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CITY OF BOSTON IN CITY COUNCIL

ORDINANCE PROTECTING LOCAL WETLANDS AND PROMOTING CLIMATE CHANGE ADAPTATION IN THE CITY OF BOSTON

WHEREAS: Climate change is an overriding public interest, against which current law and regulations does not sufficiently protect, and which the City's Conservation Commission could justifiably be empowered to address; *and*,

WHEREAS: A local wetlands ordinance will enable the improved management of the City's urban wetlands and enable the city to better protect against the effects of climate change; and,

WHEREAS: Boston is one of only three coastal municipalities in the Commonwealth without a local wetlands ordinance; and,

WHEREAS: Wetlands provide important ecosystem services, such as water filtration, wildlife habitat, and pollution sequestration, including carbon dioxide and other greenhouse gases that contribute to climate change; and,

WHEREAS: Boston's plans for climate adaptation include the development of green infrastructure, including the option to construct, restore, and revitalize local wetlands; and,

WHEREAS: Developing a local wetlands ordinance is a stated goal for the City, as expressed in the Climate Ready Boston initiative to develop a wetlands protection action plan and every city council district in the City has wetlands and/or is affected by coastal storm flowage; NOW

THEREFORE BE IT ORDERED:

That the City of Boston Code, Ordinances be amended in Chapter IV by adding the following after 7-1.3:

7-1.4. WETLANDS PROTECTION AND CLIMATE ADAPTATION

a) Purpose. The purpose of this Ordinance is to protect the wetlands, water resources, flood-prone areas, and adjoining upland areas of the City of Boston from net loss of their function, value, or acreage by controlling activities and mitigating effects deemed by the Boston Conservation Commission ("Conservation Commission" or "Commission") likely to have a significant individual or cumulative adverse effect upon protection of the following resource area values, including, but not limited to, the following: public or private water supply; groundwater; coastal and stormwater flood control, erosion and sedimentation control; storm damage

prevention, including coastal storm flowage; water quality, including water pollution control; aquaculture; wildlife species and habitat, rare/unique plant and animal species and habitat; scenic and recreational; agriculture; public safety; flood conveyance and storage; and adaptation to climate change. Collectively, these are the resource area values and interests ("Resource Area Values") protected by this Ordinance.

This Ordinance is intended to utilize the Home Rule authority of the City of Boston to supplement the jurisdiction, authority, and procedures of the Conservation Commission, and to protect additional resource areas, for additional values, with additional standards and procedures stricter than those of the Wetlands Protection Act, M.G.L. c. 131, § 40 and Regulations thereunder, 310 CMR 10.00. The portions of this Ordinance (and its Regulations) requiring the payment of consultant fees are promulgated under the concurrent authority of M.G.L. c. 44, § 53G.

b) Definitions. Except as otherwise provided in the Ordinance or its regulations, the definitions of terms in the Ordinance shall be as set forth in the Wetlands Protection Act, M.G.L. c. 131, § 40, and its Regulations, 310 C.M.R. 10.00. The following definitions shall apply in the interpretation and implementation of this Ordinance.

Abutter. The owner of any land within three hundred (300) feet of the property line of the land where the activity is proposed, as determined by the most recent assessors' records including any land located directly across a street, river, stream or pond that is within three hundred (300) feet of the project's limits of work.

Act. The Wetlands Protection Act, M.G.L. c. 131, § 40 and, whenever appropriate, the Regulations thereunder, 310 CMR 10.00.

Activity. On or in any area subject to protection by the Ordinance and its regulations: any form of draining, dumping, dredging, damming, discharging, excavating, filling or grading; the erection, reconstruction or expansion of any building or structure; the driving of pilings; the construction or improvement of roads and other ways; the alteration of site hydrology or runoff characteristics; the intercepting or diverting groundwater or surface water; the installation of drainage, sewage and water systems; the discharging of pollutants; the destruction of plant life; the cutting or removal of twenty percent (20%) or more of the growth or limbs of native or beneficial species trees or vegetation; and any other alteration of the physical characteristics of land or the physical or chemical characteristics of water. "Activity" shall include any project by any public agency or person requiring a permit by the City of Boston Inspectional Services Department or its successor.

Adaptation. Measures designed or intended to protect resource areas from the impacts of climate change and to protect the ability of resource areas to mitigate the impacts of climate change through providing the Resource Area Values protected by the Ordinance.

Agent. Any Conservation Commissioner or City staff who is appointed agent by a majority vote of the Conservation Commission at a regularly scheduled meeting of the Conservation Commission, and upon written approval of the Mayor. (M.G.L. c. 40, § 8C).

Alter. To change the condition(s) of any area subject to protection by the Ordinance and shall include but not be limited to one or more of the following actions upon the resource areas protected by this Ordinance:

- i. fill, removal, excavation or dredging of soil, sand, gravel, or aggregate material of any kind:
- ii. changing of pre-existing drainage characteristics, flushing characteristics, salinity distribution, sedimentation patterns, flow patterns, or flood storage retention areas;
- iii. draining, disturbing, or lowering of the water level or water table;
- iv. the dumping, discharging, or filling with any material which could degrade the water quality;
- v. driving of pilings, erection of buildings or structures of any kind;
- vi. placing of any object or obstruction whether or not it interferes with the flow of water;
- vii. destruction, extensive trimming (defined as twenty percent (20%) or more of limbs or growth), or removal of native or beneficial plant life, vegetation, or trees;
- viii. changing of water temperature, biochemical oxygen demand, nutrient concentration or chemical concentration, or other natural characteristics of the receiving water;
- ix. any activity, alteration, or work which pollutes any stream or body of water located in the City of Boston;
- x. application of pesticides and herbicides;
- xi. any activity, alteration, or work which adversely affects groundwater or drinking water supply;
- xii. any incremental activity that will or may have a reasonably foreseeable cumulative adverse effect on the Resource Area Values protected by the Ordinance; or
- xiii. decreasing the capacity of wetlands to respond to the impacts of climate change, including without limitation, changes in:
 - a. the timing, intensity and amount of precipitation,
 - b. temperatures,
 - c. intensity and/or frequency of storms, extreme weather events, and/or droughts.

Applicant. A person filing a Request for Determination of Applicability or Notice of Intent or other application with the Commission.

Area of Critical Environmental Concern. An area so designated by the Secretary of Environmental Affairs of the Commonwealth of Massachusetts pursuant to regulations (301 C.M.R. 12.00), said designation being due to the particular environmental factors which impact upon the areas in question and which highlight the importance of each area so designated. Any proposal to alter areas within the City of Boston which have been designated as Areas of Critical Environmental Concern by the Secretary of Energy and Environmental Affairs shall be subject to the highest standards of scrutiny by the Commission as to the impact of any such proposal. The City of Boston may separately designate in the City areas of environmental concern according to criteria and guidelines established by the Commission and distinct from those used by the Secretary.

Area Subject to Protection Under the Ordinance. See definition for Resource Area.

Area of Special Flood Hazard. Derived from FEMA flood maps, the land in a floodplain within a community subject to a one percent or greater chance of flooding in any given year. The area may be designated as Zone A, AO, AH, AE, or VE.

Base Flood. The flood having a one percent chance of being equaled or exceeded in any given year. This is the regulatory standard also referred to as the "100-year flood." The base flood is the national standard used by the National Flood Insurance Program (NFIP) and all Federal agencies for the purposes of requiring the purchase of flood insurance and regulating new development.

Base Flood Elevation. The computed elevation to which floodwater is anticipated to rise during the base flood. Base Flood Elevations (BFEs) are shown on Flood Insurance Rate Maps (FIRMs) and on the flood profiles.

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

Best Management Practices. Technologies, designs, measures, data, or engineering practices that are in general use to protect the Resource Area Values of the Ordinance.

Bog. See definition for Freshwater Wetlands.

Bordering. Any land within either of the following or the greater thereof:

- i. one hundred (100) feet horizontally lateral from the edge of any marsh, freshwater wetland, vernal pool, wet meadow, bog, swamp, river, stream, creek, pond, reservoir, or lake; or
- ii. within the maximum lateral extent of the water elevation of the statistical five hundred (500) year frequency storm as determined by a map adopted by the Commission using the best available measures.

Boundary. The boundary of an area subject to protection under the Ordinance. A description of the boundary of each area is found in the appropriate section of the Ordinance or 310 CMR 10.00.

Brook. See definition for *Stream*.

Buffer Zone. The areas 100 feet horizontally lateral from the boundary of any Resource Area, including: freshwater or coastal wetland, marsh, wet meadow, bog, swamp, vernal pool, spring, bank, reservoir, stream, brook, creek, river, lake, pond of any size, beach, dune, estuary, flat, or the ocean.

Building. A combination of any materials, whether portable or fixed, temporary or permanent, having a roof enclosed within exterior walls or firewalls built to form a structure for the shelter of persons, animals, or property.

Certificate of Compliance. A written determination by the Conservation Commission as to whether work or a portion thereof has been completed in accordance with the permit issued under the Ordinance governing said work.

Coastal Engineering Structure. A structure used to protect homes, buildings, roadways, or utilities or to provide public or commercial access on or near the coast, such as seawalls, revetments, breakwaters, jetties, groins, piers, wharfs, bulkheads, stairways, access ramps, boat ramps, boardwalks, and tide gates.

Coastal Storm Flowage. Land subject to any inundation caused by coastal storms up to and including that caused by the 500-year storm, surge of record, or storm of record, whichever is greater.

Coastal Wetlands. Any bank, marsh, swamp, meadow, flat or other lowland subject to tidal action or coastal storm flowage.

Conditions. Those requirements set forth in a written permit issued by the Conservation Commission for the purpose of permitting, regulating, or prohibiting any activity that removes, fills, dredges, builds upon, degrades, discharges into, or otherwise alters an area subject to protection under the Ordinance.

Conservation Commission or Commission. That body in Boston comprised of members lawfully appointed pursuant to M.G.L. c. 40, § 8C and Chapter VII, 7-1.1 of the City of Boston Municipal Code.

Creek. See definition for Stream.

Cumulative Effect. An effect that is significant when considered in combination with other activities that have occurred, that are occurring simultaneously, or that are reasonably foreseeable, whether such other activities are contemplated as a separate phase of the same project, or arise from unrelated but reasonably foreseeable future projects. Future activities within a site, district or institutional area identified within an annual budget, capital spending plan, Master Plan, Planned Development Agreement or equivalent document approved by the City of Boston or any other government agency are specifically to be considered as reasonably foreseeable future projects for the purposes of this Ordinance. Future effects of sea level rise, coastal or inland flooding, or other future climate change effects are included among cumulative effects.

Determination:

- i. *Determination of Applicability*. A written finding by the Conservation Commission as to whether a site or the work proposed thereon is subject to the jurisdiction of the Ordinance.
- ii. *Determination of Significance*. A written finding by the Conservation Commission 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 Resource Area Values identified in and protected by the Ordinance and its regulations.

iii. *Notification of Nonsignificance*. A written finding by the Conservation Commission that the area on which proposed work is to be done, or which the proposed work will alter, is not significant to any of the Resource Area Values of the Ordinance.

Extreme Weather Event. Weather at the extremes of the historical distribution lying in the outermost ten percent (10%) of City of Boston weather history, including but not limited to heat and humidity, droughts, winds and microbursts, blizzards and ice storms, rain and hail, fire, tornadoes, thunderstorms, hurricanes and tides affected by weather.

Federal Emergency Management Agency (FEMA). The federal agency responsible for administering the National Flood Insurance Program. FEMA provides a nationwide flood hazard area mapping study program for communities as well as regulatory standards for the development in the flood hazard areas.

Fill. To deposit any material so as to raise the elevation of land surface or ground, either temporarily or permanently or to deposit any material in any resource area covered by this ordinance so as to impair the resource values of the area.

Flood Control. The prevention or reduction of flooding and flood damage, both as currently expected to occur and as projected to occur based on the best available data regarding the impacts of climate change.

Footprint. The total square feet within the outermost dimensions of a building or structure including decks, porches, roofs, overhangs, and staircases without deduction for hallways, stairs, closets, thickness of walls, columns, or other features.

Freshwater Wetlands. The types of freshwater wetlands are wet meadows, marshes, swamps, bogs, and vernal pools. These include bordering vegetated wetlands (i.e., bordering on freshwater bodies such as on creeks, rivers, streams, ponds, and lakes), and isolated vegetated wetlands which do not border on any permanent water body. Freshwater vegetated wetlands are areas where soils are saturated and/or inundated such that they support wetland indicator plants. The ground water and surface water hydrological regime, soils, and the vegetational community which occur in each type of freshwater wetlands, including both bordering and isolated vegetated wetlands, are defined under this Ordinance based on M.G.L. c. 131, § 40.

The boundary of Vegetated Wetland, whether Bordering or Isolated, is the line within which fifty percent (50%) or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist. Wetland indicator plants shall include but not necessarily be limited to those plant species identified in the Act.

The boundary shall be defined or delineated by the following:

(a) Areas containing wetland indicator plants are presumed to indicate the presence of saturated or inundated conditions. Therefore, the boundary as determined by fifty percent (50%) or more wetland indicator plants shall be presumed accurate when:

- i. all dominant species have an indicator status or of obligate, facultative wetland, facultative wetland, or facultative wetland- and the slope is distinct or abrupt between the upland plant community and the wetland plant community; or
- ii. groundwater, including the capillary fringe, within a major portion of the root zone;
- (b) When the boundary is not presumed accurate as described above or to overcome the presumption, evidence shall be submitted by a competent source demonstrating that the boundary of Vegetated Wetlands is the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist. The Conservation Commission must evaluate vegetation and indicators of saturated or inundated conditions if submitted by a competent source, or may require credible evidence of saturated or inundated conditions sufficient to support wetland indicator plants, which shall include one or more of the following:
 - i. groundwater, including the capillary fringe, within a major portion of the root zone;
 - ii. observation of prolonged or frequent flowing or standing surface water;
- iii. characteristics of hydric soils.
- (c) Where an area has been disturbed (e.g., by cutting, filling, or cultivation), the boundary is the line within which there are indicators of saturated or inundated conditions sufficient to support wetland indicator plants or credible evidence from a competent source that the area supported, or would support under undisturbed conditions, a predominance of wetland indicator plants prior to the disturbance or characteristic of hydric soils.

Green Infrastructure. Projects and practices incorporating both/either the natural environment and/or engineered systems that provide or supplement natural processes or work in concert with natural systems to provide flood, fire, and/or drought risk reduction, and/or clean water/air benefits. Green infrastructure practices protect, restore, augment, or mimic ecological processes.

Green Infrastructure Projects. Include but are not limited to decentralized wastewater systems that infiltrate treated water; water reuse for other beneficial purposes; low-impact development projects; the conservation, enhancement and restoration of natural landscape features that naturally filter and remove silt and pollution from surface waters, maintain or restore natural hydrologic cycles, minimize imperviousness in a watershed through preservation and restoration of natural landscape buffers such as forests, floodplains, wetlands and other natural systems and restoration of natural stream channels; land acquisition and restoration projects that protect and filter drinking water supplies and buffer reservoirs; and the mitigation of risks of flooding and erosion using the restoration of saltmarsh, oyster reefs, and eelgrass beds from sea-level rise, storm surges, and extreme weather events, including the protection and restoration of natural coastal landscapes; provided that green infrastructure projects may be stand-alone and shall also be used to complement built water management infrastructure technologies such as pipes, dikes, and treatment facilities; and provided, further, that green infrastructure projects may include innovative technologies that further the mandates under the federal Clean Water Act.

Groundwater. All subsurface water contained in natural geologic formations or artificial fill including soil water in the zone of aeration.

Impacts of Climate Change. Include without limitation: extreme heat; the timing, frequency, intensity, and amount of precipitation, storm surges, and rising water levels; increased intensity and/or frequency of storm events or extreme weather events; and frequency, intensity, and duration of droughts.

In or *Within*. In, through, under, over, cantilevered over, or shading an area subject to protection under the Ordinance; does not require physical touching of said area subject to protection. With respect to structures, "In" is measured from the drip-line of the roof or foundation or footing, whichever is closer to the resource area.

Intermittent Stream. 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 part of the year within, into or out of an Area Subject to Protection under the WPA. A portion of an intermittent stream may flow through a culvert or beneath a bridge. Such a body of running water which does not flow throughout the year is an intermittent stream including that portion upgradient of all bogs, swamps, vegetated wetlands, wet meadows and marshes. The outer boundary of an intermittent stream is the first observable break in slope or mean annual high water, whichever is higher.

Isolated Land Subject to Flooding. A freshwater wetland that is a confined basin or depression which does not support a minimum of four hundred (400) square feet of predominantly wetland plant vegetation and does not function as a vernal pool and is not contiguous with other wetland resources.

Isolated Vegetated Wetland. Freshwater wetlands, of at least one thousand (1,000) square feet in area that do not border on creeks, rivers, streams, ponds or lakes. The types of Isolated Vegetated Wetlands include wet meadows, marshes, swamps and bogs. In addition to the minimum size requirement, Isolated Vegetated Wetlands must also meet the definition of Bordering Vegetated Wetlands (310 CMR 10.55(2)) with the exception that these wetlands do not border any creeks, rivers, streams, ponds, lakes or other water bodies. The boundaries of Isolated Vegetated Wetlands are the same as those for Bordering Vegetated Wetlands as defined in 310 CMR 10.55 (2)(c).

Land Subject to Flooding or Inundation. The land within the estimated maximum lateral extent of flood water which will result from the statistical 500-year frequency storm. Said boundary shall be that determined by reference to the most recently available flood profile data prepared for the City of Boston within which the work is proposed under the National Flood Insurance Program ("NFIP"). Where NFIP data are unavailable or deemed by the Commission to be outdated or inaccurate or not reflecting current or reasonably anticipated conditions, the boundary of said land shall be based on the maximum lateral extent of floodwater which has been observed or recorded, or other evidence presented and considered by the Commission. The Commission shall give special consideration to the best available data provided by the City of Boston and the Commonwealth on expected conditions due to climate change. Said land shall also include isolated areas which frequently or seasonably hold standing water of 1,000 square feet or greater surface area; such areas may or may not be characterized by wetland vegetation or soil characteristics.

Land Under Water Bodies and Waterways. The bottom of or beneath the waters of any resource area.

Lot. An area of land in one ownership, with definite boundaries. When an area of land is comprised of more than one lot, the lots share a common boundary and are owned or controlled by the same entity or individual(s), and the lots combined are used for the same purpose or enterprise, the Commission may consider the lots as a single merged lot for the purposes of applying provisions of this Ordinance

Marsh. See definition for Freshwater Wetlands.

Nature-Based Solutions. Strategies that conserve, create, restore and employ natural resources to enhance climate adaptation, resilience, and mitigation. Nature-based solutions mimic natural processes or work in tandem with constructed engineering approaches to address natural hazards like flooding, erosion, drought, and heat islands. Nature-based solutions can also maintain healthy natural cycles to sequester and maintain carbon and other greenhouse gases.

No-Disturbance Zone. That portion of the Buffer Zone which extends twenty-five feet (25') horizontally from the edge of any resource area, including: any Freshwater or Coastal Wetlands, Vernal Pool, Marshes, Wet Meadows, Bogs, Swamps, Rivers, Streams, Springs, Banks, Flats, Reservoirs, Lakes, Ponds of Any Size, Beaches, Dunes, Estuaries, the Ocean, Intermittent Streams, Brooks, and Creeks.

Except for resource area enhancement measures employed in the furtherance of the values described in this Ordinance, or where otherwise regulated by Chapter 91 and provisions of the Water Dependent Use Zone, disturbance of any kind is prohibited within this 25-Foot No-Disturbance Zone by any temporary or permanent activity including but not limited to grading, landscaping, vegetation removal, pruning, cutting, filling, excavation, roadway construction and /or driveway construction.

Notice of Intent. The written notice filed by any person intending to remove, fill, dredge, build upon, degrade, discharge into, or otherwise alter an area subject to protection under the Massachusetts Wetlands Protection Act, M.G.L. c. 131, § 40, or the Ordinance, or both.

Ordinance. This Section of the Boston Municipal Code.

Permit. The document issued by the Conservation Commission pursuant to this Ordinance which allows work in accordance with conditions set by the Commission in the resource areas protected by this Ordinance.

Permit Denial. The document issued by the Conservation Commission pursuant to the Ordinance which disallows proposed work.

Person. Any individual, group of individuals, associations, partnerships, corporations, business organizations, trust, estate, Commonwealth of Massachusetts, any public or quasi-public

corporation or body or any other legal entity, including the City of Boston or its legal representative, agents, or assigns.

Plans. Such data, maps, engineering drawings, calculations, specifications, schedules and other materials, if any, deemed necessary by the Conservation Commission to describe the site and/or work to describe current conditions and projected impacts of climate change on the resource areas and their functions, to determine the applicability of the Ordinance or to determine the impact of the proposed work upon the Resource Area Values identified in the Ordinance.

Pond. Any open body of fresh water, either naturally occurring or constructed by impoundment or excavation, which is never without standing water due to natural causes, except in periods of extended drought. For purposes of this definition, extended drought shall mean any period of four or more months during which the average rainfall for each month is 50% or less of the tenyear average for that same month. Basins or lagoons which are part of wastewater treatment plants, swimming pools or other impervious constructed retention basins shall not be considered ponds.

Prevention of Pollution. The prevention or reduction of chemicals (including without limitation nutrients, hydrocarbons, solvents, metals, vapors) determined to cause harm to humans, plants, or animals via exposure to any media (e.g. air, water, soil, sediment).

Private Water Supply. Any source or volume of surface or groundwater demonstrated to be in any private use or shown to have potential for private use for domestic purposes.

Project Locus. The Lot on which an applicant proposes to perform an activity subject to regulation under the Ordinance.

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

Protection of Wildlife. The protection of any plant or animal species, including but not limited to those listed as endangered, threatened or special concern, or on the Watch List by the Massachusetts Natural Heritage Program; listed as Federally Endangered or Federally Threatened by the U.S. Fish and Wildlife Service; deemed locally threatened, in writing, by the Conservation Commission. "Protection of Wildlife" for the purposes of this Ordinance includes protection of the capacity of any resource area to adequately provide food, breeding habitat, shelter or escape cover, for species falling within the definition of wildlife set forth in these regulations.

Request for Determination of Applicability. A written request made by any person to the Conservation Commission for a determination as to whether a site or work thereon is subject to the Ordinance.

Resilience. The ability to minimize the negative impacts of climate change; to build capacity of a resource area to minimize negative impacts of climate change.

Resource Area. Each area subject to protection under the Ordinance and which is listed in the Ordinance.

Resource Area Enhancement. Removal or management of invasive species; removal of debris, garbage, or trash; stabilization of bank or other resource area; planting or management of non-invasive species of vegetation; prevention of the generation of stormwater and non-point source pollution by reducing impervious surfaces; minimizing disturbance; protecting natural features and processes; enhancing wildlife habitat; and/or other techniques that advance the Resource Area Values of this Ordinance as the Commission may from time to time see fit to define.

River. Any natural flowing body of water that empties to any ocean, lake, pond, reservoir, stream, or other river.

Riverfront Area. The area of land between the mean annual high water line and a parallel line measured two hundred (200) feet horizontally landward of the mean annual high water line of any river, stream, brook, or creek.

Significant. Playing a discernable role as shown by preponderance of the evidence. A resource area is significant to an interest identified in this Ordinance or its regulations when it plays a role in the provisions or protection, as appropriate, of that interest, including by mitigating any adverse impacts of climate change in the provision or protection of that interest.

Special Transitional Areas. Those portions of coastal floodplains which are immediately landward of salt marshes, coastal beaches, barrier beaches, coastal dunes or coastal banks and are likely to be in a state of transition due to climate and coastal changes, resulting in inundation of these areas further landward. As sea level rises, the shoreline may retreat as areas are successively inundated more frequently by storm and tidal activity. A Special Transitional Area may include all or part of the resource Buffer Zone, Riverfront Area, and 25-foot No-Disturbance Area and in any case shall include lands subject to 500-year flood (0.2 percent annual chance flood).

Storm Damage Prevention. The prevention of damage caused by water from storms, as currently occurs and is predicted by best available data to occur from the impacts of climate change, including but not limited to erosion and sedimentation, damage to vegetation, property or buildings or damage caused by flooding, waterborne debris or waterborne ice.

Stream. A body of running water, including brooks and creeks, which moves in a definite channel in the ground due to hydraulic gradient, and includes streamlets and rivulets. 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.

Structure. A combination of materials or things arranged or constructed for permanent or temporary occupancy, shelter, or use, such as a building, bridge, trestle, wireless

communications facility, tower, rip rap associated with stormwater outfalls, framework, retaining wall, tank, tunnel, tent, shed, stadium, reviewing stand, platform, swimming pool, sports court, shelters, piers, wharves, bin, fence, sign or billboard, solar panel array of any size, utility installation including light fixture, loudspeaker, telephone or electrical transmission line, or the like.

Swamp. See definition for Freshwater Wetlands.

Vegetation Removal. Extensive trimming of native or beneficial species, defined as 20% or more of limbs or growth, or any act that will cause vegetation to die within a three-year period.

Vernal Pool. In addition to scientific definitions found in the regulations under the Wetlands Protection Act, any confined basin or depression not occurring in existing lawns, gardens, landscaped areas or driveways which, at least in most years, holds water for a minimum of two continuous months during the spring and/or summer, contains at least two hundred (200) cubic feet of water at some time during most years, is free of adult predatory fish populations, and provides breeding and rearing habitat functions for amphibian, reptile or other vernal pool community species, regardless of whether the site has been certified by the Massachusetts Division of Fisheries and Wildlife.

The boundary of the resource area for vernal pools shall be the mean annual high-water line defining the depression, or the maximum observed or recorded water level in a topographic depression. The presumption that any seasonal basin functions as a vernal pool shall prevail through a minimum of one spring/summer breeding season for the purpose of documenting the occurrence or lack of occurrence of breeding activity of vernal pool species. The buffer zone for vernal pools shall extend one hundred (100) feet from the highest extent of flooding.

Wet Meadow. See definition for Freshwater Wetlands.

Wetland Plants. Any plant listed in the U.S. Fish and Wildlife Service "National List of Plant Species That Occur in Wetlands: Massachusetts 1988" and condensed by the Massachusetts Department of Environmental Protection, Division of Wetlands and Waterways, April 1995, having an indicator category of obligate wetland (OBL), facultative wetland (FACW), or facultative (FAC).

Within. See definition for In.

Wildlife. Any mammal, bird, reptile, amphibian, fish, mollusk, arthropod or other invertebrate other than a species of the Class insects which has been determined by the Commonwealth of Massachusetts or any agency thereof to be a pest whose protection under the provisions of the Ordinance would be a risk to humans.

Wildlife Habitat. The area being used by or necessary to provide breeding or nesting habitat, shelter, food, and water for any animal species.

Work. See definition for Activity.

- **c) Jurisdiction.** Except as permitted by the Conservation Commission no person shall commence to remove, fill, dredge, build upon, degrade, discharge into, or otherwise alter the following resource areas:
 - i. any freshwater or coastal wetlands, marshes, wet meadows, bogs, swamps, vernal pools, springs, banks, reservoirs, streams, brooks, creeks, rivers, lakes, ponds of any size, beaches, dunes, estuaries, flats, fens, the ocean, and lands under water bodies;
 - ii. lands adjoining these resource areas out to a distance of one hundred (100) feet, known as the Buffer Zone;
- iii. riparian lands adjoining rivers, streams, brooks, and creeks, whether perennial or intermittent out to a distance of two hundred (200) feet, known as the Riverfront Area, provided that the Conservation Commissions in its regulations shall include provisions for previously developed areas for purposes of project review;
- iv. lands adjoining salt marsh out to a distance of one hundred (100) feet, known as the migration zone, unless a larger or smaller migration zone is determined by the Commission based on best available measures;
- v. lands subject to flooding or inundation by groundwater or surface water; and
- vi. lands subject to tidal action, coastal storm flowage, or flooding, including special transitional areas.

Any activity proposed or undertaken which is not set forth above but which activity the Conservation Commission finds will alter an area subject to the Ordinance will require the filing of a Notice of Intent.

The above-named resources are collectively known as the "resource areas protected by the Ordinance" or "resource areas." Said resource areas shall be protected whether or not they border surface waters.

d) Exemptions. The applications and permits required by this Ordinance may not be required for maintaining, repairing, or replacing, but not substantially changing or enlarging, an existing and lawfully located structure or facility used in the service of the public to provide electric, gas, water, telephone, telegraph, or other telecommunication services, provided that written notice has been given to the Conservation Commission prior to commencement of work, and provided that the work conforms to any performance standards and design specifications in regulations adopted by the Commission.

The following exemptions shall apply and no application or permit is required under this Ordinance for:

- i. normal maintenance or improvement of land in agricultural and aquacultural use as defined by the Wetlands Protection Act regulations at 310 CMR 10.04;
- ii. activities, such as monitoring wells, exploratory borings, soil sampling, and surveying, that are temporary, have negligible impacts as determined by the Commission, and are necessary for planning and design purposes;
- iii. planting native species of trees, shrubs, or groundcover (excluding turf lawns);

- iv. pruning of existing vistas, 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;
- v. the protection of the health and safety of the public, provided that the work is to be performed by or has been ordered to be performed by an agency of the Commonwealth or a political subdivision thereof; provided that advance notice, oral or written, has been given to the Commission prior to commencement of work or within twenty four (24) hours after commencement; provided that the Commission or its agent certifies the work as an emergency project; provided that the work is performed only for the time and place certified by the Commission for the limited purposes necessary to abate the emergency; and provided that within twenty one (21) days of commencement of an emergency project a permit application shall be filed with the Commission for review as provided by this Ordinance. Upon failure to meet these and other requirements of the Commission, the Commission may, after notice and a public hearing, revoke or modify an emergency project approval and order restoration and mitigation measures;
- vi. maintenance of a stormwater control structure or system in existence at the time of adoption of this Ordinance or of one approved in accordance with the Stormwater Management Standards, as provided in the Massachusetts Stormwater Policy. This exemption shall apply provided that the work to maintain the stormwater management system is limited to maintenance and that said work utilizes best practical measures to avoid and minimize impacts to wetland resource areas outside of the footprint of the stormwater management system. Such stormwater management systems may include wetland resource areas created solely for the purpose of stormwater management and approved under an Order of Conditions.

The following activities are permitted in the 100-foot Buffer Zone or the 200-foot Riverfront Area, provided the activity is not within any other resource area; there is no regrading; no trees greater than 6 inches diameter breast height are removed; there is no alteration to additional resource areas; erosion and sedimentation controls are used as needed or as determined by the Commission or agent of the Commission; and the project site is not within the 25-foot No-Disturbance Zone:

- i. Maintaining and repairing existing buildings and structures provided that: the footprint remains the same; there is no additional alteration of or discharge into any resource areas; and there is no heavy equipment or stockpiling within fifty (50) feet of resource areas.
- ii. Planting and management of native vegetation or resource area enhancement techniques designed to further the Resource Area Values protected by the Ordinance.

Other than stated in this Ordinance, the exceptions provided in the Wetlands Protection Act (M.G.L. c. 131, § 40) and regulations (310 CMR 10.00) shall not apply under this Ordinance.

e) Applications and Fees

i. Application and Applicability. No one intending to conduct any of the above-named activities may commence such activity within the jurisdiction of this Ordinance without an applicant filing a written Notice of Intent and without an applicant receiving an Order of Conditions and provided all appeal periods have elapsed. Such Notice shall be sent by certified mail or hand delivered to the Conservation Commission, including all plans as may be necessary to describe

the proposed activity and its effect on the environment. The Commission may make provision for electronic delivery of Notice and of required materials. The Conservation Commission may require information in addition to the plans and specifications required to be filed by an applicant under M.G.L. c. 131, § 40, in order to fulfill the requirements of this Ordinance. No application shall be deemed complete or timely without the submission of all application forms, plans, and all requested additional materials. No activities shall commence without receiving a permit issued pursuant to this Ordinance.

The Conservation Commission shall make a determination as to whether or not this Ordinance applies to a specific situation prior to the filing of a written Notice of Intent under the provisions hereof, within twenty-one (21) days of the receipt of a written Request for Determination of Applicability sent by certified mail or hand delivered from any person desiring such determination.

ii. *Filing Fee.* At the time of an application, the applicant shall pay a filing fee specified in regulations of the Commission. The fee is in addition to that required by the Wetlands Protection Act (M.G.L. c. 131, § 40) and regulations (310 CMR 10.00). No application shall be deemed complete or timely without the payment of all required fees.

iii. Consultant Review. Pursuant to M.G.L. c. 44, § 53G and regulations promulgated by the Commission, the Commission may impose reasonable fees upon applicants for the purpose of securing outside consultants including engineers, wetlands scientists, wildlife biologists, or other experts in order to aid in the review of proposed projects. Such funds shall be deposited with the City Treasurer who shall create a revolving fund specifically for this purpose. Additional consultant fees may be requested where the requisite review is more expensive than originally calculated or where new information requires additional consultant services.

In such instances the Commission shall notify in writing the applicant of this need and the estimated costs to be borne by the applicant, request payment of that fee, and provide the opportunity for the application to be amended or withdrawn. Notice shall be deemed to have been given on the date the Commission mails or hand delivers said notification. The applicant may withdraw the application or request within five (5) business days of the date notice is given without incurring any costs or expenses.

Consultants must meet the minimum qualifications of: An educational degree in or related to the field at issue; or three or more years of practice in the field at issue or a related field. Such consultants shall work for and represent the interests of the Commission. The Commission shall return any unused portion of the consultant fee to the applicant unless the Commission decides at a public meeting that other further or additional or different services of the consultant are necessary to make an objective decision.

The Commission may waive all application and consultant review fees for any permit application or notice filed by the City of Boston or another government agency. The Commission may waive all application and consultant review fees for any permit application or notice filed upon determination by the Commission that the proposed work will further the Resource Area Values of this Ordinance.

iv. Additional Fees. The Conservation Commission may adopt such additional fees as it may determine necessary to protect the Resource Area Values of this Ordinance.

v. *Coordination of Project Review*. The Boston Planning and Development Agency and the Inspectional Services Department within 30 days of receiving any initial project application shall inform the applicant in writing of whether the project property may be subject to provisions of this Ordinance.

The Agency and the ISD shall provide the Conservation Commission a monthly list of all project applications for which the subject property may be subject to provisions of this Ordinance.

Within 1 year of passage of this Ordinance, the Commission shall adopt rules and guidelines to harmonize and coordinate public and private project review under this Ordinance with applicant compliance with City of Boston regulations including zoning, historic preservation, protection of park and recreation facilities, water and sewer permitting as well as applicable State and federal regulations

f) Notice and Hearings.

The Commission may conduct a public hearing on any Request for Determination of Applicability or Notice of Intent and shall conduct a public hearing on any permit application.

The Commission shall commence a public hearing within twenty-one (21) days from receipt of a completed request, notice, or permit application unless an extension is authorized in writing by the applicant. The Commission shall have authority to continue the hearing to a specific date announced at the hearing, for reasons stated at the hearing, which may include the need for additional information from the applicant or others as deemed necessary by the Commission in its discretion.

Notice, including the date, time, place, and subject of any such hearing shall be given at least five (5) business days prior to the hearing, in a newspaper of general circulation in the municipality at the expense of the applicant, and on the Commission's Internet Web site, as well as by any other method determined by the Commission to provide adequate notice to parties in interest. Notices shall be publicized, and hearings shall be conducted in accordance with the Open Meeting Law.

Any person filing a request, notice, permit, or other application with the Conservation Commission at the same time shall give written notice thereof, by certified mail (return receipt requested) or hand delivered, to all abutters at their mailing addresses shown on the most recent applicable tax list of the assessors, including owners of land directly opposite on any public or private street or way, and abutters to the abutters within three hundred (300) feet of the project property line including any in another municipality or across a body of water. A copy shall be provided in the same manner to the Commission of the adjoining municipality, if the request, notice, permit, or application pertains to property within three hundred (300) feet of that municipality. The notice shall state a brief description of the project or other proposal and the date of any Commission hearing or meeting date if known. The notice to abutters also shall

include a copy of the application or request, with plans, or shall state where copies may be examined and obtained by abutters. An affidavit of the person providing such notice, with a copy of the notice mailed or delivered, shall be filed with the Commission. When a person requesting a determination is other than the owner, the request, the notice of the hearing, and the determination itself shall be sent by the Commission to the owner as well as to the person making the request.

Within twenty-one (21) days of closing the public hearing, the Conservation Commission shall either:

- i. Determine the proposed activity is not significant to any of the Resource Area Values identified by the Ordinance; or
- ii. Decide that the proposed activity is significant to one or more of the Resource Area Values identified by the Ordinance and shall issue an Order of Conditions for the protection of said values.

g) Permits.

i. Within twenty-one (21) days of the close of the hearing the Commission shall issue or deny a permit for the activities requested upon determining that the activities which are subject to the permit application, or the land and water uses which will result therefrom, are likely to have a significant individual or cumulative effect on the Resource Area Values protected by this Ordinance. The Commission shall consider the extent to which the applicant intends to avoid, minimize, and mitigate any impact from activities subject to permitting.

In evaluating and project and prior to issuing any permit, the Commission shall consider cumulative loss, degradation, isolation, and replacement or replication of such protected resource areas at the project site, resulting from past activities, whether by the applicant or any prior property owner and whether permitted, unpermitted, or exempt. The Commission shall also consider individual and cumulative adverse impacts on protected resources arising from reasonably foreseeable future activities when evaluating a project application.

The Conservation Commission shall explicitly consider climate change resilience and impacts in the issuance or denial of any permit through measurement of potential adverse impacts to resource areas for the protection of resource areas both as they currently exist and as are reasonably expected to exist based on the best available data on the projected impacts of climate change.

- ii. The Commission shall enact guidelines, performance standards and implementing regulations establishing how climate change resilience will be considered during project review and ensuring consistency with other City regulations.
- iii. The Conservation Commission is authorized to approve a permit when it determines by findings supported by substantial evidence that the proposed work meets all applicable performance standards and procedures under this Ordinance or when work can be conditioned to meet all such performance standards, and where it determines by findings supported by substantial evidence that the work will not result in significant or cumulative adverse effects upon wetland Resource Area Values protected by this Ordinance. If it issues a permit, the

Commission may impose conditions that the Commission determines necessary or desirable to protect said Resource Area Values, and all activities shall be conducted in accordance with those conditions.

iv. The Conservation Commission is empowered to deny permission for any activity that would remove, fill, dredge, build upon, degrade, discharge into, or otherwise alter subject lands within its jurisdiction if, in its judgment, such denial is necessary to preserve environmental quality of either or both the subject lands and contiguous lands. The Conservation Commission is further empowered to deny a permit for failure to meet the requirements of this Ordinance; for failure to submit necessary information and plans requested by the Conservation Commission; for failure to meet the design specifications, performance standards and other requirements in regulations of the Conservation Commission; for failure to avoid or prevent significant or cumulative effects upon the Resource Area Values protected by this Ordinance; or where no conditions are adequate to protect those values, in its sole discretion as the issuing authority.

v. The Conservation Commission may issue an Order of Conditions for flood protection projects where such projects require fill, including coastal fill above and seaward of existing seawalls, provided that the Commission finds by a preponderance of the evidence that the project will protect and improve coastal, riparian or aquatic habit over current and projected conditions, including but not limited to change from vertical seawall to intertidal habitat.

vi. Notwithstanding anything to the contrary herein, each permit, application, notice and hearing will be considered on its own merits. Due consideration shall be given to possible effects of the proposal on all values to be protected under this Ordinance and to any demonstrated hardship on the petitioner by reason of a denial, as brought forth at the public hearing. Any Order of Conditions or denial issued under this Ordinance may differ from any such order or denial issued by the Conservation Commission under the provisions of M.G.L. c. 131, § 40.

vii. In reviewing activities within the Buffer Zone and Special Transitional Area, the Commission shall presume both zones are important to the protection of other resource areas because activities undertaken in close proximity have a reasonable possibility of adverse impact, either immediately, as a consequence of construction, or over time, as a consequence of daily operation or existence of the activities. These adverse impacts from construction and use can include, without limitation, erosion, siltation, loss of groundwater recharge, poor water quality, loss of wildlife habitat, and limitation of the ability of the natural system, wetland, and/or salt marsh to migrate naturally in response to climate change. The Commission may establish, in its regulations, design specifications, performance standards, and other measures and safeguards, including setbacks, no-disturb areas, no-build areas, and other work limits for protection of such lands, including without limitation strips of continuous, undisturbed vegetative cover, unless the the Commission finds by a preponderance of the evidence that the area or part of it may be disturbed without harm to the values protected by the Ordinance.

viii. In reviewing activities within the riverfront area, the Commission shall presume the riverfront area is important to all the Resource Area Values unless demonstrated otherwise, and no permit issued hereunder shall permit any activities unless the Commission finds by preponderance of the evidence that there is no practicable alternative to the proposed project with

less adverse effects, and that such activities, including proposed mitigation measures, will have no significant adverse impact on the areas or values protected by this Ordinance. The Commission shall regard as practicable an alternative which is reasonably available and capable of being done after taking into consideration the proposed property use, overall project purpose (e.g., residential, institutional, commercial, or industrial), logistics, existing technology, costs of the alternatives, and overall project costs, and other factors at its discretion.

ix. To prevent resource area loss, the Commission shall require applicants to avoid alteration wherever feasible; to minimize alteration; and, where alteration is unavoidable and has been minimized, to provide full mitigation. The Commission may authorize or require replication of wetlands as a form of mitigation, but only with specific plans, professional design, proper safeguards, adequate security, and professional monitoring and reporting to assure success, because of the statistical high probability of failure of such replication. The Commission may require an inventory and analysis of hydrology, vegetation, wildlife, and wildlife habitat of the project area, to be paid for by the applicant, whenever it deems appropriate, regardless of the type of resource area or the amount or type of alteration proposed. The decision shall be based upon the Commission's determination of the importance of the habitat area considering (but not limited to) such factors as proximity to other areas suitable for wildlife, importance of wildlife corridors in the area, the resource significance of the project area or actual or expected presence of rare and/or unique plant or animal species in the area. The work shall be performed by an individual who meets the qualifications set out in the wildlife habitat section of the Wetlands Protection Act Regulations (310 CMR 10.60)

x. Any areas within the City of Boston which have been designated as Areas of Critical Environmental Concern by the Secretary of Energy and Environmental Affairs, Commonwealth of Massachusetts, are so designated due to the particularly unique environmental factors that affect such areas and that highlight the unique importance of each area so designated. As a result of such designation, it is incumbent upon the Commission to be even more diligent in its review of projects proposed within such areas. The highest standards of scrutiny as to the impact of any proposal are required shall be exercised by the Commission. Close scrutiny shall be given by the Commission to any proposals involving an application of new pavement or newly installed other impervious materials within any area less than one hundred (100) feet from bordering vegetated wetland, bank, beach, and meadow.

xi. The Conservation Commission may recommend to the Mayor and City Council that the City separately designate areas of environmental concern according to criteria and guidelines established by the Commission and distinct from those used by the Secretary of Environmental Affairs of the Commonwealth of Massachusetts.

xii. The Commission shall presume that all areas meeting the definition of vernal pool, including the adjacent area, perform essential habitat functions. This presumption may be overcome only by the presentation of credible evidence which, in the judgment of the Commission, by a preponderance of the evidence demonstrates that the basin or depression or surrounding area does not provide essential habitat functions. Any formal evaluation should be performed by an individual who at least meets the qualifications under the wildlife habitat section of the Wetlands Protection Act Regulations (310 CMR 10.60).

xiii. A permit allowing the proposed work shall impose such conditions, in the judgment of the Conservation Commission, that are necessary for the protection of those areas found to be significant to one or more of the Resource Area Values identified in the Ordinance. Said permit shall prohibit any work or any portion thereof that cannot be conditioned to meet said standards. The permit shall impose conditions setting limits on the quantity and quality of discharge from a point source (both open and closed channel) when said limits are necessary to protect the values identified in the Ordinance.

xiv. The Commission may require that an applicant submit a Resources Management Plan to the Commission if the Commission determines such a plan is required to meet the goals and standards of this Ordinance and the Order of Conditions of the permit. A Resources Management Plan shall adequately describe measures at the site intended to protect and enhance site resources and to eliminate, mitigate, or minimize project impacts. The Plan must include a detailed budget and identify the entity legally responsible for implementing the Plan.

xv. When Land Subject to Flooding or Inundation is significant to the interests of flood control and storm damage prevention, the following performance standards shall apply:

a. Any activity shall not have an adverse effect by increasing the elevation or velocity of flood waters or by increasing flows due to a change in drainage or flowage characteristics (e.g. change in direction) on the subject site, adjacent properties, or any public or private way.

b.Relative sea level rise and the landward migration of resource area in response to relative sea level rise shall be incorporated into the design and construction of structures and other activities proposed in Land Subject to Flooding or Inundation. At a minimum, the lowest floor shall be elevated 1 foot or higher above the base flood elevation in a FEMA-mapped AE-Zone, and setting the lowest horizontal structural member 2 feet or higher above the base flood elevation in a VE-Zone unless a higher elevation is determined by the Commission.

xvi. Activities and their ancillary uses in FEMA Velocity zones which result in alterations to vegetative cover, interruptions in the supply of sediment to other wetland resources, and/or changes to the form or volume of a dune or beach that will have an adverse effect on said landform's ability to provide storm damage prevention and flood control are, therefore, prohibited. These activities include, but are not limited to, construction of: foundations other than open pilings or columns; new or proposed expansions of roads, driveways or parking lots, or impermeable paving for existing unpaved roads, driveways or parking lots; new or proposed expansions of coastal engineering structure.

xvii. The following projects may be permitted and conditioned by the Commission, providing they adhere to the provisions of this Ordinance: pedestrian walkways; resilient landscaping designed to increase wetland and marsh development and plantings compatible with natural vegetative cover; resource area enhancement or other forms of non-structural protection, restoration, nourishment, or improvement of the feature(s) intended to meet the goals enumerated in this Ordinance.

xviii. The permit shall be valid for three years from the date of its issuance.

xix. The Conservation Commission may extend a permit for a period of up to an additional three-year period from date of issuance. No permit may be extended for more than six years after date first issued. The request for an extension shall be made to the Conservation Commission at least twenty-one (21) days prior to the expiration of the permit. The Commission shall hold a public hearing in accordance with the Ordinance and its regulations within twenty-one (21) days of receipt of said request. Should said public hearing be continued past the date of the expiration of the permit, the expiration date shall be stayed to the date on which the Commission votes on whether to extend the permit.

xx. The Order of Conditions shall be recorded in the County Registry of Deeds or Registry District of the Land Court, where appropriate, prior to the commencement of any of the proposed activities regulated by the Order of Conditions. No work shall commence until proof of recording is provided to the Commission. If work is undertaken without the applicant first recording the permit, the Conservation Commission may issue an enforcement order.

xxi. The Commission may revoke a permit, order, determination, or decision issued under the Ordinance, but only for violation of this Ordinance and only after notice of violation to the permittee and abutters, and after a properly noticed public hearing. The Commission may establish written policies and procedures with respect to permit revocation, including provision for sufficient written warning and opportunity to cure.

xxii. Amendments to permits, orders, and determinations shall be handled in the manner set out in the Wetlands Protection Act regulations and policies thereunder.

- **h) Regulations.** After public notice and public hearing, the Conservation Commission shall promulgate rules and regulations to effectuate the purposes of this Ordinance, effective when voted and filed with the city clerk. Failure by the Commission to promulgate such rules and regulations or a legal declaration of their invalidity by a court of law shall not act to suspend or invalidate the effect of this Ordinance. At a minimum these regulations shall reiterate the terms defined in this Ordinance, define additional terms not inconsistent with the Ordinance, and impose filing and consultant fees.
- i) Security. As part of a permit issued under this Ordinance, in addition to any security required by any other municipal or state board, agency, or official, the Conservation Commission may require that the performance and observance of the conditions imposed thereunder (including conditions requiring mitigation work) be secured wholly or in part by any combination of the methods described below:
 - i. By a proper bond, deposit of money or negotiable securities under a written third-party escrow arrangement, or other undertaking of financial responsibility sufficient in the opinion of the Commission, to be released in whole or in part upon issuance of a Certificate of Compliance for work performed pursuant to the permit.
 - ii. By accepting a conservation restriction, easement, or other covenant enforceable in a court of law, executed and duly recorded by the owner of record, running with the land to the benefit of this municipality whereby the permit conditions shall be performed and observed before any lot may be conveyed other than by mortgage deed.

iii. By any other method the Commission determines effective by preponderance of the evidence to achieve the purposes and intent of this Ordinance.

j) Enforcement.

No person shall remove, fill, dredge, build upon, degrade, or otherwise alter resource areas protected by this Ordinance, or cause, suffer, or allow such activity, or leave in place unauthorized fill, or otherwise fail to restore illegally altered land to its original condition, or fail to comply with a permit or an enforcement order issued pursuant to this Ordinance.

The Conservation Commission, its agents, officers, and employees shall have authority to enter upon privately owned land for the purpose of performing their duties under this Ordinance and may make or cause to be made such examinations, surveys, or sampling as the Commission deems necessary, subject to the constitutions and laws of the United States and the Commonwealth.

The Commission shall have authority to enforce this Ordinance, its regulations, and permits issued thereunder by letters, phone calls, and electronic communication, violation notices, fines, noncriminal citations under M.G.L. c. 40, § 21D, and civil and criminal court actions. Any person who violates provisions of this Ordinance may be ordered to restore the property to its original condition and take other action deemed necessary to remedy such violations.

The Commission shall have the authority to set fine amounts and levy fines for violations under this ordinance and under the Wetlands Protection Act.

Upon request of the Commission, the Corporation Counsel shall take legal action for enforcement under civil law. Upon request of the Commission, the chief of police shall take legal action for enforcement under criminal law.

Municipal boards and officers, including any police officer or other officer having police powers, shall have authority to assist the Commission in enforcement.

Any person who violates any provision of this Ordinance, or regulations, permits, or administrative orders issued thereunder, shall be punished by fine established by the Commission. Each day or portion thereof during which a violation continues, or unauthorized fill or other alteration remains in place, shall constitute a separate offense, and each provision of the Ordinance, regulations, permits, or administrative orders violated shall constitute a separate offense.

As an alternative to criminal prosecution in a specific case, the Commission may issue citations with specific penalties pursuant to the non-criminal disposition procedure set forth in M.G.L. c. 40, § 21D.

k) **Burden of Proof.** The applicant for a permit shall have the burden of proving by a preponderance of evidence that the work proposed in the permit application will not have unacceptable significant or cumulative adverse effect upon the Resource Area Values protected by this Ordinance. Failure to provide adequate evidence to the Conservation Commission

supporting this burden shall be sufficient cause for the Commission to deny a permit or grant a permit with conditions.

l) Appeals. A decision of the Conservation Commission shall be reviewable in the Superior Court in accordance with M.G.L. c. 249, § 4.

m) Relation to the Wetlands Protection Act and Other Statutes. This Ordinance is adopted under the Home Rule Amendment of the Massachusetts Constitution and the Home Rule statutes, independent of the Wetlands Protection Act (M.G.L. c. 131, § 40) and regulations (310 CMR 10.00) thereunder, and other federal, state and local environmental statutes. Activities that may not require review or permitting under the Wetlands Protection Act, the Rivers Protection Act, or other federal, state or local statutes are not assumed to be exempt from this Ordinance. It is the intention of this Ordinance that the purposes, jurisdiction, authority, exemptions, regulations, specifications, standards, and other requirements shall be interpreted and administered as stricter than those under the Wetlands Protection Act and regulations.

n) Climate Change Resilience.

The Applicant shall, to the extent applicable as determined by the Commission, integrate climate change and adaptation planning considerations into their project to promote climate resilience to protect and promote Resource Area Values and functions into the future. These considerations include but are not limited to: sea level rise, increased heat waves, extreme precipitation events, stormwater runoff, changing precipitation patterns and changes in coastal and stormwater flooding.

The Conservation Commission shall consider a project's adaptation to potential climate change impacts by considering and prioritizing the following:

- i. Design considerations to limit storm and flood damage during extended periods of disruption and flooding as might be expected in extreme weather events;
- ii. Management and/or mitigation of project stormwater surface runoff, which may increase due to storm surges and extreme weather events, and how the project will prevent pollution (including nutrients from fertilizers, roadway runoff, etc.) from entering any resource area, and consideration of eliminating impervious surfaces as feasible;
- iii. Implementation of project vegetation, planting, and landscaping plans and other measures to improve the resiliency of the wildlife habitat and resource area to withstand climate change impacts and promote landscape and habitat connectivity;
- iv. Restoration or enhancement of marsh or other wetland systems by adaptive management of elevations or water distribution;
- v. Mitigation of the heat island effect;
- vi. Protection of existing and proposed structures and reduction of damage to structures due to the impacts of climate change;
- vii. Development of on-site green infrastructure and its effectiveness in furthering resource protection in relation to similar and alternative infrastructure measures or other stormwater control structures or systems;
- viii. Ability of a project to withstand current climate risks as well as those reasonably expected and predicted to exist over the life of the project being permitted.

Those portions of coastal floodplains which are immediately landward of salt marshes, coastal beaches, barrier beaches, coastal dunes or coastal banks require special protection. These areas are likely to be in a state of transition as the entire complex of coastal wetland resources gradually moves landward due to rising sea levels along the coast of Massachusetts, resulting in inundation of more landward area. As sea levels rise, the shoreline may retreat and areas are successively inundated more frequently by storm and tidal activity. Activities carried out within these Special Transitional Areas of coastal floodplains may interfere with the natural landward migration of the adjacent coastal resource areas. Therefore, maintaining these special transitional areas in as much of their natural state as possible is necessary to protect the interests of other wetland resources. The Commission may at its discretion require that projects within the Special Transitional Areas seek a Notice of Determination of Applicability from the Commission for the project site and potential impacts to be reviewed.

o) Stormwater Management. Work or activity specified in a Request for Determination of Applicability or an application for a permit and subject to the Ordinance shall meet, at a minimum, the best management practices for stormwater management as set forth in the Stormwater Management Standards of the Massachusetts Department of Environmental Protection and any separate standards and guidelines prepared by the City including the Boston Water and Sewer Commission. The Conservation Commission may require the applicant to provide a runoff plan and calculations using the best available measures of precipitation frequency statistics and based on 500-year flood frequency event period. Calculations shall show existing and proposed runoff conditions for comparative purposes and include a narrative on the proposed project's impact on the climate change resilience of the resource area.

The requirements of this section shall be met commensurate with the nature, scope, type, and cost of the proposed project or activity.

p) Severability. The invalidity of any section or provision of this Ordinance shall not invalidate any other section or provision thereof, nor shall it invalidate any permit, approval or determination which previously has been issued.

BE IT FURTHER ORDERED: That these provisions shall take effect immediately upon passage.

Filed on: January 25, 2019