

TOWN OF WELLESLEY WETLANDS PROTECTION REGULATIONS

PROMULGATED BY THE
WELLESLEY WETLANDS PROTECTION COMMITTEE
UNDER ARTICLE 44 OF
THE TOWN OF WELLESLEY BYLAWS

EFFECTIVE DATE:
XXXXX XX, 2016

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PART 1. GENERAL PROVISIONS

1.1 Authority

- (1) These regulations are promulgated by the Town of Wellesley Wetlands Protection Committee (the “Committee”) pursuant to the authority granted it under Article 44: Wetlands Protection (the “Bylaw”) of the Town of Wellesley Bylaws. These regulations are intended to implement the Bylaw and shall have the force of law upon their effective date.
- (2) The Bylaw and these regulations serve to supplement review under Massachusetts General Laws Chapter 131, §40 (the Wetlands Protection Act; the “Act”) and the Massachusetts Department of Environmental Protection (“MassDEP”) Wetlands Protection Regulations (310 CMR 10.00 *et seq.*). The Bylaw and these regulations extend preservation and protection to additional interests and values as well as additional wetland resource areas that are not protected under the Act and 310 CMR 10.00. The Bylaw and these regulations also impose more stringent performance standards and address cumulative effects.

1.2 Purpose

- (1) The Bylaw sets forth a public review and decision making process by which activities having an impact or effect upon Areas Subject to Protection Under the Bylaw (the “Bylaw Resource Areas”) are to be regulated in order to ensure the preservation and protection of the following public interests and values (the “Bylaw Interests and Values”):
 - Public or private water supply;
 - Groundwater;
 - Flood control;
 - Erosion and sedimentation control;
 - Storm damage prevention;
 - Water pollution prevention;
 - Fisheries;
 - Wildlife habitat; and
 - Recreation.
- (2) The purpose of these regulations is to define and clarify the decision making process introduced in the Bylaw by establishing uniform definitions, procedures, and performance standards by which the Committee shall carry out its responsibilities under the Bylaw.
- (3) These regulations are intended to notify applicants proposing work within Bylaw Resource Areas as well as those regulating said work of the performance standards to be applied. The performance standards are intended to identify the level of protection that must be imposed in order to contribute to the preservation and protection of the Bylaw Interests and Values. It is the responsibility of the applicant to design and complete the activity in compliance with the performance standards; it is the responsibility of the Committee to impose such conditions on an activity to ensure that the activity is designed and completed in compliance with the performance standards.
- (4) Bylaw Resource Areas, including the Buffer Zone, contribute to the protection of a number of Bylaw Interests and Values, some of which are different from or are not identified in the Act. The Bylaw Interests groundwater and water pollution prevention as defined in these regulations replace the statutory interests protection of ground water supply and prevention of pollution, and the Bylaw Interests erosion and sedimentation control and recreation as defined in these regulations have no analogous statutory interests. The preamble for each Bylaw Resource Area provided in Part 2 of these regulations identifies the Bylaw Interests and Values that each Bylaw Resource Area serves to protect. The definition for each Bylaw Resource Area provided in Part 2 of these regulations clearly identifies each Bylaw Resource Area and its boundary under the Bylaw; certain Bylaw Resource Areas are defined more inclusively under the Bylaw than under the Act and certain Bylaw Resource Areas have no analogous resource area under the Act. The performance standards for each Bylaw Resource Area are written to

allow Bylaw Resource Areas to preserve and protect the applicable Bylaw Interests and Values in a manner under the Bylaw that is more stringent than under the Act. To protect applicable Bylaw Interests and Values, for all projects that require a Notice of Intent to be filed and meet the applicable threshold for impervious surfaces, drainage calculations using rainfall values from *NOAA Atlas 14* are required and compliance with more stringent stormwater management standards is required. Lastly, Section 2.10 of these regulations provides detailed procedures for the conduct of wildlife habitat evaluations and mitigation requirements for altered habitat under the Bylaw, which are triggered by thresholds identified in the performance standards for the various Bylaw Resource Areas. An Order of Conditions issued under the Bylaw and these regulations must serve to preserve and protect the Bylaw Interests and Values.

1.3 Jurisdiction

- (1) Bylaw Resource Areas shall consist of the following:
 - (a) any reservoir, lake, pond, river, stream, or creek and the land thereunder (hereinafter “Water Bodies and Waterways”);
 - (b) any “Bank”;
 - (c) any wetlands bordering on any area set forth in Section 1.3(1)(a) and (b) above (e.g., marshes, wet meadows, bogs, and swamps; hereinafter “Bordering Vegetated Wetlands”);
 - (d) any isolated wetlands with a surface area of 2,500 square feet or greater (e.g., marshes, wet meadows, bogs, and swamps; hereinafter “Isolated Vegetated Wetlands”);
 - (e) any land within 100 feet of any area set forth in Section 1.3(1)(a) to (d) above (hereinafter “Buffer Zone”);
 - (f) any land within 200 feet of a perennial stream or river (hereinafter “Riverfront Area”);
 - (g) any “Bordering Land Subject to Flooding”;
 - (h) any “Isolated Land Subject to Flooding”; and
 - (i) any “Vernal Pool Habitat.”

Isolated Vegetated Wetlands, Isolated Land Subject to Flooding, and Vernal Pool Habitat do not need to border a reservoir, lake, pond, river, stream, or creek in order to be subject to regulation under the Bylaw and these regulations. Subject to the Bylaw Resource Area definitions in Part 2 below, certain Bylaw Resource Areas may occur within or overlap another Bylaw Resource Areas under the Bylaw and these regulations.

- (2) Exemptions from the Bylaw: As provided by Section 4 of the Bylaw, only the activities and work identified in Sections 1.3(2)(a) to (c) below are specifically exempted from regulation under the Bylaw when conducted in accordance with the specified requirements. The Bylaw specifically omits all other exemptions provided in the Act.
 - (a) Maintaining or repairing, but not changing or enlarging, an existing and lawfully located structure or facility used in the service of the public to provide electric, gas, water, sewer, telephone, telegraph, or other telecommunications service, provided that:
 1. written notice must be provided to the Committee at least 14 days prior to commencement of work; and
 2. the work conforms to performance standards and design specifications in these regulations for the Bylaw Resource Areas within which work is proposed to be conducted.

- (b) Any work performed for normal maintenance or improvement of land in agricultural use or in aquacultural use that meets the definitions at:
 - 1. 310 CMR 10.04 Agriculture: (a) Land in Agricultural Use, (b) Normal Maintenance of Land in Agricultural Use, and (c) Normal Improvement of Land in Agricultural Use; or
 - 2. 310 CMR 10.04 Aquaculture: (a) Land in Aquacultural Use and (b) Normal Maintenance or Improvement [of Land in Aquacultural Use].
- (c) Emergency projects necessary for 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, and further provided that:
 - 1. written notice must be provided to the Committee prior to the start of work or within 24 hours after commencement of work. The notice shall specify why the project is necessary for the protection of the health and safety of the public and which agency of the Commonwealth or subdivision thereof is to perform the project or has ordered it to be performed;
 - 2. the Committee or its Administrator must certify in writing that the proposed work qualifies as an emergency project using the WPA Emergency Certification Form. If the work is initially certified by the Administrator, a majority of the Committee must certify the work as an emergency project at the next regularly scheduled meeting of the Committee or a duly posted special meeting of the Committee called for this purpose;
 - 3. the work is performed pursuant to the certification and only for the purposes and duration necessary to abate the emergency. The time limit for performance of the emergency work shall not exceed 30 days (or 60 days for Immediate Response Actions approved by the Bureau of Waste Site Cleanup of the Massachusetts Department of Environmental Protection under the Massachusetts Contingency Plan;) from the date of emergency certification by the Committee;
 - 4. an emergency certification shall be issued only for the protection of public health and safety or for the protection of Bylaw Resource Areas; and
 - 5. a Notice of Intent shall be submitted to the Committee for review within 21 days of the commencement of the emergency project as provided by the Bylaw.

If the proponent of an emergency project fails to meet any of the above requirements, the Committee may, following notice to the proponent and a public hearing, revoke or modify the emergency project certification and/or order restoration and mitigation measures.

(3) Activities Subject to Regulation under the Bylaw

- (a) Any activity proposed or undertaken that constitutes removing, filling, dredging, building upon, or altering any Bylaw Resource Area is subject to regulation under the Bylaw and requires the submittal of a Notice of Intent for an Order of Conditions under the Bylaw.
- (b) Any activity proposed or undertaken outside of all Bylaw Resource Areas shall not be subject to regulation and does not require the submittal of a Notice of Intent for an Order of Conditions under the Bylaw unless and until that activity has actually resulted in removing, filling, dredging, building upon, or altering of any Bylaw Resource Area, including the Buffer Zone. In the event that the Committee determines that such an activity has in fact altered a Bylaw Resource Area, the Committee may require the submittal of a Notice of Intent and/or issue an Enforcement Order and shall impose such conditions on the activity as it deems necessary to contribute to the preservation and protection of the Bylaw Interests and Values.

- (c) Any person who wishes to know whether or not land, or work that may affect a Bylaw Resource Area, is subject to regulation under the Bylaw may request in writing a determination from the Committee. Such Request for Determination of Applicability shall be submitted pursuant to Section 1.6(6) below of these regulations.

(4) Minor Activities not Subject to Regulation under the Bylaw

- (a) Mowing and maintenance of lawfully existing lawn, landscaping, and gardens are not subject to regulation under the Bylaw regardless of its location in any Bylaw Resource Area. Lawn clippings, leaves, brush, and other landscape debris may not be deposited in any Bylaw Resource Area, including the Buffer Zone. Expansion of the lawfully existing extent of lawn, landscaping, or gardens is subject to regulation under the Bylaw.

- (b) Notwithstanding Section 1.3(3)(a) above, the Committee has determined that certain minor activities occurring exclusively within the Buffer Zone or Riverfront Area under the Bylaw that are located outside of the 25-foot No Disturbance Zone (i.e., at least 25 feet from the boundary of Water Bodies and Waterways, Bank, Bordering Vegetated Wetlands, and Isolated Vegetated Wetlands) and at least 50 feet from the mean annual high water line of a perennial stream or river and meet all additional requirements set forth below are excluded from the requirement to obtain a Negative Determination of Applicability or an Order of Conditions under the Bylaw. These activities are limited to the following:

1. Unpaved pedestrian walkway for private use;
2. Fencing, provided it will not constitute a barrier to wildlife movement;
3. Stonewalls;
4. Stacks of cordwood;
5. Planting of native trees, shrubs, or herbaceous species in areas where the Buffer Zone and/or Riverfront Area consists of lawfully existing lawn, landscaping, or gardens; and
6. Exploratory borings, test wells, and/or soil sampling conducted using a hand or motorized drill. This activity does not include the excavation of soil test pits using a backhoe or similar equipment or the installation of a monitoring well using a truck mounted drill rig.

- (c) Notwithstanding Section 1.3(3)(a) above, the Committee has determined that certain minor activities within Bylaw Resource Areas that meet all additional requirements set forth below require advance notice and administrative review and approval by the Committee's Administrator, but are excluded from the requirement to obtain a Negative Determination of Applicability or an Order of Conditions under the Bylaw. The request for the administrative review shall be in writing and include materials necessary to allow the Administrator to conduct the review, such as, a plan showing proposed test pit or monitoring well locations, a letter from a certified arborist or photographs showing the condition and location of a tree proposed to be removed, photographs of the brush pile or man-made debris to be removed, or photographs showing the invasive species to be hand-pulled and their location. These activities are limited to the following:

1. The installation of soil test pits using a backhoe or similar equipment or the installation of a monitoring well using a truck mounted drill rig within lawfully existing lawn, landscaping, or gardens within the Buffer Zone or Riverfront Area only;
2. Removal of an individual tree when evidence is provided to demonstrate that the tree is in poor health and/or poses a safety hazard;
3. Removal of brush piles or man-made debris; and

4. Removal of invasive species by hand-pulling only.

1.4 Burdens of Moving Forward and Proof

- (1) The applicant shall have the burden of moving forward by providing credible evidence from a competent source or sources in support of all matters asserted by or on behalf of the applicant.
- (2) The applicant shall have the burden of proving by a preponderance of credible evidence that the activity or activities proposed in a Request for Determination of Applicability or Notice of Intent will not have an unacceptable significant or cumulative effect upon the ability of any Bylaw Resource Area to protect the Bylaw Interests and Values. Failure to meet this burden of proof shall be sufficient cause for the Committee to issue a positive Determination of Applicability or a denial Order of Conditions, as appropriate.
- (3) Any person claiming that an activity to remove, fill, dredge, build upon, or alter a Bylaw Resource Area does not require the submittal of a Notice of Intent shall have the burden of establishing that the activity is not subject to the Bylaw and these regulations.

1.5 Definitions

- (1) Except as specifically provided by the Bylaw or these regulations, the terms used in the Bylaw and these regulations shall have the meanings contained in the Act and 310 CMR 10.00, as amended.
- (2) The Bylaw Resource Areas are specifically defined in Part 2 of these regulations below. Additional terms used in the Bylaw and these regulations are defined as follows:

25-foot No Disturbance Zone means the land located within 25 feet of the boundary of Water Bodies and Waterways, Bank, Bordering Vegetated Wetlands, or Isolated Vegetated Wetlands.

Abbreviated Notice of Resource Area Delineation or Request for Wetland Delineation means the written notice filed with the Committee by any person seeking confirmation of the presence of specific Bylaw Resource Areas and their boundaries.

Abutter means the owner of land sharing a common boundary or corner with the property where the activity is proposed as well as the owner of land, including land across public or private ways and water bodies or waterways, where the property line of such land is located within 300 feet of the property line of the property where the activity is proposed, including such properties located in an adjacent municipality.

Act means the Massachusetts Wetlands Protection Act (MGL Ch. 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 runoff characteristics; the intercepting or diverting of surface water or groundwater; 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 or of the physical, biological, or chemical characteristics of water.

Alter means to change the condition of any Bylaw Resource Area. Examples of alterations include, but are not limited to, the following:

- (a) placement, movement, removal, excavation, or dredging of any soil, sand, gravel, sediment, aggregate, or fill material of any kind;
- (b) changing pre-existing drainage characteristics, flushing characteristics, salinity distribution, sedimentation patterns, flow patterns, or flood retention characteristics;

- (c) draining or disturbance of the water level or water table;
- (d) driving pilings or erecting buildings or structures of any kind;
- (e) placing obstructions or objects in water;
- (f) destroying plant life, including cutting or removal of living or dead trees and replacing existing plant life with landscaping or lawn; or
- (g) changing water temperature, biochemical oxygen demand, or other physical, biological, or chemical characteristics of water.

Applicant means any person who files a Request for Determination of Applicability or files an Abbreviated Notice of Resource Area Delineation or a Notice of Intent or any amendment or extension thereto.

Application for Permit means the same as Notice of Intent.

Area Subject to Protection Under the Bylaw means any area specified at Section 1.3(1)(a) to (i) above. It is used synonymously with the term Bylaw Resource Area. The various Bylaw Resource Areas are defined in Part 2 of these regulations below.

Bank is a Bylaw Resource Area that is defined in Section 2.3(2)(a) of these regulations below.

Bog means an area where standing or slowly running water is near or at the surface during a normal growing season and where a vegetational community has a significant portion of the ground or water surface covered with sphagnum moss (*Sphagnum*) and where the vegetational community is made up of a significant portion of one or more of, but not limited to nor necessarily including all, of the following plants or groups of plants: aster (*Aster nemoralis*), azaleas (*Rhododendron canadense* and *R. viscosum*), black spruce (*Picea mariana*), bog cotton (*Eriophorum*), cranberry (*Vaccinium macrocarpon*), high-bush blueberry (*Vaccinium corymbosum*), larch (*Larix laricina*), laurels (*Kalmia angustifolia* and *K. polifolia*), leatherleaf (*Chamaedaphne calyculata*), orchids (*Arethusa*, *Calopogon*, *Pogonia*), pitcher plants (*Sarracenia purpurea*), sedges (Cyperaceae), sundews (Droseraceae), sweet gale (*Myrica gale*), and white cedar (*Chamaecyparis thyoides*).

Bordering means touching.

Bordering Land Subject to Flooding is a Bylaw Resource Area that is defined in Section 2.7(2)(a) of these regulations below.

Bordering Vegetated Wetlands is a Bylaw Resource Area that is defined in Section 2.4(2)(a) of these regulations below.

Boundary means the outer limit of a Bylaw Resource Area.

Buffer Zone is a Bylaw Resource Area that is defined in Section 2.5(2)(a) of these regulations below.

Bylaw means the Town of Wellesley Wetlands Protection Bylaw (Article 44 of the Town of Wellesley Bylaws).

Bylaw Interests and Values or Interests and Values Subject to Protection under the Bylaw consist of the following nine (9) public interests or values: public or private water supply, groundwater, flood control, erosion and sedimentation control, storm damage prevention, water pollution prevention, fisheries, wildlife habitat, and recreation.

Bylaw Resource Area means any area specified at Section 1.3(1)(a) to (i) above. It is used synonymously with the term Area Subject to Protection under the Bylaw. The various Bylaw Resource Areas are defined in Part 2 of these regulations below.

Committee means the Wellesley Wetlands Protection Committee.

Creek means the same as stream.

Cumulative Effect upon Bylaw Interests and Values means the impacts on the Bylaw Interests and Values that result from the incremental effects of the proposed activity when added to other past, present, and reasonably foreseeable future activities regardless of who undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place through time. Effects can include direct effects that are immediately caused by the activity and indirect effects that are caused by the activity but become apparent in the future.

Date of Issuance or Issuance Date means the date a Determination of Applicability, Order of Resource Area Delineation, or Order of Conditions is mailed, as evidenced by the postmark, or the date it is hand delivered.

Department means the Massachusetts Department of Environmental Protection.

Determination of Applicability means a written finding by the Committee in response to a Request for Determination of Applicability as to whether land, or work that may affect a Bylaw Resource Area, is subject to regulation under the Bylaw. The Determination of Applicability may also be used to identify the scope of analysis in Riverfront Area under the Bylaw.

Erosion and Sedimentation Control is a Bylaw Interest and Value that means the prevention or reduction of the detachment or movement of soil, sediment, or rock fragments by the action of water, wind, ice, and/or gravity and the prevention or reduction of the collection or concentration of soil, sediment, or rock fragments by the action of water, wind, ice, and/or gravity.

Extension Permit means a written extension of the expiration date of an Order of Resource Area Delineation or Order of Conditions.

Extensively Altered Area means an area that has been so extensively altered by human activity that its important wildlife habitat functions have effectively been eliminated. Extensively Altered Areas include mowed lawns, landscaped areas, and gardens; parking lots and other paved areas; roads to limit of shoulder; railroad tracks to limit of ballast; cemeteries and golf courses to limit of maintenance; and areas with a gravel surface that lack a natural vegetation community. Such areas that are lawfully existing and maintained as such since that time are not important to the preservation or protection of wildlife habitat.

Fisheries is a Bylaw Interest and Value which means all species of fresh water finfish and shellfish, including the nutrient sources and the habitat in which they live for all or part of their life cycle. Protection of fisheries means the protection of the capacity of an area to prevent or reduce contamination or damage to fish and to serve as the habitat or nutrient source for a fishery.

Flood Control is a Bylaw Interest and Value that means the prevention or reduction of flooding and flood-related damage.

Groundwater is a Bylaw Interest and Value that means the water below the surface of the ground in the zone of saturation.

Interests Subject to Protection under the Bylaw means the same as Bylaw Interests and Values.

Invasive Plant Species means any alien or non-native plant species whose introduction has caused or is likely to cause economic or environmental harm.

Isolated Land Subject to Flooding is a Bylaw Resource Area that is defined in Section 2.8(2)(a) of these regulations below.

Isolated Vegetated Wetlands is a Bylaw Resource Area that is defined in Section 2.4(2)(a) of these regulations below.

Lake means any open body of fresh water with a surface area of ten acres or greater and includes Great Ponds (i.e., Lake Waban).

Lawfully Existing means existing prior to the effective date of the Wellesley Wetlands Protection Bylaw (Article 44; April 9, 2002) or subsequently permitted by the Committee through the issuance of a Negative Determination of Applicability or Order of Conditions.

Marsh means an area where a vegetational community exists in standing or running water during the growing season and where a significant part of the vegetational community is composed of, but not limited to nor necessarily including all, of the following plants or groups of plants: arums (*Araceae*), bladder worts (*Utricularia*), bur reeds (*Sparganiaceae*), button bush (*Cephalanthus occidentalis*), cattails (*Typha*), duck weeds (*Lemnaceae*), eelgrass (*Vallisneria*), frog bits (*Hydrocharitaceae*), horsetails (*Equisetaceae*), hydrophilic grasses (*Gramineae*), leatherleaf (*Chamaedaphne calyculata*), pickerel weeds (*Pontederiaceae*), pipeworts (*Eriocaulon*), pond weeds (*Potamogeton*), rushes (*Juncaceae*), sedges (*Cyperaceae*), smartweeds (*Polygonum*), sweet gale (*Myrica gale*) water milfoil (*Halragraceae*), water lilies (*Nymphaeaceae*), water starworts (*Callitrichaceae*), and water willow (*Decodon verticillatus*).

Massachusetts Contingency Plan (MCP) means 310 CMR 40.0000 *et seq.*, which was promulgated under MGL Ch. 21E, §§ 3(c), 3(d), 3(e), 3A(d), 3A(f), 3A(g), 3A(m), 3B, 5A, 6, 7, and 14, and MGL Ch. 21A, § 2(28), MGL Ch. 21C, and MGL Ch. 111, § 160.

MassDEP Wetlands Protection Regulations means 310 CMR 10.00 *et seq.*, as amended.

Notice of Intent or Application for Permit means the written notice filed with the Committee by any person intending to remove, fill, dredge, build upon, or alter any Bylaw Resource Area.

Obstruction or Objects in water mean, but are not limited to, dams, weirs, sluice gates, docks, bulkheads, pilings, slips, floats, or cofferdams.

Open Meeting Law means MGL Ch. 30A, §§ 18-25 and the associated regulations at 940 CMR 29.00.

Order of Conditions means the document issued by the Committee in response to a Notice of Intent containing conditions that regulate or prohibit an activity under the Bylaw.

Order of Resource Area Delineation means the document issued by the Committee in response to an Abbreviated Notice of Resource Area Delineation that identifies specific Bylaw Resource Areas and their boundaries under the Bylaw.

Permit means the same as Order of Conditions.

Person means any individual, group of individuals, association, partnership, corporation, company, business organization, trust, estate, the Commonwealth of Massachusetts or a political subdivision thereof to the extent subject to the Bylaw, administrative agency, public or quasi-public corporation or body, the Town of Wellesley, and any other legal entity and the respective legal representative, agent, or assigns of each person or entity listed above.

Point-source Discharge means a pipe or other similar conveyance, from which treated or untreated stormwater or non-stormwater flows are discharged.

Pond means any open body of fresh water with a surface area observed or recorded in the past ten years of 10,000 square feet or greater. Ponds may be either naturally occurring or man-made by impoundment or

excavation. Ponds shall contain standing water except during periods of extended drought, which for this purpose, shall mean those periods in specific geographical locations determined to be at the 'Advisory' or more severe drought level by the Massachusetts Drought Management Task Force or its successor pursuant to the Massachusetts Drought Management Plan. Basins or lagoons that are part of a wastewater treatment plant, swimming pools, and other impervious man-made basins shall not be considered to be ponds under the Bylaw.

Public Interest or Value means something of benefit to the health, welfare, or safety of the Town of Wellesley community at large as opposed to one individual, special interest group, organization, or other entity.

Public or Private Water Supply is a Bylaw Interest and Value that means any source or volume of surface water or groundwater demonstrated to be in public use or approved for public use for water supply pursuant to MGL Ch. 111, § 160 by the Department's Division of Water Supply or demonstrated to have a potential for public use; or any source or volume of surface water or groundwater demonstrated to be in any private use or shown to have potential for private use, respectively.

Quorum means a majority of the duly appointed members of the Committee then in office.

Recreation is a Bylaw Interest and Value that means the use of leisure time for personal satisfaction and enjoyment and for physical and mental health and revitalization. Under the Bylaw this term means generally passive recreational activities that do not conflict with or diminish other Bylaw Interests and Values that may include, but are not limited to, non-motorized boating, swimming, fishing, hunting, hiking, walking, nature watching, and photography.

Request for Determination of Applicability or Request for Determination means the written request filed with the Committee by a person to determine whether land, or work that may affect a Bylaw Resource Area, is subject to regulation under the Bylaw. The Request for Determination of Applicability may also be used to confirm the scope of analysis in Riverfront Area under the Bylaw.

Request for Wetland Delineation means the same as Abbreviated Notice of Resource Area Delineation.

Reservoir means a lake or pond where water is collected and/or stored for future use.

River means a naturally flowing body of water that empties to the ocean or any reservoir, lake, pond, or another river, and that flows throughout the year. An expanded definition is provided in Section 2.6(1)(c) below.

Riverfront Area is a Bylaw Resource Area that is defined in Section 2.6(2)(a) of these regulations below.

Significant means to play a role. A Bylaw Resource Area is significant to a Bylaw Interest and Value when it plays a role in its provision or protection.

Storm Damage Prevention is a Bylaw Interest and Value that means the prevention of damage caused by water from storms, including but not limited to, erosion and sedimentation, damage to vegetation, damage to property or structures, or damage caused by flooding or water-borne debris or ice.

Stream is specifically defined in Section 3 of the Bylaw and is clarified herein to mean an open body of running water which moves in a definite natural or man-made channel in the ground due to a hydraulic gradient and which may flow year-round or intermittently. A portion of a stream may flow through a culvert or beneath a bridge. Such bodies of running water which do not flow throughout the year are considered intermittent streams, except for those portions of which that serve only to carry the immediate surface runoff from stormwater or snowmelt (i.e., those portions located upgradient of all bogs, marshes, swamps, or wet meadows).

Swamp means an area where groundwater is at or near the surface of the ground for a significant part of the growing season or where runoff water from surface drainage frequently collects above the soil surface, and where a significant part of the vegetational community is made up of, but not limited to nor necessarily include

all of the following plants or groups of plants: alders (*Alnus*), ashes (*Fraxinus*), azaleas (*Rhododendron canadense* and *R. viscosum*), black alder (*Ilex verticillata*), black spruce (*Picea mariana*), button bush (*Cephalanthus occidentalis*), American or white elm (*Ulmus americana*), white Hellebore (*Veratrum viride*), hemlock (*Tsuga canadensis*), highbush blueberry (*Vaccinium corymbosum*), larch (*Larix laricina*), cowslip (*Caltha palustris*), poison sumac (*Toxicodendron vernix*), red maple (*Acer rubrum*), skunk cabbage (*Symplocarpus foetidus*), sphagnum mosses (*Sphagnum*), spicebush (*Lindera benzoin*), black gum tupelo (*Nyssa sylvatica*), sweet pepper bush (*Clethra alnifolia*), white cedar (*Chamaecyparis thyoides*), and willow (Salicaceae).

Vegetated Wetland or Freshwater Wetland means any area where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants. Vegetated Wetlands may be bordering or may be isolated. Vegetated Wetlands include bogs, marshes, swamps, and wet meadows.

Vernal Pool Habitat is a Bylaw Resource Area that is defined in Section 2.9(2)(a) of these regulations below.

Water Bodies and Waterways is a Bylaw Resource Area that is defined in Section 2.2(2)(a) and (b) of these regulations below.

Water Pollution means the addition of any pollutant, substance, or energy to water that affects the physical, biological, or chemical integrity of the surface water or groundwater.

Water Pollution Prevention is a Bylaw Interest and Value that means the prevention or reduction of contamination of both surface water and groundwater.

Wellesley Wetlands Protection Committee means that body lawfully appointed by the Wellesley Natural Resources Commission pursuant to Article 43.7 of the Town of Wellesley Bylaws. The primary responsibilities of the Committee are the implementation and enforcement of the Act and the Bylaw.

Wet Meadow means an area where groundwater is at the surface for a significant part of the growing season and near the surface throughout the year and where a significant part of the vegetational community is composed of various grasses, sedges and rushes; made up of, but not limited to nor necessarily including all, of the following plants or groups of plants: blue flag (*Iris*), vervain (*Verbena*), thoroughwort (*Eupatorium*), dock (*Rumex*), false loosestrife (*Ludwigia*), hydrophilic grasses (Gramineae), loosestrife (*Lythrum*), marsh fern (*Dryopteris thelypteris*), rushes (Juncaceae), sedges (Cyperaceae), sensitive fern (*Onoclea sensibilis*), and smartweed (*Polygonum*).

Wildlife means all non-domesticated, native mammals, birds, reptiles, and amphibians, and all vertebrate and invertebrate species that are listed as endangered, threatened, or of special concern under the Massachusetts Endangered Species Act (MGL Ch. 131A and its regulations 321 CMR 10.00 *et seq.*).

Wildlife Habitat is a Bylaw Interest and Value that means an area which due to its plant community composition and structure, soil or substrate composition and structure, topography, hydrologic regime, water quality, proximity to water bodies or waterways, or other characteristics provides important food, shelter, breeding areas, migratory or overwintering areas for wildlife.

Work means the same as activity.

1.6 Procedures

(1) Computation of Time Periods

- (a) Time periods of ten (10) days or less specified in the Bylaw and regulations shall be determined using only business days. Such periods shall commence on the first business day after the action and shall end at the close of business on the last business day.
- (b) Time periods greater than ten (10) days specified in the Bylaw and the regulations shall be determined using calendar days. Such periods shall commence on the first calendar day after the action and shall end at the

close of business on the last calendar day, unless the last day is a Saturday, Sunday, or legal holiday, in which case the last day shall be the next business day.

(2) Actions by the Committee

- (a) Where the Bylaw or regulations state that the Committee is to receive a Request for Determination of Applicability, Notice of Resource Area Delineation, or Notice of Intent, or some other submittal or information, a member of the Committee, the Administrator, or their designee may receive such submittal or information.
- (b) Where the Bylaw or regulations state that a particular action is to be taken by the Committee, said action shall be taken by more than one-half of the members present at a meeting of at least a quorum, except for administrative actions such as publication of legal notices, which may be done by the Administrator or their designee.
- (c) Where the Bylaw or regulations state that a Determination of Applicability, Order of Resource Area Delineation, Order of Conditions, Amended Order of Resource Area Delineation, Amended Order of Conditions, Extension Permit, or Certificate of Compliance is to be issued by the Committee, that action is to be taken by a majority of the members then in office, who need not convene as a body in order to sign said document, provided that they met pursuant to the Open Meeting Law when voting on the matter.
- (d) Where the regulations at Section 1.3(4)(c) above state that an activity may receive administrative review and approval, the Administrator shall on behalf of the Committee, conduct the review and issue the administrative approval in writing with the original mailed via certified mail, return receipt requested or hand delivered to the person making the request.

(3) Timing of Submittals and Other Information to the Committee

- (a) The following timelines apply for the submittal of materials to the Committee for review:
 - 1. Submittals requiring publication of a legal notice: In order for an item to be placed on the meeting agenda, any submittal that requires publication of a legal notice must be received at the Committee office by 12:00 noon on the day fourteen (14) calendar days prior to the meeting date. This timing is subject to modification based upon the posted schedule of meeting dates and application deadlines approved by the Committee and maintained by the Administrator. Submittals that require publication of a legal notice are listed in Section 1.6(4)(a) below. In addition to the required number of paper copies, an electronic copy of such submittals must also be provided to the Committee office by the deadline.
 - 2. Submittals not requiring publication of a legal notice: In order for an item to be placed on the agenda or for the submitted materials to be considered at a meeting, such submittal must be received at the Committee office by 12:00 noon on the day eight (8) business days prior to the meeting date. This timing is subject to modification based upon the posted schedule of meeting dates and application deadlines approved by the Committee and maintained by the Administrator. Submittals that do not require publication of a legal notice include a Request for Plan Change, Request for an Extension Permit, and Request for a Certificate of Compliance or submittal of additional or supplemental materials for an item already on the agenda. In addition to the required number of paper copies, an electronic copy of such submittals or materials must also be provided to the Committee office by the deadline.
- (b) These timelines are the minimum necessary to ensure publication of the legal notice and provide the Committee time for adequate review prior to the meeting date. Supplemental information for a prior submittal that does not meet the above timeline may result in a request for a continuance by the Committee to allow adequate time for review and consideration. However, the Committee reserves the right to exercise its discretion if the submitted material represents only a minor change to a previously submitted document or plan.

(4) Public Hearings and Public Meetings on Submittals to the Committee

- (a) Submittals to the Committee that require a public hearing include a Request for Determination of Applicability, Abbreviated Notice of Resource Area Delineation, Notice of Intent, Request for an Amended Order of Resource Area Delineation, and Request for an Amended Order of Conditions.
- (b) The Committee will generally combine its public hearing conducted under the Bylaw with the hearing under the Act on any given matter.
- (c) A public hearing on a Request for Determination of Applicability, Abbreviated Notice of Resource Area Delineation, Notice of Intent, Request for an Amended Order of Resource Area Delineation, or Request for an Amended Order of Conditions shall be held by the Committee following receipt of the minimum submittal requirements set forth in Sections 1.6(6)(c)3., (7)(b)4., (8)(b)4., and (11)(d)2., respectively, below.
- (d) The public hearing shall be advertised by the Committee, at the expense of the applicant, no less than five (5) days prior to the public hearing in a newspaper of general circulation in the Town and shall be duly posted in accordance with the requirements of the Open Meeting Law. Costs associated with the publication of legal notices are not included in the Bylaw filing fee and shall be paid by the applicant directly to the newspaper publisher. Notice of the public hearing shall be provided by the Committee to the representative, or applicant if a representative is not listed.
- (e) Submittals to the Committee that are to be addressed at a public meeting, but do not require a formal public hearing, include a Request for Plan Change, Request for Extension Permit, and Request for Certificate of Compliance. These submittals do not require abutter notification or legal notice, but shall be duly posted in accordance with the requirements of the Open Meeting Law.
- (f) Public hearings and meetings may be continued as follows:
 - 1. without the consent of the applicant to a date and time certain within 21 days of receipt of the application, for reasons stated at the public hearing, which may include, but not be limited to, untimely receipt of additional information offered by the applicant, a request for additional information and plans requested by the Committee, or in response to comments and recommendations of other local or state boards and officials;
 - 2. with the consent of the applicant, to an agreed-upon date and time certain, which shall be announced at the hearing;
 - 3. when the hearing cannot be continued to a date and time certain, with the consent of the applicant for a period not to exceed 21 days after the submittal of a specific piece of information or the occurrence of a specific event or action. The date, time, and place of said continued hearing shall be re-publicized through a legal notice by the Committee at the expense of the applicant, duly posted in accordance with the requirements of the Open Meeting Law, and notice of the continued public hearing shall be sent by the applicant to all abutters by certified mail, return receipt requested, certificate of mailing, or by hand delivery at least seven (7) days prior to the public hearing, with proof of mailing or delivery provided prior to re-opening of the public hearing; or
 - 4. in the event that a Committee meeting is not held due to a lack of quorum or is cancelled for any reason, all scheduled items on that meeting's agenda shall be continued to the next regularly scheduled meeting of the Committee or to a duly posted special meeting of the Committee called for this purpose.

(5) Filing Fees

- (a) The Bylaw and these regulations establish filing fees for a Request for Determination of Applicability, Abbreviated Notice of Resource Area Delineation, Notice of Intent, Request for an Amended Order of Resource Area Delineation or Amended Order of Conditions, Request for Extension Permit, and Request for

Certificate of Compliance. These fees are separate from and are in addition to the filing fees required under the Act and 310 CMR 10.00, as amended.

- (b) No public hearing shall be opened and no action taken on any matter before the Committee until the appropriate filing fee for the submittal under the Bylaw, as determined by the Committee or its Administrator, has been received. Except as follows, filing fees under the Bylaw are not refundable; the fee for a Waiver of Regulations (“Waiver Fee”) under Section 1.6(5)(e)4. below may be waived or reduced by the Committee in accordance with the provisions of Section 1.6(5)(f) below.
- (c) Any fee listed in Section 1.6(5)(e)3. below will be doubled for any Notice of Intent submitted after any work subject to the regulation of the Committee has been started or completed. Receipt of this doubled filing fee does not preclude the Committee from initiating enforcement actions as outlined in Section 1.7 below.
- (d) The activity categories established at 310 CMR 10.03(7)(c)1. to 6. shall be used to calculate filing fees for a Notice of Intent submitted under the Bylaw. The total Bylaw filing fee for a Notice of Intent that involves more than one activity is determined by adding the Category fees for each proposed activity. The filing fee for a Notice of Intent where work is proposed in the Riverfront Area and another Bylaw Resource Area, including the Buffer Zone shall not be subject to the 1.5 multiplier as required under the Act.
- (e) The Bylaw fees, which apply to all non-municipal projects, are detailed below:
 - 1. Request for Determination of Applicability: \$ 100;
 - 2. Abbreviated Notice of Resource Area Delineation: \$ 2 per linear foot of Bylaw Resource Area boundary with the total fee capped at \$ 200 for a single-family residential lot and \$ 2,000 for any other project;
 - 3. Notice of Intent:
 - a. Category 1: \$ 110;
 - b. Category 2: \$ 500;
 - c. Category 3: \$ 1,050;
 - d. Category 4: \$ 1,450;
 - e. Category 5: \$ 4 per linear foot;
 - f. Category 6: \$ 2 per linear foot of any Bylaw Resource Area boundary with total fee for this Category capped at \$ 200 for a single-family residential lot and \$ 2,000 for any other project;
 - 4. Waiver Fee for a Notice of Intent requiring a Waiver of Regulation under Section 1.6(9) below: \$ 500. The Waiver Fee for any number of Waivers of Regulation requested within a single Notice of Intent is capped at \$ 500. The Waiver Fee must be paid with a separate check than the other Notice of Intent filing fees in Section 1.6(5)(e)3. above;
 - 5. Request for Amended Order of Resource Area Delineation or Amended Order of Conditions: \$ 150;
 - 6. Request for Extension Permit: \$ 100;
 - 7. Request for Certificate of Compliance (Partial or Full):
 - a. for a Valid Order of Conditions: \$ 100; and
 - b. for an Expired Order of Conditions: \$ 200.

(f) A waiver or reduction of the Waiver Fee required in Section 1.6(5)(e)4. above may be allowed by the Committee under certain circumstances. A Notice of Intent that requests a Waiver of Regulation often requires a higher level of Committee and Administrator review and scrutiny than a Notice of Intent with an activity that fully complies with the performance standards. For example, the Committee and Administrator may spend more time reviewing documents submitted as part of the Notice of Intent, evaluating whether the proposed activity fully meets the more stringent requirements of the regulations, and/or determining adequate conditions to preserve and protect Bylaw Interests and Values should the Committee elect to allow such an activity.

1. Certain work that may qualify for a waiver or reduction of the Waiver Fee may not require a substantially higher level of review or scrutiny or may require an intermediate level of review compared to a project that fully complies with the performance standards. Examples of such projects include, but are not limited to, the following:
 - a. work where the land within the 25-foot No Disturbance Zone (i.e., within 25 feet of Water Bodies and Waterways, Bank, Bordering Vegetated Wetlands, or Isolated Vegetated Wetlands) is lawfully existing lawn, pavement, or structure and no impervious surfaces are proposed to be constructed closer to the above-listed Bylaw Resource Areas;
 - b. work within 25 feet of Water Bodies and Waterways or Bank where the boundary is a man-made wall and the land within 25 feet of the above-listed Bylaw Resource Areas is an extensively altered area as defined in Section 1.5 above or otherwise is not important to the preservation or protection of wildlife habitat;
 - c. minor construction associated with a single-family house on a lot created prior to April 9, 2002 where the lot is 20,000 square feet or smaller in size;
 - d. work which consists solely of the restoration of previously altered Bylaw Resource Areas to a natural condition;
 - e. work where the only activity or activities that do not comply with the performance standards are the installation of erosion controls, mitigation plantings with adequate safeguards, and/or removal of invasive species in accordance with the Town of Wellesley Integrated Pest Management Policy, as applicable; or
 - f. work that is necessary for public safety.
2. In order for the Committee to consider waiving or reducing the Waiver Fee, the applicant must submit a written request for such waiver or reduction that states how the proposed project meets one or more of the above criteria. A written request for a fee waiver will also be deemed as a request for a fee reduction if the Committee determines that a fee less than the full fee amount is warranted.
3. The check for the Waiver Fee for any Notice of Intent that requests a Waiver of Regulation must be included when the Notice of Intent is submitted. In the event the Waiver Fee is waived, the submitted Waiver Fee check will be returned to the applicant with the Order Conditions. In the event the Waiver Fee is reduced by the Committee, the applicant will be asked to submit a new check for the required amount, and the originally submitted Waiver Fee check will be returned to the applicant.

(6) Requests for Determination of Applicability and Determinations of Applicability

- (a) A Request for Determination of Applicability is a formal request that the Committee determine whether the Bylaw applies to land, or to work that may affect a Bylaw Resource Area. A Request for Determination of Applicability may also be used to identify the required scope of analysis for work proposed in the Riverfront Area. A Request for Determination of Applicability should generally not be used to confirm the type and

boundaries of Bylaw Resource Areas on a property; an Abbreviated Notice of Resource Area or a Notice of Intent are the proper processes for Bylaw Resource Area type and boundary confirmation.

(b) Any proposed activity or activities that result in 400 square feet or greater total soil disturbance requires the filing of a Notice of Intent. Certain activities, while located within the Buffer Zone outside of the 25-foot No Disturbance Zone (i.e., greater than 25 feet from Water Bodies and Waterways, Bank, Bordering Vegetated Wetlands, and Isolated Vegetated Wetlands) are unlikely to affect to ability of the Bylaw Resource Area to preserve and protect the Bylaw Interests and Values. Examples of activities that require review by the Committee under a Request for Determination of Applicability and do not normally require review under a Notice of Intent include, but are not limited to, the following:

1. installing a shed on blocks or piles within lawfully existing lawn;
2. installing an aboveground pool within lawfully existing lawn provided that adequate erosion controls are used;
3. converting lawfully existing lawn to a structure or impervious surface accessory to a single-family house, such as a deck, patio, or driveway, provided that adequate erosion control measures are used; or
4. converting a lawfully existing structure or impervious surface accessory to a single-family house to lawn, landscaping, or natural vegetation, provided that adequate erosion controls are used.

(c) Requests for Determination of Applicability

1. Any person who desires a determination as to whether the Bylaw applies to land or to work that may affect a Bylaw Resource Area, or seeks confirmation of the scope of analysis for work in the Riverfront Area, shall submit to the Committee by certified mail or by hand delivery seven (7) copies of the complete Request for Determination of Applicability. An electronic copy shall also be submitted.
2. The Request for Determination of Applicability form (WPA Form 1) used under the Act and 310 CMR 10.00, as amended, shall be used for all such submittals under the Bylaw.
3. In addition to the completed, signed, and dated form, the Request for Determination of Applicability shall at a minimum include:
 - a. a locus map with sufficient detail to locate the site;
 - b. a plan showing the site, the land and/or proposed activity and the boundary of all applicable Bylaw Resource Areas. The location of the limit of work and erosion control barrier, if needed, should be shown on the plan. Depending upon the size of the site and complexity of any proposed activity, the Committee strongly encourages that such plans be prepared and stamped and signed by a Professional Land Surveyor or Registered Professional Engineer;
 - c. a written description of the land and/or the activity, or sufficient information to allow the Committee to confirm the scope of analysis for work in the Riverfront Area;
 - d. any additional supporting information, such as a wetland report, plot plans, sketches, and photographs;
 - e. any Request for Determination of Applicability Checklist approved by the Committee and maintained by the Administrator and all additional materials required by such checklist; and
 - f. A check made payable to the Town of Wellesley with the Request for Determination filing fee as specified in Section 1.6(5)(3)1. above.

4. Abutter notification is not required for a Request for Determination of Applicability. As detailed in Section 1.6(4)(d) above, the public hearing shall be advertised by the Committee, at the expense of the applicant, no less than five (5) days prior to the public hearing in a newspaper of general circulation in the Town and shall be duly posted in accordance with the requirements of the Open Meeting Law.
5. When the person submitting a Request for Determination of Applicability is not the owner of the subject land, a complete copy of the Request for Determination of Applicability shall be sent by the applicant to the owner via certified mail, return receipt requested or by hand delivery at least five (5) days before the hearing with proof of mailing or delivery, respectively, provided to the Committee prior to the opening of the hearing on the matter.

(d) Determinations of Applicability

1. Within 21 days after receipt of a Request for Determination of Applicability, the Committee shall hold a public hearing on the matter.
2. After the public hearing on the matter has been closed, the Committee will vote to issue:
 - a. a positive Determination of Applicability that finds the land is subject to regulation under the Bylaw, or that the activity proposed is deemed likely to affect one or more of the Bylaw Interests and Values and a Notice of Intent shall be required for that activity. All procedures set forth Section 1.6(8) below shall apply prior to the start of the proposed activity;
 - b. a negative Determination of Applicability that finds the area is not subject to regulation under the Bylaw, or that the proposed activity is not likely to affect the Bylaw Interests and Values and therefore a Notice of Intent is not required for such activity; or
 - c. a positive Determination of Applicability that confirms the required scope of analysis for work proposed in the Riverfront Area.
3. The decision shall be issued on the Determination of Applicability form (WPA Form 2) used under the Act and 310 CMR 10.00, as amended, shall be signed by a majority of the Committee, and the original shall be sent to the applicant with a copy to the owner, if different, by certified mail or by hand delivery within 21 days of the close of the public hearing or any continuance thereof.
4. A Determination of Applicability may be issued jointly under the Act and the Bylaw.
5. A Determination of Applicability shall be valid for three years from the date of issuance and may not be amended or extended.
6. A copy of the Determination of Applicability and the plans shall be kept on file by the Committee and shall be available to the public at reasonable hours.
7. A Determination of Applicability does not need to be recorded at the Registry of Deeds or the Land Court.

(7) Abbreviated Notices of Resource Area Delineation and Orders of Resource Area Delineation

- (a) An Abbreviated Notice of Resource Area Delineation is a formal request that the Committee review and confirm the types and boundaries of Bylaw Resource Areas on a property. The applicant may submit this notice to seek confirmation of the types and boundaries of one to all of the Bylaw Resource Areas that may occur on a property; however, the Committee will only make findings relative to those resources for which the applicant seeks confirmation and may issue a finding that other unconfirmed resources may occur on the property. No work will be specifically approved by the Committee as part of this process. The Committee recommends that this process be completed prior to site design and the submittal of a Notice of Intent for

larger or more complex projects, or where work may be proposed within or in proximity to Bylaw Resource Areas. This process is referred to as a Request for Wetland Delineation and Determination of Wetland Delineation in the Bylaw.

(b) Abbreviated Notice of Resource Area Delineation

1. Any person who desires confirmation of the types and boundaries of any or all Bylaw Resource Areas on a property shall submit to the Committee by certified mail or by hand delivery seven (7) copies of the complete Abbreviated Notice of Resource Area Delineation. An electronic copy shall also be submitted.
2. The Abbreviated Notice of Resource Area Delineation form (WPA Form 4A) used under the Act and 310 CMR 10.00, as amended, shall be used for all such submittals under the Bylaw.
3. The Abbreviated Notice of Resource Area Delineation form shall be signed by both the applicant and the owner of the property subject to the submittal. In the event that the owner is not able to sign the form, the owner must provide written authorization that the Notice of Resource Area Delineation may be submitted.
4. In addition to the completed, signed, and dated form, the Abbreviated Notice of Resource Area Delineation shall at a minimum include:
 - a. a locus map with sufficient detail to locate the site;
 - b. a copy of the certified abutters list and the abutter notification form;
 - c. a site plan prepared by a Registered Land Surveyor that shows the site boundaries, existing site conditions, all applicable Bylaw Resource Area boundaries, topography with 1- or 2-foot contours, and be at a scale between 1" = 10' and 1" = 50'. The site plan must be stamped and signed by the Professional Land Surveyor;
 - d. certification from the wetland scientist responsible for the wetland delineation, stating the date of the delineation, the basis for the delineation, including quantitative field data sheets for both upland and wetland plots, and a statement that the flags indicated on the site plan appear to be correctly shown;
 - e. any additional supporting information, such as engineering calculations and photographs;
 - f. any Abbreviated Notice of Resource Area Delineation Checklist approved by the Committee and maintained by the Administrator and all additional materials required by such checklist;
 - g. an explanation of how the filing fee under the Bylaw was calculated; and
 - h. a check made payable to the Town of Wellesley with the Abbreviated Notice of Resource Area Delineation filing fee as specified in Section 1.6(5)(e)2. above.
5. Any person submitting an Abbreviated Notice of Resource Area Delineation to the Committee under the Bylaw at the same time shall give written notice thereof in accordance with the Bylaw by certified mail, return receipt requested; certificate of mailing; or by hand delivery to all abutters located within 300 feet of the property according to the most recent records of the assessors. The notice shall state where a copy of the submittal may be examined or obtained and where the date, time, and place of the public hearing may be obtained. Written notice shall be sent to all abutters not less than seven (7) days prior to the public hearing. An Affidavit of Service shall be included in the submittal or provided prior to the opening of the public hearing. Proof of mailing or delivery shall be provided to the Committee prior to the opening the public hearing. As detailed in Section 1.6(4)(d) above, the public hearing shall be advertised by the Committee, at the expense of the applicant, no less than five (5) days prior to the

public hearing in a newspaper of general circulation in the Town and shall be duly posted in accordance with the requirements of the Open Meeting Law.

6. When a person submitting an Abbreviated Notice of Resource Area is other than the owner of the subject property, a complete copy of the submittal shall be sent by the applicant to the owner via certified mail, return receipt requested, or by hand delivery at least five (5) days before the hearing with proof of mailing or delivery provided to the Committee prior to the opening of the public hearing.

(c) Order of Resource Area Delineation

1. Within 21 days after receipt of an Abbreviated Notice of Resource Area Delineation, the Committee shall hold a public hearing on the matter.
2. After the public hearing has been closed, the Committee will vote to issue:
 - a. an approval Order of Resource Area Delineation with findings that confirm the submitted or modified Bylaw Resource Area types and boundaries; or
 - b. a denial Order of Resource Area Delineation with findings that do not confirm the submitted Bylaw Resource Area types and boundaries.
3. The decision shall be issued on the Order of Resource Area Delineation form (WPA Form 4B) used under the Act and 310 CMR 10.00, as amended, shall be signed by a majority of the Committee, and the original shall be sent to the applicant with a copy to the owner, if different, by certified mail or by hand delivery within 21 days of the close of the public hearing or any continuance thereof.
4. An Order of Resource Area Delineation may be issued jointly under the Act and the Bylaw.
5. An Order of Resource Area Delineation shall be valid for three years from the date of issuance and may be amended and/or extended by the applicant pursuant to Sections 1.6(11) and (13), respectively, below.
6. A copy of the Order of Resource Area Delineation and the plans describing the Bylaw Resource Areas shall be kept on file by the Committee and shall be available to the public at reasonable hours.
7. An Order of Resource Area Delineation does not need to be recorded at the Registry of Deeds or the Land Court.

(8) Notices of Intent and Orders of Conditions

- (a) A Notice of Intent is a formal request that the Committee review a proposed activity that will remove, fill, dredge, build upon, or alter a Bylaw Resource Area. The Committee will conduct a review of the proposed activity in the context of the Bylaw and its regulations and either issue an Order of Conditions with conditions necessary to allow the proposed activity to proceed because it preserves or protects the Bylaw Interests and Values or issue an Order of Conditions that denies the proposed activity because it cannot be conditioned to preserve or protect the Bylaw Interests and Values. This process is referred to as an Application for Permit and Permit in the Bylaw.

(b) Notices of Intent

1. Any person who proposes to do work that will remove, fill, dredge, build upon, or alter any Area Subject to Protection Under the Bylaw shall submit by certified mail or by hand delivery seven (7) copies of the complete Notice of Intent. An electronic copy shall also be submitted.

2. Both the Notice of Intent form (WPA Form 3) used under Act and 310 CMR 10.00, as amended, and the Town of Wellesley Notice of Intent form approved by the Committee and maintained by the Administrator shall be used for all Notice of Intent submittals under the Bylaw.
3. The Notice of Intent form (WPA Form 3) shall be signed by both the applicant and the owner of the property subject to the submittal. In the event that the owner is not able to sign the form, the owner must provide written authorization that the Notice of Intent may be submitted. The Town of Wellesley Notice of Intent form provides supplemental information related to Bylaw Resource Areas and does not require additional signatures.
4. In addition to the completed, signed, and dated WPA Form 3, the Notice of Intent shall at a minimum include:
 - a. the Town of Wellesley Notice of Intent form;
 - b. a locus map on the appropriate current USGS quadrangle;
 - c. a narrative describing the existing and proposed site conditions, including proposed activities in Bylaw Resource Areas and proposed mitigation activities;
 - d. a valid Order of Resource Area Delineation or certification from the wetland scientist responsible for the wetland delineation, stating the date of the delineation, the basis for the delineation including quantitative field data sheets for both upland and wetland plots, and a statement that the flags indicated on the site plan appear to be correctly show;
 - e. a wildlife habitat assessment signed by a wildlife scientist, when required by these regulations;
 - f. a compliance evaluation to demonstrate how the proposed project meets all of the applicable performance standards for each Bylaw Resource Area within which an activity is proposed;
 - g. a compliance evaluation to demonstrate how the proposed project meets the applicable stormwater management standards identified in this section of the regulations, when triggered. No Bylaw Resource Area other than Buffer Zone, Riverfront Area, Bordering Land Subject to Flooding, or Isolated Land Subject to Flooding may be altered or filled for the impoundment, detention, or retention of stormwater and the applicable performance standards for these Bylaw Resource Areas under these regulations shall apply to any such alteration or fill. Except as expressly provided in Sections 1.6(8)(b)4.g.1) or 2) below, stormwater runoff from all industrial, commercial, institutional, office, residential, and transportation projects that are subject to regulation under the Bylaw including site preparation, construction, and redevelopment and all point source stormwater discharges from said projects within any Bylaw Resource Area shall be provided with stormwater best management practices to attenuate peak rate and volume of runoff, attenuate pollutants, and to provide a set back from receiving waters and wetlands in accordance with the applicable standards below and the Massachusetts Stormwater Handbook. In project design, the applicant shall consider environmentally sensitive site design and low impact development techniques to manage stormwater;
 - 1) the stormwater management regulations set forth at 310 CMR 10.05(6)(k) to (q) shall apply to any project pursuant to said regulations where any work is proposed within any Bylaw Resource Area or where a stormwater discharge is proposed within any Bylaw Resource Area, including the Buffer Zone. In addition to meeting the ten stormwater management standards at 310 CMR 10.05(6)(k), stormwater best management practices shall be provided to reduce by at least five (5) percent the peak runoff rates and volumes under proposed conditions compared to existing conditions for the 2- and 10-year frequency storm events and peak runoff rates and volumes under proposed conditions compared to existing conditions shall not exceed existing peak runoff rates and volumes for the 50- and 100-year frequency storm events. Drainage

calculations must include existing and proposed runoff rates and volumes for the 2-, 10-, 50-, and 100-year frequency storm events to all site design points with a narrative summary and summary table and be stamped and signed by a Registered Professional Engineer. Such calculations shall be conducted in accordance with standard recognized engineering practices using rainfall data from *NOAA Atlas 14*, NOAA Hydrometeorological Design Studies Center, September 2015 (http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmark=ma). The specific rainfall data to be used in such calculations under the Bylaw are from central Wellesley and are 3.31 inches for the 2-year, 24-hour event, 5.19 inches for the 10-year, 24-hour event, 7.26 inches for the 50-year, 24-hour event, and 8.17 inches for the 100-year, 24-hour event. Prior administrative review and approval under Section 1.3(4)(c) of these regulations is required for any test pit proposed to be excavated within any Bylaw Resource Area, including the Buffer Zone;

- 2) projects that do not trigger the stormwater management regulations cited in Section 1.6(8)(b)4.g.1) above shall, at a minimum, meet the following stormwater management standards when the proposed project would result in greater than a five (5) percent increase in impervious surfaces on the site;
 - a) there shall be no new stormwater conveyances that discharge untreated stormwater directly to or cause erosion within Bylaw Resource Areas;
 - b) peak runoff rates and volumes under proposed conditions must be reduced by at least five (5) percent compared to existing conditions for the 2- and 10-year frequency storm events and must not exceed existing peak runoff rates and volumes for the 50- and 100-year frequency storm events. Drainage calculations must include existing and proposed runoff rates and volumes for the 2-, 10-, 50-, and 100-year frequency storm events using the rainfall data provided in Section 1.6(8)(b)4.g.1) above to all site design points with a narrative summary and summary table and be stamped and signed by a Registered Professional Engineer;
 - c) loss of recharge to the groundwater shall be minimized through the use of infiltration measures, including, but not limited to environmentally sensitive site design, low impact development techniques, stormwater best management practices, and good operations and maintenance. This standard shall be met when the stormwater management system is designed to infiltrate the required recharge volume based upon soil type in accordance the Massachusetts Stormwater Handbook. There shall be pretreatment of stormwater runoff from any impervious surface other than a non-metal roof prior to infiltration. Documentation from soil test pit(s) excavated in the area of any proposed infiltration system shall be included in the filing to demonstrate a minimum of two feet of separation from the bottom of the proposed system and seasonal high groundwater, and to confirm the soil type used in the infiltration calculations. In the case where two feet of separation cannot be achieved or when the soils do not support infiltration, other stormwater management options including low impact development techniques shall be considered. Prior administrative review and approval under Section 1.3(4)(c) of these regulations is required for any test pit proposed to be excavated within any Bylaw Resource Area, including the Buffer Zone;
 - d) site and stormwater management design shall consider the presence of critical areas. Critical areas are recharge areas for public water supplies as defined at 310 CMR 22.02 (i.e., Zone I, Zone II, and Interim Wellhead Protection Areas for groundwater sources and Zone A for surface water sources), Outstanding Resource Waters and Special Resource Waters as designated at 314 CMR 4.06, bathing beaches as defined at 105 CMR 445.000, and cold-water fisheries as defined at 314 CMR 9.02 and 310 CMR 10.04. A discharge within the Zone II of a public water supply or within or near any other critical area requires the use of specific source control and pollution prevention measures and the use of

specific structural stormwater best management practices identified for such areas in the Massachusetts Stormwater Handbook. A discharge is near a critical area if there is a strong likelihood of a significant impact occurring to said area, taking into account site-specific factors. Stormwater discharges to critical areas shall be removed from or set back from receiving waters or wetlands and shall receive the highest and best practical method of treatment commensurate with the scope of the proposed project. There shall be no stormwater discharges to the Zone I of a public water supply well unless essential to the operation of the public water supply;

- e) a construction period erosion and sedimentation control plan commensurate in scope with the proposed project and its potential to affect Bylaw Resource Areas shall be provided for review and implemented during construction; and
 - f) an operations and maintenance plan commensurate in scope with the proposed project shall be provided for review and implemented post-construction which identifies the responsible party and provides the inspection and maintenance requirements for all proposed stormwater system components.
- h. if a Waiver of Regulation is requested, narrative and other documentation to demonstrate that the proposed activity meets the criteria for the two-step process described in Section 1.6(9)(b) below.
- i. all plans submitted to the Commission must be stamped and signed by a Professional Land Surveyor and/or Registered Professional Engineer, as applicable, and must conform with the following guidelines:
- 1) all site plans shall be at a scale of 1" = 10' to 1" = 50". If more than one plan sheet is necessary to show the entire site, an index sheet must be provided;
 - 2) the site plans shall show both existing and proposed conditions. All existing and proposed structures and accessory site features, such as driveways, walks, patios, pools, fencing, stonewalls, stormwater management systems, limit of existing and proposed lawn/forest, and limit of any existing extensively altered area shall be shown. The plans shall also show existing trees (dbh 5 inches or larger) located within the Limit of Work for the project, identify the species and size, and indicate if the tree is to be removed. All existing and proposed grades with a 1- to 2-foot maximum contour interval shall be shown. If necessary for clarity, separate existing and proposed conditions sheets shall be provided;
 - 3) the boundaries of all Bylaw Resource Areas shall be clearly shown. The locations and numbers of all wetland flags must be clearly shown. The Buffer Zone and 25-foot No Disturbance Zone from all pertinent resource areas shall be clearly shown;
 - 4) the limit of work or clearing must be shown, together with the minimum distance to the closest Bylaw Resource Area;
 - 5) the location of all erosion control measures must be shown. Plans must indicate the type of erosion control measures to be used and include a detail for each type of erosion control proposed;
- j. any Notice of Intent Checklist approved by the Committee and maintained by the Administrator and all additional materials required by such checklist;
- k. an explanation of how the Notice of Intent filing fee under the Bylaw was calculated; and
- l. a check made payable to the Town of Wellesley with the Notice of Intent filing fee as specified in Section 1.6(5)(e)3. above. Should a Waiver of Regulation be requested, the Waiver Fee required at

Section 1.6(5)(e)4. above shall be paid with a separate check also made payable to the Town of Wellesley.

5. Any person submitting a Notice of Intent to the Committee under the Bylaw at the same time shall give written notice thereof in accordance with the Bylaw by certified mail, return receipt requested; certificate of mailing; or by hand delivery to all abutters located within 300 feet of the property according to the most recent records of the assessors. The notice shall state where a copy of the submittal may be examined or obtained and where the date, time, and place of the public hearing may be obtained. Written notice shall be sent to all abutters not less than seven (7) days prior to the public hearing. An Affidavit of Service shall be included in the submittal or provided prior to the opening of the public hearing. Proof of mailing or delivery shall be provided to the Committee prior to the opening the public hearing. As detailed in Section 1.6(4)(d) above, the public hearing shall be advertised by the Committee, at the expense of the applicant, no less than five (5) days prior to the public hearing in a newspaper of general circulation in the Town and shall be duly posted in accordance with the requirements of the Open Meeting Law.
6. When a person submitting a Notice of Intent is other than the owner of the subject property, a complete copy of the submittal shall be sent by the applicant to the owner via certified mail, return receipt requested, or by hand delivery at least five (5) days before the hearing with proof of mailing or delivery provided to the Committee prior to the opening of the hearing.

(c) Orders of Conditions

1. Within 21 days after receipt of a Notice of Intent, the Committee shall hold a public hearing on the matter.
2. After the public hearing has been closed, the Committee will vote to issue:
 - a. an approval Order of Conditions with findings that includes such conditions as deemed necessary by the Committee for the preservation and protection of the Bylaw Interests and Values. The Order of Conditions shall impose conditions on the work or portion thereof that will, in the judgment of the Committee, result in removing, dredging, filling, building upon, or altering a Bylaw Resource Area. The Permit shall prohibit any work, or portions thereof, that cannot be conditioned to protect the Bylaw Interests and Values; or
 - b. a denial Order of Conditions with findings that explains the reasons and rationale for the denial. A denial Order of Conditions may be issued for one or more of the following reasons:
 - 1) failure to meet the requirements of the Bylaw;
 - 2) failure to submit necessary information or plans requested by the Committee;
 - 3) failure to meet design specifications, performance standards, or other requirements of these regulations;
 - 4) failure to avoid or prevent unacceptable or cumulative effects upon the Bylaw Interests and Values; and/or
 - 5) when the Committee determines that no conditions are adequate to safeguard the Bylaw Interests and Values.
3. The decision shall be issued on the Order of Conditions form (WPA Form 5) used under Act and 310 CMR 10.00, as amended, shall be signed by a majority of the Committee, and the original shall be sent to the applicant with a copy to the owner, if different, by certified mail or by hand delivery within 21 days of the close of the public hearing or any continuance thereof.

4. An Order of Conditions may be issued jointly under the Act and the Bylaw.
5. An Order of Conditions shall be valid for three years from the date of issuance and may be amended and/or extended by the applicant pursuant to Sections 1.6(11) and (13), respectively, below. The Committee may issue an Order of Conditions expiring five (5) years from the date of issuance for recurring or continuous maintenance work, providing that annual notification of time and location of work is provided in writing to the Committee. An Order of Conditions is voided upon issuance of a full Certificate of Compliance.
6. A copy of the Order of Conditions and the plans describing the work shall be kept on file by the Committee and shall be available to the public at reasonable hours.
7. Prior to the commencement of any work permitted or required by the Order of Conditions, the original complete approval Order of Conditions 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 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 to be done. In the case of registered land, the Order of Conditions 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. Proof of recording shall be sent to the Committee. If work is undertaken without the Order of Conditions first being recorded, the Committee may issue an Enforcement Order or may itself record the Order of Conditions and seek reimbursement of any recording fees from the applicant. A denial Order of Conditions shall not be recorded in the Registry of Deeds or the Land Court.
8. For good cause the Committee may revoke or modify an Order of Conditions issued under the Bylaw after public notice, notice to the holder of the Order of Conditions, and public hearing.

(9) Waiver of Regulation

- (a) The performance standards for Bylaw Resource Areas have been adopted in these regulations to ensure that the Bylaw Interests and Values are adequately preserved and protected. The Committee recognizes that in certain situations a Waiver of Regulation for a particular performance standard or standards may be appropriate when the requested Waiver of Regulation is consistent with the intent and purpose of the Bylaw and its regulations. The applicant shall have the burden of proof to demonstrate that granting of the Waiver of Regulation by the Committee is consistent with the intent and purpose of the Bylaw and these regulations. The Committee shall act on the written request for a Waiver of Regulation.
- (b) Strict compliance with the regulations may be waived by the Committee when the applicant has met its burden of proof with regard to the proposed request for a Waiver of Regulation. The applicant must show, clearly and convincingly, in writing through the following two-step process that:
 1. the proposed activity is necessary because:
 - a. such work would serve a substantial public interest, including the protection of the Bylaw Interests and Values; or
 - b. such work is required for compliance with the Massachusetts Contingency Plan (310 CMR 40.0000 *et seq.*); or
 - c. such work is required to protect public safety; or
 - d. strict compliance with the regulations would result in a hardship greater in magnitude than the Bylaw Interests and Values to be preserved or protected; or

- e. a credible expert has demonstrated that the Bylaw Resource Area does not serve to preserve or protect any of the applicable Bylaw Interests and Values; **and**
- 2. no waiver shall be granted unless:
 - a. there is no practicable and substantially equivalent economic alternative with less harmful effects to the Bylaw Interests and Values; **and**
 - b. the work and its natural, consequential, and cumulative effects on the Bylaw Interests and Values have been minimized; **and**
 - c. mitigation measures designed to functionally improve or enhance the natural capacity of the affected Bylaw Resource Area and/or other Bylaw Resource Areas to preserve or protect the Bylaw Interests and Values are provided as part of the submittal. If warranted, the Committee may require that mitigation be implemented before the alterations granted by the waiver may be conducted.

(10) Security

- (a) In addition to any security required by any other municipal or state board, agency, or official, the Committee may require as part of an Order of Conditions issued under the Bylaw that the performance and observance of the conditions imposed in the Order of Conditions be secured, wholly or in part, by one or both of the following two methods:
 - 1. by proper bond or deposit of money or negotiable securities or other undertaking of financial responsibility given to the Town in an amount and form determined by the Committee to be sufficient to secure the completion of all conservation-related work required by the Order of Conditions. The Committee may require the applicant to specify the timeframe within which all such construction shall be completed. The sum of any such bond shall bear a direct and reasonable relationship to the expected costs, including inflation, necessary to complete the work within the specified timeframe. Upon application by the person or entity that provided the security, such amount may be reduced from time to time and upon the issuance of a full Certificate of Compliance as is, in the determination of the Committee, appropriate to reflect the actual expected costs of the work that remains to be completed; and/or
 - 2. by a covenant enforceable in a court of law, executed and duly recorded within 21 days of the issuance of the Order of Conditions in the Registry of Deeds or the Land Court for the district in which the land is located by the record owner, running with the land to the benefit of the Town, requiring that the permit conditions in the Order of Conditions be fulfilled to the satisfaction of the Committee before any lot may be conveyed other than by mortgage deed. This method of security shall be used only with the consent of the applicant and record owner.

(11) Request for Plan Change or Amended Order of Resource Area Delineation or Amended Order of Conditions

- (a) Following the issuance of a final Order of Resource Area Delineation or final Order of Conditions, unforeseen circumstances may arise which may require minor deviations from the approved plan. Under certain limited circumstances, it is not reasonable to require the submittal of a new Notice of Resource Area Delineation or Notice of Intent to address minor changes to a plan or changes in proposed activities that would have unchanged or reduced impacts on the Bylaw Interests and Values. The Committee may allow for a Plan Change or an Amended Order of Resource Area Delineation or Amended Order of Conditions. However, allowing a Plan Change or an Amended Order of Resource Area Delineation or Amended Order of Conditions is solely at the discretion of the Committee. An expired Order of Resource Area Delineation or Order of Conditions cannot be changed or amended.
- (b) It must be noted that unlike an Order of Conditions, an Order of Resource Area Delineation cannot be closed out through the issuance of a Certificate of Compliance. Therefore, the submittal of a new Notice of

Resource Area Delineation prior to the expiration of a valid Order of Resource Area covering the same property could result in the rejection of the submittal or issuance of a denial Order of Resource Area Delineation under the Bylaw by the Committee.

(c) Request for Plan Change

1. A Request for Plan Change is allowed for essentially insubstantial changes to the approved plan that will have no additional impacts to Bylaw Resource Areas or the Bylaw Interests and Values compared with the approved plan and require no changes to the Order of Resource Area Delineation or Order of Conditions other than a change to the plan reference or the correction of a typographical error. The Committee reserves the right to require a Request for an Amended Order of Resource Area Delineation or Amended Order of Conditions to be submitted in lieu of a Request for Plan Change.
2. Seven (7) copies of the Request for Plan Change shall be submitted by certified mail or by hand delivery to the Committee and shall include the proposed changes and the reasons why the proposed changes would qualify for a Plan Change. A Request for Plan Change does not have a filing fee and does not require abutter notification or a published legal notice, but is required to be duly posted in accordance with the Open Meeting Law.
3. Within 21 days after receipt of a Request for Plan Change, the Committee shall discuss the matter at a public meeting. The Committee will vote to:
 - a. approve the proposed change as a Plan Change and issue a written decision with findings and the new plan reference or document correction; or
 - b. deny the proposed change as a Plan Change and issue a written decision with findings that explains the reasons and rationale for the denial.
4. The decision shall be in writing, signed by the Committee Chair or the Administrator, and shall be sent by the Committee to the applicant and owner within 21 days of the of the public meeting at which it was discussed. The decision to issue or deny a Plan Change is not subject to appeal; an approved Plan Change is not subject to appeal. The denial of a Request for Plan Change may be remedied through a Request for Amended Order of Resource Area Delineation or Request for Amended Order of Conditions, as appropriate, or through the submittal of a new Notice of Resource Area Delineation subject to Section 1.6(11)(b) above or the submittal of a new Notice of Intent, as appropriate.
5. A copy of the Plan Change and the plans shall be kept on file by the Committee and shall be available to the public at reasonable hours.
6. A Plan Change does not need to be recorded at the Registry of Deeds or the Land Court.

(d) Request for Amended Order of Resource Area Delineation or Amended Order of Conditions

1. A Request for Amended Order of Resource Area Delineation or Amended Order of Conditions is allowed for relatively minor changes to the approved plan that for an Order of Resource Area Delineation may include a case where a Bylaw Resource Area identification or boundary was the result of a mutual error, and for an Order of Conditions may include a project change that would have the same or reduced impacts to Bylaw Resource Areas and the associated Bylaw Interests and Values compared with the approved project. The Committee will consider whether the scope of the project has increased or has changed significantly from the approved project, the proposed project change increases impacts to Bylaw Resource Areas, meets the applicable performance standards, or increases the potential for adverse impacts to the Bylaw Interests and Values. Relatively minor changes that result in the same or decreased impacts to the Bylaw Interest and Values are appropriate for an amendment. The Committee reserves the right to require a new Notice of Resource Area Delineation subject to Section 1.6(11)(b)

above or a new Notice of Intent in lieu of a Request for Amended Order of Resource Area Delineation or Amended Order of Conditions.

2. Seven (7) copies of the Request for an Amended Order of Resource Area Delineation or an Amended Order of Conditions shall be submitted by certified mail or hand delivery to the Committee. The submitted materials shall include all plans and documents necessary to show and describe the proposed changes and demonstrate that the requirements for an Amended Order of Resource Area Delineation or an Amended Order of Conditions are satisfied.
3. Any person submitting a Request for Amended Order of Resource Area Delineation or a Request for Amended Order of Conditions with the Committee under the Bylaw at the same time shall give written notice thereof in accordance with the Bylaw by certified mail, return receipt requested; certificate of mailing; or by hand delivery to all abutters located within 300 feet of the property according to the most recent records of the assessors. The notice shall state where a copy of the submittal may be examined or obtained and where the date, time, and place of the public hearing may be obtained. Written notice shall be sent to all abutters not less than seven (7) days prior to the public hearing. An Affidavit of Service shall be included in the submittal or provided prior to the opening of the public hearing. Proof of mailing or delivery shall be provided to the Committee prior to the opening the public hearing. As detailed in Section 1.6(4)(d) above, the public hearing shall be advertised by the Committee, at the expense of the applicant, no less than five (5) days prior to the public hearing in a newspaper of general circulation in the Town and shall be duly posted in accordance with the requirements of the Open Meeting Law.
4. When a person submitting a Request for Amended Order of Resource Area Delineation or a Request for Amended Order of Conditions is other than the owner of the subject property, a complete copy of the submittal shall be sent by the applicant to the owner via certified mail, return receipt requested or by hand delivery at least five (5) days before the hearing with proof of mailing or delivery provided to the Committee prior to the opening of the hearing on the matter.
5. Upon receipt by the Committee of the information required in Section 1.6(11)(c)2. above and a check made payable to the Town of Wellesley with the Request for Amended Order of Resource Area Delineation or Amended Order of Conditions fee as specified in Section 1.6(5)(e)5. above, a site inspection, if deemed necessary, and review of the Request for Amended Order of Resource Area Delineation or Request for Amended Order of Conditions shall commence. Within 21 days of the receipt of the complete Request for Amended Order of Resource Area Delineation or Request for an Amended Order of Conditions, the Committee shall hold a public hearing on the matter. After the public hearing has been closed, the Committee will vote to:
 - a. approve the Request for an Amended Order of Resource Area Delineation or Amended Order of Conditions and issue an Amended Order of Resource Area Delineation with findings that address the accepted revisions or an Amended Order of Conditions with findings and that includes such conditions as deemed necessary by the Committee for the preservation and protection of the Bylaw Interests and Values. The Amended Order of Conditions shall impose conditions on the work or portion thereof that will, in the judgment of the Committee, result in removing, dredging, filling, building upon, or altering a Bylaw Resource Area. The Amended Order of Conditions shall prohibit any work, or portions thereof, that cannot be conditioned to protect the Bylaw Interests and Values; or
 - b. deny the Request for Amended Order of Resource Area Delineation or Request for Amended Order of Conditions and issue a written decision with findings that explains the reasons and rationale for the denial. The decision shall be in writing, signed by the Committee Chair or the Administrator, and shall be sent by the Committee to the applicant and owner within 21 days of the of the public hearing. The decision to deny a Request for an Amended Order of Resource Area Delineation or an Amended Order of Conditions is not subject to appeal. The denial may be remedied through the

submittal of a new Notice of Resource Area Delineation subject to Section 1.6(11)(b) above or a new Notice of Intent, as appropriate.

6. The approval decision shall be issued on the Order of Resource Area Delineation form (WPA Form 4B) or Order of Conditions form (WPA Form 5) used under Act and 310 CMR 10.00, as amended, as appropriate, with the Amended box checked, shall be signed by a majority of the Committee, and the original shall be sent to the applicant with a copy to the owner, if different, by certified mail or by hand delivery within 21 days of the close of the public hearing or any continuance thereof.
7. An Amended Order of Resource Area Delineation or Amended Order of Conditions may be issued jointly under the Act and the Bylaw.
8. An Amended Order of Resource Area Delineation or Amended Order of Conditions retains the expiration date of the original Order of Resource Area Delineation or Order of Conditions. An Amended Order of Resource Area Delineation or Amended Order of Conditions may be amended and/or extended by the applicant pursuant to Section 1.6(11) above and Section 1.6(13) below, respectively.
9. A copy of the Amended Order of Resource Area Delineation or Amended Order of Conditions and the plans shall be kept on file by the Committee and shall be available to the public at reasonable hours.
10. An Amended Order of Resource Area Delineation does not need to be recorded at the Registry of Deeds or Land Court; the original complete Amended Order of Conditions 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. Proof of recording shall be sent to the Committee.

(12) Appeals

- (a) An appealable decision of the Committee shall be reviewable in the Superior Court in an action filed within 60 days of the Committee vote on the matter, in accordance with MGL Ch. 249, § 4, as amended.
- (b) Appealable decisions of the Committee are Determinations of Applicability, Orders of Resource Area Delineation, Orders of Conditions, Enforcement Orders, Amended Orders of Resource Area Delineation, and Amended Orders of Conditions. For Amended Orders of Resource Area Delineation and Amended Orders of Condition, the appeal is limited to areas or activities that are the subject of the amendment.

(13) Extension Permits

- (a) The Committee may extend an Order of Resource Area Delineation or Order of Conditions for one or more periods of one to three years each. Seven (7) copies of the Request for Extension Permit shall be submitted by the applicant by certified mail or hand delivery and shall be received by the Committee at least thirty (30) days prior to the expiration of the Order of Resource Area Delineation, Order of Conditions, or a prior Extension Permit. The submittal shall explain the reasons why the Extension Permit is necessary: for an Order of Resource Area Delineation, a certification from a competent source that the Bylaw Resource Area boundaries remain valid; and for an Order of Conditions, a description of the work that has been completed and the work that remains to be completed shall be provided. A Request for Extension Permit does not require abutter notification or a published legal notice, but is required to be duly posted in accordance with the Open Meeting Law.
- (b) Upon receipt by the Committee of the information required in Section 1.6(13)(a) above and a check made payable to the Town of Wellesley with the Request for Extension Permit fee as specified in Section 1.6(5)(e)6. above, a site inspection, if deemed necessary, and review of the Request for Extension Permit shall commence. Within 21 days of the receipt of the complete Request for Extension Permit, the Committee shall discuss the matter at a public meeting. The Committee shall vote to:

1. extend an Order of Resource Area Delineation or Order of Conditions for a period of one to three years; or
 2. deny the Request for Extension Permit. Such denial shall be issued in writing and shall specify the reasons for denial.
- (c) An approved Extension Permit shall be issued on WPA Form 7 used under the Act and 310 CMR 10.00, as amended, must be signed by a majority of the Committee to be valid, and the original shall be sent to the applicant with a copy to the owner, if different, by certified mail or by hand delivery within 21 days of the close of the public meeting at which it was discussed. Extension Permits are not subject to appeal.
- (d) The Extension Permit shall be recorded in the Registry of Deeds or the Land Court, whichever is appropriate. Proof of recording shall be sent to the Committee.

(14) Certificates of Compliance

- (a) Seven (7) copies of the Request for Certificate of Compliance shall be submitted by certified mail or hand delivery using the Request for Certificate of Compliance form (WPA Form 8A) used under Act and 310 CMR 10.00, as amended, and shall be accompanied by an as-built plan at the same scale as the plan approved by the Order of Conditions and a written statement by an appropriate professional, such as a registered professional engineer, architect, landscape architect, land surveyor, wetland scientist, or other signatory approved by the Committee, certifying that there has been full compliance with the Order of Conditions and with the approved plans. If the project is not fully in compliance with the Order of Conditions and the approved plans, the accompanying statement shall itemize all deviations from the Order of Conditions and the approved plan and include a statement that the itemized deviations will have the same or a reduced impact on the Bylaw Interests and Values compared to the approved plans. A Request for a Certificate of Compliance does not require abutter notification or a published legal notice, but is required to be duly posted in accordance with the Open Meeting Law.
- (b) Upon receipt by the Committee of the information required in Section 1.6(14)(a) above, any other requirements as may be set forth in the Order of Conditions, and the Request for Certificate of Compliance fee for a valid or expired Order of Conditions as specified in Section 1.6(5)(e)7. above, a site inspection and review of the Request for Certificate of Compliance shall commence. Within 21 days of the receipt of the complete Request for Certificate of Compliance and fee, the Committee shall discuss the matter at a public meeting. The Committee shall make a determination as set forth in 1. or 2. below.
1. The Committee may determine after review and inspection that a Certificate of Compliance is warranted. The Committee shall issue said Certificate of Compliance on WPA Form 8B used under Act and 310 CMR 10.00, as amended, that certifies either that the work regulated by the Order of Conditions has been satisfactorily completed; a portion of the work regulated by the Order of Conditions has been satisfactorily completed; or that work regulated by the Order of Conditions never commenced. In order to be valid, the Certificate of Compliance must be signed by a majority of the Committee. The original shall be sent to the applicant with a copy to the owner, if different, by certified mail or by hand delivery within 21 days of the close of the public meeting at which it was discussed.
 - a. In the event that the Order of Conditions requires replication, replacement, or restoration of any Bylaw Resource Area or requires invasive species removal and monitoring, the Committee, at its discretion, may issue a Partial Certificate of Compliance provided that all other requirements of the Order of Conditions have been fully met and that the required replication, replacement, or restoration area has been constructed and planted in accordance with the requirements of the Order of Conditions. The Partial Certificate of Compliance shall continue any and all conditions pertaining to the replication, replacement, or restoration area and its monitoring or invasive species removal and its monitoring.

- b. If the Order of Conditions contains conditions that 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 of Compliance shall also specify to what portions of the work or property it applies, if it does not apply to all the work or areas regulated by the Order of Conditions.
2. The Committee may determine after review and inspection that the work has not been completed in compliance with the Order of Conditions and the approved plan and refuse to issue a Certificate of Compliance. The applicant may remedy any deficiencies and reapply for a Certificate of Compliance or may seek remedy through an Amended Order of Conditions or file a new Notice of Intent, as appropriate. This decision is not subject to appeal.
- (c) The Certificate of Compliance shall be recorded in the Registry of Deeds or the Land Court, whichever is appropriate. Proof of recording shall be sent to the Committee.

1.7 Enforcement

- (1) No person shall remove, fill, dredge, build upon, or alter Bylaw Resource Areas 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 Determination of Applicability, Order of Conditions, or Enforcement Order pursuant to the Bylaw. The Committee shall consider activities and actions, including but not limited to the following, as violations of the Bylaw and its regulations:
 - (a) unauthorized activity in or alteration of any Bylaw Resource Area, including the Buffer Zone;
 - (b) leaving in place unauthorized fill, or otherwise failing to restore illegally altered land to its original condition;
 - (c) unauthorized activity outside of the scope of any Negative Determination of Applicability;
 - (d) unauthorized activity following receipt of a Positive Determination of Applicability;
 - (e) violations or non-compliance with an Order of Conditions;
 - (f) unauthorized activity after the expiration of an Order of Conditions or an Extension Permit;
 - (g) violation of continuing conditions in a Certificate of Compliance; and/or
 - (h) violation of an Enforcement Order.
- (2) Any person who violates any provision of the Bylaw, its regulations, or any Determination of Applicability or Order of Conditions shall be punished by a fine of not more than \$300 per violation or offense, commencing on the day the violation was confirmed by the Committee or its Administrator. Each day or portion thereof during which the violation continues or remains in place shall constitute a separate offense, and each provision of the Bylaw, regulations, Determination of Applicability, Order of Conditions, or Enforcement Order that has been violated shall constitute a separate offense.
- (3) The Committee and its Administrator shall have the right to enter upon privately owned land at reasonable times for the purposes of performing their duties under the Bylaw and these regulations and may make or cause to be made such examinations, surveys, and samplings as the Committee deems necessary, subject to the constitution and laws of the United States and the Commonwealth of Massachusetts.
- (4) The Committee shall have the authority to enforce the Bylaw and its regulations by Violation Notices, Enforcement Orders, fines, and civil and criminal court actions. Any fine issued pursuant to the Bylaw and its regulations is punitive, and is imposed in addition to any and all work the Committee may require from the owner and/or applicant to restore and mitigate all damage to Bylaw Resource Areas.

- (5) An Enforcement Order issued by the Committee shall be issued on WPA Form 9 used under the Act and 310 CMR 10.00, as amended, and be signed by a majority of the Committee. In a situation requiring immediate action, an Enforcement Order may be signed by a single member of the Committee or by its Administrator with the consent of at least one Committee member, provided the Enforcement Order is then ratified by a majority of the Committee members at the next scheduled meeting of the Committee or a duly posted special meeting of the Committee called for this purpose.
- (6) Upon the Committee's request, Town Counsel shall take legal action for enforcement under civil law. Upon the Committee's request, the Chief of Police and/or Town Counsel 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 the authority to assist the Committee with enforcement. As an alternative to criminal prosecution in a specific case, the Committee may issue citations under the non-criminal disposition procedure set forth in MGL Ch. 40, § 21D, as amended, which has been adopted by the Town in Article 52 of its general bylaws.
- (7) Any person who purchases, inherits, or otherwise acquires real estate upon which work has been done in violation of the Bylaw and its regulations or in violation of any Request for Determination of Applicability, Order of Conditions, or Enforcement Order shall comply with such Determination or Order or shall restore such real estate to its condition prior to the violation, provided, however, that no Enforcement Order or civil or criminal action shall be brought against such person unless such Enforcement Order is issued or such civil or criminal action is commenced within three years following the recording of the deed or the date of the death by which such real estate was acquired by such person.

1.8 Professional Standards for Consultants

- (1) Any person may represent an applicant or owner during a public hearing or public meeting. However, there are situations where the Committee expects a qualified, competent professional to be available to answer questions of the Committee, its Administrator, and the public.
 - (a) For engineering, drainage, and stormwater related matters and questions, the Committee shall presume a person having a four year degree in an appropriate field of engineering or five years of practical experience in the field of civil engineering to be competent. However, the Committee reserves the right to have the licensed professional who prepared and stamped the plan or report attend the public hearing to answer questions.
 - (b) For land surveying, property line, and elevation related matters and questions, the Committee shall presume a person having a four year degree in civil engineering or land surveying or five years of practical experience in the field of land surveying to be competent. However, the Committee reserves the right to have the licensed professional who prepared and stamped the plan attend the public hearing to answer questions.
 - (c) For resource area boundary determination related matters and questions, the Committee shall presume a person having a four year degree in biology or environmental science or five years of practical experience in the field of wetland science to be competent. However, the Committee reserves the right to have the professional who delineated the resources attend the public hearing to answer questions.
 - (d) For wildlife habitat related matters and questions, the Committee shall presume a person with at least a master's degree in wildlife biology or ecological science or five years of practical experience in the field of wildlife habitat assessment to be a wildlife scientist and to be competent. However, the Committee reserves the right to have the professional who conducted the wildlife habitat evaluation attend the public hearing to answer questions.
- (2) At any time during the public hearing process, the Committee has the option to hire an outside consultant, at the applicant's expense, to review the submittal and provide professional assistance to the Committee in its review of the submittal. Such outside consultants shall be hired under the provisions of MGL Ch. 44, § 53G and as detailed in Section 1.9 below.

1.9 Outside Consultants

- (1) As provided by MGL Ch. 44, § 53G, the Committee may impose upon the applicant reasonable fees for the employment of outside consultants, engaged by the Committee, for specific expert services deemed necessary by the Committee to come to a decision on an application submitted to the Committee pursuant to the requirements of the Act, Bylaw, or any other state or municipal statute, bylaw, or regulation, as they may be amended or enacted from time to time.
- (2) Funds received by the Committee pursuant to this section shall be deposited with the Town of Wellesley Treasurer who shall establish a special account for this purpose. Expenditures from this special account may be made at the direction of the Committee without further appropriation as provided in MGL Ch. 44, § 53G. Expenditures from this account shall be made only in connection with the review of a specific project or projects for which a consultant fee has been collected from the applicant.
- (3) Specific consultant services may include, but are not limited, to resource area identification and delineation review; Request for Determination of Applicability, Abbreviated Notice of Resource Area Delineation, and Notice of Intent review and analysis; functional analysis; analysis of resource area interests and values; engineering, hydrogeologic, and drainage review and analysis; analysis of impacts on municipal conservation lands; and environmental or land use law analysis.
- (4) The outside consultant shall be chosen by the Committee, and shall report only to the Committee or its Administrator. The Committee shall give written notice to the applicant of the selection of an outside consultant. Such Consultant and Fee Notice shall identify the consultant and the fee for the proposed scope of work, and shall request payment of said fee in its entirety. The Consultant and Fee Notice shall be deemed to have been given on the date it was mailed via certified mail or hand delivered. No costs under this provision shall be incurred by the applicant if the subject submittal is withdrawn within five (5) days of the date the Consultant and Fee Notice was given. The requested fee must be received in its entirety prior to the initiation of peer review consulting services. The Committee may request additional consultant fees if necessary review requires a larger expenditure than originally anticipated or if new information requires additional consultant services. Failure by the applicant to pay the specified fee within ten (10) days of the date of notice shall be cause for the Committee to deny the submittal for lack of information.
- (5) The applicant may appeal the selection of the outside consultant to the Board of Selectmen, who may disqualify the selected consultant only on the grounds that the consultant has a conflict of interest or does not possess the minimum required qualifications. The minimum qualifications shall consist of either an educational degree or five or more years of practice in the field at issue or a related field. Such an appeal must be in writing and received by the Wellesley Board of Selectmen and the Committee within ten (10) days of the date the written Consultant and Fee Notice. The required time limits for action upon the submittal shall be extended by the duration of this administrative appeal. In the event that no decision is made by the Board of Selectmen within one month following the submittal of the appeal, the selection made by the Committee shall stand.

1.10 Severability

The invalidity of any section of the Bylaw or these regulations shall not invalidate any other section or provision thereof, nor shall it invalidate any Determination of Applicability, Order of Resource Area Delineation, or Order of Conditions that had previously been issued.

1.11 Amendment or Revision of the Regulations

These regulations may be amended or revised by the Committee after due notice and a public hearing in conformance with Section 8 of the Bylaw.

1.12 Effective Date

These regulations have been adopted by the Committee at a duly noticed public hearing on XXXXX XX, 2016. The effective date of these regulations shall be XXXXXX XX, 2016. These regulations shall be in full force and effect for any and all submittals made on or after the effective date of these regulations.

PART 2. RESOURCE AREA REGULATIONS

2.1 Incorporation of MassDEP Wetlands Protection Regulations Performance Standards

- (1) The Bylaw is intended to provide additional preservation and protection of Bylaw Interests and Values for Bylaw Resource Areas that are analogous to Areas Subject to Protection under the Act and to provide preservation and protection of the Bylaw Interests and Values for all Bylaw Resource Areas. Implicit in this statement is that an applicant seeking approval under the Bylaw must, at a minimum, meet all applicable general performance standards in the Act and at 310 CMR 10.00 for each resource area within which work is proposed. Accordingly, the following provisions of 310 CMR 10.00, as amended, are hereby incorporated into these regulations by reference and shall be fully applied unless these regulations specifically identify a more stringent analogous performance standard:
 - (a) Land Under Water Bodies and Waterways: 310 CMR 10.56(4)(a)1. to 5. and (c);
 - (b) Bank: 310 CMR 10.54(4)(a)1. to 6. and (c);
 - (c) Bordering Vegetated Wetlands: 310 CMR 10.55(4)(a)1. to 7., (b), and (d);
 - (d) Bordering Land Subject to Flooding: 310 CMR 10.57(4)(a)1. to 3. and (c);
 - (e) Isolated Land Subject to Flooding: 310 CMR 10.57(4)(b)1. to 4. and (c); and
 - (f) Riverfront Area: 310 CMR 10.58(4)(a) to (d) and (5)(a) to (h).
- (2) No activity may be permitted within any Bylaw Resource Area which will have any adverse effect on specified habitat sites of rare wetland or upland, vertebrate or invertebrate species, as identified by the procedures established under 310 CMR 10.59. The findings of the Massachusetts Natural Heritage and Endangered Species Program under the Act and 310 CMR 10.00 and the Massachusetts Endangered Species Act and 321 CMR 10.00 shall be presumed to be correct in such matters.
- (3) Protection of the Bylaw Interests and Values also requires that an applicant meet any and all additional performance standards for each Bylaw Resource Area within which work is proposed as detailed in Sections 2.2 to 2.9 below. Section 2.10 below details the Wildlife Habitat Assessment and Mitigation of Altered Habitat requirements for work conducted within the various Bylaw Resource Areas, including the Buffer Zone. Failure to meet any of these performance standards, without a Waiver of Regulation, will result in a denial Order of Conditions under the Bylaw.

2.2 Water Bodies and Waterways

- (1) Preamble
 - (a) Water Bodies and Waterways and the land under Water Bodies and Waterways (i.e., any reservoir, lake, pond, river, stream, or creek and the land thereunder) are likely to be significant to public or private water supply, groundwater, flood control, erosion and sedimentation control, storm damage prevention, water pollution prevention, fisheries, wildlife habitat, and recreation. Where such land is composed of concrete, asphalt, or other artificial impervious material, said land is likely to be significant to flood control and storm damage prevention.

1. Where the land under Water Bodies and Waterways is composed of pervious material, such land represents a point of exchange between surface water and groundwater.
2. The physical nature of the land under Water Bodies and Waterways is highly variable, ranging from deep organic and fine sedimentary deposits to rocks and bedrock. Organic soils and sediments play an important role in the process of detaining and removing dissolved and particulate nutrients, such as nitrogen and phosphorous, from the surface water. They also serve as sinks for toxic substances, including heavy metal compounds. The topography, vegetation, and general configuration of reservoirs, lakes, ponds, rivers, streams, and creeks serve to slow water movement through the system resulting in the deposition of suspended soil and sediments.
3. The land under Water Bodies and Waterways, in conjunction with Bank, serves to confine floodwater within a definite channel or basin during the most frequent storms. Filling within the channel or basin blocks flows and reduces storage which in turn causes backwater and overbank flooding during such storms. Alterations to land under Water Bodies and Waterways cause water to frequently spread out over a larger area at a lower depth and will increase the amount of property which is routinely flooded. Additionally, such alterations will result in an elevation of water temperature and a decrease in habitat in the main channel or basin, both of which are detrimental to fisheries and various wildlife species, particularly during periods of warm weather and low flows or low water levels.
4. The water contained within Water Bodies and Waterways serves as a buffer to chemical, physical, and biological perturbations. The water contained within reservoirs, lakes, ponds, rivers, stream, and creeks serve as habitat for cold and warm water fishes and for a variety of wildlife species and serves to provide a variety of recreational opportunities, including but not limited to boating, swimming, fishing, nature watching, and photography.
5. Land under rivers, streams, and creeks composed of gravel allows for the circulation of cold, well oxygenated water necessary for the survival of important game fish species. River, stream, and creek bottoms with a diverse structure composed of gravel, large and small boulders, and rock outcrops provide escape cover and resting areas for game fish species. Such bottom types also provide areas for the production of aquatic insects essential to fisheries.
6. Land under reservoirs, lakes, and ponds are vital to a large assortment of warm water fish during spawning periods. Such species use the land under reservoirs, lakes, and ponds and associated structure for cover and to build nests in the bottom substrate within which they deposit and fertilize their eggs.
7. The plant community composition and structure, sediment composition and structure, topography, hydrologic regime, and water quality of reservoirs, lakes, ponds, rivers, streams, and creeks and the land thereunder provide food, shelter, breeding areas, and migratory and overwintering areas for mammals, birds, reptiles, and amphibians. Certain submerged, rooted vegetation is eaten by water fowl and some mammals. Some amphibians as well as some invertebrate species eaten by vertebrate wildlife attach their eggs to such vegetation. Some aquatic vegetation protruding out of the water is also used for nesting, and many species use dead vegetation resting on land under water but protruding above the surface for feeding and basking. Sediment composition is also important for hibernation and for animals which begin to burrow their tunnels under water. Topography, hydrologic regime, and water quality not only affect vegetation, but also determine which species feed in an area.
8. Land within 100 feet of Water Bodies and Waterways is likely significant to the protection and maintenance of reservoirs, lakes, ponds, rivers, streams, and creeks and therefore to the preservation and protection of the associated Bylaw Interests and Values.

(2) Definition, Critical Characteristics, and Boundary

- (a) Water Bodies and Waterways include any reservoir, lake, pond, river, stream, or creek, whether natural or man-made.

- (b) Water Bodies and Waterways include the water body or waterway itself as well as the land under any water body or waterway. Said land may be composed of organic muck or peat, fine sediments, gravel, rock, concrete, asphalt, or other artificial impervious material.
- (c) The physical characteristics and location of the Water Bodies and Waterways are significant to the preservation and protection of the Bylaw Interests and Values specified in Section 2.2(1)(a) above.
- (d) The boundary of Water Bodies and Waterways is the mean annual low water level or mean annual low flow level, as appropriate.

(3) Presumption

- (a) Where an activity involves removing, filling, dredging, building upon, or altering of Water Bodies and Waterways, the Committee shall presume that such area is significant to the Bylaw Interests and Values specified in Section 2.2(1)(a) above.
- (b) The presumption of significance is rebuttable and may be overcome by a clear showing that said area of Water Bodies and Waterways does not play a role in the preservation and protection of one or more of the applicable Bylaw Interests and Values. In the event that the presumption is deemed to have been overcome for all of the Bylaw Interests and Values, the Committee shall make a written determination to this effect, setting forth its grounds on WPA Form 6, used under Act and 310 CMR 10.00, as amended. Where the applicant provides information that said area does not play a role in the preservation and protection one or more, but not all of the applicable Bylaw Interests and Values, the Committee shall determine that the presumption has been rebutted only for that or those Bylaw Interests and Values and the presumption of significance is partially overcome.

(4) Performance Standards

- (a) Where the presumption set forth in Section 2.2(3)(a) above is not overcome, any proposed activity within Water Bodies and Waterways shall meet the following performance standards.
 - 1. Activities proposed within Water Bodies and Waterways shall not impair:
 - a. the water carrying capacity of the defined channel or basin;
 - b. the surface water and groundwater quality;
 - c. the capacity of the water and land thereunder to provide breeding habitat, escape cover, and food for fisheries;
 - d. the capacity to provide important wildlife habitat function using the threshold at 310 CMR 10.56(4)(a)4. and the wildlife habitat evaluation methodology at 310 CMR 10.60; and
 - e. the capacity to provide for recreation.
 - 2. Work on a stream crossing shall be presumed to meet the performance standards at Section 2.2(4)(a)1.a. through d. above provided the work is designed and performed in strict compliance with Massachusetts Stream Crossing Standards, as amended, and consists of a span, bottomless box culvert or arch, or an embedded culvert and the structure spans the channel width by a minimum of 1.2 times the channel bankfull width and meets the required openness ratio. This presumption is rebuttable and may be overcome upon submittal of credible evidence from a competent source.
 - 3. The limit of work shall be clearly identified on the plan and in the field and appropriate erosion and sedimentation control measures shall be implemented and maintained throughout construction. No silt

or sediment may be permitted to enter any Bylaw Resource Area outside of the Limit of Work during or subsequent to construction.

4. The Committee may allow activities within Water Bodies and Waterways that serve to improve the capacity of the resource area to preserve and protect the Bylaw Interests and Values, such as removal of man-made and other debris, invasive species removal, and/or the planting of native vegetation.
5. Any activity within Water Bodies and Waterways that affects the Buffer Zone shall meet the performance standards for Buffer Zone at Section 2.5(4) below.

Commentary: Requirements of the Bylaw and Regulations That Are More Stringent than Requirements of the Act and MassDEP Wetlands Protection Regulations

1. The Bylaw Resource Area Water Bodies and Waterways includes both the water contained by the water body or waterway and the land under said water body or waterway; in contrast, Land Under Water Bodies and Waterways as defined at 310 CMR 10.56(2)(a) consists simply of the land beneath a water body or waterway and does not include the water contained by the water body or waterway.
2. Under the Bylaw, Water Bodies and Waterways contribute to public and private water supply, flood control, storm damage prevention, fisheries, and wildlife habitat, which are interests under both the Bylaw and Act; groundwater and water pollution prevention, which have analogous statutory interests; and erosion and sedimentation control and recreation, which lack analogous statutory interests. Under the Act, Land Under Water Bodies and Waterways contribute to public and private water supply, groundwater supply, flood control, storm damage prevention, prevention of pollution, fisheries, and wildlife habitat.
3. Performance standards for Water Bodies and Waterways in these regulations are more stringent at Sections 2.2(4)(a)1.a., c., and e., (4)(a)3. and (4)(a)5., above than the performance standards in the MassDEP Regulations. These standards address effects on the water carrying capacity of basins as well as channels; the capacity of both the water and the land thereunder to protect fisheries; the capacity to provide recreation; require limit of work and sedimentation control measures; and compliance with the Buffer Zone performance standards under these regulations, respectively.

2.3 Bank

(1) Preamble

- (a) Banks are likely to be significant to public or private water supply, groundwater, flood control, erosion and sedimentation control, storm damage prevention, water pollution prevention, fisheries, wildlife habitat, and recreation. Where Banks are composed of concrete, asphalt, or other artificial impervious material, said Banks are likely to be significant to flood control and storm damage prevention.
 1. Banks are areas where groundwater discharges to the surface and where, under some circumstances, surface water recharges the groundwater.
 2. Partially or totally vegetated Banks serve to maintain the stability of the Bank, which in turn protects water quality by reducing erosion and sedimentation and storm damage. Such Banks may also provide shade that moderates water temperatures and provide breeding habitat, escape cover, and food, all of which are significant to the protection of fisheries. Banks which drop off quickly or overhang the water's edge often contain undercuts that serve as cover for important species of game fish.
 3. Banks act to confine floodwaters during the most frequent storms to an established channel or basin, preventing the spread of water to adjacent land. Alterations to Banks cause water to frequently spread out over a larger area at a lower depth and will increase the amount of property which is routinely flooded. Additionally, such alterations will result in an elevation of water temperature and a decrease in habitat in the main channel or basin, both of which are detrimental to fisheries and various wildlife

species, particularly during periods of warm weather and low flows or low water levels. The maintenance of cool water temperatures during warm weather is critical to the survival of important game species.

4. The plant community composition and structure, soil or sediment composition and structure, and topography of a Bank provide important food, shelter, migratory and breeding areas for wildlife and overwintering areas for mammals and reptiles. Topography plays a role in determining the suitability of a Bank to serve as burrowing or feeding habitat. Soil and sediment structure also plays a role in determining the suitability for burrowing, hibernation, and other cover. Bank topography and soil structure affect vegetative structure, and trees, shrubs, and undergrowth extending into and over the water, and vegetation growing along the edge of the reservoir, lake, pond, river, stream, or creek are also important to a wide variety of wildlife. A number of tubers and fruit and seed producing shrubs grow on vegetated Banks and serve as important food for wildlife. Finally, Banks may provide important shelter and cover for wildlife which needs to move between various wetland areas.
5. Banks serve to protect fisheries and provide access to Water Bodies and Waterways for recreational activities, including but not limited to boating, swimming, fishing, nature watching, and photography.
6. Land within 100 feet of a Bank is likely to be significant to the protection and maintenance of the Bank, and therefore to the preservation and protection of the associated Bylaw Interests and Values.

(2) Definition, Critical Characteristics, and Boundary

- (a) A Bank is the portion of the land surface that normally abuts and confines a water body or waterway. A Bank may be partially or totally vegetated. It may consist of exposed sediment, gravel, stone, concrete, asphalt, or other artificial impervious material.
- (b) The physical characteristics of a Bank and its location are significant to the preservation and protection of the Bylaw Interests and Values specified in Section 2.3(1)(a) above.
- (c) The upper boundary of a Bank is the first observable break in the slope, or the mean annual flood level, whichever is lower. The lower boundary of a Bank is the mean annual low water level or mean annual low flow level, as appropriate.

(3) Presumption

- (a) Where an activity involves removing, filling, dredging, building upon, or altering of Bank, the Committee shall presume that such area is significant to the Bylaw Interests and Values specified in Section 2.3(1)(a) above.
- (b) The presumption of significance is rebuttable and may be overcome by a clear showing that said area of Bank does not play a role in the preservation and protection of one or more of the applicable Bylaw Interests and Values. In the event that the presumption is deemed to have been overcome for all of the Bylaw Interests and Values, the Committee shall make a written determination to this effect, setting forth its grounds on WPA Form 6, used under Act and 310 CMR 10.00, as amended. Where the applicant provides information that said area does not play a role in the preservation and protection one or more, but not all of the applicable Bylaw Interests and Values, the Committee shall determine that the presumption has been rebutted only for that or those Bylaw Interests and Values and the presumption of significance is partially overcome.

(4) Performance Standards

- (a) Where the presumption set forth in Section 2.3(3)(a) above is not overcome, any proposed activity within Bank shall meet the following performance standards.
 1. Activities proposed within Bank shall not impair:

- a. the physical stability of the Bank;
 - b. the water carrying capacity of the defined channel or basin within the Bank;
 - c. the surface water and groundwater quality;
 - d. the capacity to provide breeding habitat, escape cover, and food for fisheries;
 - e. the capacity to provide important wildlife habitat function using the threshold at 310 CMR 10.54(4)(a)5. and the wildlife habitat evaluation methodology at 310 CMR 10.60. In the case of Bank of an intermittent stream, perennial stream, or river, the impact shall be measured on each side of the waterway; and
 - f. the capacity to provide for recreation.
- (b) Work on a stream crossing shall be presumed to meet the performance standards at Section 2.3(4)(a)1.a. through e. above provided the work is designed and performed in strict compliance with Massachusetts Stream Crossing Standards, as amended, and consists of a span, bottomless box culvert or arch, or an embedded culvert and the structure spans the channel width by a minimum of 1.2 times the channel bankfull width and meets the required openness ratio. This presumption is rebuttable and may be overcome upon submittal of credible evidence from a competent source.
- (c) The limit of work shall be clearly identified on the plan and in the field and appropriate erosion and sedimentation control measures shall be implemented and maintained throughout construction. No silt or sediment may be permitted to enter any Bylaw Resource Area outside of the Limit of Work during or subsequent to construction.
- (d) The Committee may allow activities within Bank that serve to improve the capacity of the resource area to preserve and protect the Bylaw Interests and Values, such as removal of man-made and other debris, invasive species removal, and/or the planting of native vegetation.
- (e) Any work within Bank that affects the Buffer Zone shall meet the performance standards for Buffer Zone at Section 2.5(4) below.

Commentary: Requirements of the Bylaw and Regulations That Are More Stringent than Requirements of the Act and MassDEP Wetlands Protection Regulations

1. The Bylaw Resource Area Bank is defined similarly under the Bylaw and Act regulations.
2. Under the Bylaw, Banks contribute to public and private water supply, flood control, storm damage prevention, fisheries, and wildlife habitat, which are interests under both the Bylaw and Act; groundwater and water pollution prevention, which have analogous statutory interests; and erosion and sedimentation control and recreation, which lack analogous statutory interests. Under the Act, Banks contribute to public and private water supply, groundwater supply, flood control, storm damage prevention, prevention of pollution, fisheries, and wildlife habitat.
3. Performance standards for Bank in these regulations are more stringent at Sections 2.3(4)(a)1.b. and f., (4)(c), and (4)(e), above than the performance standards in the MassDEP Wetlands Protection Regulations. These standards address effects on water carrying capacity of basins as well as channels; protect the capacity to provide recreation; require limit of work and sedimentation control measures; and require compliance with the Buffer Zone performance standards under these regulations, respectively.

2.4 Vegetated Wetlands (Bordering and Isolated)

(1) Preamble

- (a) Vegetated Wetlands, both bordering and isolated, are likely to be significant to public or private water supply, groundwater, flood control, erosion and sedimentation control, storm damage prevention, water pollution prevention, fisheries, wildlife habitat, and recreation.
1. Vegetated Wetlands are areas where groundwater discharges to the surface and where, under some circumstances, surface water discharges to the groundwater.
 2. The plant community and its structure, soils, and generally flat topography of Vegetated Wetlands serve to reduce erosion, and remove or detain sediment; nutrients, such as nitrogen and phosphorous; and/or toxic substances, including heavy metal compounds that occur in runoff and flood waters. Some nutrients and toxic substances are detained for years in plant root systems or in the soil. Others are held by plants during the growing season and are released as the plants decay in the fall and winter. This latter phenomenon delays the impacts of nutrients and toxins until the cold weather period, when such impacts are less likely to reduce water quality.
 3. The profusion of vegetation in Vegetated Wetlands acts to slow down and reduce the passage of flood waters during periods of peak flows by providing temporary flood storage and by facilitating water removal through evaporation and transpiration. This process reduces downstream flood crests and resulting damage to private and public property. During dry periods, the water retained in Vegetated Wetlands is essential to the maintenance of base flow levels in rivers, streams, and creeks, which in turn is important to the protection of water quality and water supplies.
 4. Vegetated Wetlands are defined herein by hydrology and vegetation. Hydrology is the driving force that creates a wetland, but it is a transient, temporal parameter. The presence of water at or near the ground surface during a significant portion of the year supports, and in fact promotes, the growth of wetland indicator plants. Prolonged or frequent saturation or inundation also produces hydric soils, and creates anaerobic conditions that favor the growth of wetland indicator plants. Hydric soils, which represent an indicator of hydrology, are a direct indicator of long-term hydrologic conditions and are present throughout the year.
 5. Wetland vegetation supports a wide variety of insects, reptiles, amphibians, small mammals, and birds which are a source of food for important game fish. Wetland vegetation provides shade which moderates water temperatures important to fish life. Vegetated Wetlands flooded by adjacent or nearby Water Bodies and Waterways provide food, breeding habitat, and cover for fish. Fish populations in the larval stage are particularly dependent upon food provided by overbank flooding that occurs during peak flow periods.
 6. The plant community composition and structure, soil composition and structure, topography, hydrologic regime, and water chemistry of Vegetated Wetlands provide important food, shelter, migratory and overwintering areas, and breeding areas for many birds, mammals, amphibians, and reptiles. A wide variety of wetland plants, the nature of which are determined in large part by the depth and duration of water, as well as soil and water composition, are utilized by varied species as important areas for mating, nesting, brood rearing, shelter and food. The diversity and interspersions of the vegetative structure is also important in determining the nature of its wildlife habitat. Different habitat characteristics are used by different wildlife species during summer, winter, and migratory seasons. Vernal Pool Habitat (see Section 2.9 below) is often found within Vegetated Wetlands. Areas so extensively altered by human activity that their important wildlife habitat functions have been effectively eliminated are not significant to the preservation and protection of wildlife habitat.
 7. Vegetated Wetlands provide opportunities for recreational activities, including but not limited to hiking, walking, nature watching, and photography.

8. Land within 100 feet of Vegetated Wetlands is likely to be significant to the protection and maintenance of the Vegetated Wetlands, and therefore to the preservation and protection of the associated Bylaw Interests and Values.

(b) Although the vegetational community can often be used to establish an accurate wetland boundary, sole reliance on the presence of wetland indicator plants can be inadequate. Gently sloping areas often produce wide transition zones where the vegetational boundary is difficult to delineate. Observations of hydrology, including, but not limited to, the presence of hydric soil characteristics, can supplement the vegetational analysis to enhance the technical accuracy, consistency, and credibility of wetland delineations. The use of hydrology is particularly helpful in the analysis of disturbed sites.

(2) Definition, Critical Characteristics, and Boundary

(a) Vegetated Wetlands are freshwater wetlands. The types of freshwater wetlands are bogs, marshes, swamps, and wet meadows. Vegetated Wetlands are areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants. The ground and surface water regime and the vegetational community which occur in each type of freshwater wetland are specified in Section 1.5 above.

1. Bordering Vegetated Wetlands border a reservoir, lake, pond, river, stream, or creek.

2. Isolated Vegetated Wetlands do not border a reservoir, lake, pond, river, stream, or creek. An Isolated Vegetated Wetland must have a surface area of 2,500 square feet or greater to be subject to regulation under the Bylaw.

(b) The physical characteristics of Vegetated Wetlands and its location are significant to the preservation and protection of the Bylaw Interests and Values specified in Section 2.4(1)(a) above.

(c) To be consistent with the Act and 310 CMR 10.00, the boundary of a Vegetated Wetland is the line within which 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. Wetland indicator plants are also those classified in the indicator categories of Facultative, Facultative+, Facultative Wetland-, Facultative Wetland, Facultative Wetland+, or Obligate Wetland in the *National List of Plant Species That Occur in Wetlands: Massachusetts* (Fish & Wildlife Service, U.S. Department of the Interior, 1988) or plants exhibiting physiological or morphological adaptations to life in saturated or inundated conditions. Indicators of saturated or inundated conditions sufficient to support wetland indicator plants shall include, but not be limited to, groundwater, including the capillary fringe, within a major portion of the root zone; observation of prolonged or frequent flowing or standing surface water; and/or characteristics of hydric soils.

(d) The boundary of a Vegetated Wetland in an area that has been disturbed by cutting, filling, or cultivation is the line within which there are indicators of saturated or inundated conditions as listed in Section 2.4(2)(c) above sufficient to support a predominance of wetland indicator plants, a predominance of 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. This methodology shall be used to determine the Vegetated Wetland boundary within lawns, agricultural fields, and other disturbed areas.

(e) Vegetated Wetland boundaries shall be field reviewed by the Committee between April 1 and December 1. Field reviews conducted outside of this period may be allowed on a case-by-case basis upon written request to the Committee that clearly indicates the reasons why the review would not be compromised by the presence of snow and ice or the inability to review the relative indicators, including, but not limited to, vegetation and hydrology, including hydric soils. If the applicant does not agree to a continuance to allow for the field review, the Committee may hire an outside consultant or make the decision based upon the best available evidence.

- (f) Field forms consistent with those accepted under the Act and 310 CMR 10.00 shall be provided to support the delineation of both Bordering and Isolated Vegetated Wetlands under the Bylaw.

(3) Presumption

- (a) Where an activity involves removing, filling, dredging, building upon, or altering of Vegetated Wetlands, the Committee shall presume that such area is significant to the Bylaw Interests and Values specified in Section 2.4(1)(a) above.
- (b) The presumption of significance is rebuttable and may be overcome by a clear showing that said area of Vegetated Wetlands does not play a role in the preservation and protection of one or more of the applicable Bylaw Interests and Values. In the event that the presumption is deemed to have been overcome for all of the Bylaw Interests and Values, the Committee shall make a written determination to this effect, setting forth its grounds on WPA Form 6, used under Act and 310 CMR 10.00, as amended. Where the applicant provides information that said area does not play a role in the preservation and protection one or more, but not all of the applicable Bylaw Interests and Values, the Committee shall determine that the presumption has been rebutted only for that or those Bylaw Interests and Values and the presumption of significance is partially overcome.

(4) Performance Standards

- (a) Where the presumption set forth in Section 2.4(3)(a) above is not overcome, no work shall be permitted in a Vegetated Wetland that would destroy or alter any portion of said Vegetated Wetland, or impair in any way the Vegetated Wetland's ability to preserve or protect any of the Bylaw Interests and Values listed in Section 2.4(1)(a) above, except in accordance with a Waiver of Regulation as set forth in Section 1.6(9) above. Avoidance of the destruction or alteration of Vegetated Wetlands is paramount.
- (b) If the proposed activity in a Vegetated Wetland cannot be avoided and qualifies for a Waiver of Regulation at Section 1.6(9) above, and the Committee grants the Waiver of Regulation, the work in a Vegetated Wetland that is designed to meet the performance standards in Sections 2.4(4)(b)1. and 2. below shall be presumed to preserve and protect all applicable Vegetated Wetlands Bylaw Interests and Values.
 - 1. The loss or alteration of Vegetated Wetlands shall be minimized to the extent practicable as demonstrated through an alternatives analysis, and the loss or alteration shall be limited to a maximum of 5,000 square feet.
 - 2. An activity in those portions of a Vegetated Wetlands found to be significant to the preservation and protection of wildlife habitat shall not impair its capacity to provide important wildlife habitat functions. There is no threshold below which an alteration of a Vegetated Wetlands is presumed not to impair its capacity to preserve or protect wildlife habitat. Alterations to Vegetated Wetlands may be permitted only if they will not impair the capacity of the Vegetated Wetlands to preserve or protect important wildlife habitat functions in accordance with the wildlife habitat assessment procedure contained in Section 2.10 below and replacement of altered Vegetated Wetland in accordance with the following Vegetated Wetlands replacement criteria:
 - a. the surface area of the replacement area shall be at least one-and-one-half (1.5) times larger than the area to be lost, filled, or altered;
 - b. the groundwater and surface water elevations of the replacement area shall be approximately the same as the area to be lost, filled, or altered;
 - c. for Bordering Vegetated Wetlands, the horizontal configuration and location of the replacement area relative to the Bank shall be similar to the area to be lost, filled, or altered; the replacement area shall have an unrestricted hydraulic connection to the same reservoir, lake, pond, river, stream, or creek as the area to be lost, filled, or altered; and the replacement area shall be located

within the same general area of the reservoir, lake, or pond or reach of the river, stream, or creek as the area to be lost, filled, or altered;

- d. for Isolated Vegetated Wetlands, the area may be replaced as part of an adjacent Bordering Vegetated Wetlands or Isolated Vegetated Wetlands or as a separate Isolated Vegetated Wetlands; such replacement shall be in the same general area as the area to be lost, filled, or altered;
 - e. at least 75% of the surface of the replacement area shall be reestablished with indigenous wetland plant species within two growing seasons, and prior to said reestablishment, any exposed soil in the replacement area shall be temporarily stabilized in accordance with U.S. Soil Conservation Service methods;
 - f. the replacement area shall be provided in a manner that is consistent with the performance standards for each Bylaw Resource Area within which work associated with the replacement area is proposed;
 - g. the capacity of the replacement area to provide for recreation shall be at least as great as that of the Vegetated Wetland being replaced;
 - h. the limit of work shall be clearly identified on the plan and in the field and appropriate erosion and sedimentation control measures shall be implemented and maintained throughout construction. No silt or sediment may be permitted to enter any Bylaw Resource Area outside of the Limit of Work during or subsequent to construction; and
 - i. the replacement area shall be designed in accordance with the findings of the wildlife habitat assessment, and its construction supervised and success monitored by a wetland scientist with the qualifications listed in Section 1.8(1)(c) above. A monitoring report based upon observations made near the end of the growing season is required to be submitted to the Committee annually for at least two years following construction and planting of the replacement area.
 - j. the Committee shall include a continuing condition in the Certificate of Compliance prohibiting further alteration within the replacement area, except as may be required to maintain the area in its replicated condition.
3. Notwithstanding Sections 2.4(4)(a) and (b) above, the Committee may allow activities within a Vegetated Wetland that serve to improve the capacity of the Vegetated Wetland to preserve and protect the Bylaw Interests and Values, such as removal of man-made and other debris, invasive species removal, and/or the planting of native vegetation.
 4. Any work within a Vegetated Wetland that affects the Buffer Zone shall meet the performance standards for Buffer Zone at Section 2.5(4) below.

Commentary: Requirements of the Bylaw and Regulations That Are More Stringent than Requirements of the Act and MassDEP Wetlands Protection Regulations

1. The Bylaw Resource Area Vegetated Wetlands includes Bordering Vegetated Wetlands which border lakes, ponds, rivers, streams, and creeks and Isolated Vegetated Wetlands 2,500 square feet in size or greater. An Isolated Vegetated Wetland is not regulated under the Act unless it qualifies as Isolated Land Subject to Flooding pursuant to 310 CMR 10.57(2)(b).
2. Under the Bylaw, Vegetated Wetlands contribute to public and private water supply, flood control, storm damage prevention, fisheries, and wildlife habitat, which are interests under both the Bylaw and Act; groundwater and water pollution prevention, which have analogous statutory interests; and erosion and sedimentation control and recreation, which lack analogous statutory interests. Under the Act, Bordering Vegetated Wetlands contribute to public and private water supply, groundwater supply, flood control, storm

damage prevention, prevention of pollution, fisheries, and wildlife habitat, and Isolated Land Subject to Flooding may contribute to public and private water supply, groundwater supply, flood control, storm damage prevention, prevention of pollution, and wildlife habitat.

3. Performance standards for Vegetated Wetlands in these regulations are more stringent at Sections 2.3(4)(a), (4)(b)1., (4)(b)2.a., g., h., i., and j., and (4)(b)4., above, than the performance standards in the MassDEP Wetlands Protection Regulations. These standards require a Waiver of Regulation for any alteration or impairment of Vegetated Wetlands; require an additional Waiver of Regulation for any alteration or impairment of Vegetated Wetlands greater than 5,000 square feet; require a wildlife habitat evaluation pursuant to these regulations for any alteration or impairment of Vegetated Wetlands; require wetland replacement at a minimum 1.5 to 1 ratio; protect the capacity to provide recreation; limit of work and sedimentation control measures; require any replacement area to be designed based on findings of wildlife habitat evaluation; prohibit future alteration of any replacement area; and require compliance with the Buffer Zone performance standards under these regulations, respectively.

2.5 Buffer Zone

(1) Preamble

(a) The Buffer Zone (i.e., any land within 100 feet of Water Bodies and Waterways, Bank, or Vegetated Wetlands) is likely significant to public and private water supply, groundwater, erosion and sedimentation control, water pollution prevention, wildlife habitat, and recreation.

1. Areas of natural, undisturbed upland soil adjacent to Vegetated Wetlands, Bank, and Water Bodies and Waterways have been shown to provide key areas for seasonal groundwater recharge that protects public and private groundwater supplies or that maintains base flow and water quality in streams during low flow periods.
2. The natural vegetation found in upland areas adjacent to Vegetated Wetlands, Bank, and Water Bodies and Waterways provides key functions in the attenuation and uptake of pollutants that would otherwise be discharged to Vegetated Wetlands or Water Bodies and Waterways. The plant community and topography of these areas act as filters that may prevent erosion, promote sedimentation, and decrease the non-point source loading of contaminants that may alter the water quality of adjacent Vegetated Wetlands and Water Bodies and Waterways.
3. The Buffer Zone's plant community composition and structure, soil composition and structure, topography, hydrologic regime, and proximity to Water Bodies and Waterways, Bank, and Vegetated Wetlands provide important shelter, nesting, feeding, migratory, and overwintering areas for wildlife associated with the adjacent wetlands. Many wildlife species that feed or breed in wetlands require adjacent undisturbed upland areas for critical portions of their life cycles. Other wildlife, which perform key ecological roles in wetlands, may nest or perch in areas immediately adjacent to wetlands. Forested upland vegetation, where this occurs directly adjacent to forested Vegetated Wetlands, provides an important buffer that maintains air temperatures, light regimes, and habitat quality within the Vegetated Wetlands. Maintained and unmaintained meadow habitat adjacent to Vegetated Wetlands provide locally important habitat for a wide variety of wildlife species, particularly birds. Areas so extensively altered by human activities that their important wildlife habitat functions have been effectively eliminated are not significant to the preservation and protection of wildlife habitat.
4. Construction that occurs within the Buffer Zone is likely to result in the alteration of the adjacent Bylaw Resource Areas through siltation, over-grading, or deposition of construction debris. Following construction, activities within this area frequently result in impacts to the adjacent Bylaw Resource Areas from the deposition of lawn and landscaping debris, increased runoff, siltation, and increased temperature or nutrient loading. These subsequent, unregulated alterations are common in areas where development occurs in close proximity to Water Bodies and Waterways, Bank, or Vegetated Wetlands.

5. Due to the varied plant community and proximity to Vegetated Wetlands, Bank, or Water Bodies and Waterways, Buffer Zone provides opportunities for recreational activities, including but not limited to hiking, walking, nature watching, and photography as well as access for boating, swimming, and fishing.
6. Buffer Zone may overlap other Bylaw Resource Areas, such as Riverfront Area, Bordering and Isolated Land Subject to Flooding, and Vernal Pool Habitat and serves to preserve and protect the Bylaw Interests and Values provided by those Bylaw Resource Areas.

(2) Definition, Critical Characteristics, and Boundary

- (a) Buffer Zone is the area of land located between the boundary of Water Bodies and Waterways, Bank, or a Vegetated Wetlands and a line located 100 feet horizontally outward from said boundary. The Buffer Zone may include or overlap other Bylaw Resource Areas, except for any Water Bodies and Waterways, Bank, or Vegetated Wetland.
- (b) The physical characteristics and its location are significant to the preservation and protection of the Bylaw Interests and Values specified in Section 2.5(1)(a) above.
- (c) For a Buffer Zone associated with a Bordering Vegetated Wetland and/or Bank, the upper boundary of the Buffer Zone is the line that is located 100 feet horizontally outward from the Bordering Vegetated Wetland boundary, or if a Bordering Vegetated Wetland is not present, from the upper boundary of Bank. The lower boundary of the Buffer Zone is the Bordering Vegetated Wetland boundary, or if a Bordering Vegetated Wetland is not present, the upper boundary of Bank.
- (d) For a Buffer Zone associated with an Isolated Vegetated Wetland, the upper boundary of the Buffer Zone is the line located 100 feet horizontally outward from the Isolated Vegetated Wetlands boundary. The lower boundary is the Isolated Vegetated Wetlands boundary.

(3) Presumption

- (a) Where an activity involves removing, filling, dredging, building upon, or altering of Buffer Zone, the Committee shall presume that such area is significant to the Bylaw Interests and Values specified in Section 2.5(1)(a) above.
- (b) The presumption of significance is rebuttable and may be overcome by a clear showing that said area of Buffer Zone does not play a role in the preservation and protection of one or more of the applicable Bylaw Interests and Values. In the event that the presumption is deemed to have been overcome for all of the Bylaw Interests and Values, the Committee shall make a written determination to this effect, setting forth its grounds on WPA Form 6, used under Act and 310 CMR 10.00, as amended. Where the applicant provides information that said area does not play a role in the preservation and protection one or more, but not all of the applicable Bylaw Interests and Values, the Committee shall determine that the presumption has been rebutted only for that or those Bylaw Interests and Values and the presumption of significance is partially overcome.

(4) Performance Standards

- (a) Where the presumption set forth in Section 2.5(3)(a) above is not overcome, any proposed activity within Buffer Zone shall meet the following performance standards.
 1. No activity shall be allowed within the 25-foot No Disturbance Zone (i.e., land within 25 feet of the limit of Water Bodies and Waterways, Bank, or Vegetated Wetlands) and any work proposed within the Buffer Zone shall be designed to retain and preserve a minimum of 25 feet of undisturbed natural vegetation and soil adjacent to the limit of Water Bodies and Waterways, Bank, and Vegetated Wetlands.

2. Work in those portions of Buffer Zone found to be significant to the preservation and protection of wildlife habitat shall not impair its capacity to provide important wildlife habitat functions. An activity or activities on a single lot that cumulatively alters up to 10% or 5,000 square feet, whichever is less, of land in this resource area found to be significant to the protection of wildlife habitat per Section 2.5(1)(a)3. above, shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond this threshold may be permitted if they will not impair the capacity of the Buffer Zone to preserve or protect important wildlife habitat functions in accordance with the wildlife habitat assessment procedure and mitigation of altered habitat requirements contained in Section 2.10 below.
3. Work within the Buffer Zone that does not meet the wildlife habitat assessment threshold at Section 2.5(4)(a)2. above that results in the removal of a tree or trees (dbh 5 inches or larger) within the Buffer Zone shall require the planting of one replacement tree for each tree that is removed. The proposed replacement tree(s) shall be of a native species, have a caliper of at least 1.5 inches, be located to optimize the contribution to the Bylaw Interests and Values, and be monitored for two growing seasons after planting. Alternatively, the applicant may propose a functionally equivalent mitigation plan to the above replacement tree(s) that may include native trees, shrubs, and ground cover and/or invasive species removal with a proposed monitoring plan that serves to benefit the Bylaw Interests and Values of the Buffer Zone.
4. Stormwater is managed according to regulatory standards at 310 CMR 10.05(6)(k) to (q) established by the Department, as applicable, and Section 1.6(8)(b)4.g. of these regulations above, as applicable.
5. Where a proposed activity within the Buffer Zone will increase impervious surfaces and reduce groundwater recharge, infiltration measures must be designed to maintain existing groundwater recharge.
6. Activities proposed within Buffer Zone shall not impair its capacity to provide for recreation.
7. The limit of work shall be clearly identified on the plan and in the field and appropriate erosion and sedimentation control measures shall be implemented and maintained throughout construction. No silt or sediment may be permitted to enter any Bylaw Resource Area outside of the Limit of Work during or subsequent to construction.
8. Notwithstanding Section 2.5(4)(a)1. above, the Committee may allow activities within the Buffer Zone that serve to improve the capacity of the resource area to preserve and protect the Bylaw Interests and Values, such as removal of man-made debris, invasive species removal projects, and/or the planting of native vegetation.

Commentary: Requirements of the Bylaw and Regulations That Are More Stringent than Requirements of the Act and MassDEP Wetlands Protection Regulations

1. The Bylaw Resource Area Buffer Zone is a resource area in and of itself that serves to protect its Bylaw Interests and Values and has performance standards. Under the Act, the Buffer Zone was adopted as a regulatory mechanism in the 1983 revisions to the MassDEP Wetlands Protection Regulations as a means to determine which projects or activities would require preconstruction review under the provisions of the Act. Under the MassDEP Wetlands Regulations, the Buffer Zone is not a resource area, lacks its own statutory interests, serves only to protect the interest of the adjacent wetland resource area, and lacks performance standards.
2. Under the Bylaw, Buffer Zone contributes to public and private water supply and wildlife habitat, which are interests under both the Bylaw and Act; groundwater and water pollution prevention, which have analogous statutory interests; and erosion and sedimentation control and recreation, which lack analogous statutory interests. Under the Act, Buffer Zone does not in and of itself serve to protect any statutory interests.

3. As indicated above, the Buffer Zone does not have performance standards under the Act or the MassDEP Wetlands Protection Regulations. As such, the performance standards listed at Section 2.5(4)(a)1. to 7. above are more stringent than any provisions of the Act or the MassDEP Regulations. These regulations require applicants to preserve of a 25-foot No Disturbance Zone or obtain a Waiver of Regulation for work proposed within the 25-foot No Disturbance Zone; require a wildlife habitat evaluation and mitigation when threshold is exceeded; require mitigation plantings for tree removals when wildlife habitat provisions do not apply; require stormwater management with more stringent standards for most projects; require infiltration to maintain groundwater recharge when impervious surfaces are proposed; protect the capacity to provide recreation; and specifically require limit of work and sedimentation control measures, respectively.

2.6 Riverfront Area

(1) Preamble

- (a) Riverfront Area (i.e., any land within 200 feet of a perennial stream or river) is likely to be significant to public or private water supply, groundwater, flood control, erosion and sedimentation control, storm damage prevention, water pollution prevention, fisheries, wildlife habitat, and recreation.
 1. Land adjacent to rivers serves to protect the natural integrity of these waterways. The presence of natural vegetation is critical to sustaining rivers as ecosystems and providing these public values. The plant community, soils, and topography of Riverfront Area prevent degradation of water quality by filtering sediments, toxic substances, such as heavy metals, and nutrients, including phosphorus and nitrogen from stormwater runoff, non-point pollution sources, and the river itself. The plant community and topography serve to reduce erosion and to remove or detain sediments in runoff and flood waters. Sediments are trapped by vegetation before reaching the river, and nutrients and toxic substances may be detained in plant root systems or broken down by soil bacteria. The Riverfront Area can trap and remove disease-causing bacteria that would otherwise reach rivers. Natural vegetation proximate to the river also maintains water quality for fish and wildlife.
 2. Where rivers serve as water supplies or provide induced recharge to wells, the Riverfront Area can be important to the maintenance of drinking water quality and quantity. Land along rivers in its natural state with a high infiltration capacity increases the yield of public and private water supply wells. When a Riverfront Area lacks the capacity to filter pollutants, contaminants can reach human populations served by wells near rivers. The capacity to filter pollutants is equally critical to surface water supplies, reducing or eliminating the need for additional treatment. In the watershed, mature vegetation within Riverfront Area provides shade to moderate water temperature and slow algal growth, which affect surface water and groundwater quality.
 3. Within Riverfront Area, surface water interaction with groundwater significantly influences the stream ecosystem. The dynamic relationship between surface water and groundwater within the hyporheic zone sustains communities of aquatic organisms which regulate the flux of nutrients, biomass, and the productivity of organisms, including fish and wildlife within both high order and low order rivers.
 4. By providing recharge and retaining natural flood storage, as well as by slowing surface water runoff, Riverfront Area can mitigate flooding and damage from storms. The root systems of vegetation stabilize the area and keep soil porous, increasing infiltration capacity. Vegetation also removes excess water through evaporation and transpiration. Increases in storage of floodwaters can decrease peak discharges and reduce storm damage. Vegetated Riverfront Area also dissipates the energy of storm flows, reducing damage to public and private property.
 5. Riverfront Area is important to maintaining thriving fisheries. Maintaining vegetation along rivers promotes fish cover, increases food and oxygen availability, regulates temperature, decreases sedimentation, and provides spawning habitat. Maintenance of water temperatures and depths is critical to many important fish species. Where groundwater recharges surface water flows, loss of recharge as a result of impervious surfaces may aggravate low flow conditions and increase water

temperatures. Summer stream flows may be maintained almost exclusively from groundwater recharge. Small rivers are most readily impacted by removal of trees and other vegetation.

6. The plant community composition and structure, soil composition, topography, and hydrologic regime of the Riverfront Area provides important wildlife habitat functions including, but not limited to, food, shelter, overwintering, and breeding areas for wildlife, nesting sites for numerous birds, and isolated depressions that provide for amphibian breeding as well as unimpeded migratory areas along and across the riparian corridor. Riverfront Area promotes biological diversity by providing habitats for an unusually wide variety of both upland and wetland species. Large dead trees provide nesting sites for bird species that typically use the same nest from year to year. Sandy areas along rivers may serve as nesting sites for turtles and water snakes. Riverfront Area provides food and shelter for turtles and other species which feed and nest in uplands, but use rivers as resting and overwintering areas. Riverfront Area provides wildlife migration corridors for wildlife both along and perpendicular to the river to facilitate feeding or breeding. Loss of this connective function from activities that create barriers to wildlife movement results in habitat fragmentation and causes declines in wildlife populations. Vernal Pool Habitat (see Section 2.9 below) is often found within Riverfront Area. Areas so extensively altered by human activity that their important wildlife habitat functions have been effectively eliminated are not significant to the preservation and protection of wildlife habitat.
7. Due to the varied plant community and proximity to the river, Riverfront Area provides opportunities for recreational activities including, but not limited to, hiking, walking, nature watching, and photography as well as access for boating, swimming, and fishing.
8. Riverfront Area may overlap other Bylaw Resource Areas, such as, Bordering and Isolated Vegetated Wetlands, Buffer Zone, Bordering and Isolated Land Subject to Flooding, and Vernal Pool Habitat, but not Water Bodies and Waterways or Bank, and serves to preserve and protect the Bylaw Interests and Values provided by those Bylaw Resource Areas.

(2) Definition, Critical Characteristics, and Boundary

- (a) Riverfront Area is the land located within 200 feet of the mean annual high water line of a river. In the case of new agricultural or aquacultural activities, this distance is 100 feet. The Riverfront Area may include or overlap other Bylaw Resource Areas, except for Water Bodies and Waterways and Bank.
 - (b) The physical characteristics of a Riverfront Area and its location are significant to the preservation and protection of the Bylaw Interests and Values specified in Section 2.6(1)(a) above.
 - (c) A river is any natural flowing body of water that empties to any reservoir, lake, pond, or other river and which flows throughout the year. Rivers include streams that are perennial because surface water flows within them throughout the year. Subject to the provisions below, intermittent streams are not rivers as defined herein because surface water does not flow within them throughout the year. Rivers begin at the point an intermittent stream becomes perennial or at the point a perennial stream flows from a spring, reservoir, lake, or pond. Downstream of the first point of perennial flow, a river normally remains a river except where interrupted by a reservoir, lake, or pond.
1. To provide a level of certainty and consistency, the following river and stream segments located within Wellesley are always considered to be a river with Riverfront Area under the Bylaw and these regulations, excluding those portions that are ponds that lack primarily riverine characteristics. This designation as a river cannot be overcome under these regulations:
 - a. Charles River along southwestern municipal boundary;
 - b. Charles River along northern municipal boundary;

- c. Bogle Brook from municipal boundary to Reeds Pond and from Reeds Pond to main body of Morses Pond;
 - d. Sunnyside Brook (i.e., tributary to Bogle Brook) from municipal boundary under Manor Road; southwest of Sunnyside Avenue; under Mayo Road, Princeton Road, and Upson Road to confluence with Bogle Brook;
 - e. Boulder Brook from terminus of Beverly Road to Morses Pond;
 - f. Unnamed stream segment from start of channel southwest of Hampshire Road to Royalston Road;
 - g. Tributary to Boulder Brook from start of channel west of Westgate to confluence with Boulder Brook;
 - h. Waban Brook from Paintshop Pond to Lake Waban and from main body of Lake Waban to its confluence with the Charles River;
 - i. Fuller Brook from municipal boundary to unnamed pond north of Sudbury Aqueduct and from said unnamed pond to its confluence with Waban Brook;
 - j. Cold Spring Brook (i.e., tributary to Fuller Brook) from outlet of pond north of Town Hall access road, under Washington Street, west of Brook Street to confluence with Fuller Brook;
 - k. Caroline Brook from Forest Street to confluence with Fuller Brook;
 - l. Rosemary Brook from municipal boundary to Longfellow Pond and Longfellow Pond to unnamed pond north of Worcester Street and from said pond to its confluence with the Charles River;
 - m. Academy Brook from start of channel east of Lincoln Road to confluence with Rosemary Brook; and
 - n. Indian Springs Brook from railroad tracks west of Squirrel Road to its confluence with the Charles River.
2. Except for the river and stream segments listed in Section 2.6(2)(c)1. above, the presence of a river or the perennial versus intermittent status of a stream shall be determined for all other streams, mapped or unmapped by USGS, as follows:
- a. A river or stream that is shown as perennial on the current USGS map is perennial.
 - b. A river or stream that is shown as intermittent or not shown on the current USGS map that has a watershed size of one (1) square mile or greater, is perennial.
 - c. A stream shown as intermittent or not shown on the current USGS map that has a watershed size less than one square mile is intermittent unless:
 - 1) The stream to the design point has a watershed size of at least one-half (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 Committee shall find such streams to be perennial; or
 - 2) When the USGS Stream Stats method cannot be used because the stream does not have a mapped and digitized centerline and the stream has a watershed size of at least one-half (0.50) square mile, and the surficial geology of the contributing drainage area to the stream at the design point contains 75% or more stratified drift, the Committee 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. Except for the river and stream segments listed in Section 2.6(2)(c)1. above, the Committee shall find that any stream is intermittent based upon a documented field observations 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 man-made flow reductions or diversions. All field observations, including videos, photographs, and field notes, shall be submitted to the Committee with a statement signed under the penalties of perjury attesting to the authenticity and veracity of the submitted materials. Department staff, Committee members, and the Administrator are competent sources; the Committee may consider evidence from other sources that are determined to be competent pursuant to Section 1.8 above.
 - e. Rivers include perennial streams that cease to flow during periods of extended drought. Periods of extended drought shall mean those periods in specific geographical locations determined to be at the 'Advisory' or more severe drought level by the Massachusetts Drought Management Task Force or its successor pursuant to the Massachusetts Drought Management Plan. 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 man-made flow reductions or diversions shall be considered perennial.
3. The Riverfront Area includes all land except for the Bylaw Resource Areas Water Bodies and Waterways and Bank located within 200 feet (or 100 feet for new agricultural or aquacultural activities) of the mean annual high water line of the river. The Riverfront Area boundary would be drawn such that it does not include the Bylaw Resource Areas Water Bodies and Waterways or Bank. The inner boundary of the Riverfront Area is the mean annual high water line of the river; the outer boundary is a line drawn 200 feet (or 100 foot for new agricultural or aquacultural activities) from the mean annual high water line of the river subject to the following provisions.
- a. At the point where a stream becomes perennial, the Riverfront Area begins as a line with a 200-foot radius around the point along each Bank where the intermittent stream transitions to river that connects to a line drawn 200 feet from the mean annual high water line of the river.
 - b. Where a river flows through a reservoir, lake, or pond, Riverfront Area stops at the inlet and begins again at the outlet as a line with a 200-foot radius around the point along each Bank where the river transitions to reservoir, lake, or pond or where reservoir, lake, or pond transitions back to river, respectively, that connects to a line drawn 200 feet from the mean annual high water line of the river. A water body identified as a reservoir, lake, or pond on the current USGS map is a reservoir, lake, or pond, and not a river, unless the Committee finds the water body to have primarily riverine characteristics. When a water body is not identified as a reservoir, lake, or pond, on the current USGS map, the water body is a river if it has primarily riverine characteristics. Riverine characteristics may include, but are not limited to, unidirectional flow that can be visually observed or measured in the field. Great Ponds (e.g., Lake Waban) are never rivers.
 - c. When a river contains islands, the Riverfront Area extends landward into the island from and parallel to the mean annual high water line.
 - d. Where a river flows through a culvert greater than 200 feet in length, the Riverfront Area stops at the inlet and begins again at the outlet as a line with a 200-foot radius around the culvert inlet and outlet that connects to a line drawn 200 feet from the mean annual high water line of the river.

- (d) The mean annual high water line of a river is the line that is apparent from visible markings or changes in the character of soils or vegetation due to the prolonged presence of water and that distinguishes between predominantly aquatic and predominantly terrestrial land. Field indicators of bankfull conditions shall be used to determine the mean annual high water line. Bankfull field indicators include, but are not limited to: changes in slope, changes in vegetation, stain lines, top of pointbars, changes in bank materials, or bank undercuts.
1. In most rivers, the first observable break in slope is coincident with bankfull conditions and the mean annual high water line.
 2. In some river reaches, the mean annual high water line is represented by bankfull field indicators that occur above the first observable break in slope, or if no observable break in slope exists, by other bankfull field indicators. These river reaches are characterized by at least two of the following features: low gradient, meanders, oxbows, histosols, a low-flow channel, or poorly-defined or nonexistent banks.

(3) Presumption

- (a) Where an activity involves removing, filling, dredging, building upon, or altering of Riverfront Area, the Committee shall presume that such area is significant to the Bylaw Interests and Values specified in Section 2.6(1)(a) above.
- (b) The presumption of significance is rebuttable and may be overcome by a clear showing that said area of Riverfront Area does not play a role in the preservation and protection of one or more of the applicable Bylaw Interests and Values. In the event that the presumption is deemed to have been overcome for all of the Bylaw Interests and Values, the Committee shall make a written determination to this effect, setting forth its grounds on WPA Form 6, used under the Act and 310 CMR 10.00, as amended. Where the applicant provides information that said area does not play a role in the preservation and protection one or more, but not all of the applicable Bylaw Interests and Values, the Committee shall determine that the presumption has been rebutted only for that or those Bylaw Interests and Values and the presumption of significance is partially overcome.

(4) Performance Standards

- (a) Where the presumption set forth in Section 2.6(3)(a) above is not overcome, the applicant shall prove by a preponderance of credible evidence that there are no practicable and substantially equivalent economic alternatives to the proposed activity with less adverse effects on the Bylaw Interests and Values and that the activity, including any proposed mitigation, will not significantly impair the ability of the Riverfront Area to preserve and protect the Bylaw Interests and Values. Performance standards for activities proposed within previously developed Riverfront Area are set forth in Section 2.6(4)(b) below. Under certain circumstances, both sets of standards may be applicable to different aspects of a proposed project.
 1. Protection of Other Bylaw Resource Areas. The activity shall meet the performance standards for all other Bylaw Resource Areas within the Riverfront Area within which the activity is proposed, including Buffer Zone.
 2. Protection of Rare Species. No activity may be permitted within the Riverfront Area which will have any adverse effect on specified habitat sites of rare wetland or upland, vertebrate or invertebrate species, as identified by the procedures established under 310 CMR 10.59.
 3. Practicable and Substantially Equivalent Economic Alternatives. There must be no practicable and substantially equivalent economic alternative to the proposed project with less adverse effects on the Bylaw Interests and Values. An alternative is practicable and substantially equivalent economically if it is available and capable of being done in light of the overall project purpose after taking into consideration costs, existing technology, proposed use, and logistics. The determination of practicable, the scope of analysis, and the evaluation of the alternatives shall be conducted in accordance with the methodology

presented at 310 CMR 10.58(4)(c)1. to 3., respectively. This analysis should generally be conducted in a manner consistent with that under the Act.

4. No Significant Adverse Impact. The activity, including proposed mitigation measures, shall not impair the ability of the Riverfront Area to preserve and protect the Bylaw Interests and Values.
 - a. The Committee may allow the alteration of up to 5,000 square feet or 10%, whichever is greater, of the Riverfront Area on a lot recorded on or before October 6, 1997 or up to 10% of the Riverfront Area on a lot recorded after October 6, 1997, provided that the following standards are met.
 - 1) At a minimum, a 100 foot wide area of undisturbed vegetation closest to the river is provided. If there is not a 100 foot wide area of undisturbed vegetation along the river, existing vegetative cover shall be preserved or extended to the maximum extent feasible to approximate a 100 foot wide corridor of natural vegetation. Replacement, compensatory storage, and replication of habitat required to meet other Bylaw Resource Area performance standards are allowed within 100 feet of the river. Structural stormwater management measures may be allowed within 100 feet of the river 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 condition. The calculation of Riverfront Area alteration shall exclude the area of replacement, compensatory storage, and replication areas required for mitigation and structural stormwater measures provided a wildlife corridor is maintained.
 - 2) Stormwater is managed according to regulatory standards at 310 CMR 10.05(6)(k) to (q) established by the Department, as applicable, and Section 1.6(8)(b)4.g. of these regulations above, as applicable.
 - 3) Work in those portions of Riverfront Area found to be significant to the preservation and protection of wildlife habitat shall not impair its capacity to provide important wildlife habitat functions. An activity or activities on a single lot that cumulatively alters up to 5,000 square feet of land in this resource area found to be significant to the protection of wildlife habitat per Section 2.6(1)(a)6. above, shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond this threshold may be permitted if they will not impair the capacity of the Riverfront Area to preserve or protect important wildlife habitat functions in accordance with the wildlife habitat assessment procedure and mitigation of altered habitat requirements found in Section 2.10 below.
 - 4) Work within the Riverfront Area that does not meet the wildlife habitat assessment threshold at Section 2.6(4)(a)4.a.3) above that results in the removal of a tree or trees (dbh 5 inches or larger) within the Riverfront Area shall require the planting of one replacement tree for each tree that is removed. The proposed replacement tree(s) shall be of a native species, have a caliper of at least 1.5 inches, be located to optimize the contribution to the Bylaw Interests and Values, and be monitored for two growing seasons after planting. Alternatively, the applicant may propose a functionally equivalent mitigation plan to the above replacement tree(s) that may include native trees, shrubs, and ground cover and/or invasive species removal with a proposed monitoring plan that serves to benefit the Bylaw Interests and Values of the Riverfront Area.
 - 5) The proposed activity shall not impair groundwater or surface water quality by incorporating erosion and sedimentation controls and other measures to attenuate non-point source pollution.
 - 6) Activities proposed within Riverfront Area shall not impair its capacity to provide for recreation.

- 7) The limit of work shall be clearly identified on the plan and in the field and appropriate erosion and sedimentation control measures shall be implemented and maintained throughout construction. No silt or sediment may be permitted to enter any Bylaw Resource Area outside of the Limit of Work during or subsequent to construction.
 - 8) The Committee may allow activities with Riverfront Area that serve to improve the capacity of the resource area to preserve and protect the Bylaw Interests and Values, such as removal of man-made or other debris, invasive species removal, and/or the planting of native vegetation.
- b. Notwithstanding the provisions of Section 2.6(4)(a)4.a. above, the Committee shall allow the construction of a single family house, a septic system, if no sewer is available, and a driveway, on a lot recorded before August 7, 1996 where the size or shape of the lot within the Riverfront Area prevents the construction from meeting the requirements of Section 2.6(4)(a)4.a. above, provided the following criteria apply.
- 1) The lot can be developed for such purposes under the applicable provisions of other municipal and state law; and
 - 2) The performance standards of Section 2.6(a)4.a. above are met to the maximum extent feasible. The maximum extent of the clearing and lawn around the house should be limited to that area necessary for the construction of the house. A wildlife habitat assessment under Section 2.10 below shall not be required.
- c. Notwithstanding the provisions of 2.6(4)(a)4.a. above, the issuing authority may allow the construction of a commercial structure of minimum feasible dimension, on a lot recorded before August 7, 1996 where the size or shape of the lot within the Riverfront Area prevents the construction from meeting the requirements of Section 2.6(4)(a)4.a. above, only if the following criteria apply.
- 1) The lot can be developed for such purposes and cannot be developed for any other purposes under the applicable provisions of other municipal and state law;
 - 2) The activity is not eligible for redevelopment under Section 2.6(4)(b) below; and
 - 3) The performance standards of 2.6(4)(a)4.a. above are met to the maximum extent feasible.
- (b) Redevelopment within a Previously Developed Riverfront Area. Notwithstanding the provisions of Sections 2.6(4)(a)3. and 4. above, the Committee may allow work to redevelop a previously developed Riverfront Area provided that the proposed activity improves existing conditions. Redevelopment means replacement, rehabilitation or expansion of existing structures, improvement of existing roads, or reuse of degraded or previously developed areas. A previously developed Riverfront Area contains areas degraded prior to August 7, 1996 by impervious surfaces from existing structures or pavement, absence of topsoil, junkyards, or abandoned dumping grounds. Lawn and landscaped areas are not considered degraded areas as they have topsoil. Work to redevelop previously developed Riverfront Area shall conform to the following criteria.
1. The proposed activity shall result in an improvement over existing conditions of the capacity of the Riverfront Area to protect the Bylaw Interests and Values. When a lot is previously developed but no portion of the Riverfront Area is degraded, the requirements of Section 2.6(4)(a) above shall apply.
 2. Stormwater is managed according to regulatory standards at 310 CMR 10.05(6)(k) to (q) established by the Department, as applicable, and Section 1.6(8)(b)4.g. of these regulations above, as applicable.
 3. The proposed activity shall not be located closer to the river than existing conditions or 100 feet, whichever is less, except in accordance with Sections 2.6(4)(b)7. and 8. below.

4. The proposed activity, including expansion of existing structures, shall be located outside the Riverfront Area or toward the Riverfront Area boundary and away from the river, except in accordance with Sections 2.6(4)(b)7. and 8. below.
5. The area of the proposed activity shall not exceed the amount of degraded area, provided that the proposed activity may alter up to 10% of the Riverfront Area if the degraded area is less than 10% of the Riverfront Area on the lot, except in accordance with Sections 2.6(4)(b)7. and 8. below.
6. The limit of work shall be clearly identified on the plan and in the field and appropriate erosion and sedimentation control measures shall be implemented and maintained throughout construction. No silt or sediment may be permitted to enter any Bylaw Resource Area outside of the Limit of Work during or subsequent to construction.
7. When an applicant proposes on-site restoration of degraded Riverfront Area, alteration may be allowed notwithstanding the criteria of Sections 2.6(4)(b)3. to 5. above at a ratio in square feet of at least 1:1 of restored area to area of alteration not conforming to the criteria. Areas immediately along the river shall be selected for restoration. Restoration shall include:
 - a. removal of all debris, but retaining any trees or other mature vegetation;
 - b. grading to a topography which reduces runoff and increases infiltration;
 - c. coverage by topsoil at a depth consistent with natural conditions at the site; and
 - d. seeding and planting with an erosion control seed mixture, followed by plantings of herbaceous and woody species appropriate to the site.
8. When an applicant proposes mitigation either on-site or off-site within the Riverfront Area within the same general area of the river basin, alteration may be allowed notwithstanding the criteria of Sections 2.6(4)(b)3. to 5. above at a ratio in square feet of at least 2:1 of mitigation area to area of alteration not conforming to the criteria or an equivalent level of functional mitigation where square footage is not a relevant measure. Mitigation may include off-site restoration of Riverfront Area, conservation restrictions to preserve undisturbed Riverfront Area that could otherwise be developed under the Bylaw, the purchase of development rights within the Riverfront Area, the restoration of Vegetated Wetlands, projects to remedy an existing adverse impact on the Bylaw Interests and Values for which the applicant is not legally responsible, or similar activities undertaken voluntarily by the applicant.
9. The Committee shall include a continuing condition in the Certificate of Compliance for projects under Sections 2.6(4)(b)7. or 8. above prohibiting further alteration within the restoration or mitigation area, except as may be required to maintain the area in its restored or mitigated condition. Prior to requesting the issuance of the Certificate of Compliance, the applicant shall demonstrate the restoration or mitigation has been successfully completed for at least two growing seasons.

Commentary: Requirements of the Bylaw and Regulations That Are More Stringent than Requirements of the Act and MassDEP Wetlands Protection Regulations

1. The Bylaw Resource Area Riverfront Area is defined differently than Riverfront Area under the Act. Under these regulations at Sections 2.6(2)(a), (2)(c)1.a to n., (2)(c)3.a. & b., and (2)(c)3.d., Riverfront Area includes all land within 200 feet of the mean annual high-water line of the river, including a radius around the beginning and ending point of each river segment; certain streams that may be considered intermittent under the Act are always considered to be a river; lands within 200 feet of pond inlets and outlets are part of the Riverfront Area; and lands within 200 feet of the inlet and outlet of culverts over 200 feet in length are part of the Riverfront Area, respectively. Under the Act, Riverfront Area includes only land situated between a perennial river's mean annual high water line and a parallel line located 200 feet away, measured outward horizontally from the river's mean annual high-water line.

2. Under the Bylaw, Riverfront Area contributes to public and private water supply, flood control, storm damage prevention, fisheries, and wildlife habitat, which are interests under both the Bylaw and Act; groundwater and water pollution prevention, which have analogous statutory interests; and erosion and sedimentation control and recreation, which lack analogous statutory interests. Under the Act, Riverfront Area contributes to public and private water supply, groundwater supply, flood control, storm damage prevention, prevention of pollution, fisheries, and wildlife habitat.
3. Performance standards for Riverfront Area in these regulations are more stringent at Sections 2.6(4)(a)4.a.2), 3), 4), 6), and 7); and (4)(b)2. and 6., above than in the MassDEP Wetlands Protection Regulations. These standards require stormwater management with more stringent standards for new development; require a wildlife habitat evaluation and mitigation pursuant to these regulations for 5,000 or more square feet of Riverfront Area alteration; require mitigation plantings for tree removals when wildlife habitat provisions do not apply; protect capacity to provide recreation; require limit of work and sedimentation control measures for new development; require stormwater management with more stringent standards for redevelopment projects; and require limit of work and sedimentation control measures for redevelopment, respectively.

2.7 **Bordering Land Subject to Flooding**

(1) Preamble

- (a) Bordering Land Subject to Flooding is an area which floods from a rise in a bordering reservoir, lake, pond, river, stream, or creek. Such areas are likely to be significant to flood control, erosion and sedimentation control, storm damage prevention, wildlife habitat, and recreation.
 1. Bordering Land Subject to Flooding provides a temporary storage area for flood water which has overtopped the Bank of the channel of a river, stream, or creek or the basin of a reservoir, lake, or pond. During periods of peak runoff, flood waters are both retained (i.e., slowly released through evaporation and percolation) and detained (i.e., slowly released through surface discharge) by Bordering Land Subject to Flooding. Over time, incremental filling of these areas causes increases in the extent and level of flooding by eliminating flood storage volume or by restricting flows, thereby causing increases in damage to public and private properties.
 2. The plant community and its structure and generally flat topography of Bordering Land Subject to Flooding serve to reduce erosion and to remove or detain sediments in runoff and flood waters.
 3. The plant community composition and structure, soil composition and structure, topography, hydrologic regime, and proximity to Water Bodies and Waterways, Bank, Vegetated Wetlands, and Vernal Pool Habitat enable the entire Bordering Land Subject to Flooding resource area, not just those portions within the 100-year floodplain, 100-foot Buffer Zone, and within Vernal Pool Habitat, to provide important food, shelter, migratory, overwintering, and breeding areas for wildlife. Nutrients from flood waters, as well as the inundation of floodplain soil, create important wildlife habitat characteristics, such as richness and diversity of vegetation and soil. The area where floodplain habitat is proximate to Water Bodies and Waterways, Bank, and Vegetated Wetlands is frequently very high in wildlife richness and diversity. Various edges may be found elsewhere the floodplain, where differences in topography and frequency of flooding have created varied soil and plant community composition and structure. Vernal Pool Habitat (see Section 2.9 below) is often found within the 100-year floodplain. Areas so extensively altered by human activity that their important wildlife habitat functions have been effectively eliminated are not significant to the preservation and protection of wildlife habitat.
 4. Due to the varied plant community and generally flat topography, Bordering Land Subject to Flooding provides opportunities for recreational activities, including but not limited to hiking, walking, nature watching, and photography.

(2) Definition, Critical Characteristics, and Boundary

- (a) Bordering Land Subject to Flooding is an area with low, flat topography adjacent to and inundated by flood waters rising from reservoirs, lakes, ponds, rivers, streams, and creeks. Bordering Land Subject to Flooding extends from the upper boundary of Bank of these reservoirs, lakes, ponds, rivers, streams, and creeks or from the boundary of Bordering Vegetated Wetlands, when present. Bordering Land Subject to Flooding may include or overlap other Bylaw Resource Areas, including Isolated Vegetated Wetlands, Buffer Zone, Riverfront Area, Isolated Land Subject to Flooding, and Vernal Pool Habitat.
- (b) The physical characteristics and location of Bordering Land Subject to Flooding are significant to the preservation and protection of the Bylaw Interests and Values specified in Section 2.7(1)(a) above.
- (c) The boundary of Bordering Land Subject to Flooding is the estimated maximum lateral extent of flood water which will theoretically result from the statistical 100-year frequency storm. 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, “FEMA”). Said boundary, shall be presumed accurate. This presumption may be overcome only by credible evidence from a registered professional engineer or other professional competent in such matters.
- (d) Where NFIP flood 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 absence of such observations or records, the estimated maximum lateral extent of floodwater that will theoretically result from the statistical 100-year frequency storm shall be determined by a registered professional engineer using the procedures set forth at 310 CMR 10.57(2)(a)3.

(3) Presumption

- (a) Where an activity involves removing, filling, dredging, building upon, or altering of Bordering Land Subject to Flooding, the Committee shall presume that such area is significant to the Bylaw Interests and Values specified in Section 2.7(1)(a) above.
- (b) The presumption of significance is rebuttable and may be overcome by a clear showing that said area of Bordering Land Subject to Flooding does not play a role in the preservation and protection of one or more of the applicable Bylaw Interests and Values. In the event that the presumption is deemed to have been overcome for all of the Bylaw Interests and Values, the Committee shall make a written determination to this effect, setting forth its grounds on WPA Form 6, used under Act and 310 CMR 10.00, as amended. Where the applicant provides information that said area does not play a role in the preservation and protection one or more, but not all of the applicable Bylaw Interests and Values, the Committee shall determine that the presumption has been rebutted only for that or those Bylaw Interests and Values and the presumption of significance is partially overcome.

(4) Performance Standards

- (a) Where the presumption set forth in Section 2.7(3)(a) above is not overcome, any proposed work within Bordering Land Subject to Flooding shall meet the following performance standards.
 - 1. Compensatory storage shall be provided for all flood storage volume that will be lost as the result of a proposed activity within Bordering Land Subject to Flooding when said loss will cause an increase or will contribute incrementally to an increase in the horizontal extent and level of flood waters during peak flows. Compensatory storage shall mean a volume not previously used for flood storage and shall be incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100 year flood elevation, which would be displaced by the proposed activity. Such compensatory volume shall have an unrestricted hydraulic connection to and shall be provided within the same general area as the lost volume when associated with a reservoir, lake, or pond or in the same reach when associated with a river, stream, or creek.

2. Work within Bordering Land Subject to Flooding, including that work required to provide compensatory storage, shall not restrict flows so as to cause an increase in flood stage or velocity.
3. Work in those portions of Bordering Land Subject to Flooding found to be significant to the preservation and protection of wildlife habitat shall not impair its capacity to provide important wildlife habitat functions. An activity or activities on a single lot that cumulatively alters up to 10% or 5,000 square feet, whichever is less, of land in this resource area found to be significant to the protection of wildlife habitat per Section 2.7(1)(a)3. above, shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond this threshold may be permitted if they will not impair the capacity of the Bordering Land Subject to Flooding to preserve or protect important wildlife habitat functions in accordance with the wildlife habitat assessment procedure and mitigation of altered habitat requirements found in Section 2.10 below.
4. Stormwater is managed according to regulatory standards at 310 CMR 10.05(6)(k) to (q) established by the Department, as applicable, and Section 1.6(8)(b)4.g. of these regulations above, as applicable.
5. Activities proposed within Bordering Land Subject to Flooding shall not impair its capacity to provide for recreation.
6. The limit of work shall be clearly identified on the plan and in the field and appropriate erosion and sedimentation control measures shall be implemented and maintained throughout construction. No silt or sediment may be permitted to enter any Bylaw Resource Area outside of the Limit of Work during or subsequent to construction.
7. The Committee may allow activities with Bordering Land Subject to Flooding that serve to improve the capacity of the resource area to preserve and protect the Bylaw Interests and Values, such as removal of man-made or other debris, invasive species removal, and/or the planting of native vegetation.

Commentary: Requirements of the Bylaw and Regulations That Are More Stringent than Requirements of the Act and MassDEP Wetlands Protection Regulations

1. The Bylaw Resource Area Bordering Land Subject to Flooding is defined similarly under the Bylaw and Act regulations.
2. Bordering Land Subject to Flooding contributes to flood control, storm damage prevention, and wildlife habitat, which are interests under both the Bylaw and Act; and erosion and sedimentation control and recreation, which lack analogous statutory interests. Under the Act, Bordering Land Subject to Flooding contributes to flood control, storm damage prevention, and wildlife habitat.
3. Performance standards for Bordering Land Subject to Flooding in these regulations are more stringent at Sections 2.7(4)(a)3.1.b. and f., (4)(c), and (4)(e), above than the performance standards in the MassDEP Regulations. These standards consider additional areas within this resource area to be important to the protection of wildlife habitat which must be considered in any required wildlife habitat evaluation pursuant to these regulations; require stormwater management with more stringent standards for certain projects; to protect capacity to provide recreation; and require limit of work and sedimentation control measures, respectively.

2.8 Isolated Land Subject to Flooding

(1) Preamble

- (a) Isolated Land Subject to Flooding is an isolated depression or a closed basin which serves as a ponding area for runoff or high groundwater which has risen above the ground surface. Such areas are likely to be locally significant to groundwater, flood control, erosion and sedimentation control, and storm damage prevention.

Where such areas are underlain by pervious material they are likely to be significant to public or private water supply and to groundwater, and when this pervious material is covered by a layer of organic peat or muck, they are also likely to be significant to the water pollution prevention.

1. Isolated Land Subject to Flooding provides a temporary storage area where runoff and high groundwater pond and slowly evaporate or percolate into the substrate. The plant community and topography of such depressions serve to reduce erosion and to remove or detain sediments in flood waters. Filling of such areas causes lateral displacement of the ponded water onto contiguous properties, which may result in damage to said properties.
2. Where such area is underlain by pervious material, it provides a point of exchange between surface water and groundwater. Contaminants introduced into the area, such as septic system discharges and contaminants in road runoff, including nutrients, metals, and salts, find easy access into the groundwater and neighboring wells. Where these conditions occur and a mat of organic peat or muck covers the substrate of the area, said mat serves to detain and remove contaminants which might otherwise enter the groundwater and neighboring wells.

(2) Definition, Critical Characteristics, and Boundary

- (a) Isolated Land Subject to Flooding is an isolated depression or closed basin without an inlet or an outlet. It is an area which at least once a year confines standing water to an average depth of at least six (6) inches and has a surface area of 2,500 square feet or greater. Isolated Land Subject to Flooding may be underlain by pervious material, which in turn may be covered by a mat of organic peat or muck.
- (b) The physical characteristics and location are significant to the preservation and protection of the Bylaw Interests and Values specified in Section 2.8(1)(a) above.
- (c) The boundary of Isolated Land Subject to Flooding is the perimeter of the largest observed or recorded volume of water confined in said area.
- (d) In the absence of such observations or records, the estimated maximum lateral extent of floodwater that will theoretically result from the statistical 100-year frequency storm shall be based upon calculations prepared and certified by a registered professional engineer using the procedures set forth at 310 CMR 10.57(2)(b)3. and Department Wetlands Program Policy 85-2: Isolated Land Subject to Flooding, as amended, except that the maximum extent of said water and its resulting surface area shall be based upon the total volume rather than peak rate of runoff from the contributing drainage area and shall be further based upon the assumption that there is no infiltration of said runoff into the soil within confines of the Isolated Land Subject to Flooding. Groundwater inputs shall be considered in these calculations.

(3) Presumption

- (a) Where an activity involves removing, filling, dredging, building upon, or altering of Isolated Land Subject to Flooding, the Committee shall presume that such area is significant to the Bylaw Interests and Values specified in Section 2.8(1)(a) above.
- (b) The presumption of significance is rebuttable and may be overcome by a clear showing that said area of Isolated Land Subject to Flooding does not play a role in the preservation and protection of one or more of the applicable Bylaw Interests and Values. In the event that the presumption is deemed to have been overcome for all of the Bylaw Interests and Values, the Committee shall make a written determination to this effect, setting forth its grounds on WPA Form 6, used under Act and 310 CMR 10.00, as amended. Where the applicant provides information that said area does not play a role in the preservation and protection one or more, but not all of the applicable Bylaw Interests and Values, the Committee shall determine that the presumption has been rebutted only for that or those Bylaw Interests and Values and the presumption of significance is partially overcome.

(4) Performance Standards

- (a) Isolated Land Subject to Flooding that meets the applicable definitions may also be regulated as Isolated Vegetated Wetlands and Vernal Pool Habitat. Work proposed in such areas would need to meet performance standards applicable to those Bylaw Resource Areas at Section 2.4(4) above and Section 2.9(4) below, respectively.
- (b) Where the presumption set forth in Section 2.8(3)(a) above is not overcome, any proposed activity within Isolated Land Subject to Flooding shall meet the following performance standards:
 - 1. The activity shall not result in the following:
 - a. Flood damage due to filling which causes lateral displacement of water that would otherwise be confined within said area.
 - b. An adverse effect on public and private water supply or groundwater, where said area is underlain by pervious material.
 - c. An adverse effect on the capacity of said area to prevent pollution of the groundwater, where such area is underlain by pervious material which in turn is covered by a mat of organic peat and muck.
 - 2. The limit of work shall be clearly identified on the plan and in the field and appropriate erosion and sedimentation control measures shall be implemented and maintained throughout construction. No silt or sediment may be permitted to enter any Bylaw Resource Area outside of the Limit of Work during or subsequent to construction.
 - 3. The Committee may allow activities within Isolated Land Subject to Flooding that serve to improve the capacity of the resource area to preserve and protect the Bylaw Interests and Values, such as removal of man-made or other debris, invasive species removal, and/or the planting of native vegetation.
 - 4. Stormwater shall be managed according to regulatory standards at 310 CMR 10.05(6)(k) to (q) established by the Department, as applicable, and Section 1.6(8)(b)4.g. of these regulations above, as applicable.

Commentary: Requirements of the Bylaw and Regulations That Are More Stringent than Requirements of the Act and MassDEP Wetlands Protection Regulations

- 1. The Bylaw Resource Area Isolated Land Subject to Flooding is defined differently and includes additional areas than Isolated Land Subject to Flooding under the Act. Under the Bylaw, Isolated Land Subject to Flooding consists of an isolated depression that annually confines standing water to an average depth of six inches and has a surface area of 2,500 square feet or greater. Under the Act, such an area would be required to meet the provisions 310 CMR 10.57(2)(b) to be regulated as Isolated Land Subject to Flooding.
- 2. Isolated Land Subject to Flooding contributes to flood control and storm damage prevention, which are interests under both the Bylaw and Act; groundwater, which has an analogous statutory interest; and erosion and sedimentation control, which lacks an analogous statutory interest. Under the Act, Isolated Land Subject to Flooding may contribute to public and private water supply, groundwater supply, flood control, storm damage prevention, prevention of pollution, and wildlife habitat.
- 3. Performance standards for Isolated Land Subject to Flooding in these regulations are more stringent at Section 2.8(4)(a), (4)(b)2., and (4)(b)4) above than the performance standards in the MassDEP Wetlands Protection Regulations. These regulations require applicants to comply with additional performance standards should the Isolated Land Subject to Flooding also qualify as an Isolated Vegetated Wetland and/or Vernal Pool Habitat under the Bylaw; require limit of work and sedimentation control measures; and require stormwater management with more stringent standards for certain projects, respectively.

2.9 Vernal Pool Habitat

(1) Preamble

- (a) Vernal Pool Habitat, which includes the pool depression as well as the land located within 100 feet of the mean annual pool boundary, are likely significant to the protection of wildlife habitat and recreation.
1. The plant community composition and structure, soil structure, topography, and hydrologic regime of Vernal Pool Habitat provide food, shelter, migratory and breeding areas, and overwintering areas for amphibians and fairy shrimp as well as foraging habitat for a variety of wildlife species. Vernal pools constitute a unique and increasingly rare type of wildlife habitat. Vernal pools provide essential breeding habitat for certain salamanders, frogs, and toads as well as complete life-cycle habitat for fairy shrimp. Some obligate species that utilize vernal pools for breeding are totally dependent upon the pool and its associated habitat for survival. The areas proximate to the pool, and for some distance away from the pool depending upon the species, provide important non-breeding habitat functions, such as migratory pathways, feeding, shelter, and overwintering sites. Many other facultative species also utilize vernal pools and their associated uplands for breeding and non-breeding functions, although these species are not restricted to this type of habitat. The shallow edges of vernal pools represent one of the most ecologically valuable portions of these habitats. These areas are first to thaw in the spring, allowing earlier access by amphibians to the pool. The water in these shallow water zones is warmer than in deeper pool areas and egg development benefits from the warmer water temperatures. Trees and shrubs growing proximate to the pool provide shading upon leaf-out later in the vernal pool season. Vegetation growing near and within the pool provide coarse and fine woody debris which serve as substrate for egg mass attachment, and in combination with leaf litter, as a base for the food web in the vernal pool. Stumps, fallen logs, and leaf litter offer shelter and cover for amphibians migrating to and from the pool. Vernal pools provide other important wildlife habitat functions during the non-breeding season for a wide variety of wildlife species. Vernal Pool Habitat excludes those areas so extensively altered by human activity that their important wildlife habitat functions have been effectively eliminated.
 2. Due to the varied and unique habitat and wildlife features of vernal pools, Vernal Pool Habitat provides opportunities for recreational activities, including but not limited to walking, nature watching, and photography.

(2) Definition, Critical Characteristics, and Boundary

- (a) Vernal Pool Habitat is specifically defined in Section 3 of the Bylaw and is clarified herein to mean a confined basin depression which, at least in most years, holds water for a minimum of two continuous months during the spring or summer, and which is free of an adult fish population as well as the land located within 100 feet of the mean annual boundary of the pool. These areas are essential breeding habitat and provide other extremely important wildlife habitat functions during the non-breeding season for a variety of amphibian species. Vernal Pool Habitat does not need to be located within another Bylaw Resource Area to be regulated under the Bylaw. Vernal Pool Habitat may be found within other Bylaw Resource Areas including Vegetated Wetlands, Buffer Zone, Riverfront Area, Bordering Land Subject to Flooding, and Isolated Land Subject to Flooding. Vernal Pool Habitat does not need to be certified by the Natural Heritage and Endangered Species Program to be regulated under the Bylaw.
- (b) The physical characteristics and location of Vernal Pool Habitat are significant to the preservation and protection of the Bylaw Interests and Values specified in Section 2.9(1)(a) above.
- (c) The mean annual boundary of the vernal pool is the maximum observed or recorded extent of flooding. In the absence of a clear and distinct topographic break, this boundary shall be delineated based upon leaf staining and other evident indicators of flooding and hydrology. Vernal pools do not have a lower size threshold.

- (d) In the absence of such observations or records, the boundary of the vernal pool shall be the estimated maximum lateral extent of standing water that will theoretically result based upon calculations prepared and certified by a registered professional engineer using the procedures set forth in 310 CMR 10.57(2)(b)3. and Department Wetlands Program Policy 85-2: Isolated Land Subject to Flooding, as amended, except that the maximum extent of said water shall be based upon the total volume rather than peak rate of runoff from the contributing drainage area using a design storm of 2.6 inches of precipitation in 24 hours with the assumption that there is no infiltration of said runoff into the soil within confines of the vernal pool. Groundwater inputs shall be considered in these calculations.
- (e) The boundary of Vernal Pool Habitat is the line located 100 feet horizontally outward from the mean annual boundary of the vernal pool, but shall not include extensively altered areas as defined in Section 1.5 above.
- (f) The presumption that a vernal pool meeting the definition in Section 2.9(2)(a) above actually provides typical vernal pool habitat functions may be overcome by a clear and convincing showing that the presumed vernal pool does not meet the certification requirements set forth in the March 2009 Natural Heritage and Endangered Species Program's *Guidelines for the Certification of Vernal Pool Habitat*. As vernal pools are seasonal features in the landscape, the evidence necessary to overcome this presumption shall be collected during the appropriate season. The Committee may require a site visit or may hire an outside consultant, as necessary, to verify the evidence presented to overcome the presumption. If the presumption is not overcome, Vernal Pool Habitat under the Bylaw shall be considered to be present.

(3) Presumption

- (a) Where an activity involves removing, filling, dredging, building upon, or altering of Vernal Pool Habitat, the Committee shall presume that such area is significant to the Bylaw Interests and Values specified in Section 2.9(1)(a) above.
- (b) The presumption of significance is rebuttable and may be overcome by a clear showing that said area of Vernal Pool Habitat does not play a role in the preservation and protection of one or more of the applicable Bylaw Interests and Values. In the event that the presumption is deemed to have been overcome for all of the Bylaw Interests and Values, the Committee shall make a written determination to this effect, setting forth its grounds on WPA Form 6, used under Act and 310 CMR 10.00, as amended. Where the applicant provides information that said area does not play a role in the preservation and protection one or more, but not all of the applicable Bylaw Interests and Values, the Committee shall determine that the presumption has been rebutted for only that or those Bylaw Interests and Values and the presumption of significance is partially overcome.

(4) Performance Standards

- (a) Where the presumption set forth in Section 2.9(3)(a) above is not overcome, no activity shall be permitted in Vernal Pool Habitat that would destroy or alter any portion of said Vernal Pool Habitat, or impair in any way the Vernal Pool Habitat's ability to preserve or protect any of the Bylaw Interests and Values listed in Section 2.9(1)(a) above.
- (b) If the proposed work in Vernal Pool Habitat qualifies for a Waiver of Regulation at Section 1.6(9) above and the Committee grants the Waiver of Regulation, the activity in the Vernal Pool Habitat shall be designed to meet the following performance standards.
 1. Vernal Pool Habitat may be found within other Bylaw Resource Areas. When Vernal Pool Habitat occurs within another Bylaw Resource Area, the activity proposed in Vernal Pool Habitat must also meet the applicable performance standards for all other Bylaw Resource Areas within which such activity is proposed.

2. Work in those portions of Vernal Pool Habitat found to be significant to the preservation and protection of wildlife habitat shall not impair its capacity to provide important wildlife habitat functions. There is no threshold below which an alteration of Vernal Pool Habitat is presumed not to impair its capacity to preserve or protect wildlife habitat. Alterations to Vernal Pool Habitat may be permitted if they will not impair the capacity of the Vernal Pool Habitat to preserve or protect important wildlife habitat functions in accordance with the wildlife habitat assessment procedure and mitigation of altered habitat requirements found in Section 2.10 below.
 3. The limit of work shall be clearly identified on the plan and in the field and appropriate erosion and sedimentation control measures shall be implemented and maintained throughout construction. Erosion control barriers proximate to and within Vernal Pool Habitat shall contain gaps to allow for wildlife movement. No silt or sediment may be permitted to enter any Bylaw Resource Area outside of the Limit of Work during or subsequent to construction.
- (c) Notwithstanding Sections 2.9(4)(a) and (b) above, the Committee may allow activities within Vernal Pool Habitat that serve to improve the capacity of the resource area to preserve and protect the Bylaw Interests and Values, such as removal of man-made or other debris, invasive species removal projects, and/or the planting of native vegetation.
- (d) Activities proposed within Vernal Pool Habitat shall not impair its capacity to provide for recreation.

Commentary: Requirements of the Bylaw and Regulations That Are More Stringent than Requirements of the Act and MassDEP Wetlands Protection Regulations

1. The Bylaw Resource Area Vernal Pool Habitat is a resource area in and of itself that includes the pool depression and the land within 100 feet of the pool, serves to protect its Bylaw Interest and values, and has performance standards. Under the Act, Vernal Pool Habitat is not a resource area and lacks performance standards; instead, it is a type of wildlife habitat that may be found within wetland resource areas, such as Bordering Vegetated Wetlands, Bordering and Isolated Land Subject to Flooding, and Riverfront Area.
2. Under the Bylaw, Vernal Pool Habitat contributes to wildlife habitat, which is an interest under both the Bylaw and Act; and recreation, which lacks an analogous statutory interest. Under the Act, Vernal Pool Habitat must be located within an Area Subject to Protection under the Act to be considered under the Act or MassDEP Wetlands Protection Regulations.
3. As indicated above, Vernal Pool Habitat does not have performance standards under the Act. As such, the performance standards in these regulations listed at Section 2.9(4)(a), (4)(b)1. to 3., and (4)(d) above are more stringent than any provision of the Act or the MassDEP Wetlands Protection Regulations. These standards require a Waiver of Regulation for any alteration or impairment of Vernal Pool Habitat; impose performance standards for all other Bylaw Resource Areas within which the Vernal Pool Habitat is located; require a wildlife habitat evaluation pursuant to these regulations for any alteration or impairment of Vernal Pool Habitat; require limit of work and sedimentation control measures; and protect capacity to provide recreation, respectively.

2.10 Wildlife Habitat Assessment and Mitigation of Altered Habitat

(1) Wildlife Habitat Assessment

- (a) The regulations protect all Bylaw Resource Areas except for Isolated Land Subject to Flooding, in part, for their ability to preserve and protect wildlife habitat. These regulations presume the important wildlife habitat functions provided by Water Bodies and Waterways and Bank are adequately preserved and protected with the thresholds found at 310 CMR 10.56(4)(a)4. and 10.54(4)(a)5., respectively, and the wildlife habitat evaluation procedure set forth at 310 CMR 10.60. These regulations approach the remaining Bylaw Resource Areas in a manner consistent with, but different from the Act and 310 CMR 10.00. For example, alterations to Bordering Vegetated Wetlands and Riverfront Area do not necessarily require a wildlife habitat evaluation pursuant to 310 CMR 10.60. These regulations presume that additional areas of

Bordering Land Subject to Flooding are important to the preservation and protection of wildlife habitat. Lastly, the Bylaw Resource Areas Isolated Vegetated Wetlands, Buffer Zone, and Vernal Pool Habitat are not Areas Subject to Protection under the Act and 310 CMR 10.00. As such, these regulations establish thresholds and procedures for performing wildlife habitat assessments for activities proposed within these Bylaw Resource Areas. The portions of these Bylaw Resource Areas that meet the definition of an extensively altered area at Section 1.5 above are not subject to a wildlife habitat assessment and shall not be used in the calculation of the review threshold.

- (b) The performance standards for the respective Bylaw Resource Areas at the above Sections 2.4(4)(b)2. for Vegetated Wetlands, 2.5(4)(a)2. for Buffer Zone, 2.6(4)(a)4.a.3) for Riverfront Area, 2.7(4)(a)3. for Bordering Land Subject to Flooding, and 2.9(4)(b)2. for Vernal Pool Habitat identify the applicable threshold above which a wildlife habitat assessment pursuant to these regulations shall be required. The regulations presume that any alteration in excess of the respective threshold will result in an impairment of the capacity of said Bylaw Resource Area to preserve and protect wildlife habitat, including the ability to provide food, shelter, breeding, migratory, and/or overwintering habitat, as applicable, for birds, mammals, amphibians, and/or reptiles. Once habitat alteration associated with an activity exceeds the applicable threshold in a Bylaw Resource Area, mitigation shall be provided for the entire altered habitat within said Bylaw Resource Area, not just that portion above the threshold.
- (c) The purpose of a wildlife habitat assessment is to evaluate the existing conditions within the portion of the Bylaw Resource Area where the activity is proposed and conduct the necessary analysis to determine if the activity will result in an adverse effect on wildlife habitat. The collected field data shall be used in the preparation of a functionally suitable mitigation program to avoid an impairment of the capacity of the Bylaw Resource Area to provide the applicable important wildlife habitat functions. An impairment of the capacity of the Bylaw Resource Area to provide the applicable important wildlife habitat functions means the alteration of any applicable wildlife habitat characteristics for the respective Bylaw Resource Area listed in the above Sections 2.4(1)(a)6. for Vegetated Wetlands, 2.5(1)(a)4. for Buffer Zone, 2.6(1)(a)6. for Riverfront Area, 2.7(1)(a)3. for Bordering Land Subject to Flooding, and 2.9(1)(a)1. for Vernal Pool Habitat, insofar as such alteration will, following two growing seasons of project completion, or if the activity will result in the removal of trees upon the maturity of the mitigation area, that substantially reduces the capacity of the Bylaw Resource Area to provide the identified important wildlife habitat functions. Wildlife habitat assessments under the regulations shall be conducted by a wildlife scientist as defined in Section 1.8(1)(d) above.
- (d) Wildlife habitat assessments under the regulations shall be in narrative form with any supporting figures or tables, as applicable, and shall include a description of the area of the Bylaw Resource Area to be altered and its wildlife habitat characteristics with discussion on a resource area, site, and landscape level context; a description of the adjacent Bylaw Resource Area and its wildlife habitat characteristics when the altered resource area is Buffer Zone; a description of the proposed mitigation measures; and a clear and concise conclusion. These requirements are detailed as follows.

1. Description of the Bylaw Resource Area to be Altered

- a. The area in square feet of the area of Bylaw Resource Area to be altered and the total area of said Bylaw Resource Area on the site, with discussion of the configuration of the alteration within the Bylaw Resource Area and an overview of the alteration from a resource area, site, and landscape level context.
- b. All important wildlife habitat characteristics for the Bylaw Resource Area proposed to be altered shall be identified, including, but not limited to:
 - 1) plant community composition and structure including, dominant cover type and plant species, interspersions, and percent cover and size by strata (i.e., canopy, shrub, and ground cover);
 - 2) substrate or soil composition and structure including, substrate type (i.e., rock, boulder, gravel,

sand, silt, clay, organic, or other); typical soil profile to 24 inches; depth to saturation, free water, and refusal; and presence of soft soil or moist soil;

- 3) topography including, watershed position, slope (i.e., gradual, moderate, or steep), depressions and size, and hummock/hollows;
 - 4) hydrologic regime including, type of hydrology, presence of open water and its depth range and duration (i.e., permanent, semi-permanent, ephemeral, or absent), presence of seeps or springs, water quality (i.e., color and clarity), presence and extent of flooding and evidence of flooding (i.e., liter discoloration or debris line), and groundwater depth range;
 - 5) general proximity or distance to a water body or waterway;
 - 6) other wildlife habitat characteristics, such as diameter of overstory trees, number and size of snags, tree cavity presence and size, clearings, thickets, rock piles, woody debris presence and type (i.e., logs, branches, or other), ground litter cover as well as type and depth, mudflats, exposed areas of sandy soils, edge features, nearby cover types, and potential wildlife corridors;
 - 7) a description of any observed habitat degradation in the Bylaw Resource Area to be altered and on a resource area, site, and landscape context; and
 - 8) direct observations of wildlife usage of the area.
2. When the Bylaw Resource Area to be altered consists of Buffer Zone, the general characteristics of the adjacent Water Bodies and Waterways, Bank, or Vegetated Wetlands shall be provided based upon the characteristics listed in Section 2.10(1)(d)1.b. above.
 3. A comprehensive discussion of the proposed wildlife habitat mitigation program and how the proposed mitigation program will serve to functionally replicate, restore, or mitigate for the altered important wildlife habitat characteristics and functions.
 4. Provide a clear and concise conclusion as to whether or not the proposed activity, including mitigation, will result in an impairment of the capacity of said Bylaw Resource Area to provide the applicable important wildlife habitat functions.

(2) Mitigation of Altered Habitat

- (a) Alteration of wildlife habitat characteristics beyond permissible thresholds may be allowed if the altered habitat is replicated, restored, or mitigated through preservation on-site or off-site in accordance with the following general criteria, and any additional conditions the Committee deems necessary to ensure that the standard in Section 2.10(1)(c) above is satisfied. Restoration or replication shall be provided such that the restored or replicated area is equal to or greater than the altered area; preservation shall be provided such that the preserved area is two times greater than the altered area or provides an equivalent level of functional mitigation where square footage is not a relevant measure.
- (b) Altered Vegetated Wetlands habitat, including Vegetated Wetlands portions of Vernal Pool Habitat, shall be replaced in accordance with the requirements at Section 2.4(4)(b)2. above.
- (c) Altered Buffer Zone and Riverfront Area habitat may be mitigated preferentially through the restoration of extensively altered areas on the site. As these Bylaw Resource Areas are established based upon a distance from a delineated boundary, this complicates conventional habitat replication. As such, additional means to mitigate for altered habitat include, but are not limited to, a covenant, deed restriction, or conservation restriction to preserve undisturbed Buffer Zone or Riverfront Area, as applicable, that could otherwise be developed under the Bylaw; a covenant, deed restriction, or conservation restriction to preserve

undisturbed upland forest or meadow, as appropriate, not subject to protection under the Bylaw that could otherwise be developed that is located in close proximity to the altered Buffer Zone or Riverfront Area; a project to remedy an existing adverse impact on the Bylaw Interests and Values for which the applicant is not legally responsible; or a similar activity undertaken voluntarily by the applicant. Preference shall be given to mitigation measures that functionally restore altered Buffer Zone or Riverfront Area, as applicable, or preserve undisturbed Buffer Zone or Riverfront Area, as applicable, on the site. Off-site restoration or preservation will be considered only if on-site measures are demonstrated by the applicant not to be practicable. Securing off-site restoration or preservation opportunities shall be the responsibility of the applicant.

- (d) Extensively altered areas located within Bordering Land Subject to Flooding or within 100 feet of a vernal pool may be restored to mitigate for altered habitat within Bordering Land Subject to Flooding and Vernal Pool Habitat, respectively. Altered Bordering Land Subject to Flooding and non-wetland Vernal Pool Habitat may be replicated in accordance with the following criteria:
1. the surface of the replication area to be created shall be equal to or greater than the habitat area that will be lost;
 2. the elevation of groundwater relative to the surface of the replication area shall be approximately equal to that of the lost area;
 3. the replication area shall be located within the same general area as the lost area. For Bordering Land Subject to Flooding, the replication area shall be located approximately the same distance from the water body or waterway as the lost area. For Vernal Pool Habitat, the replication area shall be located in close proximity to the lost area;
 4. the interspersed and diversity of vegetation, water, and other wildlife habitat characteristics of the replication area, as well as its location relative to neighboring wildlife habitats, shall be similar to that of the lost area to maintain the wildlife habitat functions of the lost area;
 5. if the replication area is located within another Bylaw Resource Area, there shall be no adverse effect on the existing important wildlife habitat functions of said area;
 6. the replication area shall be provided in a manner that is consistent with the performance standards for each Bylaw Resource Area within which work associated with the replication area is proposed;
 7. the limit of work shall be clearly identified on the plan and in the field and appropriate erosion and sedimentation control measures shall be implemented and maintained throughout construction of the replication area;
 8. the replication area shall be designed in accordance with the findings of the wildlife habitat assessment, and its construction supervised and success monitored by a wetland scientist with the qualifications listed in Section 1.8(1)(c) above. A monitoring report based upon observations made near the end of the growing season is required to be submitted to the Committee annually for at least two years following construction and planting of the replication area; and
 9. the Committee shall include a continuing condition in the Certificate of Compliance prohibiting further alteration within the replication area, except as may be required to maintain the area in its replicated condition.