310 CMR 10.31(2).

Salt Marsh is defined in 310 CMR 10.32(2).

Saturated Hydraulic Conductivity Test means 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 Amoozegar permeameter. A Title 5 percolation test, as defined at 310 CMR 15.002, is not an acceptable Saturated Hydraulic Conductivity Test for purposes of stormwater management (310 CMR 10.05(6)(k)-(q)).

Seasonal High Groundwater Elevation means, for purposes of stormwater management (310 CMR 10.05(6)(k)-(q)), 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.”

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

Severe Weather Emergency Declaration is a declaration issued by the Commissioner, following a destructive weather event, which authorizes widespread emergency recovery, debris cleanup, or roadway or utility repair, necessary for the protection of the health or safety of the residents of the Commonwealth, without filing a Notice of Intent or requesting an emergency certification or authorization pursuant to 310 CMR 10.06(1) through (7).

Sediment, for the purpose 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, and for inland waters, below the upper boundary of a bank, as defined in 310 CMR 10.54(2).



Shellfish Growing Area means 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 Fisheries as a Shellfish Growing Area including any area identified on such map as an area where shellfishing 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 for shellfish harvesting with or without depuration. In addition, Shellfish Growing Areas shall include Shellfish 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 importance of the area for recreational and commercial shellfishing.

Shellfish Suitability Area means an area located within land containing shellfish and identified on maps prepared in May 2011 by the Massachusetts Division of Marine Fisheries with input from local Shellfish Constables and commercial fishermen as suitable for shellfish. The areas covered include sites where shellfish have been observed since the mid 1970s but may not currently support shellfish and thus represent both existing and potential shellfish habitat areas.

Shelter means protection from the elements or predators

Significant means plays a role. A Resource Area is significant to an interest identified in M.G.L. c. 131, § 40 when it plays a role in the provision or protection, as appropriate, of that interest. Within the context of the protection of the riverfront area, no significant adverse impact means the level of protection of the performance standards provided under 310 CMR 10.58.

Soil Absorption System means 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 Flood Hazard Area means the area of land in the flood plain that is subject to a 1% chance of flooding in any given year as determined by the best available information, including, but not limited to, the currently effective or preliminary Federal Emergency Management Agency (FEMA) Flood Insurance Study or Rate Map (except for any portion of a preliminary map that is the subject of an appeal to FEMA) for Land Subject to Coastal Storm Flowage, the Velocity Zone as defined in 310 CMR 10.04, and the Flood Insurance Study for Bordering Land Subject to Flooding as defined in 310 CMR 10.57.

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

Spring Tides means those tides which occur with the new and full moons, and which are perceptibly higher and lower than other tides.

State-listed Species mean the same as rare species, as defined in 310 CMR 10.04.

Storm Damage Prevention means the prevention of damage caused by water from storms, including, but not limited to, erosion and sedimentation, damage to vegetation, property or buildings, or damage caused by flooding, water-borne debris or water-borne ice.

Stormwater Control Measure (SCM) means a 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, discharge outlet, 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, 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 conveying, collecting, storing, discharging, recharging or treating stormwater.

Stormwater Management Standards means the regulations specified at 310 CMR 10.05(6)(k)1. through 11.

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

Stormwater Management System Improvement means:

- (a) expansion of a stormwater management system beyond its existing geographic footprint to provide treatment for additional stormwater volume, provide additional groundwater recharge or enhance groundwater recharge or pollutant removal capability such as the addition of treatment train components; or
- (b) modification to, or addition of, features within the existing geographic footprint of a stormwater management system to enhance groundwater recharge or pollutant removal capability, such as modifying outlet control structures.

Stream means a body of running water, including brooks and creeks, which moves in a definite channel in the ground due to a hydraulic gradient, and which flows within, into or out of an Area Subject to Protection under M.G.L. c. 131, § 40. A portion of a stream may flow through a culvert or beneath a bridge. Such a body of running water which does not flow throughout the year (*i.e.*, which is intermittent) is a stream except for that portion upgradient of all bogs, swamps, wet meadows and marshes.

Substitute EPA-PRC means 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.

Superseding Determination means a determination of applicability, of significance or of non-significance, as the case may be, issued by the Department. It shall be made on Form 2.

Superseding Order means a document issued by the Department containing conditions which regulate or prohibit an activity. It shall be made on Form 5.

Surface Waters means all waters other than ground water within the jurisdiction of the Commonwealth including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, wetlands, and coastal waters.

Swamp is defined in M.G.L. c. 131, § 40, para. 9.

Terminal Treatment Practices mean 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 means the installation or deployment of water dependent Innovative Technology in situ for purposes 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 means 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) means 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) means the total phosphate content in stormwater including all particulate and dissolved phosphorus, in both organic and inorganic forms.

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

Underground Injection Control Program or UIC Program means the Underground Injection Control Program under Part C of the Federal Safe Drinking Water Act, 42 U.S.C. §§ 300f *et seq.*, which is implemented and enforced in Massachusetts by the Department pursuant to 310 CMR 27.00: *Underground Injection Control Regulations*.

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

Velocity Zone or V-Zone also known as the Coastal High Hazard Area means an area within the Special Flood Hazard Area that is subject to high velocity wave action from storms or seismic sources. The Velocity Zone Boundaries are determined by reference to the currently effective or preliminary Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency (FEMA), whichever is more recent (except for any portion of a preliminary map that is the subject of an appeal to FEMA), or at a minimum to the inland limit of the Primary Frontal Dune, whichever is farther landward.

Vernal Pool Habitat means confined basin depressions which, at least in most years, hold water for a minimum of two continuous months during the spring and/or summer, and which are free of adult fish populations, as well as the area within 100 feet of the mean annual boundaries of such depressions, to the extent that such habitat is within an Area Subject to Protection under M.G.L. c. 131, § 40 as specified in 310 CMR 10.02(1). These areas are essential breeding habitat, and provide other extremely important wildlife habitat functions during non breeding season as well, for a variety of amphibian species such as wood frog (*Rana sylvatica*) and the spotted salamander (*Ambystoma maculatum*), and are important habitat for other wildlife species.

Vista Pruning means the selective thinning of tree branches or understory shrubs to establish a specific "window" to improve visibility. Vista pruning does not include the cutting of trees which would reduce the leaf canopy to less than 90% of the existing crown cover and does not include the mowing or removal of understory brush.

Wastewater Residuals Landfill means a facility or part of a facility approved by the Department for the disposal of wastewater residuals into or on land, but not including a site where wastewater residuals are land applied in accordance with 310 CMR 32.00: *Land Application of Sludge and Septage*.

Water-dependent Uses mean those uses and facilities which require direct access to, or location in, marine, tidal or inland waters and which therefore cannot be located away from said waters, including but not limited to: marinas, public recreational uses, navigational and commercial fishing and boating facilities, water-based recreational uses, navigation aids, basins, and channels, industrial uses dependent upon waterborne transportation or requiring large volumes of

cooling or process water which cannot reasonably be located or operated at an upland site, crossings over or under water bodies or waterways (but limited to railroad and public roadway bridges, tunnels, culverts, as well as railroad tracks and public roadways connecting thereto which are generally perpendicular to the water body or waterway), and any other uses and facilities as may further hereafter be defined as water-dependent in 310 CMR 9.00: *Waterways*.

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

Water Supply Well means 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 means 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 means 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 Order.

Wildlife means all mammals, birds, reptiles and amphibians and, for the purposes of 310 CMR 10.37 and 10.59, all vertebrate and invertebrate animal species which are officially listed in 321 CMR 8.00: *Endangered Wildlife and Wild Plants* as endangered, threatened, or of special concern.

Wildlife Habitat means an Area Subject to Protection under M.G.L. c. 131, § 40, which due to its plant community, composition and structure, hydrologic regime or other characteristics provides important food, shelter, migratory or overwintering areas or breeding areas for wildlife.

Wildlife Specialist means an individual with at least a masters degree in wildlife biology or ecological science from an accredited college or university, or other competent professional with at least two years experience in wildlife habitat evaluation.

Work means the same as activity.

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

Zone II means 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*, means (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.

### **10.05: Procedures**

**[NOTE TO REVIEWERS; MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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 10.05(1), 10.05(2) or 10.05(3) and the EXISTING REGULATION LANGUAGE FOR THESE SECTIONS WILL REMAIN THE SAME.]**

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#### **(4) Notices of Intent.**

(a) Any person who proposes to do work that will remove, fill, dredge or alter any Area Subject to Protection under M.G.L. c. 131 § 40, shall file a Notice of Intent on Form 3 and other application materials in accordance with the submittal requirements set forth in the *General Instructions for Completing Notice of Intent (Form 3)*. If the applicant is not a landowner of the Project Locus, the applicant shall obtain written permission from the landowner(s) prior to filing a Notice of Intent for proposed work, except for work proposed on Great Ponds or Commonwealth tidelands. A construction period erosion, sedimentation and pollution prevention plan prepared in accordance with 310 CMR 10.05(6)(b) and 310 CMR 10.05(6)(k)8. shall accompany the Notice of Intent for all Activities. For projects subject to the Stormwater Management Standards (310 CMR 10.05(6)(k)1. through 11.), the following shall also be included with the Notice of Intent: stormwater report checklist stamped by a registered professional engineer, long-term pollution prevention plan, operation and maintenance plan, and no illicit discharge compliance statement. For Redevelopment projects, for the purposes of the Stormwater Management Standards, the following submittals shall also be included with the Notice of Intent: the Redevelopment checklist, and the written alternatives analysis, when needed. Two copies of the completed Notice of Intent with supporting plans and documents shall be sent by certified mail or hand delivery to the conservation

commission, and one copy of the same shall be sent concurrently in like manner to the Department.

Concurrent with the filing of the Notice of Intent, the applicant shall provide notification to all Abutters. Notwithstanding the foregoing, the requirement to provide Abutter notification is subject to the following limits. An applicant is required to provide notification to an Abutter whose Lot is separated from the Project Locus by a public or private street or body of water only if the Abutter's Lot is within 100 feet from the property line of the Project Locus. An applicant who proposes work solely within Land under Water Bodies or Waterways, or solely within a Lot with an area greater than 50 acres, is required to provide notification only to Abutters whose Lot is within one hundred feet from the Project Site. An applicant proposing a Linear- shaped Project greater than 1,000 feet in length is required to provide notification only to Abutters whose Lot is within 1,000 feet from the Project Site. Abutter notification is not required for projects proposed by the Massachusetts Department of Transportation Highway Division pursuant to St. 1993, c. 472 as approved on January 13, 1994. The applicant shall provide notification at the mailing addresses shown on the most recent applicable tax list from the municipal assessor. Notification shall be at the applicant's expense. The notification shall state where within the municipality copies of the Notice of Intent may be examined or obtained and where information on the date, time, and location of the public hearing may be obtained. To ensure compatibility with local procedures, applicants must comply with any rules of the local conservation commission pertaining to the location for examining or obtaining the Notice of Intent and information about the hearing. The applicant shall provide written notification to all Abutters required to be notified by hand delivery or certified mail, return receipt requested, or by certificates of mailing. Mailing at least seven days prior to the public hearing shall constitute timely notice. The applicant shall present either the certified mail receipts or certificate of mailing receipts for all Abutters at the beginning of the public hearing. The presentation of the receipts for all abutters required to be notified as identified on the tax list shall constitute compliance with Abutter notification requirements. The conservation commission shall determine whether the applicant has complied with Abutter notification requirements. The Department will dismiss Requests for Action based on allegations of failure to comply with Abutter notification requirements, absent a clear showing by an Abutter seeking Department action that the applicant failed to notify the Abutter. An applicant submitting a Notice of Intent for a project that is also subject to 310 CMR 9.00: *Waterways* and/or 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* may provide joint public notice by appending to the public notice required by 310 CMR 9.13: *Public Notice and Participation Requirements* and/or 314 CMR 9.00: *Submission of an Application*, as applicable, notification that a Notice of Intent is pending before the issuing authority, provided the notification complies with 310 CMR 10.05(4).

(b) For certain purposes, other forms of Notices may be used.

1. For certain projects, applicants may at their option use the Abbreviated Notice of Intent. This latter form may only be used when all three of the following circumstances exist:

**[NOTE TO REVIEWERS; MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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 10.05(4)(b) through 10.05(4)(g) and the EXISTING REGULATION LANGUAGE FOR THESE SECTIONS WILL REMAIN THE SAME.]**

...

(h) The issuing authority may require that supporting plans and calculations be prepared and stamped by a registered professional engineer (PE) when, in its judgment, the complexity of the proposed work warrants this professional certification. The issuing authority may also require the preparation of supporting materials by other professionals including, but not limited to, registered landscape architect, registered land surveyor, environmental scientist, geologist or hydrologist when in its judgment the complexity of the proposed work warrants the relevant specialized expertise. The issuing authority may require a delineation in an Abbreviated Notice of Resource Area Delineation to be performed by a professional with relevant specialized expertise.

(5) Public Hearings by Conservation Commissions.

(a) A public hearing shall be held by the conservation commission within 21 days of receipt of the minimum submittal requirements set forth in the General Instructions for Completing Notice of Intent (Form 3), Abbreviated Notice of Intent (Form 4) and Abbreviated Notice of Resource Area Delineation, and shall be advertised in accordance with M.G.L. c. 131, § 40 and the requirements of the open meeting law, M.G.L. c. 39, § 23B.

(b) Public hearings may be continued as follows:

1. without the consent of the applicant to a date, announced at the hearing, within 21 days, of receipt of the Notice of Intent;
  2. with the consent of the applicant, to an agreed-upon date, which shall be announced at the hearing; or
  3. with the consent of the applicant for a period not to exceed 21 days after the submission of a specified piece of information or the occurrence of a specified action.
- The date, time and place of said continued hearing shall be publicized in accordance with M.G.L. c. 131, § 40, and notice shall be sent to any person at the hearing who so requests in writing.

(6) Orders of Conditions Regulating Work and Orders of Resource Area Delineation.

(a) Within 21 days of the close of the public hearing, the conservation commission shall either:



1. make a determination that the area on which the work is proposed to be done, or which the proposed work will remove, fill, dredge or alter, is not significant to any of the interests identified in M.G.L. c. 131, § 40, and shall so notify the applicant and the Department on Form 6;
2. make a determination that the area on which the work is proposed to be done, or which the proposed work will remove, fill, dredge or alter, is significant to one or more of the interests identified in M.G.L. c. 131, § 40, and shall issue an Order of Conditions for the protection of said interest(s), on Form 5. If the issuing authority also determines that the project meets the eligibility criteria for issuance of a Restoration Order of Conditions set forth in the applicable provisions of 310 CMR 10.00, the Order of Conditions for the project shall be a Restoration Order of Conditions; or
3. make a determination that bordering vegetated wetland and other resource areas subject to jurisdiction have been identified and delineated according to the definitions in 310 CMR 10.00 and shall issue an Order of Resource Area Delineation to confirm or modify the delineations submitted. The Order of Resource Area Delineation shall be effective for three years.

The standards and presumptions to be used by the issuing authority in determining whether an area is significant to the interests identified in M.G.L. c. 131, § 40, are found in 310 CMR 10.21 through 10.37 (for coastal wetlands) and 10.51 through 10.60 (for inland wetlands).

(b) The Order of Conditions shall impose such conditions as are necessary to meet the performance standards set forth in 310 CMR 10.21 through 10.60 for the protection of those areas found to be significant to one or more of the interests identified in M.G.L. c. 131, § 40, and the Stormwater Management Standards provided in 310 CMR 10.05(6)(k) 1. through 11. The Order shall prohibit any work or any portion thereof that cannot be conditioned to meet said standards.

The Order shall impose conditions only upon work or the portion thereof that is to be undertaken within an Area Subject to Protection under M.G.L. c. 131, § 40, or within the Buffer Zone. The Order shall impose conditions to control erosion and sedimentation within Resource Areas and the Buffer Zone. The Order shall impose conditions setting limits on the quantity and quality of discharge from point sources (both closed and open channel) and non-point sources, when said limits are necessary to protect the interests identified in M.G.L. c. 131, § 40; provided, however, that the point of discharge falls within an Area Subject to Protection under M.G.L. c. 131, § 40, or within the Buffer Zone, and further provided that said conditions are consistent with the limitations set forth in 310 CMR 10.03(4).

Notwithstanding the foregoing, when the issuing authority has determined that an Activity outside the Areas Subject to Protection under M.G.L. c. 131, § 40 and outside the Buffer Zone has in fact altered an Area Subject to Protection under M.G.L.c. 131,§ 40, it shall impose such conditions on any portion of the activity as are necessary to contribute to the protection of the interests identified in M.G.L.c. 131, § 40.

When the Issuing Authority determines that a project meets the eligibility criteria for a Restoration Order of Conditions, the Issuing Authority shall impose only the conditions set forth in the applicable provisions of 310 CMR 10.00 for that Restoration Order of Conditions. A Restoration Order of Conditions may reference the plans and specifications approved by the issuing authority.

(c) If the conservation commission finds that the information submitted by the applicant is not sufficient to describe the site, the work or the effect of the work on the interests identified in M.G.L. c. 131, § 40, it may issue an Order prohibiting the work. The Order shall specify the information which is lacking and why it is necessary.

(d) Except as provided in M.G.L. c. 131, § 40 for maintenance dredging, an Order of Conditions, Order of Resource Area Delineation, or Notification of Non-significance shall be valid for three years from the date of its issuance; provided, however, that the issuing authority may issue an Order for up to five years where special circumstances warrant and where those special circumstances are set forth in the Order. An Order of Resource Area Delineation shall be valid for three years, and may be extended by the issuing authority for one or more years up to three years each under 310 CMR 10.05(8) upon written confirmation by a professional with relevant expertise that the resource area delineations remain accurate.

(e) The Order or Notification of Non-significance shall be signed by a majority of the conservation commission and shall be mailed by certified mail (return receipt requested) or hand delivered to the applicant or his or her agent or attorney, and a copy mailed or hand delivered at the same time to the Department. If the Order imposes conditions necessary to meet any performance standard contained in 310 CMR 10.37 or 10.59, a copy shall be mailed or hand delivered at the same time to the Massachusetts Natural Heritage and Endangered Species Program.

(f) A copy of the plans describing the work and the Order shall be kept on file by the conservation commission and by the Department, and shall be available to the public at reasonable hours.

(g) Prior to the commencement of any work permitted or required by the Final Order, including a Final Order of Resource Area Delineation, or Notification of Non-significance, the Order or Notification shall be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the final order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of registered land, the final order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is to be done. Certification of recording shall be sent to the issuing authority on the form at the end of Form 5. If work is undertaken without the applicant first recording the Order, the issuing authority may issue an Enforcement Order (Form 9) or may itself record the Order of Conditions.

(h) Notwithstanding the provisions contained in 310 CMR 10.10(1) and (3), any Order of Conditions not containing an expiration date, issued for work proposed in a Notice of Intent filed under M.G.L. c. 131, § 40 prior to November 18, 1974, shall expire on April 17, 1986.

(i) An Order of Conditions does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of property rights.

(j) Failure to comply with conditions stated in the Order and with all related statutes and other regulatory measures shall be deemed cause to revoke or modify the Order of Conditions.

(k) Except as expressly provided, stormwater runoff from all industrial, commercial, institutional, office, residential and transportation projects that are subject to regulation under M.G.L. c. 131, § 40 and all point and non-point source stormwater discharges from said projects within an Area Subject to Protection under M.G.L. c. 131, § 40 or within the Buffer Zone 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 waters 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 wetland Resource Areas in accordance with 310 CMR 10.05(6)(q), however, a Setback reduced in accordance with the *Massachusetts Stormwater Handbook* [2023 Edition] will be presumed to meet the Setback requirement in 310 CMR 10.05(6)(q). Soil evaluation must be performed to meet 310 CMR 10.05(6)(k)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. Additionally, no Area Subject to Protection under M.G.L. c. 131, § 40, other than Bordering Land Subject to Flooding, isolated land subject to flooding, Land Subject to Coastal Storm Flowage, or Riverfront Area, may be altered or filled for the impoundment or detention of stormwater, infiltration, the control of sedimentation or the attenuation of pollutants in stormwater discharges, and the applicable performance standards shall apply to any such alteration or fill in the aforementioned other areas. MassDOT may use the Highway Specific Considerations, including the Macro-Approach and the Watershed-scale Accounting Method, to comply with or be presumed to comply with applicable Stormwater Management Standards. MassDOT will be presumed to comply with applicable 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 Highway Specific 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. This standard may be waived for stormwater discharges to coastal Resource Areas as defined in 310 CMR 10.21 to 10.36, unless the discharge is to a coastal Resource Area located up-gradient of an existing or proposed stream crossing, culvert or bridge. 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.

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 Notice of Intent. 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 the 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 1-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 Elevation 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 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].

- 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 1-inch 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 Notice of Intent. 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 Notice of Intent 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 wetland Resource Areas and minimize snow disposal in the Buffer Zone. 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 come in contact 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 310 CMR 10.05(6)(k)4. Table 1 MassDEP Crosswalk;
    - ii. to capture the required one-inch water quality volume when discharges are Near or discharge 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 310 CMR 10.05(6)(k)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 310 CMR 10.05(6)(k)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* Appendix A [2023 Edition].

d. Pretreatment for TSS removal is provided in accordance with 310 CMR 10.05(6)(k)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 310 CMR 10.05(6)(k)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 310 CMR 10.05(6)(k)4. Table 1 MassDEP Crosswalk, written documentation shall be submitted to the Issuing Authority with the Notice of Intent 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 Issuing Authority 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 310 CMR 10.05(6)(k)4. or 10.05(6)(k)7.c., and for proprietary manufactured pretreatment practices, 310 CMR 10.05(6)(k)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 Issuing Authority 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 and endorsed by the States of California, Massachusetts, Maryland, New Jersey, Pennsylvania, and Virginia (<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*.

310 CMR 10.05(6)(k)4. Table 1 MassDEP Crosswalk (Note that all EPA Performance Removal Curves (EPA-PRC) referenced in this Table can be found at the EPA-PRC BATT Tool and Appendix B of the *Massachusetts Stormwater Handbook* [2023 Edition]. See 310 CMR 10.04: Definitions. In certain cases where an EPA-PRC is not available, MassDEP has approved Substitute EPA-PRCs in 310 CMR 10.05(6)(k)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    |               |                                |  |   |

| MassDEP SCM  | Credit Method | Does SCM Require Pretreatment? | Pollutant Removal Credit  |   |
|--|---------------|--------------------------------|---|---|
|  |               |                                | TSS   | TP  |
| Credit 1: General ESSD   | MassDEP       | No                             | 90%   | 60%   |
| Credit 2: Solar ESSD   | MassDEP       | No                             | 90%   | 60%   |
| Credit 3: Roof Runoff to Qualifying Pervious Area A, B and C soils for Hydrologic Soil Group | 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 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 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. |
| <b>Structural Pretreatment</b>   |               |                                |   |   |
| 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 if determined by Issuing Authority in accordance with 310 CMR 10.05(6)(k)4.e.                        | No Treatment minimum, higher credit if determined by Issuing Authority in accordance with 310 CMR 10.05(6)(k)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   | No Treatment  |



| MassDEP SCM                              | Credit Method      | Does SCM Require Pretreatment?                            | Pollutant Removal Credit   |  |
|--|--------------------|---|--|--|
|  |                    |   | TSS  | TP   |
|  |                    |   | Bioretention Areas, Infiltration Trenches, ESSD Credit 3, ESSD Credit 4 and ESSD Credit 7                |  |
| <b>Structural Treatment</b>              |                    |   |  |  |
| 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 if determined by Issuing Authority in accordance with 310 CMR 10.05(6)(k)4.e. | 30% minimum, higher credit if determined by Issuing Authority in accordance with 310 CMR 10.05(6)(k)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  |
| 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  |
| <b>Structural Conveyance</b>             |                    |   |  |  |
| Drainage Channel                         | MassDEP            | No  | No Treatment   | No Treatment   |
| Grass Channel (Biofilter Swale)          | Substitute EPA-PRC | Yes   | EPA Grass Swale Curve  | EPA Grass Swale Curve  |
| Water Quality Swale (Dry/Wet)            | MassDEP            | Yes   | 70%  | No Treatment   |
| <b>Structural Infiltration</b>           |                    |   |  |  |
| Dry Well                                 | Substitute EPA-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  |

| MassDEP SCM             | Credit Method      | Does SCM Require Pretreatment? | Pollutant Removal Credit             |                                      |
|-------------------------|--------------------|--------------------------------|--------------------------------------|--------------------------------------|
|                         |                    |                                | TSS                                  | TP                                   |
| Subsurface Infiltrator  | Substitute EPA-PRC | Yes                            | EPA Infiltration Basin Curve         | EPA Infiltration Basin Curve         |
| <b>Structural Other</b> |                    |                                |                                      |                                      |
| 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 310 CMR 10.05(6)(k)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 the regulations promulgated thereunder at 314 CMR 3.00: *Surface Water Discharge Permit Program*, 314 CMR 4.00: *Massachusetts Surface Water Quality Standards* and 314 CMR 5.00: *Ground Water Discharge Permit Program*.

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 310 CMR 10.05(6)(k)4.a. shall address source controls and pollution 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. described in 2023 Stormwater discharges and all components of structural and nonstructural SCMs, located Near or that discharge to Critical Areas, shall be removed and set back from the receiving water or wetland in accordance with 310 CMR 10.05(6)(q) 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 314 CMR 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: 310 CMR 10.05(6)(k)2., 310 CMR 10.05(6)(k)3., the pretreatment and structural Stormwater Control Measures and related stormwater Best Management Practice requirements of 310 CMR 10.05(6)(k)5. and 6, and the Setback requirements at 310 CMR 10.05(6)(q). Existing stormwater discharges shall comply with 310 CMR 10.05(6)(k)1. only to the Maximum Extent Practicable.
  - b. Redevelopment projects shall 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 310 CMR 10.05(6)(k)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 the requirements of 310 CMR 10.05(6)(k)3 and 310 CMR 10.05(6)(k)11.d. when the written alternatives analysis determines 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 wetland Resource Area, 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 Order is issued to meet the requirements of 310 CMR 10.05(6)(k)7. The Watershed-scale Accounting Method may be used rather than or in addition to meeting 310 CMR 10.05(6)(k)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 the Issuing Authority and to MassDEP.
  - e. Retrofit Projects shall comply with 310 CMR 10.05(6)(k)1., 5., 6., 8., 9., and 10. Retrofit Projects shall not have to comply with 310 CMR 10.05(6)(k)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 and other 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 Notice of Intent for review and approval by the Issuing Authority. A condition shall be included in the Order of Conditions that specifies that failure to comply with the construction period erosion, sedimentation and pollution prevention plan as approved in the Order of Conditions 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 issuing authority 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 Notice of Intent, for review and approval by the Issuing Authority. After a Certificate of Compliance has been issued or the Order of Conditions 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 Issuing Authority 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 wetland Resource Area 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 310 CMR 10.05(6)(k)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 310 CMR 10.05(6)(k)3. and 4.; and
- d. For Redevelopment, the Stormwater Management System is designed to comply with 310 CMR 10.05(6)(k)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.

(l) The Stormwater Management Standards shall not apply to the following:

1. A single-family house;

2. Housing development and Redevelopment projects comprised of detached single-family dwellings on four or fewer lots, provided that there are no stormwater discharges that may potentially 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 their drainage systems; provided that Emergency Certification is obtained pursuant to 310 CMR 10.06; and
5. Gardens; provided that there are no new Impervious Surfaces. Gardens do not include greenhouses.

(m) 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 on four or fewer lots that have a stormwater discharge that may potentially affect a Critical Area;
2. Multi-family housing developments and Redevelopment projects with four or fewer units, including condominiums, cooperatives, apartment buildings, and townhouses, that have a stormwater discharge that may potentially affect a Critical Area;
3. Housing development and Redevelopment projects comprised of detached single-family dwellings, on five to nine lots, provided there is no stormwater discharge that may potentially affect a Critical Area;
4. Multi-family housing development and Redevelopment projects, with 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, snowmelt, 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, emergency vehicles, and vehicles performing periodic maintenance), not including paved sidewalks located near or adjacent to private or public roads.
7. Maintenance of an Existing Public Roadway.

(n) For phased projects the determination of whether the Stormwater Management Standards apply is made on the entire project as a whole 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.

(o) 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 stormwater management.

(p) Compliance with the Stormwater Management Standards set forth in 310 CMR

10.05(6)(k)1. through 11. 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, 314 CMR 3.00: *Surface Water Discharge Permit Program*, 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*, 314 CMR 5.00: *Ground Water Discharge Permit Program*, 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*, local land use controls adopted to comply with 310 CMR 22.21: *Ground Water Supply Protection* or the NPDES General Permit for Small Municipal Separate Storm Sewer Systems, the requirements of the NPDES General Stormwater permits such as the Construction General Permit, and the Multi-sector General Permit.

(q) The following minimum Setbacks from any component of a Stormwater Management System shall be met. Horizontal Setbacks for purposes of stormwater management (310 CMR 10.05(6)(k)-(q)) must be measured from the outermost portions of 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, ORWs, and Special Resource Waters  | Setback at least 10 feet outside Zone I, IWPA, Zone A, ORWs, and Special Resource Waters, except within 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 wetland Resource Areas except for Bordering Land Subject to Flooding (BLSF), Isolated Land Subject to Flooding (ILSF), Land Subject to Coastal Storm Flowage (LSCSF), and Riverfront Area | Setback at least 10 feet outside of all wetland Resource Areas except for BLSF, ILSF, LSCSF, and Riverfront Area. There is no Setback for BLSF, ILSF, LSCSF, and Riverfront Area. |

| Resource   | Minimum Setback from any component of a Stormwater Management System to Resource (all Setbacks horizontal except as otherwise stated)   |
|--|---|
| 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 Resource Area) |
| 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.  |
| 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) Requests for Actions by the Department (Appeals).

**[NOTE TO REVIEWERS: MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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 10.05(7)(a) through 10.05(7)(h) and the EXISTING REGULATION LANGUAGE FOR THESE SECTIONS WILL REMAIN THE SAME.]**

...

- (i) After receipt of a request for a Superseding Determination or Order, the Department may conduct an informal meeting and may conduct an inspection of the site. In the event an inspection is conducted, all parties shall be invited in order to present any information

necessary or useful to a proper and complete review of the proposed activity and its effects upon the interests identified in M.G.L. c. 131, § 40. Any party presenting information as a result of such a meeting shall provide copies to the other parties.

Based upon its review of the Notice of Intent, the Order, any informal meeting or site inspection, and any other additional plans, information, or documentation submitted under 310 CMR 10.05(7)(f) or (g), the Department shall issue a Superseding Order for the protection of the interests identified in M.G.L. c. 131, § 40. The Superseding Order shall impose such conditions as are necessary to meet the performance standards set forth in 310 CMR 10.21 through 10.60 and stormwater standards set forth at 301 CMR 10.05(6)(k) for the protection of those interests. The Superseding Order shall prohibit any work or any portions thereof that cannot be conditioned to protect such interests. The Department may issue a Superseding Order which affirms the Order issued by the conservation commission. The Department shall issue a Restoration Order of Conditions as the Superseding Order of Conditions in the event it determines that the project meets the eligibility criteria for a Restoration Order of Conditions.

(j) Administrative Hearings.

**[NOTE TO REVIEWERS: MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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 10.05(7)(j)1. through 10.05(7)(j)9. and the EXISTING REGULATION LANGUAGE FOR THESE SECTIONS WILL REMAIN THE SAME.]**

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10. Coordination of Appeals. The Department may coordinate adjudicatory hearings under 310 CMR 10.05(7)(j), 310 CMR 9.17: *Appeals*, and 314 CMR 9.10: *Appeals* or other administrative appeals.

- a. If a 401 Water Quality Certification been issued pursuant to 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 and/or a permit, license or other written approval has been issued pursuant to 310 CMR 9.00: Waterways, the Department may exclude issues solely within the jurisdiction of 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 and/or 310 CMR 9.00: Waterways at an adjudicatory hearing held under 310 CMR 10.05(7)(j).
- b. If an adjudicatory hearing has been requested in accordance with 310 CMR 9.17: *Appeals* and/or 314 CMR 9.10: *Simplified Procedures* for



Small Structures Accessory to Residences, or another administrative appeal, the Department may consolidate the proceedings.

(k) No work shall be undertaken until all administrative appeal periods from an Order or Notification of Non-significance have elapsed or, if such an appeal has been taken, until all proceedings before the Department have been completed.

(8) Extensions of Orders of Conditions and Orders of Resource Area Delineations.

(a) The issuing authority may extend an Order for one or more periods of up to three years each, except as otherwise provided in 310 CMR 10.05(11)(f) (extensions for Test Projects) and 310 CMR 10.05(12)(f) (extensions for Scientific Research Projects). Any extension granted by the issuing authority shall be made on Form 7. The request for an extension shall be made to the issuing authority at least 30 days prior to expiration of the Order.

(b) The issuing authority may deny the request for an extension and require the filing of a new Notice of Intent for the remaining work or a new Abbreviated Notice of Resource Area Delineation in the following circumstances:

1. where no work has begun on the project, except where such failure is due to an unavoidable delay, such as appeals, in the obtaining of other necessary permits;
2. where new information, not available at the time the Order was issued, has become available and indicates that the Order is not adequate to protect the interests identified in M.G.L. c. 131, § 40; or
3. where incomplete work is causing damage to the interests identified in M.G.L. c. 131, § 40;
4. where work has been done in violation of the Order or 310 CMR 10.00; or
5. where a resource area delineation or certification under 310 CMR 10.02 (2)(b)2. in an Order of Resource Delineation is no longer accurate.

(c) If issued by the conservation commission, the Extension Permit shall be signed by a majority of the commission. A copy of the Extension Permit shall be sent to the conservation commission or the Department, whichever is appropriate, by the issuing authority.

(d) The Extension Permit shall be recorded in the Land Court or the Registry of Deeds, whichever is appropriate. Certification of recording shall be sent to the issuing authority on the form at the end of Form 7. If work is undertaken without the applicant so recording the Extension Permit, the issuing authority may issue an Enforcement Order (Form 9) or may itself record the Extension Permit.

(9) Certificates of Compliance.

(a) Upon completion of the work described in a Final Order of Conditions, but not later than the three year term of an Order of Resource Area Delineation or any extension thereunder, the applicant shall request in writing the issuance of a Certificate of Compliance stating that the work has been satisfactorily completed. Upon written request by the applicant, a Certificate of Compliance shall be issued by the issuing authority within 21 days of receipt thereof, and shall certify on Form 8 that the activity or portions thereof described in the Notice of Intent and plans has been completed in compliance with the Order. If issued by the Conservation Commission, the Certificate of Compliance shall be signed by a majority of the commission. A copy of the Certificate of Compliance shall be sent to the conservation commission or the Department, whichever is appropriate, by the issuing authority.

(b) Prior to the issuance of a Certificate of Compliance, a site inspection shall be made by the issuing authority, in the presence of the applicant or the applicant's agent. If the Department is the issuing authority, it shall notify the conservation commission of the request and the date of the site inspection.

(c) If the issuing authority determines, after review and inspection, that the work has not been done in compliance with the Order, it may refuse to issue a Certificate of Compliance. Such refusal shall be issued within 21 days of receipt of a request for a Certificate of Compliance, shall be in writing and shall specify the reasons for denial.

(d) If a project has been completed in accordance with plans stamped by a registered professional engineer, architect, landscape architect or land surveyor, a written statement by such a professional person certifying substantial compliance with the plans and setting forth what deviation, if any, exists from the plans approved in the Order shall accompany the request for a Certificate of Compliance.

(e) If the final order contains conditions which continue past the completion of the work, such as maintenance or monitoring, the Certificate of Compliance shall specify which, if any, of such conditions shall continue. The Certificate shall also specify to what portions of the work it applies, if it does not apply to all the work regulated by the Order.

(f) The Certificate of Compliance shall be recorded in the Land Court or Registry of Deeds, whichever is appropriate. Certification of recording shall be sent to the issuing authority on the form at the end of Form 8. Upon failure of the applicant to so record, the issuing authority may do so.

(10) Variance.

(a) The Commissioner may waive the application of any regulation(s) in 310 CMR 10.21 through 10.60 when he or she finds that:

1. there are no reasonable conditions or alternatives that would allow the project to proceed in compliance with 310 CMR 10.21 through 10.60;
2. that mitigating measures are proposed that will allow the project to be conditioned so as to contribute to the protection of the interests identified in M.G.L. c. 131, § 40; and
3. that the variance is necessary to accommodate an overriding community, regional, state or national public interest; or that it is necessary to avoid an Order that so restricts the use of property as to constitute an unconstitutional taking without compensation.

(b) Procedure. A request for a variance shall be made in writing and shall include, at a minimum, the following information:

1. a description of alternatives explored that would allow the project to proceed in compliance with 310 CMR 10.21 through 10.60 and an explanation of why each is unreasonable;
2. a description of the mitigating measures to be used to contribute to the protection of the interests identified in M.G.L. c. 131, § 40; and
3. evidence that an overriding public interest is associated with the project which justifies waiver of 310 CMR 10.21 through 10.60, or evidence that the Superseding Order so restricts the use of the land that it constitutes an unconstitutional taking without compensation.

The request for a variance shall be sent to the Department by certified mail or hand delivered and a copy thereof shall at the same time be sent by certified mail or hand delivered to the conservation commission and any other parties.

The Department will place a notice in the *Environmental Monitor* published by the Massachusetts Environmental Policy Act Office of the Executive Office of Energy and Environmental Affairs to solicit public comments on the request. The Department shall conduct a public hearing on a request for a variance. After reviewing the information submitted with the request for a variance and any other information submitted by any party within the public comment period, the Commissioner shall issue a decision as to whether to grant the variance. Within ten days of the date of issuance of the Commissioner's decision on the variance, any person who submitted comments during the public comment period may, according to the procedures specified in 310 CMR 10.05(7)(j), request an adjudicatory hearing on the decision. On a request for a variance based on overriding public interest, the Commissioner may dismiss the request to hold an adjudicatory hearing if the request repeats matters adequately considered in the variance decision, renews claims or arguments previously raised, or attempts to raise new claims or arguments not raised during the public comment period. On a request for a variance to avoid restrictions that would constitute an unconstitutional taking, the Commissioner shall hold an adjudicatory hearing. If an adjudicatory hearing is held, the applicant has the burden of demonstrating that the project meets the criteria necessary for a variance. Other parties to the adjudicatory hearing may introduce evidence either in favor of or opposing the request for a variance.

For projects in which all of the proposed work will be undertaken on land within the boundaries of one city or town, the request for a variance shall not be filed until the applicant first files a Notice of Intent with the Conservation Commission. The Commission shall review the project in accordance with the procedures set forth in 310 CMR 10.01 through 10.10 and issue an Order of Conditions consistent with 310 CMR 10.21 through 10.60. Within ten days of the issuance of the Order of Conditions, the applicant may request the Department to issue a Superseding Order. The Department staff shall review the project in accordance with the procedures set forth in 310 CMR 10.01 through 10.10 and shall issue a Superseding Order consistent with the provisions of 310 CMR 10.21 through 10.60. Within ten days of the issuance of the Superseding Order, the applicant may request an adjudicatory hearing on that order and/or a variance under 310 CMR 10.05(10) according to the procedure previously described.

For projects in which the proposed work will be undertaken on land within the boundaries of more than one city or town, the applicant may file a request for a variance directly with the Commissioner, with a copy to each affected conservation commission. If, after public notice, the Commissioner finds that a project meets the variance criteria, he shall specify which regulation(s) has been waived and what general requirements or conditions must be met to satisfy the variance criteria listed in 310 CMR 10.05(10)(a). The applicant shall then file a Notice of Intent with the appropriate conservation commissions in accordance with the procedures contained in 310 CMR 10.01 through 10.10. The conservation commissions shall issue Orders of Conditions consistent with all provisions of 310 CMR 10.21 through 10.60 except those waived by the Commissioner and containing any additional conditions or requirements imposed by the Commissioner in the variance. The usual procedures contained in 310 CMR 10.01 through 10.10 for requesting Superseding Orders and adjudicatory hearings remain applicable.

310 CMR 10.05(10), which provides that the Commissioner may waive the application of one or more of the regulations on the basis of overriding public benefit, is intended to be employed only in rare and unusual cases. The provision authorizing a variance request directly to the Commissioner for projects on land within more than one city or town is intended to apply to projects that involve functionally related work in several contiguous towns (*e.g.*, transportation and energy transmission facilities) and to provide for a single uniform determination concerning alternative locations and the other variance criteria.

(11) Permitting of Test Projects.

(a) General. The purpose of 310 CMR 10.05(11) is to establish procedures for permitting Test Projects to promote the development of potential new renewable energy technologies and other Innovative Technologies. Innovative Technologies must be proven through field testing before any large scale commercial deployment can occur in order to develop the data and information needed to support siting and full-scale deployment in a cost-effective manner. 310 CMR 10.05(11) will facilitate and encourage the development, testing and demonstration of Innovative Technologies, including water dependent renewable energy technologies, through review procedures for Test Projects. Given their limited scope and duration, these projects are expected to have minimal adverse environmental impacts and, therefore, are permissible under 310 CMR 10.05(11), provided that the applicant provides for adequate post-installation monitoring to identify any unanticipated adverse environmental impacts that occur in the course of the project. The issuing authority may require the alteration or removal of the project if the monitoring study or other information indicates that the project has unexpected or more than minimal adverse environmental impacts. Pre-application consultation with the issuing authority is recommended. Proposed Test Projects that do not meet the eligibility criteria in 310 CMR 10.05(11)(b) may be permitted provided they meet all applicable requirements of 310 CMR 10.24 through 10.36 for projects in coastal Resource Areas and 310 CMR 10.54 through 10.58 and 10.60 for projects in inland Resource Areas.

(b) Eligibility Criteria. Notwithstanding the provisions of 310 CMR 10.24 through 10.36, 10.53 through 10.58, and 10.60, the issuing authority may issue an Order of Conditions, and impose such conditions as will contribute to the interests identified in M.G.L. c. 131, § 40, to permit Test Projects (although no such project may be permitted which will have any adverse effect on specified habitat sites of Rare Species, as identified by procedures established under 310 CMR 10.37 and 10.59) provided:

1. the applicant documents the readiness of the device or technology for in situ testing with the results of laboratory testing, modeling, technical evaluations, or similar forms of supporting material;
2. the structures associated with the project will not be located in specified habitat sites of Rare Species located within a resource area or Buffer Zone;
3. the structures associated with the project are not located within a salt marsh or seagrass bed; and
4. any structures associated with the project can be easily and quickly removed with minimal disruption to resource areas.

(c) Application Requirements. For the purpose of authorizing eligible Test Projects pursuant to 310 CMR 10.05(11), the following provisions shall apply:

1. In *lieu* of plans prepared by a Registered Professional Engineer or Registered Land

Surveyor a Notice of Intent for a Test Project may include documentation that appropriate laboratory testing and/or modeling has occurred and show the proposed location of the project on a plan designating all project components by coordinates referenced to the Massachusetts State Plane Coordinate System.

2. In addition to the documentation provided in 310 CMR 10.11(c)1., a Notice of Intent for a Test Project shall include the following:

- a. a description of the device or technology to be tested and the purpose of the project;
- b. a description of the installation process and schedule for installation, testing, and removal of the devices, technologies and associated equipment;
- c. a demonstration that the project complies with the eligibility requirements of 310 CMR 10.05(11)(b)1. through 4.;
- d. a plan for the restoration of all disturbed resource areas to pre-existing conditions and a schedule for completing the restoration before the Order of Conditions expires;
- e. an environmental monitoring plan sufficiently broad to ensure the project meets all applicable regulatory standards; and
- f. a plan for prompt removal of the components of the project if the Department or conservation commission determines that the project threatens public health, safety or the environment.

(d) Order of Conditions. At a minimum, the Order of Conditions authorizing a Test Project pursuant to 310 CMR 10.05(11) shall require the applicant to implement the monitoring plan and the restoration plan submitted with the Notice of Intent as approved by the issuing authority. The Order of Conditions shall also provide that if the Department or the conservation commission determines that the Test Project threatens the public health, safety or the environment, the applicant shall implement the removal plan submitted with the Notice of Intent as approved by the issuing authority, or modify the project as directed by the conservation commission or the Department.

(e) Term. Notwithstanding the provisions of 310 CMR 10.05(6)(b), an Order of Conditions for a Test Project issued under 310 CMR 10.05(11) shall be valid for no more than one year.

(f) Extension Permits. An Order of Conditions for a Test Project issued in accordance with 310 CMR 10.05(11) may be extended for one additional year upon written application by the applicant in accordance with 310 CMR 10.05(8)(a). The issuing authority may deny a request for an extension, if it determines that: the project objectives have not been advanced during the initial term; the continuation of the project would not adequately protect public health, safety, or the environment; or the extension should be denied based on the one or more of the circumstances identified in 310 CMR 10.05(8)(c). An extension permit issued for a Test Project in accordance with 310 CMR 10.05(11) is subject to the provisions of 310 CMR 10.05(8)(d) and (e).

(g) Appeals. The provisions governing Department action and adjudicatory hearings set forth in 310 CMR 10.05(7) shall apply to decisions authorizing Test Projects pursuant to 310 CMR 10.05(11). In the event that the Department issues a Superseding Order of Conditions denying a Test Project on the ground that it does not meet the eligibility criteria set forth in 310 CMR 10.05(11)(b), the applicant may file a Notice of Intent seeking authorization for the Test Project under the applicable provisions of 310 CMR 10.24 through 10.37, 10.53 through 10.58 and 10.60 in lieu of requesting an adjudicatory hearing.

(12) Scientific Research Projects.

- (a) General. The purpose of 310 CMR 10.05(12) is to establish procedures and standards for permitting Scientific Research Projects that are solely intended to gather information or test hypotheses on the ability of coastal wetland Resource Areas to respond to the effects of climate change or sea level rise. Scientific Research Projects must be supported by reliable field, laboratory, or modelling data in order to demonstrate that the intended study will be credible and will have a negligible or no adverse effect on the Resource Area's ability to protect the interests identified in M.G.L. c. 131, § 40. The project shall be designed and conducted by an individual with the requisite expertise in environmental science. Given their limited scope and duration, these projects are expected to have negligible or no adverse effect, and therefore are permittable under 310 CMR 10.05(12) provided that the project design includes appropriate post-installation monitoring to identify any unanticipated adverse environmental impacts that occur in the course of the project. The Issuing Authority shall require the alteration or removal of the project if the monitoring study or other information indicates that the project has more than negligible adverse effects. Pre-application consultation with the Issuing Authority and other relevant environmental agencies is recommended. The Issuing Authority or the Department may require the applicant to consult with the Office of Coastal Zone Management or the Division of Marine Fisheries prior to the issuance of a file number when it determines such assistance is necessary and it may require the applicant to incorporate any recommendations made through such consultation in the Notice of Intent.
- (b) Eligibility Criteria. Notwithstanding the provisions of 310 CMR 10.25 to 10.28 and 10.30 to 10.36, the Issuing Authority may issue an Order of Conditions and impose such conditions as will contribute to the interests identified in MGL c. 131, §40, to permit Scientific Research Projects; provided that:

1. the Applicant is an established entity or institution, such as a college/university, environmental agency, or an environmental nonprofit organization that demonstrates it has the requisite expertise in environmental science necessary to design and conduct the research;
2. the project must have as its sole goal the collection of data or testing of hypotheses directly related to the ability of coastal wetland Resource Areas to respond to climate change or sea level rise through associated changes in salinity, sediment distribution, flow patterns, chemistry of soils or water, changes in vegetation, or the capacity to reduce flooding and prevent storm damage;
3. the Applicant must demonstrate the readiness of the project to be subject to field testing with the results of laboratory testing, modeling, technical evaluations, historical research, peer reviewed research or similar forms of supporting material and/or data;
4. the project shall be limited in duration to no longer than one year;
5. the Project Site of the project shall be limited in geographic extent to the minimum necessary to accomplish the research goal, and no more than 1,000 square feet of Salt Marsh, 100 linear feet of Coastal Bank, and 1,000 square feet of any other coastal Resource Area;
6. the project shall have no more than negligible adverse effects and no permanent impacts on wetland Resource Areas, including no changes to hydraulic

or hydrologic characteristics that could result in indirect or secondary alterations beyond the Project Site. Any structures associated with the project, including but not limited to elements and materials used in the project itself, must be easily and quickly removed if adverse effects should occur and shall be entirely removed upon completion of data gathering; and any structures associated with the project may not be located within Barrier Beach, an area with a recorded Restriction Order, or seagrass bed, or have any adverse effect on specified habitat sites of Rare Species as identified under the procedures established at 310 CMR 10.37.

(c) Application Requirements. For the purpose of authorizing eligible Scientific Research Projects pursuant to 310 CMR 10.05(12), the following provisions also shall apply:

1. At least 14 days prior to the filing of a Notice of Intent for a Scientific Research Project, the Applicant shall submit written notification of the proposed filing for publication in the Environmental Monitor. The notification shall include a brief description of the project, the Conservation Commission which will review the project, and the anticipated date of filing. Comments on the project shall be sent to the Conservation Commission and the Department.

2. If the proposed Scientific Research Project will take place within a coastal waterbody, the applicant shall obtain from the Division of Marine Fisheries a determination whether the project requires a Time of Year Restriction or is compatible with the requirements of a fish run.

3. The Notice of Intent shall include the following information:

- a. plans and details showing the location of the Project Site and the boundaries of all Resource Areas within the Project Site, as well as all other information required in the Notice of Intent form issued by the Department;
- b. a demonstration that the eligibility criteria of 310 CMR 10.05(12)(b)1. through 6. have been met;
- c. a description of the hypothesis or method to be tested, the project purpose and all supporting information and data;
- d. plans showing the pre-project conditions of wetland Resource Areas within the Project Site including but not limited to elevations, contours, cross-sections and vegetative cover;
- e. a description of the installation process and schedule of installation, testing, reporting and removal of the components and any related equipment;
- f. a plan for restoration of all disturbed Resource Areas to pre-existing conditions and a schedule for completing the restoration before the Order of Conditions expires; and
- g. a monitoring plan and a contingency plan that includes a description of the applicant's capacity, including expected funding, to ensure prompt removal of all components of the project prior to completion if the Conservation Commission or the Department determines that the project threatens public health, safety or the environment, or results in more than a negligible adverse effect on the Resource Area's ability to protect the interests identified in M.G.L. c. 131, § 40.

(d) Order of Conditions. At a minimum, the Order of Conditions authorizing a Scientific Research Project pursuant to 310 CMR 10.05(12) shall require the Applicant to implement the monitoring plan and the restoration plan submitted with the Notice of Intent as approved by the Issuing Authority. The Order of Conditions shall also provide that if the Department or the Conservation Commission determines that the project threatens the public health, safety or the environment, the Applicant shall implement the removal plan submitted with the Notice of Intent as approved by the Issuing Authority, or modify the project as directed by the Conservation Commission or the Department. The Applicant shall provide ongoing, post-installation monitoring and reporting to ensure that any restored vegetation is stabilized and to identify any unanticipated adverse environmental impacts that occur in the course of the project. The Order shall require that the Applicant submit a copy of the findings of the research project to the Conservation Commission and the Department;

(e) Term. Notwithstanding the provisions of 310 CMR 10.05(6)(b), an Order of Conditions for a Scientific Research Project issued under 310 CMR 10.05(12) can be for no more than three years, of which no more than one year may be research, with site restoration completed within the following two years. A Certificate of Compliance shall not be issued until any areas of disturbed vegetation are reestablished with indigenous wetlands plant species and non-vegetated areas are restored.

(f) Extensions. An Order of Conditions for a Scientific Research Project issued in accordance with 310 CMR 10.05(12) may be extended for no more than one additional year upon written application by the applicant in accordance with 310 CMR 10.05(8)(a). The request shall state the status of the research and progress toward completion. The Issuing Authority may deny a request for an extension if it determines that the project objectives have not been advanced during the initial term; the continuation of the project would not adequately protect public health, safety or the environment; or the extension should be denied based on one or more of the circumstances identified in 310 CMR 10.05(8)(b). An extension permit issued for a Scientific Research Project is subject to the provisions of 310 CMR 10.05(8)(c) and (d).

(g) Notice of Intent for Project based on Scientific Research. An applicant may file Notice of Intent under the procedures of 310 CMR 10.05(1) through (10) to leave in place work allowed under an Order of Conditions for a Scientific Research Project either during the year allowed for research, or during an extension approved under 310 CMR 10.05(12)(f). The Issuing Authority shall review the Notice of Intent based upon the applicable performance standards for the Resource Areas at the site or the provisions at 310 CMR 10.11 through 10.14 if applicable.

(h) Appeals. The provisions governing Department action and adjudicatory hearings set forth in 310 CMR 10.05(7) shall apply to decisions authorizing Scientific Research Projects pursuant to 310 CMR 10.05(12).

*[NOTE TO REVIEWERS: MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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 10.06 (Emergencies) or Section 10.07 (Compliance with M.G.L. c. 30 §§ 61 through 62H) and the EXISTING REGULATION LANGUAGE FOR THESE SECTIONS WILL REMAIN THE SAME. /**

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#### **10.08: Enforcement Orders**

- (1) When the conservation commission, the Department or the Office of Law Enforcement of the Executive Office of Energy and Environmental Affairs determines that an activity is in violation of M.G.L. c. 131, § 40, 310 CMR 10.00 or a Final Order, the conservation commission, Department or the Office of Law Enforcement may issue an Enforcement Order. Violations include:
  - (a) failure to comply with a Final Order, Final Determination, Emergency Declaration, or Emergency Certification, such as failure to observe a particular condition or time period specified in the Order, Declaration, or Certification;
  - (b) failure to complete work described in a Final Order or Final Determination, Emergency Declaration, or Emergency Certification when such failure causes damage to the interests identified in M.G.L. c. 131, § 40;
  - (c) failure to obtain a valid Final Order or Extension Permit prior to conducting an Activity Subject to Regulation under M.G.L. c. 131, § 40 as defined in 310 CMR 10.02(2);
  - (d) making any false, inaccurate, or misleading statements in any certification filed under 310 CMR 10.00, including any certification that the requirements of 310 CMR 10.02(2)(b)2. will be met.
  - (e) failure to comply with any certification on project plans or eligibility under 310 CMR 10.02(2)(b)2.
  - (f) leaving in place unauthorized fill or otherwise fail to restore illegally altered land to its original condition, or the continuation of any other activity in violation of M.G.L. c. 131, § 40.
  - (g) failure to provide any information requested by the Department pursuant to 310 CMR 10.00 or a permit, approval or order issued pursuant to 310 CMR 10.00.The conservation commission, its members and agents, and Department employees may enter upon privately owned land for the purpose of performing their duties under M.G.L. c. 131, § 40, subject to constitutional limitations.
- (2) A Final Order, Emergency Declaration, or Emergency Certification may be enforced by either the conservation commission or the Department regardless of which is the issuing authority. The members, officers, employees and agents of the conservation commission and the Department may enter upon privately owned land for the purpose of performing their duties under M.G.L. c. 131, § 40, and 310 CMR 10.00.

(3) An Enforcement Order issued by a conservation commission shall be signed by a majority of the commission. In a situation requiring immediate action, an Enforcement Order may be signed by a single member or agent of the commission, if said Order is ratified by a majority of the members at the next scheduled meeting of the commission.

#### **10.09: Severability**

If any provision of any part of 310 CMR 10.00 or the application thereof, is held to be invalid, such invalidity shall not affect any other provision of 310 CMR 10.00.

#### **10.10: Effective Date**

(1) 310 CMR 10.01 through 10.10 and 10.51 through 10.60 shall take effect on April 1, 1983 and shall apply to all Notices of Intent filed on or after that date and any subsequent procedures related to such filings made on or after that date. 310 CMR 10.01 through 10.10 and 10.51 through 10.60 shall not apply to any Notice of Intent filed prior to the effective date of 310 CMR 10.00, or to any extensions of any Order of Conditions the Notice of Intent for which was filed prior to said effective date, except as otherwise provided in 310 CMR 10.05(4)(g) and (h).

(2) The effective date of 310 CMR 10.21 through 10.37 is August 10, 1978. 310 CMR 10.21 through 10.37 shall not apply to any Notice of Intent filed prior to August 10, 1978, or to any extensions to an Order of Conditions when the Notice of Intent upon which such Order was based was filed prior to August 10, 1978.

(3) All proceedings and actions commenced under M.G.L. c. 131, § 40 prior to the effective date of 310 CMR 10.00 shall remain in full force and effect under the prior applicable regulations, except as otherwise provided in 310 CMR 10.05(4)(g) and (6)(h).

(4) The amendments to 310 CMR 10.00 concerning application of herbicides to rights of way contained in 310 CMR 10.03(6), 10.04: Alter, 10.05(3)(a)2., (b)1. and (d)1. shall be effective on July 10, 1987.

(5) The amendments to 310 CMR 10.00 published in the Massachusetts Register on October 16, 1987, concerning primarily the protection of wildlife habitat, shall take effect on November 1, 1987, and shall apply to all Notices of Intent filed on or after that date and any subsequent procedures related to such filing made on or after that date. The amendments to 310 CMR 10.00, concerning primarily the protection of wildlife habitat, shall not apply to any Notice of Intent filed prior to November 1, 1987, or to any extensions of any Order of Conditions the Notice of Intent for which was filed prior to November 1, 1987, except as otherwise provided in 310 CMR 10.05(4)(g) and (6)(h). All proceedings and actions commenced under M.G.L. c. 131, § 40 prior to November 1, 1987, and shall remain in full force and effect under the prior applicable regulations, except as otherwise provided in 310 CMR 10.05(4)(g) and (6)(h).

(6) The amendment to 310 CMR 10.55 concerning work in Bordering Vegetated Wetlands that are within an Area of Critical Environmental Concern contained in 310 CMR 10.55(4)(e) shall be effective on April 23, 1993, and shall not apply to any Notice of Intent filed prior to the effective date.

(7) The amendments to 310 CMR 10.00 concerning normal maintenance and improvement of land in agricultural use contained in 310 CMR 10.04: Agriculture, 10.06(6), and 10.53(5) shall be effective on May 21, 1993, and shall not apply to any Notice of Intent filed prior to the effective date.

(8) The provisions of 310 CMR 10.03(7)(c)2.k., 3.e., and 4.j. through l., 10.06(7), 10.24(7)(c)4. through 6., 10.53(3)(m) through (q), and the revisions to 310 CMR 10.03(7)(c)2.e., and 4.b., 10.06(3) and (5), and 10.53(3)(i) promulgated on December 3, 1993, shall take effect on January 1, 1994. They shall not apply to any Notice of Intent filed before January 1, 1994, nor to any extensions to an Order of Conditions when the Notice of Intent upon which such Order was based was filed prior to that date.

(9) The effective date of 310 CMR 10.55(1) and (2) is June 30, 1995.

(10) The revisions to 310 CMR 10.02 through 10.05, 10.21, 10.53, 10.58, and 10.60 to incorporate St. 1996, c. 258 amendments to M.G.L. c. 131, § 40, and the deletion of 310 CMR 10.99, shall be effective on October 6, 1997 and shall apply to Requests for Determination of Applicability and Notices of Intent filed after that date. Applicants who have received an Order of Conditions before August 7, 1996 or filed a Notice of Intent before August 7, 1996 and received a Final Order of Conditions before August 7, 1997, or later pending resolution of an adjudicatory hearing, shall not be subject to the requirements of 310 CMR 10.58 for the work permitted by the Order. A Determination of Applicability issued before August 7, 1996 is valid only for the resource areas specified in the Determination and not for the riverfront area.

(11) The amendments to 310 CMR 10.00 concerning drought (found at 310 CMR 10.04: Pond; 310 CMR 10.58(2)(a)1.f.) and perennial and intermittent streams (found at 310 CMR 10.58(2)(a)) shall take effect on December 20, 2002 and shall not apply to any Request for Determination of Applicability, Abbreviated Notice of Resource Area Delineation, Abbreviated Notice of Intent, or Notice of Intent filed prior to the effective date.

(12) The provisions of 310 CMR 10.00 promulgated in 2005 shall take effect on March 1, 2005. They shall not apply to any Notice of Intent or and Notice of Resource Area Delineation filed prior to March 1, 2005.

(13) The revised procedures for wetland appeals set forth 310 CMR 10.05(7)(j) take effect on October 31, 2007 and shall apply to all wetland appeals for which a notice of claim is filed on or after October 31, 2007.

(14) The amendments to 310 CMR 10.00 concerning Combined Applications, Combined Permits, Restoration Order of Conditions, Ecological Restoration Limited Projects and procedures for filing a Notice of Intent shall apply to Notices of Intent filed on or after October 24, 2014.

(15) The amendments to 310 CMR 10.00 concerning Stormwater Management at 310 CMR 10.04; 10.05(6)(k)-(q); and 10.58 shall apply to Notices of Intent filed more than six months after [the effective date of these regulations]. The amendments concerning Public Shared Use Paths at 310 CMR 10.02(2)(b)2.r., 10.24(7)(c)8., and 10.53(3)(u); Bordering Land Subject to Flooding at 310 CMR 10.57(2)(a)3. - 6.; Extended Drought at 310 CMR 10.04: Pond and 310 CMR 10.58(2)(a)1.f.; and perennial and intermittent streams at 310 CMR 10.58(2)(a)1.f., shall not apply to any Request for Determination of Applicability, Abbreviated Notice of Resource Area Delineation, Abbreviated Notice of Intent, or Notice of Intent filed prior to [the effective date of these regulations]. Any Notice of Intent submitted to the Department prior to six months after [the effective date] shall be considered under the standards and criteria in effect prior to [the effective date]. The amendments to 310 CMR 10.00 concerning Land Subject to Coastal Storm Flowage shall apply to Requests for Determinations of Applicability, Abbreviated Notices of Resource Area Delineation, and Notices of Intent filed on or after [the effective date of these regulations], except when a draft environmental impact report was submitted pursuant to M.G.L. c. 30, § 62B, on or before [one year prior to date of promulgation], and the project received a certificate on the final environmental impact report or a building permit was issued on or before [six months prior to promulgation].

#### **10.11: Actions Required Before Submitting a Notice of Intent for an Ecological Restoration Project**

An applicant shall take the following actions before filing a Notice of Intent for an Ecological Restoration Project that meets the eligibility criteria for a Restoration Order of Conditions set forth in 310 CMR 10.13 or for approval as an Ecological Restoration Limited Project pursuant to 310 CMR 10.24(8) or 10.53(4).

(1) At least 14 days prior to the filing a Notice of Intent for an Ecological Restoration Project, the applicant shall submit written notification of the proposed filing for publication in the Environmental Monitor. At a minimum, the written notification shall contain a brief description of the proposed project, the anticipated date of submission of the Notice of Intent, the name and address of the conservation commission that will review the Notice of Intent and shall state where copies of the Notice of Intent may be examined or obtained and where information on the date, time, and location of the public hearing may be obtained.

(2) If the project will impact an area located within estimated habitat which is indicated on the most recent *Estimated Habitat Map of State-listed Rare Wetlands Wildlife* published by the Natural Heritage and Endangered Species Program (the Program), the applicant shall obtain a written preliminary determination from the Program as to whether the Rare Species identified on the aforementioned map are likely to continue to be

located on or near the project and, if so, whether the Resource Area to be altered by the proposed project is in fact part of the habitat of the Rare Species. If the Program issues a preliminary determination that the Resource Area that would be altered by the proposed project is in fact within the habitat of a Rare Species, the preliminary determination shall identify the Rare Species whose habitat would be altered and recommend any changes or conditions that are necessary to ensure that the project will have no short or long term adverse effect on the habitat of the local population of the Rare Species or the project will be carried out in accordance with a habitat management plan that has been approved in writing by the Natural Heritage and Endangered Species Program and submitted with the Notice of Intent.

(3) If the project will occur within a coastal waterbody with a restricted Time of Year, as identified in Appendix B of the Division of Marine Fisheries Technical Report TR 47 *Marine Fisheries Time of Year Restrictions (TOYs) for Coastal Alteration Projects* dated April 2011, the applicant shall obtain a written determination from the Division of Marine Fisheries as to whether the proposed work requires a TOY restriction, and if so, the written determination shall specify the recommended TOY restriction and any other recommended conditions on the proposed work.

(4) If the project may affect a diadromous fish run as identified in the Division of Marine Fisheries Technical Reports TR 15 through 18, dated 2004, the applicant shall obtain a written determination from the Division of Marine Fisheries as to whether the design specifications and operational plan for the project are compatible with the passage requirements of the fish run.

(5) If the project involves silt-generating, in-water work that will impact a non-tidal perennial river or stream, the in-water work shall either occur between May 1<sup>st</sup> and August 30<sup>th</sup> or the applicant shall obtain a determination from the Division of Fisheries and Wildlife as to whether the proposed work requires a TOY restriction, and if so, the written determination shall specify the recommended TOY restriction and any other recommended conditions on the proposed work.

(6) If the Ecological Restoration Project involves dredging of 100 cubic yards or more in a Resource Area or dredging of any amount in an Outstanding Resource Water, the applicant shall file an application for a Water Quality Certification pursuant to 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* prior to submitting a Notice of Intent.

#### **10.12: Notice of Intent for an Ecological Restoration Project**

A Notice of Intent for an Ecological Restoration Project that meets the eligibility criteria for a Restoration Order of Conditions set forth in 310 CMR 10.13, or for approval as an Ecological Restoration Limited Project in accordance with 310 CMR 10.24(8) or 10.53(4), shall comply with the requirements of 310 CMR 10.12(1) and (2).

(1) At a minimum, a Notice of Intent for an Ecological Restoration Project shall include the following:

- (a) the project's ecological restoration goals;
- (b) the location of the Ecological Restoration Project;
- (c) the construction sequence for completing the project;
- (d) a map of the Areas Subject to Protection under M.G.L. c. 131, § 40, that will be temporarily or permanently altered by the project or include habitat for Rare Species, Habitat of Potential Regional and Statewide Importance, eel grass beds, or Shellfish Suitability Areas;
- (e) an evaluation of any flood impacts that may affect the built environment, including without limitation, buildings, wells, septic systems, roads or other man-made structures or infrastructure as well as any proposed flood impact mitigation measures;
- (f) a plan for invasive species prevention and control;
- (g) any preliminary written determinations obtained from the Natural Heritage and Endangered Species Program in accordance with 310 CMR 10.11(2);
- (h) any Time of Year restrictions and/or other conditions recommended by the Division of Marine Fisheries or the Division of Fisheries and Wildlife in accordance with 310 CMR 10.11(3) through (5);
- (i) proof that notice was published in the Environmental Monitor as required by 310 CMR 10.11(1);
- (j) a certification by the applicant under the penalties of perjury that the project meets the eligibility criteria set forth in 310 CMR 10.13, 10.24(8) or 10.53(4), whichever is applicable;
- (k) if the Ecological Restoration Project involves the construction, repair, replacement or expansion of infrastructure, an operation and maintenance plan to ensure that the infrastructure will continue to function as designed;
- (l) If the project involves dredging of 100 cubic yards or more or dredging of any amount in an Outstanding Resource Water, demonstration that an application for a Water Quality Certification pursuant to 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* has been submitted to the Department.
- (m) if the Ecological Restoration Project involves work on a stream crossing, information sufficient to make the showing required by 310 CMR 10.24(10) for work in a coastal resource area and 310 CMR 10.53(8) for work in an inland resource area; and
- (n) if the Ecological Restoration Project involves work on a stream crossing, baseline photo-points that capture longitudinal views of the crossing inlet, the crossing outlet and the upstream and downstream channel beds during low flow conditions. The latitude and longitude coordinates of the photo-points shall be included in the baseline data.

(2) Notwithstanding the provisions of 310 CMR 10.54(4)(a)5., 10.56(4)(a)4., and 10.60, a person submitting a Notice of Intent for an Ecological Restoration Project that meets the requirements of 310 CMR 10.12(1) and (2) is exempt from the requirement to perform a wildlife habitat evaluation in accordance with 310 CMR 10.60.

### **10.13: Eligibility Criteria for Restoration Order of Conditions**

Notwithstanding the provisions of 310 CMR 10.25 through 10.36, 10.54 through 10.58, and 10.60, an Ecological Restoration Project shall be permitted by a Restoration Order of Conditions provided that the project meets all applicable eligibility criteria in 310 CMR 10.13. Ecological Restoration Projects permitted by a Restoration Order of Conditions may result in the temporary or permanent loss of Resource Areas and/or the conversion of one Resource Area to another when such loss and/or conversion is necessary to the achievement of the project's ecological restoration goals.

(1) An Ecological Restoration Project shall be permitted by a Restoration Order of Conditions if it meets all of the following eligibility criteria:

(a) The project is an Ecological Restoration Project as defined in 310 CMR 10.04, is a project type listed in 310 CMR 10.13(2) through (7), and the applicant has submitted a Notice of Intent that meets all applicable requirements of 310 CMR 10.12.

(b) The project will further at least one of the interests identified in M.G.L. c. 131, § 40.

(c) The project will not have any short-term or long-term adverse effect, as identified by the procedures established by 310 CMR 10.11, on specified habitat sites of Rare Species located within the Resource Areas that may be affected by the project or will be carried out in accordance with a habitat management plan that has been approved in writing by the Natural Heritage and Endangered Species Program and submitted with the Notice of Intent.

(d) To the maximum extent practicable, the project will:

1. avoid adverse impacts to Resource Areas and the interests identified in M.G.L. c. 131, § 40, that can be avoided without impeding the achievement of the project's ecological restoration goals;

2. minimize adverse impacts to Resource Areas and the interests identified in M.G.L. c. 131, § 40, that are necessary to the achievement of the project's ecological restoration goals; and

3. utilize best management practices such as erosion and siltation controls and proper construction sequencing to prevent and minimize adverse construction impacts to Resource Areas and the interests identified in M.G.L. c. 131, § 40

(e) The project will not have significant adverse effects on the interests of flood control and storm damage prevention in relation to the built environment (*i.e.*, the project will not result in a significant increase in flooding or storm damage affecting buildings, wells, septic systems, roads or other human-made structures or infrastructure).

(f) If the project will involve the dredging of 100 cubic yards of sediment or more or dredging of any amount in an Outstanding Resource Water, the Notice of Intent includes a demonstration that an application for a Water Quality Certification pursuant to 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* has been submitted to the Department.

(g) The project will not substantially reduce the capacity of a Resource Area to serve the habitat functions identified in 310 CMR 10.60(2). A project will be presumed to meet this eligibility criteria if the project as proposed in the Notice of Intent will be carried out in accordance with any time of year restrictions or other conditions recommended by the Division of Marine Fisheries for coastal waters, and by the Division of Fisheries and Wildlife for inland waters in accordance with 310 CMR 10.11(3) through (5). As set forth

in 310 CMR 10.12(3), a person submitting a Notice of Intent for an Ecological Restoration Project that meets the requirements of 310 CMR 10.12(1) and (2) is exempt from the requirement to perform a wildlife habitat evaluation in accordance with 310 CMR 10.60.

(h) If the Ecological Restoration Project involves work on a stream crossing, the stream crossing has been designed in accordance with 310 CMR 10.24(10) for work in coastal resource areas and 310 CMR 10.53(8) for work in inland resource areas, as applicable.

(i) The Ecological Restoration Project will not result in a discharge of dredged or fill material within 400 feet of the high water mark of a Class A surface water (exclusive of its tributaries) unless the project is conducted by a public water system under 310 CMR 22.00: *Drinking Water* or a public agency or authority for the maintenance or repair of existing public roads or railways in accordance with 314 CMR 4.06(1)(d)1.

(j) The Ecological Restoration Project will not result in a discharge of dredged or fill material to a vernal pool certified by the Division of Fisheries and Wildlife.

(k) The Ecological Restoration Project will not result in a point source discharge to an Outstanding Resource Water.

(l) The Ecological Restoration Project will not involve the armoring of a Coastal Dune or Barrier Beach.

(2) Additional Eligibility Criteria for Dam Removal Projects. If the Ecological Restoration Project is a dam removal project, the project shall be presumed to meet the eligibility criteria set forth in 310 CMR 10.13(1)(d), if the project is consistent with the Department's guidance entitled *Dam Removal and the Wetlands Regulations*, dated December 2007. If the Ecological Restoration Project is a dam removal project, the Ecological Restoration Project shall be approved by a Restoration Order of Conditions, provided that in addition to the eligibility criteria set forth in 310 CMR 10.13(1), the project meets all of the following eligibility criteria:

(a) The project will not involve the removal of a dam that was constructed or is managed for flood control by a municipal, state or federal agency.

(b) The project will not adversely impact public water supply wells or water withdrawals permitted or registered under the Water Management Act, M.G.L. c. 21G, and 310 CMR 36.00: *Massachusetts Water Resources Management Program* within the reach of the stream impacted by the impoundment.

(c) The project will not adversely impact private water supply wells including agricultural or aquacultural wells or surface water withdrawal points.

(d) The project provides for the removal of the full vertical extent of the dam such that no remnant of the dam will remain at or below the streambed as determined prior to commencement of the dam removal project, or if such determination cannot be made at that time, as determined during construction of the project.

(e) The project provides for the removal of enough of the horizontal extent of the dam such that after removal no water will be impounded during the 500 year flood event.

(f) The project will not involve a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license.

(g) The applicant has obtained from the Department of Conservation and Recreation Office of Dam Safety a written determination that the dam is not subject to the jurisdiction of the Office under 302 CMR 10.00: *Dam Safety*, a written determination that the dam removal does not require a permit under 302 CMR 10.00: *Dam Safety* or a



permit authorizing the dam removal in accordance with 302 CMR 10.00: *Dam Safety* has been issued.

(h) If the project is exempt from the requirement to obtain a license or permit under 310 CMR 9.05(3)(n), the project will not have an adverse effect on navigation or on any docks, piers or boat ramps authorized under 310 CMR 9.00: *Waterways*.

(3) Additional Eligibility Criteria for Freshwater Stream Crossing Repair and Replacement Projects. If the Ecological Restoration Project is a freshwater stream crossing repair or replacement project, the Ecological Restoration Project shall be approved by a Restoration Order of Conditions, provided that in addition to the eligibility criteria set forth in 310 CMR 10.13(1), the project meets all of the following eligibility criteria:

- (a) The width of the structure will be at least 1.2 times bankfull width to facilitate the movement of fish and other aquatic organisms and wildlife species that may utilize riparian corridors.
- (b) The structure will be an open-bottom span where practicable or if an open-bottom span is not practicable, the structure bottom will be embedded in a substrate that matches the substrate of the stream channel and that shall be designed to maintain continuity of aquatic and benthic elements of the stream including appropriate substrates and hydraulic characteristics within the culvert (water depths, turbulence, velocities, and flow patterns).
- (c) The structure will have an Openness Ratio of at least 0.82 feet, or as close to 0.82 feet as is practicable.

(4) Additional Eligibility Criteria for Stream Daylighting Projects. If the Ecological Restoration Project is a stream daylighting project, the Ecological Restoration Project shall be approved by a Restoration Order of Conditions, provided that in addition to the eligibility criteria set forth in 310 CMR 10.13(1), the project meets all of the following eligibility criteria:

- (a) The project will meet the applicable performance standards for Bank, 310 CMR 10.54, and Land under Water Bodies and Waterways, 310 CMR 10.56. As set forth in 310 CMR 10.12(3), a person submitting a Notice of Intent that meets the requirements of 310 CMR 10.12 (1) and (2) for a stream daylighting project is exempt from the requirement to perform a wildlife habitat evaluation in accordance with 310 CMR 10.60, notwithstanding the provisions of 310 CMR 10.54(4)(a)5., 10.56(4)(a)4., and 10.60.
- (b) To the maximum extent practicable, the project is designed to include the revegetation of all disturbed areas with noninvasive indigenous species appropriate to the site.

(5) Additional Eligibility Criteria for Tidal Restoration Projects. If the Ecological Restoration Project is a Tidal Restoration Project designed to restore tidal flow that has been restricted or blocked by a man-made structure, the Ecological Restoration Project shall be approved by a Restoration Order of Conditions, provided that in addition to the eligibility criteria set forth in 310 CMR 10.13(1), the project meets all of the following eligibility criteria:

- (a) If the project will involve work in a Coastal Dune and/or a Coastal Beach, the project meets the applicable performance standard(s) at 310 CMR 10.27 and/or 10.28.
- (b) The project will not include a new or relocated tidal inlet/breach through a Barrier Beach or additional armoring of a Barrier Beach, but may include the modification, replacement or enlargement of an existing culvert or inlet through a Barrier Beach.

- (c) The project will not involve installation of new water control devices (*i.e.*, tide gates, flash boards and adjustable weirs) or a change in the management of existing water control devices, when the existing or proposed function of said devices is to prevent flooding or storm damage impacts to the built environment, including without limitation, buildings, wells, septic systems, roads or other human-made structures or infrastructure.
- (d) The project's physical specifications are compatible with passage requirements for diadromous fish runs identified at the project location by the Division of Marine Fisheries.

(6) Additional Eligibility Criteria for Rare Species Habitat Restoration. If the Ecological Restoration Project is a Rare Species habitat restoration project, the Ecological Restoration Project shall be approved by a Restoration Order of Conditions, provided that in addition to the eligibility criteria set forth in 310 CMR 10.13(1), the project meets all of the following eligibility criteria:

- (a) The project is exempt from review under 321 CMR 10.00: *Massachusetts Endangered Species Act Regulations* as a project that involves the active management of Rare Species habitat for the purpose of maintaining or enhancing the habitat for the benefit of Rare Species. A project that involves the active management of Rare Species habitat and is exempt from review under 321 CMR 10.00: *Massachusetts Endangered Species Act Regulations* may include without limitation the mowing, cutting, burning or pruning of vegetation or the removal of exotic or invasive species.
- (b) The project is carried out in accordance with a Habitat Management Plan that has been approved in writing by the Natural Heritage and Endangered Species Program and submitted with the Notice of Intent.

(7) Additional Eligibility Criteria for Restoring Fish Passageways. If the Ecological Restoration Project involves the restoration or repair of a fish passageway as identified by the Division of Marine Fisheries in its Marine Fisheries Technical Reports, TR 15 through 18, dated 2004, the Ecological Restoration Project shall be approved by a Restoration Order of Conditions, provided that in addition to the eligibility criteria set forth in 310 CMR 10.13(1), the applicant has submitted a Fishway Permit Application to the Division of Marine Fisheries, pursuant to M.G.L. c. 130, §§ 1 and 19, and 322 CMR 7.01(4)(f) and (14)(m), and the fish passageway will be operated and maintained in accordance with an Operation and Maintenance Plan approved by the Division of Marine Fisheries.

#### **10.14: Restoration Order of Conditions**

If after reviewing a Notice of Intent for an Ecological Restoration Project, the issuing authority determines that the Ecological Restoration Project meets the eligibility criteria in 310 CMR 10.13(1) and the applicable provisions of 310 CMR 10.13(2) through (7), the issuing authority shall issue a Restoration Order of Conditions that contains the general conditions set forth in 310 CMR 10.14(1), and all applicable special conditions set forth in 310 CMR 10.14(2) through (7). The Restoration Order of Conditions may reference the plans and specifications for the Ecological Restoration Project approved by the issuing authority. A Restoration Order of Conditions is subject to the provisions of 310 CMR 10.05 that apply to any Order of Conditions except as expressly provided otherwise in 310 CMR 10.00.

(1) General Conditions Applicable to all Ecological Restoration Projects. The Restoration Order of Conditions shall contain the following general conditions:

- (a) Failure to comply with all conditions stated herein and with all related statutes and other regulatory measures shall be deemed cause to revoke or modify this Restoration Order of Conditions.
- (b) This Restoration Order of Conditions does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
- (c) This Restoration Order of Conditions does not relieve the permittee or any other person of the necessity of complying with all applicable federal, state or local statutes, ordinances, bylaws or regulations.
- (d) The work authorized under this Restoration Order of Conditions shall be completed within three years from the date of issuance of this General Order unless the General Order is extended in accordance with 310 CMR 10.05(6)(d) or by operation of law.
- (e) This Restoration Order of Conditions may be extended by the issuing authority for one or more periods of up to three years upon application to the issuing authority at least 30 days prior to the expiration date of this Restoration Order.
- (f) Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, trees, ashes, refrigerators, motor vehicles or parts of any of the foregoing.
- (g) This Restoration Order of Conditions is not final until all administrative appeal periods from this Restoration Order have elapsed or if such an appeal has been taken, until all proceedings before the Department have been completed.
- (h) No work shall be undertaken until the Restoration Order of Conditions has become final and has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located within the chain of title to the affected property. In the case of recorded land, the Final Restoration Order of Conditions shall also be noted in the Registry's Grantor index under the name of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Issuing Authority prior to commencement of the work.
- (i) A sign that is not less than two square feet or more than three square feet shall be displayed at the site. The sign shall bear the words "Massachusetts Department of Environmental Protection" and include the File Number.
- (j) Where the Department is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before the Department.
- (k) Upon completion of the work described herein, the applicant shall submit a Request for a Certificate of Compliance to the issuing authority.
- (l) The work shall conform to the plans and special conditions referenced in this Restoration Order of Conditions.
- (m) Any change to the plans approved in this Restoration Order of Conditions shall require the applicant to inquire of the Issuing Authority in writing whether the change is significant enough to require the filing of a new Notice of Intent.

(n) Representatives of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Restoration Order of Conditions at reasonable hours to evaluate compliance with the conditions set forth in this Restoration Order of Conditions and may require the submittal of any data deemed necessary by the Conservation Commission or the Department for that evaluation.

(o) This Restoration Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Restoration Order of Conditions and to any contractor or other person performing work conditioned by this Order.

(p) Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland or Salt Marsh, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the issuing authority.

(q) All sedimentation barriers shall be maintained in good repair, until all disturbed areas have been fully stabilized with vegetation or other means. During construction, the applicant or his or her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the issuing authority. The Issuing Authority reserves the right to require any additional erosion and/or damage prevention controls it deems necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.

(r) The project shall be conducted in accordance with any preliminary written determination obtained from the Natural Heritage and Endangered Species Program as set forth in 310 CMR 10.11(2) and any time of year restrictions or other conditions recommended in writing by the Division of Marine Fisheries (for projects in coastal Resource Areas) and the Division of Fisheries and Wildlife (for projects in inland Resource Areas) as set forth in 310 CMR 10.11(3) through (5).

(s) The applicant shall implement the plan submitted with the Notice of Intent as approved by the Issuing Authority to prevent and control invasive species.

(t) If the project involves the dredging of 100 cubic yards or more in a Resource Area or dredging of any amount in an Outstanding Resource Water, the dredging and Dredged Material management shall be performed in accordance with the Water Quality Certification submitted with the Notice of Intent.

(u) If the project involves infrastructure, the owner shall operate and maintain the infrastructure in accordance with the operation and maintenance plan submitted with the Notice of Intent as approved by the Issuing Authority. Implementation of the operation and maintenance plan as approved by the Issuing Authority shall be a continuing condition that shall be set forth in the Certificate of Compliance.

(2) Special Conditions for Dam Removal Projects. If the Ecological Restoration Project involves dam removal, the Restoration Order of Conditions shall contain the following special conditions in addition to the general conditions set forth in 310 CMR 10.14(1):

(a) An as-built plan and a written statement from a registered professional engineer or other environmental professional expert in ecological restoration certifying substantial compliance with the design plan and construction specifications approved in the

Restoration Order of Conditions shall be submitted to the Issuing Authority within 90 days of completion of the dam removal.

(b) The applicant shall monitor the dam removal site during the first two years following completion of the dam removal. Said monitoring shall include a topographic survey of the longitudinal profile and stream cross-sections from downstream of the former dam through the upstream end of the former impoundment. The survey reference point shall comprise a permanent marker or recoverable survey point with known coordinates, such as a fixed point shown on the as-built plan, an existing bench mark, or a new benchmark. That marker should be identified or referenced on the plans and on the as-built plans. The applicant shall establish at least two photo-points for pre- and post-restoration monitoring at the dam removal site. At least one photo-point location shall be chosen to document a view of the dam pre-restoration and to document the same site after the dam is removed. A second location shall be chosen to document a view of the impoundment pre- and post-restoration. Photos shall be taken for two years after the dam removal is completed.

(c) The applicant shall submit a report detailing the results of this monitoring within six months of the completion of the two year post-construction monitoring period, or within 30 months after the dam removal is complete whichever is sooner. The report shall include a comparison of post-restoration survey data with pre-restoration survey data as illustrated by the photos taken during the monitoring period.

(3) Special Conditions for Freshwater Stream Crossing Repair and Replacement Projects. If the Ecological Restoration Project involves freshwater crossing repair or replacement, the Restoration Order of Conditions shall contain the following special conditions in addition to the general conditions set forth in 310 CMR 10.14(1):

(a) An as-built plan and/or a written statement from a registered professional engineer or other environmental professional expert in ecological restoration certifying substantial compliance with the design plans and construction specifications approved in the Restoration Order of Conditions shall be completed within 90 days of completion of construction. The as-built plan shall include the dimensions of the structure, the invert elevation of the upstream and downstream ends of the structure and the road or other surface elevation above the structure.

(b) The applicant shall monitor the site by collecting sufficient data within 12 months after construction is complete to evaluate the effect of the structure. At a minimum, when a Certificate of Compliance is requested, the applicant shall provide post-construction photo-points that capture longitudinal views of the crossing inlet, the crossing outlet and the upstream and downstream channel beds during low flow conditions. The photo-points shall be located at the same geographic photo-point latitude and longitude coordinates as required in the Notice of Intent per 310 CMR 10.12(1)(n). The applicant shall submit a report to the Issuing Authority detailing the results of this monitoring within 18 months after construction is complete. The report shall include a comparison of the post-restoration data with pre-restoration data.

(4) Special Conditions for Stream Daylighting Projects. If the Ecological Restoration Project involves stream daylighting, the Restoration Order of Conditions shall include the following special conditions in addition to the general conditions set forth in 310 CMR 10.14(1):

(a) An as-built plan and a written statement from a registered professional engineer or other environmental professional expert in ecological restoration certifying substantial compliance with the design plan and construction specifications approved in the Restoration Order of Conditions shall be submitted to the Issuing Authority within 90 days of completion of the project. At a minimum, when a Certificate of Compliance is requested, the applicant shall provide post-construction photo-points that capture longitudinal views of the upstream and downstream channel beds of the daylighted reach during low flow conditions.

(b) The applicant shall conduct photo-point monitoring by establishing at least three photo-points for pre- and post-restoration monitoring at the stream daylighting site. One photo-point location shall be chosen to document the upstream end of the site and one photo-point location shall be chosen to document the downstream end of the site. A third photo-point shall be chosen to document conditions in the restored channel. Photos shall be taken during high flow and low (summer) flow of each year during the two years following completion of the project.

(c) Within 30 months after the completion of the project, the applicant shall submit a report describing the ecological changes observed at the Project Site during the two years following completion of the project, as illustrated by the photos.

(5) Special Conditions for Tidal Restoration Projects. If the Ecological Restoration Project involves restoration of tidal influence, the Restoration Order of Conditions shall contain the following special conditions in addition to the general conditions set forth in 310 CMR 10.14(1):

(a) If the project is a culvert or bridge replacement or repair project, an as-built plan and a written statement from a registered professional engineer or other environmental professional expert in ecological restoration certifying substantial compliance with the design plans and construction specifications approved in the Restoration Order of Conditions shall be submitted to the Issuing Authority within 90 days of completion of construction. The as-built plan shall include the dimensions of the structure, the invert elevation of the upstream and downstream ends of the structure and the road or other surface elevation above the structure.

(b) The applicant shall monitor pre- and post-construction tidal conditions upstream and downstream of the tidal restriction with water level readings measured at an interval no greater than every ten minutes over a minimum of a one-week period that includes a spring tide. Pre- and post-construction water level readings shall be taken at approximately the same locations and shall be referenced to the same vertical elevation datum. The applicant shall prepare a report detailing the results of this monitoring within 12 months after construction is complete. The report shall include and compare pre- and post-construction tidal elevation monitoring data to assess attainment of the project's predicted post-restoration tidal conditions.

(6) Special Conditions for Rare Species Habitat Restoration. If the Ecological Restoration Project is a Rare Species Habitat Restoration Project, the Restoration Order of Conditions shall in addition to the general conditions set forth in 310 CMR 10.14(1) include the following special conditions:

(a) An as-built plan and a written statement from a registered professional engineer or other environmental professional expert in ecological restoration certifying substantial

compliance with the design plan, construction specifications, and the Habitat Management Plan submitted with the Notice of Intent as approved in the Restoration Order of Conditions shall be submitted to the Issuing Authority within 90 days of completion of the project.

(b) The applicant shall establish at least two photo-points for pre- and post-restoration monitoring at the Project Site. Photos shall be taken for two years after construction is complete. Within 30 months of completion of the project, the applicant shall submit to the Issuing Authority a report describing the ecological changes observed at the Project Site as illustrated by the photos.

(7) Special Conditions for Fish Passageway Restoration Projects. If the Ecological Restoration Project involves the repair or replacement of a fish passageway, the Restoration Order of Conditions shall in addition to the general conditions set forth in 310 CMR 10.14(1) contain the following special conditions:

(a) The property owner is responsible for maintaining and repairing the fishway in good condition so that it will support safe and efficient fish passage in accordance with an operation and maintenance plan approved by the Division of Marine Fisheries. This requirement is a continuing condition that shall be set forth in the Certificate of Compliance.

(b) A post-construction project summary using surveys, a narrative and photographs as needed, that confirm the fishway slope and entrance and exit elevations shall be submitted to and approved by the Division of Marine Fisheries, prior to submittal of a request for a Certificate of Compliance.

**[SECTIONS 10.15-10.20 DO NOT EXIST IN THE EXISTING REGULATION.]**

### **10.21: Introduction**

310 CMR 10.21 through 10.37 apply to all work subject to M.G.L. c. 131, § 40, M.G.L. c. 131, § 40, which will alter, dredge, fill, or remove any coastal beach, coastal dune, tidal flat, coastal wetland, land subject to coastal storm flowage, coastal bank, land subject to tidal action, or land under an estuary, under a salt pond, under the ocean or under certain streams, ponds, rivers, lakes or creeks within the coastal zone that are anadromous/catadromous fish runs. This Part is in addition to and does not change the provisions set forth in 310 CMR 10.01 through 10.10. 310 CMR 10.21 through 10.37 are intended to ensure that development along the coastline is located, designed, built and maintained in a manner that protects the public interests in the coastal resources listed in M.G.L. c. 131, § 40. The proponent of the work must submit sufficient information to enable the issuing authority to determine whether the proposed work will comply with 310 CMR 10.21 through 10.37. Any proposed work may be subject to the requirements of sections concerning coastal beaches, coastal dunes and land containing shellfish. Thus, in order to determine which provisions apply to a proposed project, 310 CMR 10.00 must be read in its entirety. 310 CMR 10.21 through 10.37 are divided into 16 sections, 44 of which deal with specific coastal resources. Each coastal resource section begins with a preamble. In addition, the requirements for protection of the riverfront area in 310 CMR 10.58 apply within the coastal resource areas. The riverfront area may overlap other coastal resource areas and the performance standards for each resource area must be met. 310 CMR 10.24(7) applies to

riverfront areas within coastal resource areas. The Preamble identifies the interests of M.G.L. c. 131, § 40 to which that resource is or is likely to be significant and describes the characteristics or factors of the resource which are critical to the protection of the interest to which the resource is significant. 310 CMR 10.21 through 10.37 are in the form of performance standards and shall be interpreted to protect those characteristics and resources to the maximum extent permissible under M.G.L. c. 131, § 40.

The performance standards are intended to identify the level of protection the issuing authority must impose in order to contribute to the protection of the interests of M.G.L. c. 131, § 40. It is the responsibility of the issuing authority to order specific measures and requirements for each proposed project which will ensure that the project is designed and carried out consistent with the required level of protection. Such authority must then issue an Order of Conditions which is understandable and enforceable.

#### 10.22: Purpose

310 CMR 10.21 through 10.37 are promulgated pursuant to M.G.L. c. 131, § 40 and are intended to implement it. They are further intended to establish criteria and standards for the uniform and coordinated administration of the provisions of M.G.L. c. 131, § 40; to ensure coordination between the Department and other Executive Office of Energy and Environmental Affairs agencies; and to ensure consideration by the Department of relevant policies, laws or programs of other Executive Office of Energy and Environmental Affairs agencies. 310 CMR 10.21 through 10.37 is, in addition, intended to be consistent with and form a part of the Commonwealth's Coastal Zone Management Program as it has been promulgated and defined by 301 CMR 21.00: *Coastal Zone Management Program Federal Consistency Review Procedures*. 310 CMR 10.21 through 10.37, however, are adopted independently under M.G.L. c. 131, § 40 and would remain in full force and effect in the absence of 301 CMR 20.00: *Coastal Zone Management Program*.

The interpretation and application of 310 CMR 10.21 through 10.37 shall be consistent with the policies of 301 CMR 20.00: *Coastal Zone Management Program* to the maximum extent permissible under M.G.L. c. 131, § 40. M.G.L. c. 21A, § 2 establishes the CZM policies as part of 301 CMR 20.00, and the Department recognizes these policies as state environmental policy, which it will carry out in accordance with M.G.L. c. 21A, § 2. Specifically, 301 CMR 20.99: *Severability*, Coastal Hazards Policy #1, and #2, Energy Policy #1, Habitat Policy #1, Ocean Resources Policy #1, Ports and Harbors Policy #1, #2 and #3, Protected Areas Policy #1 and Water Quality Policy #1 and #2 are applicable to the administration of M.G.L. c. 21A, § 2, but the provisions of the more specific regulations contained in the following sections shall govern, unless the Secretary, pursuant to the conflict resolution procedures of M.G.L. c. 21A, 301 CMR 20.00 of the CZM Regulations, has resolved any conflict and has determined that the CZM policies should or should not apply.

#### 10.23: Additional Definitions for 310 CMR 10.21 through 10.37

The definitions contained in 310 CMR 10.23 apply to and are valid for 310 CMR 10.21 through 10.37. The following definitions are for terms used throughout 310 CMR



10.21 through 10.37. Other terms that are used only in specific sections of 310 CMR 10.21 through 10.37 are defined in those sections.

Act means the Wetlands Protection Act, M.G.L. c. 131, § 40.

Adverse Effect means a greater than negligible change in the resource area or one of its characteristics or factors that diminishes the value of the resource area to one or more of the specific interests of M.G.L. c. 131, § 40, as determined by the issuing authority.

Negligible means small enough to be disregarded.

Applicant means any person giving notice of intention to remove, fill, dredge or alter under M.G.L. c. 131, § 40.

Area of Critical Environmental Concern (ACEC) means an area which has been so designated by the Secretary in accordance with 301 CMR 12.00: *Areas of Critical Environmental Concern*. The term Area for Preservation or Restoration (APR) shall be synonymous with ACEC, as provided in the CZM Regulations.

Building means any residential, commercial, industrial, recreational or other similar structure. For the purposes of 310 CMR 10.00, building may be interpreted to include a large, substantial structure such as a utility tower.

Coastal Engineering Structure means, but is not limited to, any breakwater, bulkhead, groin, jetty, revetment, seawall, weir, riprap or any other structure that is designed to alter wave, tidal or sediment transport processes in order to protect inland or upland structures from the effects of such processes.

Coastal Zone means that area defined in 301 CMR 20.02: *Definitions*.

DMF means the Division of Marine Fisheries.

Grain Size means a measure of the size of a material or rock particle that makes up sediment.

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

Interests of the Act means the following eight interests specified in M.G.L. c. 131, § 40: public or private water supply, ground water supply, flood control, storm damage prevention, prevention of pollution, protection of land containing shellfish and protection of fisheries and wildlife habitat.

Issuing Authority means either a conservation commission or the Department, as appropriate.

Littoral Processes means the movement of sediment, including gravel, sand or cobbles, along the coast caused by waves or currents.

Maintenance Dredging means dredging under a license in any previously dredged area which does not extend the originally-dredged depth, width, or length but does not mean improvement dredging or backfilling.

Marine Fisheries means any animal life inhabiting the ocean or its adjacent tidal waters or the land thereunder that is utilized by man in a recreational and/or commercial manner or that is part of the food chain for such animal life.

Mean High Water Line means 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.

Mean Low Water Line means the line where the arithmetic mean of the low 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.

Minimize means to achieve the least amount of adverse effect that can be attained using Best Available Measures or Best Practical Measures, whichever is referred to in the pertinent section. "Best Available Measures" means the most up-to-date technology or the best designs, measures or engineering practices that have been developed and that are commercially available. "Best Practical Measures" means technologies, designs, measures or engineering practices that are in general use to protect similar interests.

NPDES (National Pollutant Discharge Elimination System) Permit means the permit issued jointly by the federal and state governments, in accordance with 33 U.S.C. 1342 and M.G.L. c. 21, § 43, regulating liquid discharges from a point source.

Productivity means the rate of biomass production over a period of time.

Resource Area means any coastal bank; coastal wetland; coastal beach; coastal dune; tidal flat; or any land under the ocean or under an estuary or under a salt pond; land subject to tidal action or coastal 100 year storm flowage; or land under certain streams, ponds, rivers, lakes, or creeks within the coastal zone that are anadromous/catadromous fish runs.

Secretary means the Secretary of Energy and Environmental Affairs.

Significant. A resource area shall be found to be significant to an interest of M.G.L. c. 131, § 40 when such resource area plays a role in the provision or protection, as appropriate, of public or private water supply, ground water supply, flood control, storm

damage prevention, prevention of pollution, land containing shellfish, fisheries, and/or wildlife habitat.

Turbidity means the amount of particulate matter suspended in water.

Water Circulation means the pattern of water movement in coastal waters.

#### **10.24: General Provisions**

(1) If the issuing authority determines that a Resource Area is significant to an interest identified in M.G.L. c. 131, § 40 for which no presumption is stated in the Preamble to the applicable section, the issuing authority shall impose such conditions as are necessary to contribute to the protection of such interests.

(a) For work in the buffer zone subject to review under 310 CMR 10.02(2)(b)3., the issuing authority shall impose conditions to protect the interests of the Act identified for the adjacent Resource Area. The potential for adverse impacts to Resource Areas from work in the buffer zone may increase with the extent of the work and the proximity to the resource area. The issuing authority may consider the characteristics of the buffer zone, such as the presence of steep slopes, that may increase the potential for adverse impacts on Resource Areas. Conditions may include limitations on the scope and location of work in the buffer zone as necessary to avoid alteration of Resource Areas. The issuing authority may require erosion and sedimentation controls during construction, a clear limit of work, and the preservation of natural vegetation adjacent to the Resource Area and/or other measures commensurate with the scope and location of the work within the buffer zone to protect the interests of M.G.L. c. 131, § 40. Where a buffer zone has already been developed, the issuing authority may consider the extent of existing development in its review of subsequent proposed work and, where prior development is extensive, may consider measures such as the restoration of natural vegetation adjacent to the Resource Area to protect the interests of M.G.L. c. 131, § 40. The purpose of preconstruction review of work in the buffer zone is to ensure that adjacent Resource Areas are not adversely affected during or after completion of the work.

(b) For work in any coastal Resource Area or Buffer Zone along the shoreline, the Applicant shall consider, and the Issuing Authority may require, the restoration, enhancement, or creation of wetland Resource Areas through natural methods and materials as an alternative to coastal engineering structures to promote resiliency along the shoreline. In planning shoreline protection projects, Applicants shall consult the [resilientma.org](http://resilientma.org) website for the most current mapping and other available information related to shoreline change and sea level rise or similarly reliable local data acceptable to the Issuing Authority. Applicants and Issuing Authorities shall confirm that the proposed project design takes into account the characteristics of the site, including existing Resource Areas, wave energy, tidal range, elevation, intertidal slope, bathymetry, and erosion rate. The Issuing Authority shall require projects be designed to protect or enhance Resource Areas seaward of a seawall or other coastal engineering structure wherever practicable. Notwithstanding the provisions of 310 CMR 10.24(2), the Issuing Authority may allow the conversion of one Resource Area to other Resource Areas to achieve greater shoreline resiliency, but there shall be no loss of Salt Marsh, no alteration of Primary Frontal Dune,

and no cumulative net loss of or adverse effects on Resource Areas. The Issuing Authority shall confirm that the project will not cause an increase in flood velocity, volume, or elevation on other properties resulting in storm damage. The purpose of preserving and enhancing the adaptive capacities of Resource Areas whenever feasible is to provide coastal property owners with an effective means of shoreline protection in light of rising sea levels and increasing severity of coastal storms, while protecting the interests of M.G.L. c. 131, § 40.

(2) When the issuing authority determines that a project in one Resource Area would adversely affect another Resource Area, the issuing authority shall impose such conditions as will protect the interest to which each resource are significant to the same degree as required in 310 CMR 10.00 concerning each Resource Area.

(3) A determination which finds that a resource area is not significant to an interest to which it is presumed in 310 CMR 10.21 through 10.37 to be significant, or is significant to an interest to which it is presumed to be not significant, shall be made on Form 7. No such determination shall be effective unless a copy of this form and the accompanying written explanation for the determination required by 310 CMR 10.00 is sent on the day of issuance to the appropriate regional office of the Department.

(4) (a) 310 CMR 10.21 through 10.37 do not change the requirement of any other Massachusetts statute or by-law. A proposed project must comply with all applicable requirements of other federal, state and local statutes and by-laws, in addition to meeting the requirements of 310 CMR 10.00. Examples of such laws which may be applicable are the Coastal Restrictions Act (M.G.L. c. 130, § 105), the Ocean Sanctuaries Act (M.G.L. c. 132A, §§ 13 through 16 and 18), the Mineral Resources Act (M.G.L. c. 21, §§ 54 through 58), the Massachusetts Clean Water Act (M.G.L. c. 21, §§ 26 through 53), the Waterways laws (M.G.L. c. 91), the Massachusetts Environmental Policy Act (M.G.L. c. 30, §§ 61 through 62H), the act establishing the Martha's Vineyard Commission (St. 1974, c. 637) and the Scenic Rivers Act (M.G.L. c. 21, § 2. 17B).

(b) When the site of a proposed project is subject to a Restriction Order which has been duly recorded under the provisions of M.G.L. c. 130, § 105, such a project shall conform to 310 CMR 10.21 through 10.37.

(c) If an NPDES permit for any new point-source discharge has or will be obtained prior to the commencement of the discharge, the effluent limitations established in such permit shall be deemed to satisfy the water quality standards established in any section of 310 CMR 10.21 through 10.37 relative to the effects of the new point-source discharge on water quality. Such effluent limitations shall be incorporated or shall be deemed to be incorporated into the Order of Conditions.

(5) (a) When any area subject to 310 CMR 10.21 through 10.37 has been designated an Area of Critical Environmental Concern by the Secretary of Energy and Environmental Affairs pursuant to 301 CMR 20.00: *Coastal Zone Management Program*, and when the Secretary has made a finding of the significance of the area to one or more interests of M.G.L. c. 131, § 40, the issuing authority shall presume that such area is significant to those interests.

(b) When any portion of a designated Area of Critical Environmental Concern is determined by the Issuing Authority to be significant to any of the interests of M.G.L. c. 131, § 40, any proposed project in or impacting that portion of the Area of Critical Environmental Concern shall have no adverse effect upon those interests, except as provided under 310 CMR 10.25(4) for maintenance dredging, under 310 CMR 10.11 through 10.14, 10.24(8) and 10.53(4) for Ecological Restoration Projects, and under 310 CMR 10.25(3) for improvement dredging conducted by a public entity for the sole purpose of the maintenance or restoration of historic, safe navigation channels or turnaround basins of a minimum length, width, and depth consistent with a Resource Management Plan adopted by the municipality(ies) and approved by the Secretary of the Executive Office of Energy and Environmental Affairs.

(6) Where any section of 310 CMR 10.00 provides that a proposed project “may be permitted” in certain circumstances, no such project shall be undertaken until all of the usual procedures required by M.G.L. c. 131, § 40 and 310 CMR 10.21 through 10.37 have been followed and a Final Order has been issued approving the work. The Issuing Authority shall impose such conditions on such projects as may be necessary to contribute to the protection of the interests of M.G.L. c. 131, § 40. Notwithstanding the foregoing, when the Issuing Authority determines that a project meets the eligibility criteria for a Restoration Order of Conditions, the Issuing Authority shall impose only the conditions set forth in the applicable provisions of 310 CMR 10.00. As set forth in 310 CMR 10.05(6)(b), a Restoration Order of Conditions may reference the plans and specifications approved by the Issuing Authority.

(7) Notwithstanding the provisions of 310 CMR 10.25 through 10.36, the issuing authority may issue an Order of Conditions and impose such conditions as will contribute to the interests identified in M.G.L. c. 131, § 40, permitting the limited projects listed in 310 CMR 10.24(7)(a) through (c), although no such project may be permitted which will have any adverse effect on specified habitat sites of Rare Species, as identified by procedures established under 310 CMR 10.37. In determining whether to exercise its discretion to approve the limited projects listed in 310 CMR 10.24(7)(a) through (c), the Issuing Authority shall consider the following factors: the magnitude of the alteration and the significance of the project to the interests identified in M.G.L. c. 131, § 40, the availability of reasonable alternatives to the proposed activity, and the extent to which adverse impacts are minimized and the extent to which mitigation measures including replication or restoration are provided to contribute to the protection of the interests identified in M.G.L. c. 131, § 40. Adverse effects to be minimized include without limitation any adverse impacts on the relevant interests of M.G.L. c. 131, § 40, due to changes in wave action or sediment transport or adjacent coastal banks, coastal beaches, coastal dunes, salt marshes or barrier beaches. The provisions of 310 CMR 10.24(7)(a) through (c) are not intended to prohibit the Issuing Authority from imposing such additional conditions as are necessary to contribute to the interests of M.G.L. c. 131, § 40 where the indicated minimizing measures are not sufficient.

(a) The construction, reconstruction, operation and maintenance of the following structures associated with and essential to an electric generating facility may be permitted as a limited project pursuant to 310 CMR 10.24(7) provided the project is proposed to be constructed and operated in accordance with all applicable provisions of 310 CMR 10.24(1) through (6), (7)(a)1. through 6., and (9) and (10):

1. Conduits for cooling water intake or discharge, which may be emplaced by trenching with a minimum depth of four feet of cover below original grade, except where they traverse salt ponds, salt marshes and barrier beaches, in which cases they may be emplaced only by tunneling;
  2. Headwalls and other essential structures appurtenant to 310 CMR 10.24(7)(a)1., except that these structures may not be constructed in salt marshes, salt ponds or barrier beaches;
  3. Pipelines or other conduits for the transmission of utilities essential to the facility (water, fuel, sewage, and power), which may be emplaced by trenching with a minimum depth of four feet of cover below original grade, or which may be carried above grade on pilings or similar supports, but only if the applicant demonstrates that there will be no adverse effect on the Resource Area by the construction, operation, and maintenance of such pipelines or other conduits. If such pipelines or conduits are emplaced through a Resource Area which adverse effects are required to be minimized by 310 CMR 10.25 through 10.36, then that standard shall be applied, except that in no case shall fuel or sewage lines be operated or be designed to be operated so that they will have an adverse effect on the Resource Area.
  4. Structures necessary for navigation, berthing and protection of such vessels and vessel movements as may be necessary to the operation of the facility, but only on coastal banks, coastal beaches, rocky intertidal shores or land under the ocean;
  5. Structures for maritime dependent accessory activities essential to the facility, but only on coastal banks, coastal beaches, rocky intertidal shores or land under the ocean;
  6. Coastal engineering structures necessary to the protection of such other structures as may be permitted under 310 CMR 10.24, but only on coastal banks, coastal beaches, rocky intertidal shores, or land under the ocean;
- (b) The construction, reconstruction, operation and maintenance of underground and overhead public utilities, limited to electrical distribution or transmission lines, or communication, sewer, water and natural gas lines, may be permitted as a limited project pursuant to 310 CMR 10.24(7) provided that the project complies with all applicable provisions of 310 CMR 10.24(1) through (6), (9) and (10), and (7)(b)1. through 9.:
1. For local distribution or connecting lines not reviewed by the Energy Facilities Siting Council, the Issuing Authority determines that alternative routes with fewer adverse effects are not physically or legally feasible;
  2. Adverse effects during construction are minimized using the Best Available Measures, which may include such equipment as Bailey bridges and helicopters;
  3. The surface vegetation and contours of the area are substantially restored;
  4. When a trench is made in a Salt Marsh, all spoil is removed from the Salt Marsh upon excavation. Clean sand or other appropriate material shall be used to restore the level of the trench to that of the surrounding undisturbed Salt Marsh. The surface vegetation shall be restored substantially to its original condition by immediately transplanting appropriate marsh plant nursery stock once construction is completed. Baffles of concrete, clay or other non porous material shall be placed in the trench, if necessary, to prevent groundwater excursion. During the first growing season, periodic maintenance of the marsh restoration

area shall be required and shall include at least the replacement of non surviving transplants and the removal of all deposits of debris and organic litter.

During construction, equipment such as Bailey bridges and helicopters shall be used to minimize, using Best Available Measures, the adverse effects of construction on the Salt Marsh. All vehicles shall be used only on swamp mats or in such a way as to prevent tire marks, trenches, or ruts;

5. No utility shall traverse a Salt Marsh unless the applicant has shown that any thermal influence on the Salt Marsh of such line subsequent to the project being completed will not alter the natural freezing and thawing patterns of the top 24 inches of the Salt Marsh surface. Thermal sand, concrete or other suitable material may be used to backfill the trench to a point no less than 24 inches below grade. Above this level, clean sand shall be used to restore the level of the trench to that of the surrounding undisturbed Salt Marsh;

6. No permanent access roads shall be permitted except in Designated Port Areas; and

7. All sewer lines shall be constructed so as to be watertight so as to prevent inflow and leakage.

8. All fuel lines shall be double cased and watertight so as to prevent inflow and leakage.

9. The conduits or structures shall be designed to minimize, using the Best Available Measures, adverse effects on the relevant interests of M.G.L. c. 131, § 40 due to changes in wave action or sediment transport or adjacent coastal banks, coastal beaches, coastal dunes, salt marshes or barrier beaches.

(c) The following projects may be permitted as a limited project pursuant to 310 CMR 10.24(7) provided the project complies with all applicable provisions of 310 CMR 10.24(1) through (6) and (9) and (10):

1. Maintenance and improvement of existing public roadways, but limited to widening less than a single lane, adding shoulders, correcting substandard intersections, and improving drainage systems. Existing public roadways may be elevated to reduce impacts from sea level rise or coastal storm flowage; provided that:

a. the width of the elevated roadway surface is the same as the existing roadway surface;

b. unavoidable loss of Salt Marsh, if necessary for adjustment of the toe of slope, is mitigated by the restoration or creation of an equivalent area of Salt Marsh, with at least 75% of the area established with indigenous salt marsh plant species within two growing seasons, and, prior to the vegetative reestablishment, any exposed soil is temporarily stabilized to prevent erosion in accordance with standard NRCS methods;

c. the existing hydrology up to and including the highest spring tide of the year between both sides of the roadway is maintained, there is no restriction of flow and no increase in flood stage or velocity, and the existing hydrology is improved where not adequately sustaining the Salt Marsh; provided the Issuing Authority has determined that no adverse flooding impacts to landward properties will occur; and

- d. the work avoids and minimizes alterations of other coastal Resource Areas to the maximum extent practicable.

**[NOTE TO REVIEWERS: MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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 FURTHER EDITS TO SECTIONS 10.24(7)(c) 2, 3, 4, 5, and 6 AND THESE WILL REMAIN THE SAME AS EXISTING REGULATION**].**

10.24(7)(c)

7. The construction of a new access roadway, or the improvement, repair and/or replacement of an existing access roadway, needed to transport equipment to a renewable energy Project Site, provided that it is carried out in accordance with the following general conditions and any additional conditions deemed necessary by the issuing authority. Such projects shall be designed, constructed, implemented, operated, and maintained to meet all of the following standards to the maximum extent practicable:
  - a. The work is limited to the following coastal resource areas or portions thereof: the portion of Land Subject to Coastal Storm Flowage that is outside the Velocity Zone, Designated Port Areas, and Banks of or Land under the Ocean, Ponds, Streams, Rivers, Lakes or Creeks that Underlie an Anadromous/Catadromous Fish Run.
  - b. Hydrological changes to resource areas shall be minimized.
  - c. Best management practices shall be used to minimize adverse impacts during construction. An applicant shall be presumed to use best management practices to minimize adverse impacts during construction if he or she implements erosion and sediment controls in accordance with the *Massachusetts Erosion and Sediment Control Guidelines*. This presumption may be rebutted by credible evidence from a competent source.
  - d. No access road or other structure or activity shall restrict flows so as to cause an increase in flood stage or velocity.
  - e. No change in the existing surface topography or the existing soil and surface water levels shall occur except for temporary access roads.
  - f. Temporary structures and work areas in resource areas shall be removed within 30 days of completion of the work. Temporary alterations to resource areas shall be substantially restored to preexisting hydrology and topography. At least 75% of the surface of any area of disturbed vegetation shall be reestablished with indigenous wetland plant species within two growing seasons and prior to said vegetative reestablishment any exposed soil in the area of disturbed vegetation shall be temporarily stabilized to prevent erosion. Surface areas shall be presumed to be stabilized to prevent erosion if the applicant implements the procedures set forth in the *Massachusetts Erosion and Sediment Control Guidelines*. This presumption may be rebutted by credible evidence from a competent source.



g. Work in resource areas shall occur only during those periods when the ground is sufficiently frozen, dry, or otherwise stable to support the equipment being used.

h. Slash, branches, and limbs resulting from cutting and removal operations shall not be placed within 25 feet of the bank of any water body.

8. Public Shared Use Paths within abandoned rail beds: The construction of a Public Shared Use Path of the minimum practical width within the footprint of the rail bed, or the minor improvement, repair, and/or replacement of an existing Public Shared Use Path within the footprint of the rail bed; provided that it is carried out in accordance with the following conditions and any additional conditions deemed necessary by the Issuing Authority. The Issuing Authority may approve a proposed route outside the footprint of the rail bed if a different alignment within the right-of-way is advantageous to reduce Resource Area alterations. Public Shared Use Paths are 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). 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. Public Shared Use Paths shall be designed, constructed, operated, and maintained to meet all of the following standards:

a. Any portion of a salt marsh within a designated Area of Critical Environmental Concern is presumed to be significant to the interests of M.G.L. c. 131, § 40, and no proposed Public Shared Use Path projects shall have an adverse effect upon those interests.

b. No Public Shared Use Path, associated structure, or activity shall restrict flow so as to cause an increase in flood stage or velocity.

c. Compensatory flood storage shall be provided for all flood storage volume that will be lost within the Special Flood Hazard Area within any portion of a wetland Resource Area, for any work located upgradient of a stream or wetland crossing, culvert, or bridge.

d. Construction work in Resource Areas shall occur only during those periods when the ground is sufficiently frozen, dry, or otherwise stable enough to support the equipment being used.

e. During construction, slash, branches, and limbs resulting from cutting and removal operations shall not be placed within 25 feet of the bank or any body of water.

f. For any permanent alterations to Resource Areas, mitigation measures shall be implemented that contribute to the protection of the interests identified in M.G.L. c. 131 § 40, either in accordance with existing performance standards to the maximum extent practicable or an equivalent level of environmental protection where square footage is not a relevant measure, such as restoration or preservation. Mitigation may be offsite, but must be considered in the following order: same Project Site, same Project Locust, adjacent site, same wetland Resource Area, same municipality, and the same stream reach within the Hydrologic Unit Map (HUC) 12 sub-watershed. All instances of Offsite Mitigation for Redevelopment shall be within the same HUC 12 sub-watershed.

- g. All temporary alterations to Resource Areas and Buffer Zones shall be restored to preexisting hydrology and topography, and replanted with noninvasive native vegetation.
  - h. A separate NOI may be filed either concurrently to the filing of the NOI for the project, or after the Order is issued, for vegetation management and other activities as defined in 310 CMR 10.02(2)(b)2.r.i.-v. in wetlands Resource Areas. Orders of Conditions shall be valid for five years and may be extended by the issuing authority for one or more years up to five additional years, pursuant to 310 CMR 10.05(8).
  - i. After a Certificate of Compliance is obtained, minor activities as defined at 310 CMR 10.02(2)(b)2. may take place in the Buffer Zone and Riverfront Area to provide for vegetation management provided that any such work is restricted to hand methods to the maximum extent practicable. No snow clearing beyond the shoulder shall occur, and the application of deicing and anti-icing agents and sanding is prohibited.
  - j. Stormwater shall be managed to the Maximum Extent Practicable in accordance with 310 CMR 10.05(6)(m). A long-term operations and maintenance plan prepared in accordance with 310 CMR 10.05(6)(k)9. Shall also be provided.
  - k. Best Management Practices shall be used to minimize adverse impacts during construction, including prevention of erosion and siltation of adjacent water bodies and wetlands in accordance with the construction period erosion, sedimentation and pollution prevention plan (310 CMR 10.05(6)(k)8.).
9. The relocation of an existing public roadway, railway, or other public transportation infrastructure, and any associated utilities, when necessary to mitigate or avoid flooding or coastal storm damage; the relocation or reconfiguration of an existing Water-dependent Use facility when necessary to mitigate or avoid flooding or coastal storm damage; or the construction, reconstruction, or reconfiguration of Water-dependent Use structures determined to be functionally dependent by the building official under 780 CMR: *Massachusetts State Building Code* and Referenced Standard ASCE 24-14. (Functionally dependent means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.) The work shall be designed, constructed, implemented, operated, and maintained in accordance with the following general conditions and any additional conditions deemed necessary by the Issuing Authority:
- a. Any work in a Salt Marsh shall meet the performance standards of 310 CMR 10.32, and shall not otherwise directly or indirectly impact the hydrology of a Salt Marsh;
  - b. The selection of a design shall be based on an alternatives analysis that evaluates all practicable alternatives to avoid and minimize adverse effects on Resource Areas and to minimize repetitive reconstruction. Alternatives shall include, at a minimum, improvement of an alternate route and relocation landward that avoids and minimizes adverse effects on other Resource Areas. When a road or facility is relocated, the former site shall be restored to natural conditions, including the restoration or creation of any Resource Areas that naturally would occur at the site;
  - c. Best Management Practices shall be used to minimize adverse impacts during construction. Best Management Practices used in accordance with the Massachusetts Erosion and Sediment Control Guidelines will be presumed to meet this standard;

- d. Construction shall not take place during Time of Year Restrictions as identified in 310 CMR 10.35(4);
- e. No road, other structure, or activity shall restrict flows or cause an increase in flood stage or velocity; and
- f. Temporary structures and work areas in Resource Areas shall be removed as soon as possible but no more than 30 days after the scheduled completion of the work. Temporary alterations to Resource Areas shall be restored to preexisting hydrology, topography, and vegetation.

(8) Ecological Restoration Limited Project.

- (a) Notwithstanding the requirements of 310 CMR 10.25 through 10.36, 10.54 through 10.58, and 10.60, the Issuing Authority may issue an Order of Conditions permitting an Ecological Restoration Project listed in 310 CMR 10.24(8)(e) as an Ecological Restoration Limited Project and impose such conditions as will contribute to the interests identified in M.G.L. c. 131, § 40, provided that:

*[NOTE TO REVIEWERS: MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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 FURTHER EDITS TO SECTIONS 10.24(8), and NO EDITS TO 10.24(9), 10.24(10), 10.25, 10.26, 10.27, 10.28, 10.29, 10.30, or 10.31 AND THESE SECTIONS WILL REMAIN THE SAME AS EXISTING REGULATION.]***

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**10.32: Salt Marshes**

(1) Preamble. Salt marshes are significant to protection of marine fisheries, wildlife habitat, and where there are shellfish, to protection of land containing shellfish, and prevention of pollution and are likely to be significant to storm damage prevention and ground water supply.

A salt marsh produces large amounts of organic matter. A significant portion of this material is exported as detritus and dissolved organics to estuarine and coastal waters, where it provides the basis for a large food web that supports many marine organisms, including finfish and shellfish as well as many bird species. Salt marshes also provide a spawning and nursery habitat for several important estuarine forage finfish as well as important food, shelter, breeding areas, and migratory and overwintering areas for many wildlife species.

Salt marsh plants and substrate remove pollutants from surrounding waters. The network of salt marsh vegetation roots and rhizomes binds sediments together.

The sediments absorb chlorinated hydrocarbons and heavy metals such as lead, copper, and iron. The marsh also retains nitrogen and phosphorous compounds, which in large amounts can lead to algal blooms in coastal waters.

The underlying peat also serves as a barrier between fresh ground water landward of the salt marsh and the ocean, thus helping to maintain the level of such ground water.

Salt marsh cord grass and underlying peat are resistant to erosion and dissipate wave energy, thereby providing a buffer that reduces wave damage.

When a proposed project involves the dredging, filling, removing or altering of a salt marsh, the issuing authority shall presume that such area is significant to the interests specified above. This presumption may be overcome only upon a clear showing that a salt marsh does not play a role in the protection of marine fisheries or wildlife habitat, prevention of pollution, ground water supply, or storm damage prevention, and if the issuing authority makes a written determination to such effect.

When a salt marsh is significant to one or more of the interests specified above, the following characteristics are critical to the protection of such interest(s):

- (a) the growth, composition and distribution of salt marsh vegetation, (protection of marine fisheries and wildlife habitat, prevention of pollution, storm damage prevention);
- (b) the flow and level of tidal and fresh water (protection of marine fisheries and wildlife habitat, prevention of pollution); and
- (c) the presence and depth of peat (ground water supply, prevention of pollution, storm damage prevention).

## (2) Definitions.

Salt Marsh means a coastal wetland that extends landward up to the highest high tide line, that is, the highest spring tide of the year, and is characterized by plants that are well adapted to or prefer living in, saline soils. Dominant plants within salt marshes typically include salt meadow cord grass (*Spartina patens*) and/or salt marsh cord grass (*Spartina alterniflora*), but may also include, without limitation, spike grass (*Distichlis spicata*), high-tide bush (*Iva frutescens*), black grass (*Juncus gerardii*), and common reedgrass (*Phragmites*). A salt marsh may contain tidal creeks, ditches and pools.

Spring Tide means the tide of the greatest amplitude during the approximately 14-day tidal cycle. It occurs at or near the time when the gravitational forces of the sun and the moon are in phase (new and full moons).

WHEN A SALT MARSH IS DETERMINED TO BE SIGNIFICANT TO THE PROTECTION OF MARINE FISHERIES, THE PREVENTION OF POLLUTION, STORM Effective 10/24/2014 310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION DAMAGE PREVENTION OR GROUND WATER SUPPLY, 310 CMR 10.32(3) THROUGH (6) SHALL APPLY:

(3) A proposed project in a salt marsh, on lands within 100 feet of a salt marsh, or in a body of water adjacent to a salt marsh shall not destroy any portion of the salt marsh and shall not have an adverse effect on the productivity of the salt marsh. Alterations in growth, distribution and composition of salt marsh vegetation shall be considered in evaluating adverse effects on productivity. 310 CMR 10.32(3) shall not be construed to prohibit the harvesting of salt hay.

(4) Notwithstanding the provisions of 310 CMR 10.32(3), a small project within a salt marsh, such as an elevated walkway or other structure which has no adverse effects other

than blocking sunlight from the underlying vegetation for a portion of each day, may be permitted if such a project complies with all other applicable requirements of 310 CMR 10.21 through 10.37.

(5) Notwithstanding the provisions of 310 CMR 10.32(3), a project which will restore or rehabilitate a salt marsh may be permitted in accordance with 310 CMR 10.11 through 10.14, 10.24(8) and/or 10.53(4). Creation of a new salt marsh or conversion of another Resource Area to expand a salt marsh may be permitted; provided that the design is in accordance with Best Available Measures as defined in 310 CMR 10.04, notwithstanding the performance standards for the other Resource Area.

(6) Notwithstanding the provisions of 310 CMR 10.32(3) through (5), no project may be permitted which will have any adverse effect on specified habitat sites of Rare Species, as identified by procedures established under 310 CMR 10.37.

*[NOTE TO REVIEWERS: MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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 10.33, 10.34, OR 10.35 AND THESE SECTIONS WILL REMAIN THE SAME AS EXISTING REGULATION.**]*

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### **10.36: Land Subject to Coastal Storm Flowage**

(1) Preamble. Land Subject to Coastal Storm Flowage is likely to be significant to storm damage prevention and flood control. Land Subject to Coastal Storm Flowage reduces storm damage and flooding by diminishing and buffering the high energy effects of storms within the coastal floodplain. Velocity Zones (V-Zones) and Moderate Wave Action Zones (MoWA Zones), the seaward areas of Land Subject to Coastal Storm Flowage, are particularly subject to hazardous flooding, wave impact, erosion, backrush, sediment transport, and scour. The V-Zones and MoWA Zones within Land Subject to Coastal Storm Flowage are per se significant to storm damage prevention and flood control.

Wave energy and flood water movement are affected by topography, soil, and sediment characteristics (e.g., roughness, composition, size, and density), and the erodibility, transportability, and permeability of the land surface within Land Subject to Coastal Storm Flowage. Vegetation helps to prevent erosion, slow moving water, and filter sediments. Impervious surfaces and even smooth pervious surfaces can exacerbate wave energy and flooding by increasing the velocity of flood waters. The low-lying topography of Land Subject to Coastal Storm Flowage allows flood waters to spread laterally and landward, dissipating wave energy.

The placement of solid fill structures or buildings within Land Subject to Coastal Storm Flowage may cause the refraction, diffraction, or reflection of waves, forcing wave energy and moving water onto adjacent properties. Development within V-Zones and MoWA Zones of Land

Subject to Coastal Storm Flowage may increase the velocity and height of storm waves causing them to break further inland, increasing storm damage and flooding. Coastal flood water may be retained within basins which confine flood waters, preventing the return flow of the storm surge to the ocean and contributing to storm damage prevention and flood control.

Land Subject to Coastal Storm Flowage has a vertical dimension, extending from the ground to the base flood elevation of the 1% annual chance storm, storm of record, or surge of record. Where wave velocities are moderate, elevation of buildings on Open Piles above the base flood elevation can maintain more natural floodplain functions and provide a margin of safety for larger storms and sea level rise.

The V-Zone is the area within Land Subject to Coastal Storm Flowage that is most frequently subject to extreme wave action during coastal storms. The V-Zone may extend over other coastal Resource Areas, such as Coastal Beach and Dune, and the shape and location of these Resource Areas may change seasonally, with storm events, and with sea level rise. In the V-Zone, where wave action is most frequent and intense, Open Piles necessary to support buildings and other structures are likely to cause scour from the turbulence of asymmetrical waves and swash. Additionally, human activities associated with buildings typically result in loss of vegetation. During and after storm events, these areas cannot naturally recover as readily as undisturbed flood zones, frequently resulting in storm surge waves breaking further landward. When this occurs, the V-Zone within Land Subject to Coastal Zone Flowage is more susceptible to erosion because it becomes less effective at absorbing wave energy. Except as otherwise provided in 310 CMR 10.36(4), to prevent these conditions and to protect the interests of flood control and storm damage protection, new buildings, even on Open Piles, are not allowed in the V-Zone under these regulations.

Other coastal and sometimes inland Resource Areas may be found within the boundaries of Land Subject to Coastal Storm Flowage and are regulated separately, with the exception of Rocky Intertidal Shore and Coastal Banks which are determined not to be significant to storm damage prevention or flood control because they do not supply sediment to Coastal Beach, Coastal Dune, or Barrier Beach. Except as otherwise provided in 310 CMR 10.36(4), the requirements for the elevation of structures on pile-supported foundations, which is required to dissipate the wave energy within V-Zones and MoWA Zones, apply within any coastal or inland Resource Areas within Land Subject to Coastal Storm Flowage. The area within 100 feet of other coastal or freshwater wetland Resource Areas is particularly important to protecting those Resource Areas due to potential adverse effects from development.

When a proposed activity involves dredging, filling, removal, or alteration of Land Subject to Coastal Storm Flowage within the V-Zone or MoWA Zone, these zones are per se significant to the interests of storm damage prevention and flood control. In other areas of Land Subject to Coastal Storm Flowage, the Issuing Authority shall presume that the area is significant to the interests of storm damage prevention and flood control. This presumption may be overcome only upon a clear showing that such other areas of Land Subject to Coastal Storm Flowage do not play a role in storm damage prevention or flood control and if the Issuing Authority makes a written determination to that effect.

When Land Subject to Coastal Storm Flowage is significant to storm damage prevention and flood control, the following characteristics are critical to the protection of those interests:

- (a) The ability of the area to dissipate wave energy and to decrease the velocity of moving water;
- (b) The ability of the area to receive coastal flood waters that spread laterally and

landward and percolate downward into the soil and sediment;

(c) The ability of the area to allow flood water to flow across the landform without redirecting or channeling flow or increasing the velocity of the flood waters;

(d) The ability of the vegetative cover in the area to slow moving water, thereby reducing erosion and sedimentation; and

(e) the ability of the area to store flood waters that are confined by a natural or manmade feature (*e.g.*, seawall, culvert, bridge, dike, bulkhead, revetment, or topographic depression) until such time as it can slowly return to the ocean or infiltrate into the ground.

(2) Definitions. (See also definitions at 310 CMR 10.04, *e.g.*, Land Subject to Coastal Storm Flowage, Primary Frontal Dune, Fill, Velocity Zone or V-Zone, Special Flood Hazard Area, Redevelopment, and definitions at 310 CMR 10.23).

A Zone or AE Zone mean areas subject to inundation by a 1%-annual-chance flood with wave heights and/or wave run-up depths less than 3 feet. The “E” in AE indicates that a predicted elevation of water has been determined and is designated on the FIRM.

AO Zone means an overwash area, usually sheet flow on sloping terrain, for which flood depths range from 1 to 3 feet and flow velocities and paths vary.

FIRM means a Flood Insurance Rate Map, prepared by FEMA as part of the National Flood Insurance Program, that depicts flood zones.

Historic Structure means any structure that is listed individually in the National Register of Historic Places, preliminarily determined by the U.S. Secretary of the Interior as meeting the requirements for individual listing on the National Register, or certified or preliminarily determined by the U.S. Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the U.S. Secretary of the Interior to qualify as a registered historic district. Historic Structure also means any structure individually listed on the Massachusetts Register of Historic Places or individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified by the Massachusetts Historical Commission.

Minimal Wave Action Zone or MiWA Zone means the area of Land Subject to Coastal Storm Flowage where base flood wave heights are less than 1.5 feet.

Moderate Wave Action Area or MoWA Zone means the area of Land Subject to Coastal Storm Flowage where base flood wave heights are equal to or greater than 1.5 feet but less than 3 feet.

One-Percent-Annual-Chance Flood (or 1% Annual Chance Flood) means the flood having a one percent chance of being equaled or exceeded in a given year (formerly referred to as the 100-year flood).

Open Piles means the vertical structures supporting an elevated building, without grade beams below the base flood elevation, without concrete footings or pads, and where the space below the

building is free of obstruction.

Substantial Damage means as defined and determined by the building official under 780 CMR: *Massachusetts State Building Code*.

Substantial Improvement means as defined and determined by the building official under 780 CMR: *Massachusetts State Building Code*.

Substantial Repair of a Foundation means as defined and determined by the building official under 780 CMR: *Massachusetts State Building Code*.

(3) Boundaries. The boundaries of the V-Zone, MoWA Zone, and MiWA Zone within Land Subject to Coastal Storm Flowage shall be determined by reference to the currently effective or preliminary FIRM (after the FEMA appeal period has passed) prepared by FEMA (except for any portion of a preliminary map that is the subject of an appeal to FEMA), including any letter of map revision obtained by the Applicant from FEMA. The boundary between the MoWA Zone and the MiWA Zone may be referred to as the Limit of Moderate Wave Action (LiMWA) on the FIRM. These boundaries shall be presumed accurate. This presumption is rebuttable and, to show flood zones are more landward or expansive, may be overcome by credible evidence from a competent source, such as the methods and calculations in the most recent FEMA Guidelines and Specifications for Flood Risk Analysis and Mapping, other FEMA operating guidance, or information from the U.S. Geologic Survey Flood Event Viewer. The Issuing Authority may consider historical evidence relevant to the surge of record or storm of record greater than the 1% Annual Chance Flood to determine the landward boundary of Land Subject to Coastal Storm Flowage shown on the FIRM. The Issuing Authority shall use the best available information in determining the boundaries for purposes of applying the performance standards.

(4) Application of Performance Standards. The performance standards at 310 CMR 10.36(5)-(7) apply to new development and the performance standards at 310 CMR 10.36(8) apply to Redevelopment within Land Subject to Coastal Storm Flowage which does not overlie another coastal Resource Area, with certain additions and exceptions:

(a) The construction of new buildings proposed within the MoWA Zone or an AO Zone adjacent to a V-Zone shall be designed to allow flood water to flow completely unobstructed under the building during the 1% annual chance storm, with a minimum of two feet above the 1% annual chance base flood elevation, or the elevation required to meet the standards of 310 CMR 10.28 (Coastal Dunes) or 310 CMR 10.29 (Barrier Beaches), whichever elevation is higher. Open Piles shall not be considered an obstruction. The requirement to elevate new buildings two feet above the 1% annual chance base flood elevation may be waived for properties where demonstration can be made that, due to topography or proximity of surrounding structures, such buildings will not contribute to loss of Land Subject to Coastal Storm Flowage function of flood control and storm damage prevention to the project site and adjacent properties. This waiver is intended to be employed only in exceptional cases. Reconstruction or Redevelopment of buildings in the V-Zone shall conform to 310 CMR 10.36(8). The construction of new buildings in the V-Zone is prohibited.



- (b) For work on a Coastal Bank that does not supply sediment to Coastal Beach, Coastal Dune, or Barrier Beach, the provisions of 310 CMR 10.36(5) through (8) and 310 CMR 10.30 shall apply.
- (c) For work on a Rocky Intertidal Shore, the provisions of 310 CMR 10.36(5) through (8) and 310 CMR 10.31 shall apply.
- (d) For work in a Designated Port Area related to water-dependent industrial uses as defined in 310 CMR 9.12(2)(b), the provisions of 310 CMR 10.36 shall not apply.

Any other work proposed within both Land Subject to Coastal Storm Flowage and another Coastal Resource Area that is not covered by 310 CMR 10.36(4)(a)-(c) shall meet the performance standards for the other Coastal Resource Area and not the standards at 310 CMR 10.36(5) through (8).

(5) Adverse Effects in the V-Zone and MoWA Zone. No activity within a V-Zone or MoWA Zone shall have an adverse effect on the critical characteristics identified in 310 CMR 10.36(1)(a) through (e) by:

- (a) Impeding the ability of the area to dissipate wave energy and decrease the velocity of moving water by altering the area's topography, vegetation, soil, and sediment characteristics (e.g., roughness, composition, size, shape and density of material) and the erodibility, transportability, and permeability of the soil and sediment;
- (b) Causing unnatural redirection, refraction, diffraction, and/or reflection of coastal flood waters that cause or exacerbate storm damage from erosion, scour, and backrush;
- (c) Adding fill or a structure that redirects or channelizes flow and increases velocity of the flood waters, which may cause erosion, scour, and increased storm damage to adjacent areas;
- (d) Interfering with the ability of the vegetative cover in the area to reduce erosion, sedimentation, and pollution, particularly to other Resource Areas; or
- (e) Increasing flood elevations within a topographic depression or confined basin where a manmade or natural feature significantly impedes or prevents the return flow of coastal flood waters.

(6) Activities in the V-Zone and MoWA Zone. New construction of a building, including on Open Piles, is prohibited in the V-Zone. Notwithstanding the provisions of 310 CMR 10.36(5), the Issuing Authority may permit the activities identified in 310 CMR 10.36(6)(a) through (e) in the V-Zone or MoWA Zone, and the activity identified in 310 CMR 10.36(6)(f) only in the MoWA Zone; provided that the Applicant demonstrates, to the satisfaction of the Issuing Authority, that Best Available Measures are utilized to minimize adverse effects on all critical characteristics of Land Subject to Coastal Storm Flowage, and provided that all other performance standards for underlying Resource Areas are met:

- (a) Plantings compatible with natural vegetative cover;
- (b) Pedestrian walkways designed to minimize the disturbance to the vegetative cover;
- (c) Commercial or public boat launching facilities, elevated open rack boat storage facilities, navigational aids, piers, docks, wharves and dolphins;
- (d) Repair and maintenance of an existing coastal engineering structure to preserve its structural integrity;
- (e) Septic systems in compliance with 310 CMR 15.213; provided that fill for new

mounded systems is not allowed; and

(f) A building on Open Piles, consistent with the elevation requirements of 310 CMR 10.36(4)(a), may be allowed in the MoWA Zone or AO Zone; provided that the structure and any alterations associated with the structure are located outside the V-Zone and as far landward on the lot as practicable. Alterations shall be minimized to the extent practicable and designed to preserve or restore the natural topography and vegetative cover. Limited areas for vehicle access shall use crushed stone, shells, or similar material, without curbing or walls.

Where an AO Zone shown on the FIRM borders a Velocity Zone, it shall be subject to the performance standards established for the MoWA Zone.

(7) Activities in the MiWA Zone. Any Applicant proposing development in the Minimum Wave Action (MiWA) Zone shall use Best Available Measures to minimize adverse effects on the critical characteristics of Land Subject to Coastal Storm Flowage identified in 310 CMR 10.36(1)(a) through (e) by:

- (a) Allowing flood waters to spread inland and laterally by avoiding fill, structures, or topographic alterations which would increase velocity or redirect flow and cause increased erosion, channelization, storm damage, or flooding;
- (b) Avoiding fill, structures, or topographic alterations that would, in the judgment of the Issuing Authority, contribute incrementally to an increase in flood velocity, volume, or elevation on other properties resulting in storm damage;
- (c) Avoiding, or mitigating through flood easements or other means, any fill, structure, or topographic alteration that would increase flood velocity, volume, or elevations within a topographic depression or confined basin that can be identified using LiDAR or on a USGS topographic map where a manmade or natural feature significantly impedes or prevents the return flow of coastal flood waters;
- (d) Preserving soils and vegetation at the site to reduce erosion to the maximum extent practicable and allow coastal flood waters to percolate downward;
- (e) Reducing impervious surfaces to increase permeability and avoid increasing the velocity of floodwater;
- (f) Managing stormwater as required by 310 CMR 10.05(6)(k) through (q); and
- (g) Elevating any building on Open Piles or a solid foundation as allowed under the Massachusetts State Building Code. When, in the judgment of the Issuing Authority, wave energy across the site may be significant and the Project Site is within the 100 foot Buffer Zone of another coastal Resource Area, the Issuing Authority may require the elevation of the building on Open Piles at least two feet above the 1% annual chance base flood elevation, elevation with an open foundation to allow lateral movement of floodwater, or location of the building landward on the lot.

(8) Redevelopment Within Previously Developed Land Subject to Coastal Storm Flowage. Notwithstanding the provisions of 310 CMR 10.36(5) through (7) which apply to new development, the Issuing Authority may allow work to redevelop a previously developed area within Land Subject to Coastal Storm Flowage; provided that the work promotes resiliency by improving existing conditions to the maximum extent practicable. Redevelopment means the replacement, rehabilitation, or expansion of existing structures, Improvement of an Existing

Public Roadway, or reuse of previously developed areas. A previously developed area is one that contains structures or portions of structures, fill or other vertical impediments to flow, construction debris, or pavement. Activities shall conform to the standards specified in 310 CMR 10.36(4) through (7) when a site was previously developed but is not currently developed. Work to redevelop Land Subject to Coastal Storm Flowage shall conform to the following criteria:

- (a) At a minimum, proposed work shall result in an improvement over existing conditions of the capacity of the Land Subject to Coastal Storm Flowage to protect the interests of storm damage prevention and flood control to the maximum extent practicable. Existing conditions may be improved by topographical alterations to provide flood storage, planting of vegetation, reducing impervious surfaces, increasing permeability, removing vertical impediments to flowage, and restoring or creating coastal Resource Areas where they do not currently exist or are currently covered by impervious surfaces. Where a previously developed coastal Resource Area has not been regulated under the applicable performance standards to protect the interests of flood control and storm damage prevention, the proposed work shall restore those interests to the extent practicable;
- (b) Stormwater management is implemented as required by 310 CMR 10.05(6)(k) through (q);
- (c) No portion of any proposed new building may be located within the V-Zone and no portion of any newly reconstructed building may be located more seaward than its previously developed location within the MoWA Zone area of the lot. A building in the V-Zone that has been substantially damaged or is undergoing substantial improvement may be reconstructed only if elevated on Open Piles as specified in 310 CMR 10.36(4)(a) and if the building was constructed and received an occupancy permit prior to the effective date of this regulation. No reconstructed building may be larger than the building it replaces, so that the overall building footprint on the site is not increased;
- (d) Mitigation, such as flood easements or other means, is implemented or any fill, structure, or topographic alteration that would increase flood velocity, volume, or elevations within a confined basin that can be identified using LiDAR or on a USGS topographic map, where a manmade or natural feature significantly impedes or prevents the return flow of coastal flood waters;
- (e) Additional elevation shall be provided in the MoWA and MiWA Zones where the building official has determined under 780 CMR: *Massachusetts State Building Code* that the project includes certain work. This work includes: alteration of existing buildings with new foundations, replacement or Substantial Repair of a Foundation, repairs of Substantial Damage, or Substantial Improvement. Within the MoWA Zone, buildings shall be elevated to allow flood water to flow completely unobstructed under the building during the 1% annual chance storm, with a minimum of two feet above the 1% annual chance base flood elevation. Within the MiWA Zone, buildings shall be elevated with or without Open Piles as allowed under the Massachusetts State Building Code. When, in the judgment of the Issuing Authority, wave energy across the site may be significant and the Project Site is within the MiWA Zone and within another coastal Resource Area or the 100-foot Buffer Zone of another coastal Resource Area, the Issuing Authority may require the elevation of the building on Open Piles at least two feet above the 1% annual chance base flood elevation. Historic structures are exempt from the elevation requirements identified in 310 CMR 10.36(8);

(f) The placement of fill for flood control purposes may be allowed in a MiWA Zone where impervious surfaces have predominantly replaced the natural coastal floodplain; provided that there shall be no redirection of wave energy or of flood waters to other properties, and other requirements of 310 CMR 10.36(7) and (8) have been met; and  
(g) The elevation in height of an existing seawall or the construction of a berm with associated fill for flood control purposes in a V-Zone or a MoWA Zone of Land Subject to Coastal Storm Flowage in an area where impervious surfaces have predominantly replaced the natural coastal floodplain may be allowed when conducted by the public agency responsible for the infrastructure, or in the case of private seawalls or berms, when supported by the municipality. The Issuing Authority shall determine that the proposed work will achieve the objectives of promoting resiliency and effective flood control in the area while preserving floodplain functions to the extent practicable. The work shall not redirect wave energy or flood waters to other properties or impede the return flow of flood waters. The project shall meet other requirements of 310 CMR 10.36(8) and any public access requirements established under 310 CMR 9.00:

*Waterways*; provided that there are no adverse effects on any Resource Area or adjacent properties. Salt Marsh or Coastal Dune created through passive or active migration shall be subject to the provisions of 310 CMR 10.32 or 310 CMR 10.28, respectively. Work in Salt Marsh or Coastal Dune may be proposed under 310 CMR 10.24(8): Ecological Restoration Limited Project.

(9) Salt Marsh and Coastal Dune Migration. Notwithstanding other provisions of 310 CMR 10.36(4) through (8), the Issuing Authority may issue an Order of Conditions permitting work to encourage the migration of Salt Marsh or Coastal Dune in Land Subject to Coastal Storm Flowage. Such work may be within the Buffer Zone of Salt Marsh or Buffer Zone of Coastal Dune where Land Subject to Coastal Storm Flowage overlies the Buffer Zone; provided that there are no adverse effects on any Resource Area or adjacent properties. Salt Marsh or Coastal Dune created through passive or active migration shall be subject to the provisions of 310 CMR 10.32 or 310 CMR 10.28, respectively. Work in Salt Marsh or Coastal Dune may be proposed under 310 CMR 10.24(8): Ecological Restoration Limited Project.

(10) Protection of Rare Species Habitat. Notwithstanding the provisions of 310 CMR 10.36(4) through (9), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

### **10.37: Estimated Habitats of Rare Wildlife (for Coastal Wetlands)**

If a project is within estimated habitat which is indicated on the most recent Estimated Habitat Map of State-listed Rare Wetlands Wildlife (if any) published by the Natural Heritage and Endangered Species Program (hereinafter referred to as the Program), a fully completed copy of the Notice of Intent (including all plans, reports, and other materials required under 310 CMR 10.05(4)(a) and (b)) for such project shall be sent to the Program via the U.S. Postal Service by express or priority mail (or otherwise sent in a manner that guarantees delivery within two days). Such copy shall be sent no later than the date of the filing of the Notice of Intent with the issuing authority. Proof of

timely mailing or other delivery to the Program of the copy of such Notice of Intent shall be included in the Notice of Intent which is submitted to the issuing authority and sent to the Department's regional office.

Estimated Habitat Maps shall be based on the estimated geographical extent of the habitats of all state-listed vertebrate and invertebrate animal species for which a reported occurrence within the last 25 years has been accepted by the Program and incorporated into its official data base.

Within 30 days of the filing of such a Notice of Intent with the issuing authority, the Program shall determine whether any state-listed species identified on the aforementioned map are likely to continue to be located on or near the site of the original occurrence and, if so, whether the area to be altered by the proposed project is in fact part of such species' habitat. Such determination shall be presumed by the issuing authority to be correct. Any proposed project which would alter a resource area that is not located on the most recent Estimated Habitat Map (if any) provided to the conservation commission, shall be presumed not to be within a rare species' habitat. Both of these presumptions are rebuttable and may be overcome upon a clear showing to the contrary. If the issuing authority fails to receive a response from the Program within 30 days of the filing of such a Notice of Intent, a copy of which was received by the Program in a timely manner, it shall issue its Order of Conditions based on available information; however, the fact that a proposed project would alter a resource area that is located on an Estimated Habitat Map shall not be considered sufficient evidence in itself that such project is in fact within the habitat of a rare species.

If the Program determines that a resource area which would be altered by a proposed project is in fact within the habitat of a state-listed species, it shall provide in writing to the applicant and to the Conservation Commission and the Department, the identification of the species whose habitat would be altered by the proposed project, and all other relevant information which the Program has regarding the species' location and habitat requirements, insofar as such information may assist the applicant and the issuing authority to determine whether the project is or can be designed so as to meet the performance standard set in 310 CMR 10.37.

Notwithstanding 310 CMR 10.24(7) and 10.25 and 10.27 through 10.36, if a proposed project is found by the issuing authority to alter a Resource Area which is part of the habitat of a state-listed species, such project shall not be permitted to have any short or long term adverse effects on the habitat of the local population of that species. A determination of whether or not a proposed project will have such an adverse effect shall be made by the issuing authority. However, a written opinion of the Program on whether or not a proposed project will have such an adverse effect shall be presumed by the issuing authority to be correct. This presumption is rebuttable and may be overcome upon a clear showing to the contrary.

The conservation commission shall not issue an Order of Conditions under 310 CMR 10.05(6) regarding any such project for at least 30 days after the filing of the Notice of Intent, unless the Program before such time period has elapsed has either determined that the resource area(s) which would be altered by the project is not in fact within the habitat of a state-listed species or, if it has determined that such resource area(s) is in fact within rare species habitat, rendered a written opinion as to whether the project will have an adverse effect on that habitat.

Notwithstanding any other provision of 310 CMR 10.37, should an Environmental Impact Report be required for a proposed project under the M.G.L. c. 60, §§ 6 through 62H, as determined by 301 CMR 11.00: MEPA Regulations the performance standard established under 310 CMR 10.37 shall only apply to proposed projects which would alter the habitat of a rare species for which an occurrence has been entered into the official data base of the Massachusetts Natural Heritage and Endangered Species Program prior to the time that the Secretary of the Executive Office of Energy and Environmental Affairs has determined, in accordance with the provisions of 301 CMR 11.09(4), that a final Environmental Impact Report for that project adequately and properly complies with the M.G.L. c. 30, §§ 6 through 62H (unless, subsequent to that determination, the Secretary requires supplemental information concerning state-listed species, in accordance with the provisions of 301 CMR 11.17: *Transition Rules*).

**[NOTE TO REVIEWERS: MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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 CURRENTLY NO SECTIONS 10.38 THROUGH 10.50. THERE ARE NO EDITS TO SECTIONS 10.51 OR 10.52 AND THESE SECTIONS WILL REMAIN THE SAME AS EXISTING REGULATION.]**

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### **10.53: General Provisions**

(1) If the Issuing Authority determines that a Resource Area is significant to an interest identified in M.G.L. c. 131, § 40 for which no presumption is stated in the Preamble to the applicable section, the Issuing Authority shall impose such conditions as are necessary to contribute to the protection of such interests. For work in the Buffer Zone subject to review under 310 CMR 10.02(2)(b)3., the Issuing Authority shall impose conditions to protect the interests of the Act identified for the adjacent Resource Area. The potential for adverse impacts to Resource Areas from work in the Buffer Zone may increase with the extent of the work and the proximity to the Resource Area. The Issuing Authority may consider the characteristics of the Buffer Zone, such as the presence of steep slopes, that may increase the potential for adverse impacts on Resource Areas. Conditions may include limitations on the scope and location of work in the Buffer Zone as necessary to avoid alteration of Resource Areas. The Issuing Authority may require erosion and sedimentation controls during construction, a clear limit of work, and the preservation of natural vegetation adjacent to the Resource Area and/or other measures commensurate with the scope and location of the work within the Buffer Zone to protect the interests of M.G.L. c. 131, § 40. Where a Buffer Zone has already been developed,

the Issuing Authority may consider the extent of existing development in its review of subsequent proposed work and, where prior development is extensive, may consider measures such as the restoration of natural vegetation adjacent to a Resource Area to protect the interest of M.G.L. c. 131, § 40. The purpose of preconstruction review of work in the Buffer Zone is to ensure that adjacent Resource Areas are not adversely affected during or after completion of the work.

(2) When the site of a proposed project is subject to a Restriction Order which has been duly recorded under the provisions of M.G.L. c. 131, § 40A, such a project shall conform to both the provisions contained in that Order and 310 CMR 10.51 through 10.60.

(3) Notwithstanding the provisions of 310 CMR 10.54 through 10.58 and 10.60, the Issuing Authority may issue an Order of Conditions and impose such conditions as will contribute to the interests identified in M.G.L. c. 131, § 40 permitting the following limited projects (although no such project may be permitted which will have any adverse effect on specified habitat sites of Rare Species, as identified by procedures established under 310 CMR 10.59). In determining whether to exercise its discretion to approve the limited projects listed in 310 CMR 10.53(3), the Issuing Authority shall consider the following factors: the magnitude of the alteration and the significance of the project site to the interests identified in M.G.L. c. 131, § 40, the availability of reasonable alternatives to the proposed activity, the extent to which adverse impacts are minimized, and the extent to which mitigation measures, including replication or restoration, are provided to contribute to the protection of the interests identified in M.G.L. c. 131, § 40.

***[NOTE TO REVIEWERS: MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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 10.53(3)(a) through 10.53(3)(i) AND THESE SECTIONS WILL REMAIN THE SAME AS EXISTING REGULATION.]***

...

(u) The construction of a Public Shared Use Path on an abandoned rail bed of minimal practical width within the footprint of the rail bed, or the minor improvement, repair, and/or replacement of an existing Public Shared Use Path within the footprint of the rail bed; provided that it is carried out in accordance with the following conditions and any additional conditions deemed necessary by the Issuing Authority. The Issuing Authority may approve a proposed route outside the footprint of the rail bed if a different alignment within the right-of-way is advantageous to reduce Resource Area alterations. Public Shared Use Paths are

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). 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. Such projects shall be designed, constructed, implemented, operated, and maintained to meet all of the following standards:

1. No Public Shared Use Path, associated structure or activity shall restrict flow so as to cause an increase in flood stage or velocity.
2. Compensatory flood storage shall be implemented in accordance with the standards of 310 CMR 10.57(4)(a)1. for all flood storage volume that will be lost within the Special Flood Hazard Area.
3. Construction work in Resource Areas shall occur only during those periods when the ground is sufficiently frozen, dry, or otherwise stable to support the equipment being used.
4. During construction, slash, branches, and limbs resulting from cutting and removal operations shall not be placed within 25 feet of the bank or any body of water.
5. For any permanent alterations to Resource Areas, mitigation measures shall be implemented that contribute to the protection of the interests identified in M.G.L. c. 131 § 40, either in accordance with existing performance standards to the maximum extent practicable or to an equivalent level of environmental protection where square footage is not a relevant measure, such as restoration or preservation. Mitigation may be offsite but must be considered in the following order: same Project Site, same Project Locus, adjacent site, same wetland Resource Area, same municipality, and the same stream reach within the Hydrologic Unit Map (HUC) 12 sub-watershed. All instances of Offsite Mitigation for Redevelopment shall be within the same HUC 12 sub-watershed.
6. All temporary alterations to Resource Areas and Buffer Zones shall be restored to preexisting hydrology and topography, and replanted with noninvasive native vegetation.
7. The Applicant must demonstrate to the satisfaction of the Issuing Authority that any stream crossings meet the general performance standards for Bank in 310 CMR 10.54(4)(a) and Land under Water Bodies and Waterways in 310 CMR 10.56(4)(a).
8. A separate NOI may be filed either concurrently to the filing of the NOI for the project, or after the Order is issued, for vegetation management and other activities as defined in 310 CMR 10.02(2)(b)2.r.i.-v. in wetland Resource Areas. Orders of Conditions shall be valid for five years and may be extended by the issuing authority for one or more years up to five additional years, pursuant to 310 CMR 10.05(8).



9. After a Certificate of Compliance is obtained, minor activities as defined at 310 CMR 10.02(2)(b)2. may take place in the Buffer Zone and Riverfront Area to provide for vegetation management; provided that any such work is restricted to hand methods to the maximum extent practicable. No snow clearing beyond the shoulder shall occur, and the application of deicing and anti-icing agents and sanding is prohibited.
10. Stormwater shall be managed to the Maximum Extent Practicable in accordance with 310 CMR 10.05(6)(m) and (o). A long-term operations and maintenance plan prepared in accordance with 310 CMR 10.05(6)(k)9. Shall also be provided.
11. Best Management Practices shall be used to minimize adverse impacts during construction, including prevention of erosion and siltation of adjacent water bodies and wetlands in accordance with the construction period erosion, sedimentation and pollution prevention plan (310 CMR 10.05(6)(k)8.).

(4) Ecological Restoration Limited Projects.

**[NOTE TO REVIEWERS: MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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 10.53(4)(a) through 10.53(4)(e)3. AND THESE SECTIONS WILL REMAIN THE SAME AS EXISTING REGULATION.]**

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(e) Types of Ecological Restoration Limited Projects.

...

4. Tidal Restoration Projects. A project that will restore tidal flow and that does not meet all the eligibility criteria set forth in 310 CMR 10.13 may be permitted as an Ecological Restoration Limited Project provided that in addition to the eligibility criteria set forth in 310 CMR 10.53(4)(a) through (d), the project, including any proposed flood mitigation measures, will not significantly increase flooding or storm damage to the built environment, including without limitation, buildings, wells, septic systems, roads or other man-made structures or infrastructure,
5. Other Restoration Projects. An Ecological Restoration Project that is not listed in 310 CMR 10.53(4)(e)2. through 4., that will improve the natural capacity of a Resource Area(s) to protect the interests identified in M.G.L. c. 131, s. 40, may be permitted as an Ecological Restoration Limited Project provided that the project meets the eligibility criteria set forth in 310 CMR 10.53(4)(a) though (d). Such

projects include, but are not limited to, the restoration, enhancement or management of Rare Species habitat, the restoration of hydrologic and habitat connectivity, the removal of aquatic nuisance vegetation to retard pond and lake eutrophication, the thinning or planting of vegetation to improve habitat value, riparian corridor re-naturalization, river floodplain reconnection, in-stream habitat enhancement, fill removal and regrading, flow restoration, and the installation of fish passage structures.

*[NOTE TO REVIEWERS: MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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 10.53(5) through 10.53(8) or to SECTIONS 10.54, 10.55, 10.56, OR 10.57(1)(a) or (b) AND THESE SECTIONS WILL REMAIN THE SAME AS EXISTING REGULATION.]***

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#### **10.57: Land Subject to Flooding (Bordering and Isolated Areas)**

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##### **(2) Definitions, Critical Characteristics and Boundaries.**

###### **(a) Bordering Land Subject to Flooding.**

1. Bordering Land Subject to Flooding is an area with low, flat topography adjacent to and inundated by flood waters rising from creeks, rivers, streams, ponds or lakes. It extends from the banks of these waterways and water bodies; where a bordering vegetated wetland occurs, it extends from said wetland.
2. The topography and location of Bordering Land Subject to Flooding specified in the foregoing 310 CMR 10.57(2)(a)1. are critical to the protection of the interests specified in 310 CMR 10.57(1)(a). Where Bordering Land Subject to Flooding is significant to the protection of wildlife habitat, the physical characteristics as described in the foregoing 310 CMR 10.57(1)(a)(3) are critical to the protection of that interest.
3. The boundary of Bordering Land Subject to Flooding is the estimated maximum lateral extent of flood water which will theoretically result from the statistical 1% annual chance flood (formerly referred to as the 100-year flood). Said boundary shall be that determined by reference to the most recently available flood profile data prepared for the community within which the work is proposed under the National Flood Insurance Program (NFIP, currently administered by the Federal Emergency Management Agency, successor to the U.S. Department of

Housing and Urban Development). Said boundary, so determined, shall be presumed accurate. This presumption is rebuttable and may be overcome only by credible evidence from a registered professional engineer or other professional competent in such matters.

Where NFIP Profile data is unavailable, the boundary of Bordering Land Subject to Flooding shall be the maximum lateral extent of flood water which has been observed or recorded. In the event of a conflict, the issuing authority shall require the applicant to determine the boundary of Bordering Land Subject to Flooding by engineering calculations which shall be:

- a. based upon the upper confidence of the 100-year 24-hour storm 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 at the geographic outlet of the river, stream, bordering vegetated wetland, lake, or pond, from which the Bordering Land Subject to Flooding arises. The NOAA Type C or D storm distribution (U.S. National Resources Conservation Service 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. The Type III Rainfall, as defined by the U.S. Natural Resource Conservation Service shall not be utilized;
- b. the hydrologic computations shall be based upon the standard methodologies set forth in 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). The hydraulic computations shall be conducted using the U.S. Army Corps of Engineers Hydrologic Engineering Center River Analysis System (HEC-RAS) 6.0 or later versions are permissible, using steady state flow; and
- c. prepared by a registered professional engineer or other professional competent in such matters.

4. The boundary of the ten-year floodplain is the estimated maximum lateral extent of the flood water which will theoretically result from the statistical ten-year frequency flood. Said boundary shall be determined as specified under 310 CMR 10.57(2)(a)3., except that where NFIP Profile data is unavailable, the boundary shall be the maximum lateral extent of flood water which has been observed or recorded during a ten year frequency flood and, in the event of conflict, engineering calculations under 310 CMR 10.57(2)(a)3.a. shall be based on the upper confidence of the 10-year 24-hour storm 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 at the geographic outlet of the river, stream, bordering vegetated wetland, lake, or pond, from which the Bordering Land Subject to Flooding arises, using the storm distribution, hydrologic methods, and hydraulic methods specified in 310 CMR 10.57(3)(a)-(c).

5. The only portions of this resource area which shall be presumed to be vernal pool habitat are those that have been certified as such by the Massachusetts Division of Fisheries and Wildlife, where said Division has forwarded maps and other information needed to identify the location of such habitat to the Conservation Commission and DEP prior to the filing of each Notice of Intent or Abbreviated Notice of Intent regarding that portion. Such presumption is rebuttable and may be overcome upon a clear showing to the contrary. However, notwithstanding any other provision of 310 CMR 10.57, should an Environmental Impact Report be required for a proposed project as determined by 301 CMR 11.00: *MEPA Regulations* the performance standard established under this Section regarding vernal pool habitat shall only apply to proposed projects which would alter such habitats as have been identified prior to the time that the Secretary of the Executive Office of Energy and Environmental Affairs has determined, in accordance with the provisions of 301 CMR 11.09(4): *Eligible Projects*, that a final Environmental Impact Report for that project adequately and properly complies with the M.G.L. c. 30, § 6 through 62H (unless, subsequent to that determination, the Secretary requires supplemental information concerning vernal pool habitat, in accordance with the provisions of 301 CMR 11.17: *Transition Rules*).

6. The boundary of a vernal pool is that certified by the Massachusetts Division of Fisheries and Wildlife. In the event of a conflict of opinion, or the lack of a clear boundary delineation certified by the Division of Fisheries and Wildlife, the applicant may submit evidence from a competent source, such as evidence that would be sufficient to certify a pool if submitted to the Division of Fisheries and Wildlife, as to the extent of said boundary of the certified or uncertified vernal pool based on field observations. Competent sources include Conservation Commissions, Department staff, and persons meeting the criteria specified in 310 CMR 10.60(1)(b). Vernal pool habitat shall include the area within 100 feet of the boundary of the vernal pool itself, insofar as such area is contained within the boundaries of this Resource Area.

**[NOTE TO REVIEWERS: MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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 10.57(2)(b), or 10.57(3) or (4) AND THESE SECTIONS WILL REMAIN THE SAME AS EXISTING REGULATION.]**

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**10.58: Riverfront Area**

**[NOTE TO REVIEWERS: MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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 10.58(1) AND THIS SECTION WILL REMAIN THE SAME AS EXISTING REGULATION.**]**

...

(2) Definitions, Critical Characteristics and Boundaries.

(a) A Riverfront Area is the area of land between a river's mean annual high-water line and a parallel line measured horizontally. The riverfront area may include or overlap other Resource Areas or their buffer zones. The riverfront area does not have a buffer zone.

1. A river is any natural flowing body of water that empties to any ocean, lake, pond, or other river and which flows throughout the year. Rivers include streams (see 310 CMR 10.04: Stream) that are perennial because surface water flows within them throughout the year. Intermittent streams are not rivers as defined herein because surface water does not flow within them throughout the year. When surface water is not flowing within an intermittent stream, it may remain in isolated pools or it may be absent. When surface water is present in contiguous and connected pool/riffle systems, it shall be determined to be flowing. Rivers begin at the point an intermittent stream becomes perennial or at the point a perennial stream flows from a spring, pond, or lake. Downstream of the first point of perennial flow, a stream normally remains a river except where interrupted by a lake or pond. Upstream of the first point of perennial flow, a stream is normally intermittent.

a. A river or stream shown as perennial on the current United States Geological Survey (USGS) or more recent map provided by the Department is perennial.

b. A river or stream shown as intermittent or not shown on the current USGS map or more recent map provided by the Department, that has a watershed size greater than or equal to one square mile, is perennial.

c. A stream shown as intermittent or not shown on the current USGS map or more recent map provided by the Department, that has a watershed size less than one square mile, is intermittent unless:

i. The stream has a watershed size of at least  $\frac{1}{2}$  (0.50) square mile and has a predicted flow rate greater than or equal to 0.01 cubic feet per second at the 99% flow duration using the USGS Stream Stats method. The issuing authority shall find such streams to be perennial; or

ii. When the USGS StreamStats method cannot be used because the stream does not have a mapped and digitized centerline (including but not limited to streams located in the following basins: North Coastal Basin, Taunton

Basin, Buzzards Bay Basin, Cape Cod and Islands Basin, and that portion of the South Coastal Basin that is south of the Jones River sub-basin), and the stream has a watershed size of at least  $\frac{1}{2}$  (0.50) square mile, and the surficial geology of the contributing drainage area to the stream at the Project Site contains 75% or more stratified drift, the issuing authority shall find such streams to be perennial. Stratified drift shall mean sand and gravel deposits that have been layered and sorted by glacial meltwater streams. Areal percentages of stratified drift may be determined using USGS surficial geologic maps, USGS Hydrological Atlases, Massachusetts Geographical Information System (MassGIS) surficial geology data layer, or other published or electronic surficial geological information from a credible source.

d. Notwithstanding 310 CMR 10.58(2)(a)1.a. through c., the issuing authority shall find that any stream is intermittent based upon a documented field observation that the stream is not flowing. A documented field observation shall be made by a competent source and shall be based upon an observation made at least once per day, over four days in any consecutive 12 month period, during a non-drought period on a stream not significantly affected by drawdown from withdrawals of water supply wells, direct withdrawals, impoundments, or other human-made flow reductions or diversions. Field observations made after December 20, 2002 shall be documented by field notes and by dated photographs or video. Field observations made prior to December 20, 2002 shall be documented by credible evidence. All field observations shall be submitted to the issuing authority with a statement signed under the penalties of perjury attesting to the authenticity and veracity of the field notes, photographs or video and other credible evidence. Department staff, conservation commissioners, and conservation commission staff are competent sources; issuing authorities may consider evidence from other sources that are determined to be competent.

e. Rivers include the entire length and width to the mean annual high-water line of the major rivers (Assabet, Blackstone, Charles, Chicopee, Concord, Connecticut, Deerfield, Farmington, French, Hoosic, Housatonic, Ipswich, Merrimack, Millers, Nashua, Neponset, Parker (Essex County), Quinebaug, Shawsheen, Sudbury, Taunton, Ten Mile, and Westfield).

f. Rivers include perennial streams that cease to flow during periods of extended drought. Periods of extended drought for purposes of 310 CMR 10.00 shall be those periods, in those specifically identified geographic locations, determined to be at the "Level 1 – Mild Drought" or more severe drought level by the Secretary of Energy and Environmental Affairs, in accordance with the Massachusetts Drought Management Plan, dated September 2019. Rivers and streams that are perennial under natural conditions but are significantly affected by drawdown from withdrawals of water supply wells, direct withdrawals, impoundments, or other human-made flow reductions or diversions shall be considered perennial.

**[NOTE TO REVIEWERS: MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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 10.58(2)(a)(1)g or h, 10.58 (2)(a)(2), 10.58(2)(a)(3), or 10.58(2)(b) or (c), or 10.58(3). AND THIS SECTION WILL REMAIN THE SAME AS EXISTING REGULATION.]**

...

(4) General Performance Standard. Where the presumption set forth in 310 CMR 10.58(3) is not overcome, the applicant shall prove by a preponderance of the evidence that there are no practicable and substantially equivalent economic alternatives to the proposed project with less adverse effects on the interests identified in M.G.L. c.131 § 40 and that the work, including proposed mitigation, will have no significant adverse impact on the riverfront area to protect the interests identified in M.G.L. c. 131 § 40. In the event that the presumption is partially overcome, the issuing authority shall make a written determination setting forth its grounds in the Order of Conditions and the partial rebuttal shall be taken into account in the application of 310 CMR 10.58 (4)(d)1.a. and c.; the issuing authority shall impose conditions in the Order that contribute to the protection of interests for which the riverfront area is significant.

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...

(d) No Significant Adverse Impact. The work, including proposed mitigation measures, must have no significant adverse impact on the riverfront area to protect the interests identified in M.G.L. c. 131, § 40.

1. Within 200 foot riverfront areas, the issuing authority may allow the alteration of up to 5000 square feet or 10% of the riverfront area within the lot, whichever is greater, on a lot recorded on or before October 6, 1997 or lots recorded after October 6, 1997 subject to the restrictions of 310 CMR 10.58(4)(c)2.b.vi., or up to 10% of the riverfront area within a lot recorded after October 6, 1997, provided that:

- a. At a minimum, a 100 foot wide area of undisturbed vegetation is provided. This area shall extend from mean annual high-water along the river unless another location would better protect the interests identified in M.G.L. c. 131 § 40. If there is not a 100 foot wide area of undisturbed vegetation within the riverfront area, existing vegetative cover shall be preserved or extended to the maximum extent feasible to approximate a 100 foot wide corridor of natural vegetation. Replication and compensatory storage required to meet other Resource Area performance standards are allowed within this area; structural stormwater management measures may be allowed only when there is no practicable alternative. Temporary impacts where necessary for installation of linear site-related utilities are allowed, provided the area is restored to its natural conditions. Proposed work which does not meet the requirement of 310 CMR 10.58(4)(d)1.a. may be allowed only if an applicant demonstrates by a preponderance of evidence from a competent source that an area of undisturbed vegetation with an overall average width of 100 feet will provide equivalent protection of the riverfront area, or that a partial rebuttal of the presumptions of significance is sufficient to justify a lesser area of undisturbed vegetation;
  - b. Stormwater is managed according to standards established by the Department at 310 CMR 10.05(6)(k) through (q) ;
  - c. Proposed work does not impair the capacity of the riverfront area to provide important wildlife habitat functions. Work shall not result in an impairment of the capacity to provide vernal pool habitat identified by evidence from a competent source, but not yet certified. For work within an undeveloped riverfront area which exceeds 5,000 square feet, the issuing authority may require a wildlife habitat evaluation study under 310 CMR 10.60.
  - d. Proposed work shall not impair groundwater or surface water quality by incorporating erosion and sedimentation controls and other measures to attenuate nonpoint source pollution. The calculation of square footage of alteration shall exclude areas of replication or compensatory flood storage required to meet performance standards for other resource areas, or any area of restoration within the riverfront area. The calculation also shall exclude areas used for structural stormwater management measures, provided there is no practicable alternative to siting these structures within the riverfront area and provided a wildlife corridor is maintained (e.g. detention basins shall not be fenced).
2. Within 25 foot riverfront areas, any proposed work shall cause no significant adverse impact by:
- a. Limiting alteration to the maximum extent feasible, and at a minimum, preserving or establishing a corridor of undisturbed vegetation of a maximum feasible width. Replication and compensatory storage required to meet other Resource Area performance standards are allowed within this area; structural stormwater management measures shall be allowed only when there is no practicable alternative;
  - b. Providing stormwater management according to standards established by the Department at 310 CMR 10.05(6)(k)1. through 11.;
  - c. Preserving the capacity of the riverfront area to provide important wildlife habitat functions. Work shall not result in an impairment of the capacity to provide vernal pool habitat when identified by evidence from a competent source but not yet



certified; and

d. Proposed work shall not impair groundwater or surface water quality by incorporating erosion and sedimentation controls and other measures to attenuate nonpoint source pollution.

**[NOTE TO REVIEWERS: MassDEP IS SETTING FORTH IN THIS DOCUMENT PROPOSED AMENDMENTS TO THE CURRENT REGULATION AT 310 CMR 10.00 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 10.58(4)(d)3, 10.58(4)(d)4. Or 10.58(5) AND THESE SECTIONS WILL REMAIN THE SAME AS EXISTING REGULATION.**]**

...

(6) Notwithstanding the Provisions of 310 CMR 10.58(1) through (5), Certain Activities or Areas Are Exempted from Requirements for the Riverfront Area:

(a) Any excavation, structure, road, clearing, driveway, landscaping, utility line, rail line, airport owned by a political subdivision, marine cargo terminal owned by a political subdivision, bridge over two miles long, septic system, or parking lot within the riverfront area in existence on August 7, 1996. Maintenance of such structures or areas is allowed (including any activity which maintains a structure, roads (limited to repairs, resurfacing, repaving, but not enlargement), clearing, landscaping, etc. in its existing condition) without the filing of a Notice of Intent for work within the riverfront area, but not when such work is within other Resource Areas or their buffer zones except as provided in 310 CMR 10.58(6)(b). Changes in existing conditions which will remove, fill, dredge or alter the riverfront area are subject to 310 CMR 10.58, except that the replacement within the same footprint of structures destroyed by fire or other casualty is not subject to 310 CMR 10.58.

(b) Certain minor activities as identified in 310 CMR 10.02(2)(b)1.

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***TO MAKE IT CLEAR WHERE THE NEW TEXT IS PROPOSED TO BE INSERTED INTO THE CURRENT REGULATIONS. THERE ARE NO EDITS TO SECTIONS 10.58(6)(c)-(k), 10.59 or 10.60. AND THESE SECTIONS WILL REMAIN THE SAME AS EXISTING REGULATION.]***

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