

Rules and Regulations of the Town of Medway Conservation Commission

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SECTION 1. INTRODUCTION

1.01 AUTHORITY

These rules and regulations of the Medway Conservation Commission (together with any amendments thereto, these Rules and Regulations) are promulgated under the authority of Article XXI, Section 21.10 of the Town's General By-laws, and shall be effective upon the fulfillment of all legal requirements for their effectiveness.

1.02 PURPOSE

These Rules and Regulations are adopted in accordance with the provisions of the Towns Wetlands Protection By-Law (the By-Law), which is Article XXI of the Town's General By-Laws. The By-Law sets forth a public review process by which activities having an impact or cumulative effect upon the wetland, surface and groundwater resources of the Town of Medway are regulated. In addition, the By-Law identifies additional public interests not recognized by (and expands other interests identified in) the Massachusetts Wetlands Protection Act. These additional public interests are: surrounding habitat, erosion and sedimentation control, protection of rivers, streams, ponds and other bodies of water, water quality enhancements, and recreation. These Rules and Regulations are intended to complement and clarify provisions of the By-Law and to assist applicants, and/or their advisors and consultants, in their dealings with the Conservation Commission. More explicitly, the intent is to improve communications, maximize efficiency and consistency in project review, minimize delay in responses by the Commission, and minimize post-application redesign by the applicant.

The Medway By-Law establishes a public review and decision-making process by which activities affecting protected resource areas are to be regulated, in order to contribute to the protection of the following interests:

- a. quality and quantity of public and private water supplies
- b. quality and quantity of ground water supplies as well as recharge and storage areas
- c. flood control
- d. storm damage prevention
- e. prevention of pollution
- f. prevention of erosion
- g. wildlife habitat

1.03 OTHER GOVERING LAWS APPLICABLE

The laws referred to in these Rules and Regulations include:

- a. The Massachusetts Wetlands Protection Act, General Laws chapter 131 section 40, and the regulations promulgated thereunder (codified at 310 CMR 10.00), including the amendments added by the Rivers Protection Act (Acts of 1996, Ch. 258);
- b. The most recent flood profile data available from the National Flood Insurance Program currently administered by the Federal Emergency Management Agency (FEMA);

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- c. The Massachusetts Environmental Policy Act (MEPA), General Laws chapter. 30 sections 61-62H, and the regulations promulgated thereunder (codified at 301 CMR 11.00);
- d. The Massachusetts laws governing designated Areas of Critical Environmental Concern, General Laws chapter 21A section 2(7) and the regulations promulgated thereunder (codified at 301 CMR 12.00);
- e. Applicable portions of Medway Zoning Bylaw and the rules and regulations promulgated thereunder; and
- f. Applicable portions of the rules and regulations of the Medway Board of Health.

SECTION 2 JURISDICTION

The Resource Areas protected by the By-Law are set forth in Section 2 of the By-Law and differ from those protected by the Massachusetts Wetlands Protection Act in that additional areas are protected by the By-Law. These include vernal pools (including those that have not been certified by any Massachusetts regulatory agency) and certain freshwater wetlands that may not meet the definition of bordering vegetated wetlands under the Massachusetts Wetlands Protection Act. The buffer zone surrounding a Resource area is itself deemed to be a Resource Area protected by the By-Law. Resources noted within Section 2(a)(1, 2, 3 and 5) have 100 foot buffer zone. Distances shall be measured horizontally from the natural edge of the Resource Area. All Setbacks shall not be obtained by filling, altering or relocating a resource area. All other Resource Areas shall use buffer zone criteria as defined under 310 CMR 10.00.

- a. Areas subject to protection under this Bylaw and these regulations, this
 - 1. Any marsh, freshwater wetland (bordering or isolated), vernal pool, wetland meadow, bog, swamp
 - 2. Any river, stream, creek, pond, reservoir, or land
 - 3. Any bank of areas set for in (a)(1) and (a)(2) above
 - 4. Any land under the areas set forth in (a)(2) above said waters
 - 5. Any land bordering the areas set forth in (a)(1), (a)(2), or (a)(3) above
 - 6. Any riverfront area as defined in 310 CMR 10.00
 - 7. Any land subject to flooding or inundation
- b. Activities subject to regulation under the Bylaw and the provisions of these regulations
 - 1. Any activity proposed or undertaken which constitutes removing, filling, dredging, discharging into, building upon, degrading or otherwise altering any area specified in Subsection A of this Section is subject to regulation under the Bylaw and requires the filing of an application for permit.
 - 2. Any activity proposed or undertaken outside the areas specified in Subsection A above shall not be subject to regulation under the Bylaw unless, in the judgment of the Conservation Commission, said activity may result or has resulted in the removing, filling, dredging, discharging into, building upon, degrading or otherwise altering an area specified in Subsection A above. If anyone wishes to have the

Conservation Commission determine whether an activity may be subject to regulation under the Bylaw, he or she shall submit a request for determination of applicability pursuant to Section 8(A) of these regulations.

3. For stormwater management systems constructed per Massachusetts Department of Environmental Protection's stormwater management policy (November 18, 1996) or standards (January 2, 2008), any activity proposed or undertaken within said stormwater management systems that includes the removal of less than 12 inches of sediment from a basin, water quality swale or constructed stormwater wetland (including forebays or other forms of pretreatment) is not subject to these regulations.

2.01 PROMULGATION OF REGULATIONS

The Commission may amend these Rules and Regulations after public notice and public hearing in accordance with Section 21.10 of the By-law.

SECTION 3 BURDEN OF PROOF

The applicant shall have the burden of going forward with credible evidence from a competent source in support of all matters asserted pursuant to Subsection B below by the applicant in accordance with his or her burden of proof.

The applicant shall have the burden of proving by a preponderance of the credible evidence from a competent source that the work in the application will not have a significant or cumulative effect upon the wetland values protected by the Bylaw. Failure to meet the burden of proof shall be cause for the Conservation Commission to deny the application for permit along with any work or activity proposed therein.

SECTION 4 DEFINITIONS

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

ADAPTION: or resilience to the impacts of climate means measures designed or intended to protect resource areas from the impacts of climate change and to protect the ability of resource areas to mitigate the impacts of climate change through providing the interests protected by the Bylaw (the resource area values and functions).

ALTER: shall mean to change the condition(s) of any area subject to protection by the Bylaw and shall include but not be limited to one or more of the following actions upon the resource areas protected by this Bylaw;

- a. fill, removal, excavation or dredging of soil, sand, gravel or aggregate material of any kind;

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- b. changing of pre-existing drainage characteristics, flushing characteristics, salinity distribution, sedimentation patterns, flow patterns or flood storage retention areas;
- c. draining, disturbing or lowering of the water level or water table;
- d. the dumping, discharging or filling with any material which could degrade the water quality;
- e. driving of pilings, erection of buildings or structures of any kind;
- f. placing of any object or obstruction whether or not it interferes with the flow of water;
- g. destruction, extensive trimming (defined as 20% or more of limbs or growth), or removal of plant life, vegetation, or trees;
- h. changing of water temperature, biochemical oxygen demand, nutrient concentration or chemical concentration or other natural characteristics of the receiving water;
- i. any activities, changes or work which pollutes any stream or body of water, whether located in or out of the Town of Medway;
- j. application of pesticides and herbicides;
- k. any activity, change or work which adversely effects groundwater or drinking water supply; or
- l. any incremental activity that has or may have a cumulative adverse effect on the Resource Area Values protected by the Bylaw
- m. any other activity which the Commission finds to have a negative effect on any of the interests of the Bylaw or wetlands resources as defined in the Bylaw and/or the Regulations

APPLICANT: any person making a filing, or on whose behalf a filing is made. Includes contractors, vendors and agents acting on the applicant's behalf.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACEC): those critical areas and resources designated by the Commonwealth of Massachusetts Secretary of Environmental Affairs for the purpose of long-term preservation, management and use or stewardship under authority granted by General Laws chapter 21A sections 2(7) and 40(e) and the regulations promulgated thereunder (codified at 301 CMR 12.00).

AREA SUBJECT TO PROTECTION UNDER THE BY-LAW: those areas defined in the Massachusetts Wetlands Protection Act or Section 2 of the By-Law. It is used synonymously with Resource Area.

BANK: is defined in Section 3.1 of the By-Law. As defined by the wetlands protection act.

BEACH: a naturally occurring beach with an unvegetated bank.

BEST AVAILABLE MEANS: the most up-to-date technology or the best designs, measures, or engineering/scientific practices that have been developed and that are commercially available.

BEST PRACTICAL MEASURES: state of the art technologies, designs, measures, or engineering practices that are in general use.

BORDERING shall be defined to include any land within either of the following or the greater thereof:

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- a. 100 feet horizontally lateral from the edge of any marsh, freshwater wetland, vernal pool, wet meadow, bog, swamp, river, stream, creek, pond, reservoir, or lake; or
- b. within the maximum lateral extent of the water elevation of the statistical 100 year frequency storm.

BOUNDARY: the boundary of an Area Subject to Protection under the By-Law. A description of the boundary of each area is found in the appropriate section of these Rules and Regulations.

BUFFER ZONE: Land within one hundred (100) feet horizontally landward from the perimeter or outer border of any Resource Area (other than a buffer zone).

CALIPER Diameter of a tree trunk (in inches) measured six inches above the ground for trees up to and including four-inch diameter, and 12 inches above the ground for larger trees.

CERTIFICATE OF COMPLIANCE: a written determination in recordable form by the Commission that work, or a portion thereof, has been completed in accordance with the issued Order of Conditions.

COMPETENT OVERSIGHT: engineer, scientist, land surveyor, contractor or other party with demonstrated ability (education, training, experience, past practice) to supervise and enforce conditions placed on a project by the commission and to implement and supervise best available means and best practical measures. Competent oversight status can be revoked by the commission based on inability of person or party to perform required oversight.

CONDITIONS: those requirements set forth in an Order of Conditions issued by the Commission for the purpose of permitting, regulating, or prohibiting any activity having an impact or cumulative effect upon a Resource Area.

CONSERVATION COMMISSION OR COMMISSION: that body in Medway, Massachusetts comprised of members lawfully appointed pursuant to General Laws chapter 40 section 8C.

CREDIBLE EVIDENCE: evidence which the Commission finds to be based upon sound technical principals and investigations. May include but is not limited to measurements, photos, published scientific literature, testing, and expert testimony.

CREEK: the same as “stream”.

CUMULATIVE EFFECT - shall mean an effect that is significant when considered in combination with other activities that have occurred, are going on simultaneously, or that are likely to occur, whether such other activities have occurred or are contemplated as a separate phase of the same project, such as the build-out of a subdivision or an industrial park, or unrelated but reasonably foreseeable actions, including other development projects that are currently under construction, under review or that may be expected to come forward.

DATE OF ISSUANCE: the date any document issued by the Commission (including, but not limited to, an Order of Conditions, a Determination of Applicability, or an Enforcement Order) is mailed, as evidenced by a postmark, or the date it is hand delivered and receipted to an applicant or the applicants agent.

DATE OF RECEIPT: the date of actual delivery to an office, home address or usual place of business by mail or hand delivery.

DBH (DIAMETER AT BREAST HEIGHT): The diameter (in inches) of the trunk of a tree (or, for multiple trunk trees, the aggregate diameters of the multiple trunks) measured 4 ½ feet from the existing grade at the base of the tree.

DEP: the Massachusetts Department of Environmental Protection.

DESIGNATED AGENT: person or person (s) voted as a designee by the Commission at a public meeting of the Commission. This may include but not limited to the Conservation Commission Agent, town contractors, other Town Officials, associate members and Commissioners. The Commission reserves the right to rescind this designation.

DETERMINATION OF APPLICABILITY OR DETERMINATION: a written finding of a majority of the Conservation Commission, following a public hearing by the Commission, as to whether a site or the work proposed thereon is subject to the jurisdiction of the By-Law.

DETERMINATION OF SIGNIFICANCE: A written finding by the Conservation Commission, after a public hearing, that the area on which the proposed work is to be done or which the proposed work will alter is significant to one or more of the interests identified in and protected by the Bylaw and these regulations.

DETERMINATION OF NON-SIGNIFICANCE: A written finding by the Conservation Commission, after a public hearing, that the area on which proposed work is to be done, or which the proposed work will alter, is not significant to any of the interests of the Bylaw.
(26) DBH (“Diameter at Breast Height”)

DROUGHT: is a period of usually persistent dry weather that continues for long enough to cause serious problems such as crop damage, water supply shortage, and habitat loss. The severity of the drought depends upon how acute the water deficit is, the duration, and the size of the affected area. The Medway Conservation Commission has determined that sixty continuous days of below average total rainfall/snowpack in the Town of Medway, based off the closest available precipitation gage for rain and snowfall will constitute drought conditions. Additionally, if the Commission considers the Town of Medway under drought conditions, any applicants applying for an ANRAD for an amendment of the status of a stream under the perimeters of 310 CMR 10.58(2) (a)(1)(d) are not valid under this Bylaw.

Drought can be characterized as an abnormally dry (moisture-deficient) condition that is a shift away from average conditions for some prolonged period of time. Abnormally dry conditions may be due to a combination of precipitation deficit and increased evapotranspiration from heat stress. Depending on a drought's severity and duration drought can affect a wide range of natural and anthropogenic systems, and these impacts can last beyond the drought.

Examples of impacts to natural systems include diminished quantity and quality of streamflow, groundwater, and surface water, which in turn affect aquatic life and habitat; increased fire danger; decline in the health of forests and other vegetation leading to increased vulnerability to storm damage and uprooting, resulting in increased erosion and reduced bank stability; and indirect impacts to forests from insects, whose predators are vulnerable to drought.

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Examples of impacts to anthropogenic systems include diminished water supply quantity and quality; reduced water supply, which may lead to diminished pressure for firefighting, increased stress on the agricultural industry, which may need to secure additional water supplies and potentially alter operations; increased fire risk for people and infrastructure especially those living near forests.

As such the Conservation commission considers streamflow of less than 75% for two consecutive months as measured by streamflow gauges in Medway and the adjacent upstream and downstream towns or a declaration of the Executive Office of Energy and Environmental Affairs (EEA) of a Mild, Significant, Critical or Emergency drought or to be considered drought conditions.

A drought will be considered to be over once the EEA has removed the warning and the streamflow gauges in Medway and it's adjacent towns show a rate greater than 75% for two consecutive months.

EXTENSION PERMIT: A written extension from the Conservation Commission through the issuance of a WPA Form 7 based on a vote of the Commission during a public meeting where the Commission stated the length of the extension of time within which the permit shall be allowed to continue.

EXTREME WEATHER EVENT: means weather at the extremes of the historical distribution lying in the outermost 10 percent of a place's history, including but not necessarily limited to droughts, high winds and microbursts, blizzards and ice storms, excessive precipitation, wildfires, tornadoes, and severe thunderstorms or hurricanes.

FILL: any material not native to its current location.

FILING: any filing made under the Massachusetts Wetlands Protection Act or the By-Law to the Commission, including, but not limited to, a Request for a Determination of Applicability, Notice of Intent, Abbreviated Notice of Intent, or Abbreviated Notice of Resource Area Delineation.

FLOOD CONTROL: prevention or reduction of flooding and flood damage.

FRESHWATER WETLANDS/VEGETATED WETLANDS: any area of at least 5,000 square feet where surface and/or groundwater, or ice at or near the surface of the ground, supports a plant community dominated (at least 50%) by wetland species and/or exhibits evidence of hydric soils. Freshwater wetlands are further described under Section 20 hereof (bogs, swamp, forested wetland).

GROUNDWATER SUPPLY: shall mean all subsurface water contained in natural geologic formations or artificial fill including soil water in the zone of aeration. Activities within 100 feet of resource areas shall not significantly alter the existing quality or elevation of naturally occurring groundwater.

IMMINENT RISK TO PUBLIC HEALTH AND SAFETY: means the activity within the jurisdiction of the Medway Conservation Commission is an imminent risk to public health or safety or property as confirmed in writing and submitted to the Commission by the Medway

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Board of Heath, Medway Tree Warden, Fire Department Representative, Public Safety Officer.
Add language to the Emergency Certification Section

IMPACTS OF CLIMATE CHANGE mean, but are not necessarily limited to, (i) extreme heat (ii) the timing, frequency, intensity, and amount of precipitation, (iii) storm surges and rising water levels, (iv) increased intensity and/or frequency of storm events or extreme weather events, and (v) frequency, intensity and duration of droughts.

INTERESTS PROTECTED BY THE BY-LAW: those interests specified in Section 1 of the By-Law.

ISSUING AUTHORITY: The Medway Conservation Commission

LAKE: any open body of fresh water with a surface area of 10 acres or more, including, but not limited to, great ponds.

LAND SUBJECT TO FLOODING: as defined within the Massachusetts Wetlands Protection Act under its Regulations 310 CMR 10.57.

LAND UNDER WATER BODIES AND WATERWAYS: the bottom of or land under the surface of any creek, river, stream, pond, lake or watercourse. Land under water bodies is further described in the Massachusetts Wetlands Protection Act and its Regulations under 310 CMR 10.56.

LARGE PROJECT: is defined but not limited to residential developments, multiple single family homes, multi-tenant housing, commercial buildings, utility construction, road projects, parking lots, and stormwater structures or other projects requiring multiple conditions and significant oversight. This may be defined by the Commission based on criteria such as but not limited to, size, complexity, structures, area of disturbance, public and town interest, duration of hearings, and expected project oversight requirements.

MAJORITY: more than half of a quorum of the members of the Conservation Commission voting on a motion before the Commission.

MARSH: is defined in MGL 131 sec 40 (10) look this up

MASSACHUSETTS WETLANDS PROTECTION ACT: General Laws chapter 131 section 40 and the regulations promulgated thereunder (codified at 310 CMR 10.00).

MEPA: Massachusetts Environmental Policy Act, General Laws chapter 30 sections 61-62H, and the regulations promulgated thereunder (codified at 310 CMR 11.00).

NOTICE OF INTENT: written notice filed under the Massachusetts Wetlands Protection Act and/or the By-Law by an applicant intending to remove, fill, dredge, or otherwise alter a Resource Area.

ORDER: an Order of Conditions issued pursuant to the Massachusetts Wetlands Protection Act or the By-Law.

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ORDER OF CONDITIONS: the document issued in recordable form by the Commission containing conditions which regulate or prohibit an activity under the Massachusetts Wetlands Protection Act or the By-Law. Also referred to as “permit” under the By-Law.

OWNER OF LAND ABUTTING THE ACTIVITY: the owner of land sharing a common boundary or corner with the site of the proposed activity in any direction, including land located directly across a street, way, creek, river, stream, brook, canal, lake, or pond.

PLANS: such data, maps, engineering drawings, calculations, specifications, schedules and other materials, if any, deemed necessary by the Commission to describe the site, all areas subject to jurisdiction under the Massachusetts Wetlands Protection Act or the By-Law, and/or to determine the impact of the proposed work upon the interests identified in the Massachusetts Wetlands Protection Act or the interests protected by the By-Law.

POND: means any open body of fresh water with a surface area observed or recorded within the last 10 years of at least 5,000 square feet. Ponds may be either naturally occurring or man-made by impoundment, excavation, or otherwise. Ponds shall contain standing water except for periods of extended drought. For purposes of this definition, extended drought shall mean any period of four or more months during which the average rainfall for each month is 50% or less of the ten year average for that same month.

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

- a. basins or lagoons which are part of wastewater treatment plants;
- b. swimming pools or other impervious man-made basins; or
- c. individual gravel pits or quarries excavated from upland areas unless inactive for 5 or more consecutive years.

PREVENTION OF POLLUTION: the prevention or reduction of contamination of soils and/or surface water or groundwater.

PRIOR DISTURBANCE: any disturbance in the vicinity of the project after the effective date of the act. This includes adjacent parcels including previous subdivisions.

PRIOR PERFORMANCE: compliance and performance history of applicant, contractors, and or agents associated with a filing.

PRIVATE WATER SUPPLY: any source or volume of surface or groundwater demonstrated to be in any private use or shown to have potential for private use.

PROTECTION OF FISHERIES: to prevent or reduce contamination or damage to fish and to protect their habitat and nutrient sources.

PROTECTION OF WILDLIFE HABITAT: (1) the protection of the habitat of any plant or animal species listed as endangered, threatened or of special concern, or on the Watch List by the Massachusetts Natural Heritage Program; listed as Federally Endangered or Federally Threatened

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by the U.S. Fish and Wildlife Service; and (2) the protection of the ability of any Resource Area to provide food, breeding habitat, or escape cover and species falling within the definition of wildlife as set forth in these Rules and Regulations.

PUBLIC WATER SUPPLY: any source or volume of surface or groundwater demonstrated to be in public use or approved for water supply pursuant to General Laws chapter 111 section 160 by the Division of Water Supply of the DEP or shown to have a potential for public use.

QUORUM: a majority of the members of the Commission then in office.

REQUEST FOR DETERMINATION OF APPLICABILITY: a written request on the proper form made by any person, to the Commission for a determination as to whether a site or work thereon is subject to the By-Law.

RESOURCE AREA: those areas defined in the Massachusetts Wetlands Protection Act or Section 2.0 of the By-Law. It is used synonymously with Area Subject to Protection Under the By-Law.

RESILIENCE: ability to minimize the negative impacts of climate change; to build capability and ability of a resource area to minimize negative impacts of climate change. CHECK TENSE

RESOURCE AREA: used synonymously with "area subject to protection under the Bylaw," each one of which is listed in the Bylaw and in Section 2 of these regulations.

RIVER: a natural flowing body of water that empties into any lake, pond, ocean or other river and which flows throughout the year. River is further defined in the Rivers Protection Act (Acts of 1996, Ch. 258).

RIVERFRONT AREA: is defined in the Rivers Protection Act (Acts of 1996, Ch. 258).

SIGNIFICANT: shall mean plays a discernable role; e.g., a resource area is significant to an interest identified in the Act when it plays a role in the provisions or protection, as appropriate, of that interest.

SMALL PROJECT: is defined as including but not limited to individual single family homes, additions, decks, patios, swimming pools, landscaping, sheds and garages and other projects requiring minimal conditions and oversight.

STORM DAMAGE PREVENTION: the prevention of damage caused by water from storms, including, but not limited to, erosion and sedimentation, damage to vegetation, property, or buildings, or damage caused by flooding, waterborne debris or waterborne ice.

STREAM: as defined in the Wetlands Protection Act and 310 CMR 10.58.

STRUCTURE: means a combination of materials or things arranged or constructed for permanent or temporary occupancy, shelter, or use, such as a building, bridge, trestle, wireless communications facility, tower, rip rap associated with stormwater outfalls, framework, retaining wall, tank, tunnel, tent, shed, stadium, reviewing stand, platform, swimming pool, sports court, shelters, piers, wharves, bin, fence, sign, or the like.

VEGETATED WETLANDS: also known as Freshwater Wetlands.

VERNAL POOL: The term “vernal pool” shall mean a naturally occurring, confined basin depression which, at least in most years, holds water for a minimum of two continuous months during the spring and/or summer, which is free of adult fish populations and which provides essential breeding habitat for certain amphibians and/or food, shelter, migration and breeding habitat for other wildlife species as well as the vernal pool boundary. Such sites shall be protected regardless whether or not they have been certified by the Massachusetts Division of Fisheries and Wildlife. Determination as to whether a Vernal Pool meets the qualifications as, shall not be made until such time as conditions permit for an acceptable (scientifically defensible) determination may be made.

VERNAL POOL BOUNDARY: with respect to vernal pools, the highest observed water surface elevation (for example, evidence of water stained tree trunks), include any surrounding vegetation critical to the sustainability of the pool, and any soil or geologic feature that sustains the viability of the pool.

WEATHER DELAYS: are events such as droughts, floods, snow fall, or snow cover, which may delay the Commission’s determination regarding resource areas of filings.

WET MEADOW: is defined in § 20 hereof.

WILDLIFE: shall mean all mammals, birds, reptiles, amphibians and all vertebrate and invertebrate animal species, except domesticated species.

WILDLIFE HABITAT: shall mean those areas subject to the bylaw which, due to the plant community composition and structure, hydrologic regime, or other characteristics, provide important food, shelter, migration travel or overwintering areas or breeding areas for wildlife.

SECTION 5 TIME PERIODS

All time periods of 10 days or less specified in the Bylaw and these regulations shall be computed using business days only. In the case of a Determination or Order, such period shall commence on the first day after the date of issuance and shall end at the close of business on the 10th business day thereafter. All other time periods specified in the Bylaw and regulations shall be computed on the basis of calendar days, unless the last day falls on a Saturday, Sunday or legal holiday, in which case the last day shall be the next business day following.

SECTION 6 ACTIONS BY THE COMMISSION

Where the Bylaw states that a particular action (except receipt of a request or notice) is to be taken by the Conservation Commission, that action is to be taken by more than half the members present at a meeting of at least a quorum. A quorum is defined as a majority of the members then in office.

Where the Bylaw states that a determination, permit, or notification or certificate of compliance shall be signed and issued by the Conservation Commission, that action is to be taken by the majority of the quorum present at a public meeting or hearing, or by a majority of the members

then in office who need not convene as a body in order to sign said permit or notification, provided that the Commission met pursuant to the Open Meeting Law, M.G.L. c. 30A, Sections 18 through 25, when voting on the matter.

Where the Bylaw states that the Conservation Commission is to receive a request or notice, Conservation Commission means a member of the Conservation Commission or an individual designated by the Conservation Commission to receive such request or notice.

SECTION 7 WORKING SESSIONS

When the Commission has time available, as a matter of courtesy, it may, but is not required, to conduct a working session with any person seeking guidance or direction on what type of application to file with the Commission, and what information the Commission might like to see in such an application in addition to that specified elsewhere in these regulations or the state Wetlands Protection Regulations. No one has a right to a working session. Any working session shall be held in accordance with the Open Meeting Law, M.G.L. c. 30A, Sections 18 – 25.

For any working session, notwithstanding the Plan requirements in Section 12, the following information at a minimum must be provided (at the working session):

- a. a map or plan showing the location of the proposed work;
- b. photographs (minimum 5” x 7” size) of the area of the proposed work; and
- c. a sketch of the area of the proposed work, showing existing conditions (structures, approximate locations of actual or potential resource areas).

Statements by the Commission or any Commission member in a working session shall not be construed as prejudging a project or guaranteeing a particular action by the Commission on a subsequent filing. The Commission shall not be bound any comments or opinions offered at a working session. A person who relies on any statements or information provided at the working session does so at his or her own risk.

SECTION 8 DETERMINATION OF APPLICABILITY

8.01 REQUEST FOR DETERMINATION OF APPLICABILITY

- a. Any person who desires a determination as to whether the Bylaw applies to land, or to work that may affect an area subject to protection under the Bylaw, may submit to the Conservation Commission electronically and by certified mail, regular mail, or hand delivery a written request for a determination of applicability and other application materials in accordance with the submittal requirements set forth in the filing guidelines for requests for determination of applicability provided in these regulations. Said person shall also provide the number of paper copies as set forth in the filing guidelines of the Commission. At the time of filing the applicant shall not have any other expired Order of Conditions and/or issued Violation Notice, Enforcement Order and/or unpaid 21D Tickets.

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- b. Simultaneously with filing the Request for Determination of Applicability, the applicant shall provide notification to each abutter by hand delivery or certified mail, return receipt requested, first class mail, postage prepaid. An affidavit specifying how and when abutter notice was made shall accompany the RDA. The contents of the abutter notification shall be specified by the Commission and shall, at a minimum, provide a brief description of the proposed work (if any), identify resource areas involved, list the location (street address, assessors lot and map identifiers), specify where a copy of the request may be obtained, and the date, time, and place of the hearing.
- c. Said request shall include sufficient information to enable the Conservation Commission to find and view the area and determine whether the proposed work will alter an area subject to protection under the Bylaw.
- d. A request for determination of applicability shall include certification that the owner of the area subject to the request, if the person making the request is not the owner, has been notified in writing via certified mail, return-receipt requested that a determination is being requested under the Bylaw.
- e. A request for determination of applicability shall be filed with the Commission no less than 14 days prior to the Commission's next meeting and simultaneously copies of the request for determination of applicability shall be hand delivered or mailed to each Commission member (including associate members). Failure to meet such filing and distribution deadline shall be cause for the Commission to continue or defer discussion of the request for determination to the following meeting.

8.02 DETERMINATION OF APPLICABILITY

- a. Within 21 days after the date of receipt of the request for a determination of applicability, the Conservation Commission shall hold a public hearing on the request for a determination of applicability. Notice of the time and place of the public meeting at which the determination will be made shall be given by the Conservation Commission at the expense of the person making the request not less than five business days prior to such meeting, by publication in a newspaper of general circulation in the Town of Medway, and by mailing a notice to the person making the request, the property owner if not the applicant. The Commission will forward the notice of this hearing to the Town Manager, Board of Selectmen, Town Clerk, Planning Department, Town Counsel, Department of Public Works, Town Engineer, Zoning Board of Appeals, Board of Health, Building Inspector, and the Redevelopment Board. Notice shall also be given in accordance with the Open Meeting Law, M.G.L. c. 30A, Sections 18 - 25.
- b. Said determination shall be signed and issued by the Conservation Commission, and copies thereof shall be sent by the Conservation Commission to the person making the request and to the owner within 21 days of the close of the public hearing or any continuances thereof. Said determination shall be valid for three years from date of issuance and may not be extended or renewed.
- c. The Conservation Commission shall find that the Bylaw applies to the land, or a portion thereof, if it is an area subject to protection under the Bylaw as defined in Section 2(A)

above. The Conservation Commission shall find that the Bylaw applies to the work on the portion thereof, if it is an activity subject to the regulations under the Bylaw as defined in Section 2(B) above.

- d. An application for permit shall be filed in the event of a positive determination, and all of the procedures set forth in Section 10 shall apply.
- e. Request for Determination of Applicability vs. Notice of Abbreviated Resource Area Delineation. No Request for Determination of Applicability or Determination of Applicability shall be used to evaluate or confirm the delineation of any Resource Area.

SECTION 9 EMERGENCY CERTIFICATION

9.01 APPLICATION FILING

Any person requesting permission to perform an emergency project, or within 24 hours of commencing an emergency project, shall specify in writing why the project is necessary for the protection of the health or safety of the citizens of the Town and what agency of the Commonwealth (or subdivision thereof) or Town entity is to perform the project or has ordered the project to be performed. Work may not proceed unless the Commission or its Administrator has certified the work to be necessitated by an emergency. In no case shall work or alteration by such certification extend beyond the minimum amount of work and time necessary to abate the emergency. If the project is certified to be an emergency by the Conservation Commission, its designated Agent, its Chair or Vice Chair, or the Department of Environmental Protection, the certification shall include a description of the work which is to be performed and shall not include work beyond that necessary to abate the emergency. If practicable, a site inspection shall be made prior to certification. If issued by the Conservation Administrator, the emergency certification must be ratified at the next meeting of the Conservation Commission.

9.02 GRANTING OF EMERGENCY CERTIFICATION

- a. An emergency certification may be issued by the Conservation Commission Chair, Vice Chair, Agent or designee (voted by the Commission at a public hearing) and shall be issued only for the protection of public health or safety.
- b. The time limitation for performance of emergency work shall not exceed 30 days, or 60 days for Immediate Response Actions approved by the Bureau of Waste Site Cleanup (BWSC) of the Department of Environmental Protection in accordance with the provisions of 310 CMR 40.0410. The emergency certification may be extended for an additional 15 days only for good cause.
- c. In appropriate circumstances, the Commission may require that within 14 days of issuance of an emergency certification, a Notice of Intent/permit application shall be filed by the recipient of the emergency certification with the Conservation Commission for review as provided by the Bylaw and these Regulations.

- d. Upon failure to meet the requirements of this section and other requirements of the Conservation Commission, the Conservation Commission may, after notice and a public hearing, revoke or modify an emergency certification and order restoration and mitigation measures.

SECTION 10 NOTICE OF INTENT/ABBREVIATED NOTICES OF RESOURCES AREA DELINEATION

10.01 NOTICE OF INTENT

- a. Any person who proposes to do work or activity that will remove, fill, dredge or otherwise alter any area subject to protection under the Bylaw shall submit an application, called a Notice of Intent, for a permit on forms specified by the Conservation Commission and in conformance with the plan requirements in **Section 12**. Simultaneously with filing the Notice of Intent with the Commission or its Agent, an applicant shall provide an electronic copy of the application to the Commission and provide the number of paper copies specified by the Conservation Administrator, and said paper copies shall be provided with envelopes with sufficient first-class postage, prepaid, for mailing (by the Administrator) of such copies to Commission members. Failure to provide the specified number of paper copies or electronic copies shall be grounds for the Commission to continue the public hearing without the applicant's consent. Simultaneously with filing the Notice of Intent, the applicant shall provide notification to each abutter by hand delivery or certified mail, return receipt requested. The contents of the abutter notification shall be specified by the Commission and shall, at a minimum, provide a description of the proposed work, location (street address and assessor's map and lot identifier), where a copy of the request may be obtained, and the date, time, and location of the hearing.
- b. Upon receipt of the application materials referred to in Subsection A above, the Conservation Commission shall assign a file number, which file number shall be that issued by the Department of Environmental Protection ("DEP") for a Notice of Intent also submitted under the Wetlands Protection Act. The DEP will notify the applicant of the file number. The designation of file number shall not imply that the plans and supporting documents have been accepted or judged adequate for the issuance of a permit and does not prevent the Commission from requesting additional information at a later time. For a Notice of Intent not also filed under the Wetlands Protection Act, the Commission shall issue a file number.
- c. If only a portion of a proposed project or activity lies within an area subject to protection under the Bylaw and the remainder of the project or activity lies outside those areas, all aspects of the project must be described in the detail, provided also that in such circumstances the Notice of Intent shall also contain a description and calculation of peak flow and estimated water quality characteristics of discharge from a point source (both closed and open channel), when the point of discharge falls within an area subject to protection under the Bylaw.
- d. A public hearing shall be held by the Conservation Commission with 21 days of receipt of the complete Notice of Intent.

- e. Abutter notifications shall be sent to the Commission not later than 2 day prior to the public hearing, this shall apply to Notice of Intent and Abbreviated Notice of Resource Area Delineations.

10.02 ABBREVIATED NOTICE OF RESOURCE AREA DELINEATION

- a. An Abbreviated Notice of Resource Area Delineation may be filed to confirm the delineated boundary of Vegetated Wetland or other Area Subject to Protection under the Bylaw on the site. If utilized, an applicant must file an Abbreviated Notice of Resource Area Delineation prior to filing a Notice of Intent. Alternatively, the boundary of a Resource Area may be determined through the filing of a Notice of Intent. The procedures for a Notice of Intent shall be used for an Abbreviated Notice of Resource Area Delineation. The applicant shall have the burden of proving by a preponderance of the credible evidence from a competent source that the delineation of Vegetated Wetland or other Area Subject to Protection Under the Bylaw is accurate.
- b. If the Commission determines that the applicant incorrectly or incompletely delineates a Resource Area(s), the Commission shall request that the applicant provide the correct delineation or missing information. If the correct delineation or missing information is not provided, the Commission shall close the hearing and issue a denial Order of Resource Area Delineation or denial Order of Conditions within 21 calendar days, specifying each Resource Area that is incorrectly or incompletely delineated. The Commission shall have the authority to deny any proposed Resource Area delineation when: 1) the application is incomplete; 2) the delineation is incorrect; or 3) the Commission requires additional information that is not provided by the applicant.
- c. Review period. Resource area boundary delineations shall be reviewed only between April 1 and December 1 of each year. Delineations may be reviewed at the sole discretion of the Commission and/or the Agent between December 1 and April 1, and shall be reviewed only when site conditions are such that the Commission believes it can adequately review the relevant resource area indicators (e.g., soils, vegetation, topography, and hydrology).
- d. Drought. The Commission shall only determine the apply the MA WPA Regulations 310 CMR 10.58(2) (a)(1)(d) under weather conditions that are not considered to be a drought within the Town of Medway, based on the definition within these Regulations. During the ANRAD application, the applicant shall submit the appropriate precipitation data for the Town of Medway for the last 60 days in order to provide sufficient information to show that Medway is currently not in a drought as defined within these Regulations.

10.03 COORDINATION WITH OTHER BOARDS

Any person making a Filing with the Commission shall provide written notice thereof at the same time, by certified mail or hand delivery, to the Building Inspector and any of the following that have, or will have, jurisdiction over any aspect of the project: Board of Selectmen, Board of Health, Planning Board, and Board of Appeals. The applicant is to inform the Commission as to who has been so notified. The Commission shall not close any hearing on any Filing until such boards and officials have had 14 days from receipt of notice to file written comments and

recommendations with the Commission, which the Commission shall take into account but which shall not be binding upon the Commission. The applicant shall have the right to receive any such comments and recommendations, and to respond to them at a hearing of the Commission, prior to the Commission's final action.

10.04 ROAD AND DONATED APRCEL ACCEPTANCE

The Commission will not recommend accepting roads or donated parcels from projects unless a Certificate of Compliance has been issued.

SECTION 11 FILING FESS AND CONSULTANT FEES

11.01 CONSULTING FEES

The Commission may determine that it requires technical advice and may employ the use of outside consultants to assist the Commission in reviewing a filing. Such independent consultants may be in fields such as, but not limited to, engineering, hydro geological, legal or other. Such consultants shall assist the Commission in plan review, impact analysis, site inspection, review of calculations, analysis of the filing, assistance in drafting decisions, and monitoring or inspecting a site during construction or post-construction and other technical or legal assistance necessary to ensure compliance with all relevant laws and regulations. Such consultants shall be selected and retained by the Commission, with the actual and reasonable costs for their services to be paid by the applicant in the form of a review fee. Consultant review fees shall be submitted upon receipt of notice of estimated consultant review cost for deposit in an account established under G.L. c. 44 §53G. Consultant work shall not commence until the fee has been paid in full. The applicant shall be notified of the consultant selection. Pursuant to G.L. c. 44 §53G, the applicant may administratively appeal the selection of the consultant to the Board of Selectmen. Any appeal is limited to the grounds that the consultant lacks the minimum qualifications or has a conflict of interest. An appeal shall be instituted by the applicant filing a notice with the Town Clerk within 7 days of notice of selection. The required time limits for action upon a filing shall be extended during the duration of an appeal to the Board of Selectmen. The Commission may require an additional consultant review fee if the amount in the applicant's account falls below 25% of the initial consultant review fee. Failure of the applicant to pay the consultant review fee or to replenish the account when requested may be grounds for denial of disapproval of the filing.

11.02 FEE SCHEDULE FOR FILINGS UNDER THE BYLAW

- a. Fee to the State - determined by the fee schedule contained in the Massachusetts Wetlands Protection Act.
- b. Fee to the Conservation Commission - determined by the fee schedule contained in the Massachusetts Wetlands Protection Act.
- c. By-Law fee to the Town - determined by Town of Medway Wetlands Protection By-Law
- d. Advertising fee - determined by the paper where the notice is posted. Applicant is responsible for paying all fees associated with the legal notice posting.

Separate checks are to be submitted at the time of filing. The Commission, or its staff, will assist an applicant in fee determination upon request.

11.03 NOTICE OF INTENT (NOI) FEES

Refer to the following table and bullets for the complete Medway fee schedule; for definitions of the Notice of Intent categories listed below, refer to Appendix A, Form A, “Wetlands Filing Fee Calculation Worksheet”.

Overall, NOI fees involve three separate payments covering (i) a MA State-specified fee that is divided between the State and the Town and (ii) a Medway By-Law fee. There are two payments (currently by check) made out to the Town of Medway: one for the town share of the State fee and one for the Medway By-Law fee. There is one payment for the state share of the State fee that is made directly to the Commonwealth of Massachusetts and sent to the MA DEP.

The following table summarizes the fees for the State-specified categories of activities for NOI filings; see Appendix A for more information. The State fee is as of 1/03/2013 and is subject change by the MA DEP; it is presented in DEP WPA Form 3 and its instructions.

| NOI Category | Total Fees | Medway By-Law Fee | <u>MA State Fee</u> | |
|--------------|------------|---|---------------------------------|-------------|
| | | | Town Share | State Share |
| Category 1 | | \$250.00 | \$67.50 | \$ 42.50 |
| Category 2 | | \$1000.00 | \$ 262.50 | \$ 237.50 |
| Category 3 | | \$2000.00 | \$ 537.50 | \$ 512.50 |
| Category 4 | | \$3,000.00 | \$ 737.50 | \$ 712.50 |
| Category 5 | | \$1,500.00 | See DEP WPA Form 3 instructions | |
| Category 6 | | \$1.50 per linear foot with a \$2000.00 max | See DEP WPA Form 3 instructions | |

11.04 OTHER FEES

- a. An Amended Order of Conditions requires a fee as listed in the table to the Town; no State fee is required.

| NOI Amendment Request Category | Medway By-Law Fee |
|--------------------------------|-------------------|
| Category 1 | \$120.00 |
| Category 2 | \$500.00 |

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| | | |
|------------|--|------------|
| Category 3 | | \$1000.00 |
| Category 4 | | \$1,500.00 |
| Category 5 | | \$750.00 |

- b. An Extension of an Order of Conditions requires a fee equal to the original filing fee for the Notice of Intent for that same project; no State fee is required.
- c. An Extension of an Order of Conditions filed when the work approved by the original Order of Conditions has not commenced will require a fee of \$50. In addition, the applicant must pay the fees associated with recording the Extension to the Order of Conditions, if granted.
- d. Request for Determination of Applicability requires a fee dependent on the scope of the project, please choose from the following tiers and submit accordingly.
1. **Basic Fee:** \$75.00 - The basic fee is applicable to all additions, renovations and modifications to an existing residence or an existing single family lot, exclusive to new subdivisions, lot reconfigurations, or establishments of an easement. Examples include: Residence additions (such as a patio or family room), septic systems and well related work, ancillary structures (such as a barn or a shed), and driveway installation/reconfigurations.
 2. **Comprehensive Fee:** \$200.00 - All projects that do not fit the criteria required to qualify for the basic fee shall be charged the comprehensive fee amount. Examples include, but are not limited to, all commercial projects, subdivisions or projects establishing new property lines or limits, dedication of easement or rights-of-way, and demolition and removal of existing structures for reconstruction of new structures on an existing lot or new lot.
 3. **Additional Inspections/Site Visit Fee:** \$40.00 - Additional site visits by the Agent, a Commissioner and/or a Commission designee may be required to fulfill the Commission's work. Such visits can arise due to plan modification or other filing changes. The Basic fee includes up to one site visit.
- Note:* The Comprehensive fee includes up to two site visits. Additional site visits shall be charged in the amount of \$35 per visit. The additional site visits are required due to a comprehensive redesign or resubmission of an application shall be either: (a) charged as an additional site visit or (b) at the Agent's discretion, part of a required re-application and its corresponding fee.
- e. A Request for a Certificate of Compliance requires as listed in the table. No State fee is required.

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Note: A Request for a Certificate of Compliance for approved alterations which never commenced will require a fee of \$50.

| Certificate of Compliance Category (as filed for NOI) | Medway By-Law Fee |
|--|--------------------------|
| Category 1 | \$75.00 |
| Category 2 | \$200.00 |
| Category 3 | \$400.00 |
| Category 4 | \$600.00 |
| Category 5 | \$300.00 |

- f. A Request for a Certificate of Compliance for an expired Order of Conditions requires a fee equal to the filing fee for the original Notice of Intent or \$200.00, whichever is greater. No State fee is required.
- g. Certificates of Compliance shall be recorded at the Registry of Deeds by or for the property owner and the recording costs shall be paid by the property owner or his designee.

11.05 FILING FEE POLICIES

- a. Fees are payable at the time of application and are nonrefundable.
- b. Fees shall be calculated based on the above fee schedule and confirmed by the Commission or its Administrator and/or Agent.

SECTION 12 FILING REQUIREMENTS

12.01 GENERAL

Any correspondence and/or submittal (including any Filing) should be addressed to:

Medway Conservation Commission
Medway Town Hall
155 Village Street
Medway, MA 02053

All correspondence submitted to the Commission that is sent through the U.S. post office should be by certified mail. Alternatively, such correspondence may be hand delivered to the Town Clerks Office in Town Hall, where it should be date stamped. Three copies of each submittal shall be made to the Conservation Commission. No common law doctrines such as the Mail Box Rule shall apply to any correspondence or mailings of any kind. All correspondence shall be

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considered received by the Conservation Commission when date stamped by the Town Clerk's Office.

Time critical correspondence should include copies to the Commission by electronic mail and/or confirmation of receipt by telephone.

Electronic submittal are required for all filings. In addition, the Commission requests that all shapefiles or CAD files for the wetlands resource delineated on the property are submitted with the filing.

The following items may be required as minimum standards. The applicant may submit, or may be required to submit, additional information and data which will assist in the review and which is deemed necessary to determine the proposed effect on the interests protected by the Massachusetts Wetlands Protection Act or the By-Law. These items are, where applicable, in addition to any requirements of the Massachusetts Wetlands Protection Act or its regulations. The Commission, in its sole discretion, may waive any requirement.

12.02 SITE PLANS

Plans shall describe the proposed activity and its effect on the environment. The applicant shall submit a site plan, or plans, at a scale of 1 inch = not more than 40 feet, showing the following items:

- a. Existing and proposed contours (in contrasting symbols or line weight) shall be expressed in feet above mean sea level, with intervals no greater than two feet. Date of ground survey, reference datum, and reference bench mark(s) shall be given. All plans shall show a north direction, with an indication of either true or magnetic north.
- b. Within 100 feet of the subject property, the delineation of all wetlands, lands subject to flooding, water bodies, waterways, ditches, creeks, rivers, streams and ponds, whether natural or manmade, continuously or intermittently flowing. Where applicable, the State water quality classifications of waterways are to be given. The upland boundary of all bordering vegetated wetlands, isolated wetlands, vernal pools, and isolated land subject to flooding shall also be shown. The 100-year flood elevation line, and any flood plains showing on the Towns FEMA flooding maps, shall be shown. Plans shall depict the following:
 1. open or flowing water: light blue
 2. marsh or swamp: light green with swamp symbol
 3. all meadows, flats and lands subject to flooding: outline with a dashed blue line
- c. The delineation of all applicable buffer zones/setbacks including, without limitations, the first 25 feet of the buffer zone closest to the wetland line shall be shown.
- d. A delineation of all alterations proposed in, or having an impact on, any Resource Area, including buffer zones. All alterations, either permanent or temporary, of each separate Resource Area should indicate extent of disturbance by square feet, or lineal feet, as applicable. Plans shall show:

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1. areas to be dredged: outline in red
 2. areas to be filled: outline in brown
 3. areas to be altered in anyway other than dredging and filling: outline in black
- e. Existing stone walls, buildings, rock ridges, rock outcroppings, and hiking trails, carpaths and walkways.
 - f. Location, extent and area of all existing and proposed structures, roadways, including their names, driveways, paved areas, septic systems including their reserve area, wells, tanks, swimming pools, dry wells, decks, courts, and the like, and utility and other easements and right-of-ways.
 - g. Proposed lowest elevation of cellars or floors, proposed lowest elevation of flooding entry to structure, and proposed building structure location and aerial footprint.
 - h. Existing and proposed location, rim elevation and invert elevation of all catch basins and manholes, drains, culverts, and other drainage structures, including detention/retention basins, immediately upstream and downstream of the site, as well as those on-site. Sizes, shapes and materials of all conduits are to be shown. Headwalls, flared-ends, rip-rap, and similar drainage/erosion-control structures are to be shown, where applicable, including material specification of the same.
 - i. Details and locations for all temporary and permanent erosion controls proposed, as well as all temporary and permanent easements.
 - j. Proposed permanent pollution control devices on-site, such as: hooded catch basins, flow dissipaters, oil/water separators, or vegetative buffers.
 - k. Cross-sections showing existing and proposed slope, elevations, bank and bottom conditions of each water course to be altered. Locations of cross-sections shall be specified.
 - l. Proposed location of any fill or excavated material which will be stored on-site.
 - m. The limit of work line shall be shown.
 - n. Delineation of applicable water resources protection districts and water supply districts per Town Zoning By-Laws.
 - o. Location and identification of all soil test pits, soil borings, and monitoring wells, including pertinent test results and groundwater elevations.
 - p. Existing and proposed location, rim elevation and invert elevation of all manholes, invert elevation of all sewers, immediately upstream and downstream of the site, as well as those on-site. Sizes and materials of all conduits are to be indicated. Location and extent of all treatment and disposal works are to be indicated, as well as appropriate information on connections from collection works to the plant and from the plant to the disposal works.

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- q. As applicable, location(s) and extent of wetlands replication area(s). Planting plan for the replication area, as well as applicable elevations of base elevations and finished elevations are to be shown.
- r. As applicable, location(s) and extent of replacement flood storage. Planting plan for the replacement area, as well as all applicable elevations are to be shown.
- s. Site plan, or another plan, shall show the locus of the site with regard to identifiable Town features, such as named streets and other natural or man-made features and/or public open space.
- t. Adjoining property lines shall be indicated, including distances, bearings, markers at the perimeter, along with a list of all abutting owners and their property address or identification.
- u. Outline of any watershed areas related to the proposed activity.
- v. Before site inspections for the Filing process can be made by the Conservation Commission or its agent, the following conditions must be met:

12.03 STAKING THE SITE WORK

The Conservation Commission and/or the Agent prior to site inspections may require, the following must be completed:

- a. Stakes shall be provided as follows:
 - 1. Stakes indicating the corners of houses or other structures nearest the wetland resource area.
 - 2. Stakes indicating the septic tank and the leaching field location.
 - 3. Stakes indicating the limit of work.
- b. Lot number or house number should be posted at location.
- c. Edges of all resource areas shall be delineated. (Please refer to rules and regulations for definitions.)
- d. Directions shall be made available to the Commission to locate property.
- e. Failure to have the lot staked may result in no review and thus delay of a project. Upon completion of staking, the Conservation Commission shall be notified and a site inspection shall be arranged. The requirements of this section shall be met commensurate with the nature, scope, type, and cost of the proposed project or activity.
- f. Failure to have the lot staked as identified above may result in non-review by the Commission and thereby delay of any intended project.
- g. Upon completion of staking, the office of the Conservation Commission should be notified so that a site inspection shall be arranged prior to any scheduled public hearing.

12.04 DRAINAGE CALCULATIONS

The applicant needs to demonstrate that the following considerations have been attended to:

- a. Calculations should be supplied for 2, 10, 25 and 100 year interval storms. Methodology and information sources shall be supplied. (The Soil Conservation Services method is preferred.) Calculations should show predevelopment and post-development conditions for comparative purposes, demonstrating that there is no increase in peak runoff for a 10-year frequency storm. A map needs to be supplied to indicate all drainage sub-basins used in the calculations.
- b. Drainage should be designed on a 25-year frequency basis for storm drains and retention basins; on a 50-year frequency basis for culverts. Damage potential shall be examined for a 100-year frequency storm, demonstrating that there is no increase in upstream or downstream flooding damage potential. Additionally, the drainage design should attempt to:
 1. control runoff at source areas, before concentration, and not only at the point of concentration;
 2. use infiltrative techniques wherever possible, including leaching catch basins, porous paving material driveways, and retention basins;
 3. employ vegetated wetlands as receivers for drainage from paved areas, rather than water bodies, wherever possible, using appropriate erosion control measures;
 4. use open ditches, where feasible, instead of conduits; and
 5. avoid the use of existing wetland systems for storm-water storage from new developments, except when, in the opinion of the Commission, such use shall not result in:
 - a. the loss of wildlife habitat;
 - b. an increase in flood levels exceeding 1 inch within a 24-hour period immediately following a storm event; or
 - c. flooding of downstream areas nor runoff backwater effect on upstream areas.
- c. Use of existing wetland systems for storm-water storage from new developments, if permitted by the Commission, shall not result in nutrient overloading of the wetlands system. The foregoing provisions notwithstanding, the Commission shall not approve the use of existing wetlands system for storm-water storage in new developments when the effective surface area of the wetlands system is less than 20,000 square feet.
- d. Projects within the Towns Groundwater Resources Protection Districts may not decrease total recharge, nor introduce constituents into surface or groundwater other than those normally found in the effluent of appropriately treated domestic sewage, or in concentrations which cause the Safe Drinking Water Standards, as set by the Commonwealth of Massachusetts or the federal Environmental Protection Agency, to be exceeded.
- e. All projects must show the methods of handling roof, driveway and other paved area runoff.
- f. A narrative needs to be supplied indicating the nature of compliance of the above four

items and describing drainage calculations so that the Commission can more easily review the material submitted.

12.05 STREAM RELOCATION OR CHANNELIZATION

An applicant shall provide information on the following:

- a. Existing and proposed carrying capacity of the stream.
- b. Stream bottom and bank sediment/soil type, under existing and proposed conditions.
- c. Existing and proposed vegetation within stream and on its banks in the area of the proposed project.
- d. Water velocities and flow rates at base flow, mean flow, and annual flood flows.
- e. Calculations to demonstrate that velocities will be the same or less after relocation/channelization than before it, and that carrying capacity will not be reduced.
- f. Erosion and sediment control during construction and after, until surfaces have stabilized.
- g. Information on fish within the stream and mitigation measures to prevent disruptive impact.
- h. Proposed time table for construction.
- i. Demonstration that relocation/channelization will not change the low flow regime and negatively impact upon existing wetlands.
- j. Step-by-step construction procedures referenced to water and soil handling, sediment control, and emergency procedures during any high flow event.

SECTION 13 PUBLIC HEARINGS

13.01 HEARING

The public hearing held under the provisions of the Massachusetts Wetlands Protection Act shall serve simultaneously as the hearing under the By-Law. Public notices of hearings to be conducted for an applicant are to be inserted in a local newspaper by the Commission, but paid for by the Applicant. Any hearing may be continued for a reasonable time in order to allow the applicant, or other parties, sufficient time to produce information that the Commission deems necessary to make a decision on the impact of the project. Failure or refusal by the applicant to produce the additional information in a timely fashion as requested may result in a denial by the Commission. The Commission reserves the right to require additional public notifications for filings continued for multiple months.

- a. A public hearing shall be held by the Conservation Commission with 21 days of receipt of the complete Notice of Intent, and shall be advertised by the Commission at the applicant's expense in accordance with the Bylaw (Section 5) and the requirements of the Open Meeting Law, M.G.L. c. 30A, Sections 18 – 25. Abutter notification as detailed above shall be done by and at the expense of the applicant at the time of filing the

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Request for Determination of Applicability, Abbreviated Notice of Resource Area
Delineation, Abbreviated Notice of Intent or Notice of Intent.

- b. Continued hearings
 - 1. Public hearings may be continued as follows:
 - a. Without the consent of the applicant to a date certain announced at the hearing should the applicant or the applicant's representative fail to provide at least ten (10) calendar days prior to that scheduled meeting/hearing sufficient abutter notification, newspaper notification, an electronic copy or a sufficient number of paper copies specified by the Conservation Administrator of any written information or documents intended for discussion at a meeting/hearing, or fail to provide to the Commission office or Administrator envelopes with sufficient first-class postage, prepaid, for mailing of such copies to Commission members.
 - b. Without the consent of the applicant to a certain date announced at the hearing either for receipt of additional information offered by the applicant or others or for information required of the applicant deemed necessary by the Conservation Commission at its discretion; or
 - c. With the consent of the applicant, to an agreed-upon date, which shall be announced at the hearing.
 - d. Without the consent of the applicant, for lack of the applicant to provide requested information and/or lack of attendance at two or more public hearings, to certain date announced at the hearing; or
 - e. Without the consent of the applicant, for failure to pay the Consultant Fee pursuant to Section 11 of the Bylaw, to a date certain announced at the hearing.
 - f. Without the consent of the applicant, for failure to pay the filing fee pursuant to Section 11 of the Bylaw, to a date certain announced at the hearing.
 - 2. The date, time and place of any such continued hearing shall be publicized in accordance with the Open Meeting Law, and notice shall be sent by the applicant to any person at the hearing who so requests.

SECTION 14 ISSUANCE OF A PERMIT

14.01 ORDER OF CONDITIONS

- a. Within 21 days of the close of the public hearing or any continuance thereof on an application/Notice of Intent for a permit, the Conservation Commission shall:
 - 1. Make a determination that the area on which the work is proposed to be done, or on which the proposed work will remove, fill, dredge, discharge into, build upon,

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degrade or otherwise alter, is not significant to any of the interests identified in the Bylaw, and shall so notify the applicant;

2. Make a determination that the area on which the work is proposed to be done, or on which the proposed work will remove, fill, dredge or alter, is significant to one or more of the interests identified in the Bylaw and issue a permit for the protection of said interests;
 3. Make a determination that the proposed work fails to meet the design specifications, performance standards, or other requirements of the Bylaw, its regulations, or policies of the Commission, or that the project fails to avoid or prevent unacceptable significant or cumulative effects upon the resource area values of the Bylaw, or that there are no conditions adequate to protect said values; or
 4. If the Conservation Commission finds that the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Bylaw, it may issue a permit denial. The permit shall specify the information which is lacking and why such information is necessary. If the Commission issues a permit denial, no work may occur until an applicant reapplies and the Commission grants a permit allowing work.
- b. A permit allowing the proposed work shall impose such conditions, in the judgment of the Conservation Commission, that are necessary for the protection of those areas found to be significant to one or more of the interests identified in the Bylaw. Such a condition may include, but are not limited to the placement of permanent bounds (granite or metal) to demarcate all or part of a resource area or mitigation area. Said permit shall prohibit any work or any portion thereof that cannot be conditioned to meet said standards. The permit shall impose conditions setting limits on the quantity and quality of discharge from a point source (both open and closed channel) when said limits are necessary to protect the interests identified in the Bylaw.
 - c. The permit shall be valid for three years from the date of its issuance.
 - d. The permit shall be signed and issued by the Conservation Commission and shall be mailed or hand-delivered to the applicant, his or her agent or attorney.
 - e. A copy of the plans describing the work and the permit shall be kept on file by the Conservation Commission and shall be available to the public at reasonable hours.
 - f. Prior to the commencement of any work permitted or required by the permit, the permit shall be recorded in the Registry of Deeds or the Land Court. In the case of recorded land, the permit shall also be noted in the Registry's Grantor Index under the name of the owner of land upon which the proposed work is to be done. In the case of registered land, the permit shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is to be done. Certification of recording shall be sent to the Conservation Commission within two weeks of recording. If work is undertaken

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without the applicant first recording the permit, the Conservation Commission may issue an enforcement order.

- g. Orders of conditions and determinations under the By-law shall expire three years from the date of the issuance. Any Order of Conditions may be renewed one time for an additional one year period, provided that a written request for renewal is received by the Commission at least 45 days prior to the expiration of the Order of Conditions.
- h. An Order of Conditions must be filed at the Registry of Deeds in order to be valid under the By-Law. An applicant is expected to file either the Determination of Applicability or Order of Conditions within the statutory appeal period (10 business days) and must supply the Commission with a return copy of the recorded document, within seven calendar day of receipt of same from Norfolk County District Registry of Deeds, which shall clearly note the registry bar code stamp with the recorded Book and Page and Date and Time of recording.
- i. As part of an Order of Conditions issued under the By-law, in addition to any security required by any other municipal or state board, agency, or official, the Commission may require that the performance and observance of the conditions imposed thereunder (including conditions requiring mitigation work) be secured wholly or in part by a proper bond or deposit of money or other undertaking of financial responsibility sufficient in the opinion of the Commission. Such bond or surety, if required to be filed or deposited, shall be approved as to form and manner of execution by the Town Counsel, and as to sureties by the Town Treasurer, and shall be contingent upon the satisfaction of such conditions within the time frame of the permit and extension. Such bonds shall be approved by the Commission prior to the close of the public hearing.
- j. An Order of Conditions, once it has expired, is not valid. A new Filing, with its own Order of Conditions, is required for construction to continue in this case. Conditions of expired orders may be enforced.
- k. Failure to comply with the conditions stated in the Order and with all related statutes and other regulatory measures shall be deemed cause to revoke or modify the Order of Conditions.

SECTION 15 EXTENSION TO ISSUED PERMIT

15.01 REQUEST FOR EXTENSION

Applicants, successors and property owners may request in writing a Request for Extension to the Order of Conditions for a period to be determined by the Commission.

- a. The Conservation Commission may extend a permit for a period of up to an additional three-year period from date of issuance. No permit may be extended for more than six years after date first issued. The request for an extension shall be made to the

Conservation Commission at least 30 days prior to the expiration of the permit. The Commission shall hold a public hearing in accordance with the Bylaw and these regulations within 30 days of receipt of said request. Should said public hearing be continued past the date of the expiration of the permit, the expiration date shall be stayed to the date on which the Commission votes on whether to extend the permit, should the Commission vote not to grant the request for permit extension.

- b. The Conservation Commission may deny the request for an extension and require the filing of a new application for permit for the remaining work in the following circumstances:
 - 1. Where no work has begun on the project, except where such failure is due to an unavoidable delay, such as appeals and in the obtaining of other necessary permits;
 - 2. Where new information, not available at the time the permit was issued, has become available and indicates that the permit is not adequate to protect the resource area values identified in the Bylaw;
 - 3. Where incomplete work is causing damage to the resource area values identified in the Bylaw;
 - 4. Where work has been done in violation of the permit or the Bylaw or these regulations; or
 - 5. Where resource areas have changed.
- c. If issued by the Conservation Commission, the extension permit shall be signed by a majority of the quorum of the members of the Conservation Commission present.
- d. The extension permit shall be recorded in the Land Court or the Registry of Deeds, whichever is appropriate. If work is undertaken without the applicant recording the extension permit, the Conservation Commission may issue an enforcement order or may itself record the extension permit.

SECTION 16 MINOR/MODERATE/ OR SIGNIFICANT AMENDMENT OF PERMIT

Quite often, modifications must be made to projects during construction. The Commission recognizes the need for such changes and sets forth the following procedures for assessing them. Because each modification is unique, it is impossible to determine in advance how any particular change will be addressed by the Commission. With any proposed modification, the applicant will first contact the Commission and explain the modification in writing. The Commission has the authority to determine the appropriate category for the modification. The applicant will be charged a fee according to the Fee Schedule in Section 11 for an Amended Order of Conditions.

16.01 MINOR CHANGES

These changes are modifications that the Commission determines have no likelihood of an impact on any wetland resource and need only the authorization of the Commission. Applicants will contact the Commission to request a change. If the Commission finds the change requested is a minor modification it will record that determination in the applicant's file and mail a copy to the applicant and the Massachusetts Department of Environmental Protection regional office. The Commission will consider the following criteria in making this determination:

- a. extent of modification

- b. proximity to wetland
- c. type of equipment required for construction

16.02 MODERATE CHANGES

These changes are modifications that the Commission determines have some likelihood of an impact on a wetland resource. These changes require an Amended Order of Conditions, which requires a request for a public hearing, payment of a separate filing fee of \$500, and abutters' notices sent by the applicant or their agent. Following receipt of the separate filing fee, the Commission will schedule a public hearing to be held within 21 days of the receipt of such fee and will publish a notice thereof in a local publication in the same general manner as for a Notice of Intent. The Commission will make a decision on the request for an Amended Order of Conditions following a public hearing. An Amended Order of Conditions must be filed by the Commission at the Registry of Deeds with a marginal reference to the original Order of Conditions.

The following may require an Amended Order of Conditions:

- a. Decrease in the distance from resource area
- b. Increase in potential for erosion
- c. Decrease in the size of no alteration zone
- d. Alteration of land form
- e. Change in size and location of structure and appurtenances
- f. Increase in amount of vegetation removed
- g. Activity beyond the limit of work

16.03 SIGNIFICANT CHANGES

Changes that are not related to the originally permitted activity may require a new Notice of Intent rather than an Amended Order of Conditions (that is, a deck appurtenant to a permitted dwelling would require a separate filing). Any modification that will change or increase the impact of the project on any wetland resource is considered a Significant Change.

SECTION 17 CERTIFICATE OF COMPLIANCE

Upon written request by the applicant, a certificate of compliance shall be issued by the Conservation Commission within 21 days of receipt thereof, and shall certify if it so determines, that the activity or portions thereof described in the application for permit and plans has been completed in compliance with the permit and any amendment(s) thereto. If approved by the Conservation Commission, the certificate of compliance shall be signed and issued by the Commission.

- a. Prior to the issuance of a certificate of compliance, a site inspection shall be made by the Conservation Commission or its agent, in the presence of the applicant or the applicant's agent if applicant so desires.
- b. If the Conservation Commission determines, after review and inspection, that the work has not been done in compliance with the permit, it shall refuse to issue a certificate of compliance. Such refusal shall be issued within 21 days of receipt of a request for a certificate of compliance, shall be in writing, and shall specify the reasons for denial.

- c. If a project has been completed in accordance with plans stamped by a registered professional engineer or a land surveyor or a registered landscape architect for landscaping projects, a written statement by such a professional person certifying substantial compliance with the plans and setting forth what deviation, if any, exists from the plans approved in the permit shall accompany the request for a certificate of compliance. The Commission reserves the right to administer the requirements of this paragraph in its sole discretion commensurate with the nature, scope, type, and cost of the proposed project or activity.
- d. If the permit contains conditions which continue past the completion of the work, such as maintenance or monitoring, the certificate of compliance shall specify which, if any, of such conditions shall continue. The certificate shall also specify to what portion of the work it applies, if it does not apply to all the work regulated by the permit.
- e. The certificate of compliance shall be recorded in the Land Court or Registry of Deeds, whichever is appropriate. Certification of recording shall be sent to the Conservation Commission on the form specified by the Commission.

SECTION 18 PROHIBITED/FILL MATERIALS

All fill used in connection with any project under the jurisdiction of the Commission will be clean fill, containing no garbage, refuse, rubbish, industrial or commercial or municipal fill or waste, demolition debris, or septic sludge, including, but not limited to lumber, wood, stumps, plaster, wire, rubbish, pipes, lathe, paper, cardboard, glass, metal, tires, ashes, appliances, motor vehicles or parts of any of the foregoing. No fill containing levels of oil or hazardous materials above GW-1/S-1 Method 1 Standards, as described in the Massachusetts Contingency Plan (MCP) environmental regulations as revised, will be used in connection with any project under the jurisdiction of the Commission.

The source of any fill will be made known in writing to a member of the Commission. All proposed fill for a site within jurisdictional areas shall be approved by the Commission for placement at the site. All environmental reports and results of chemical testing of such fill will be filed with the Commission prior to work commencement. The Commission reserves the right to require specific additional chemical testing of fill by a third party, at the applicant's expense, prior to placement at the site.

SECTION 19 INLAND BANKS (Naturally Occurring Banks and Beaches)

19.01 PREAMBLE

Banks are likely to be significant to wildlife, public or private water supply, to ground water supply, to flood control, to storm damage prevention, to the prevention of pollution and to the protection of fisheries and wildlife. 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.

Banks are areas where ground water discharges to the surface and where, under some circumstances, surface water recharges the ground water.

Where banks are partially or totally vegetated, the vegetation serves to maintain their stability, which in turn protects water quality by reducing erosion and siltation.

Banks may also provide shade that moderates water temperatures, as well as providing breeding habitat and escape cover and food, all of which are significant to the protection of fisheries and wildlife. Banks which drop off quickly or overhang the waters edge often contain numerous undercuts which are favorite hiding spots for important game species.

Banks act to confine floodwater during the most frequent storms, preventing the spread of water to adjacent land. Because banks confine water during such storms to an established channel they maintain water temperatures and depths necessary for the protection of fisheries. The maintenance of cool water temperature during warm weather is critical to the survival of many species. An alteration of a bank that permits water to frequently and consistently spread over a larger and more shallow area increases the amount of property which is routinely flooded, as well as elevating water temperatures and reducing fish habitat within the main channel, particularly during warm weather.

Land within 100 feet of a bank is likely to be significant to the protection and maintenance of the bank, and therefore to the protection of the interests which these Resource Areas serve to protect.

19.02 DEFINITION, CRITICAL CHARACTERISTICS AND BOUNDARY

A bank is the portion of the land surface which normally abuts and confines a water body. It occurs between a water body and a vegetated bordering wetland and adjacent flood plain, or, in the absence of these, it occurs between a water body and an upland. A bank may be partially or totally vegetated, or it may be comprised of exposed soil, gravel or stone.

- a. The physical characteristics of a bank, as well as its location, as described in the foregoing subsection (2) (a) are critical to the protection of the interests specified in Section 19 hereof.
- b. The upper boundary of a bank is the first observable break in the slope or the mean annual flood level, whichever is higher, and it may be outside the line of the bordering vegetated wetlands. The lower boundary of a bank is the mean annual low flow level.

19.03 PERMITTED ACTIVITIES; WAIVERS

No activity, other than the maintenance of an already existing structure, which will result in the building within or upon, removing, filling, or altering of a bank, on land within 25 feet of any bank, shall be permitted by the Conservation Commission, except for activity which is allowed under a waiver from these Rules and Regulations granted pursuant to Section 7 hereof and in accordance with Section 21.2(b) of the By-law.

Any activity which is allowed under a waiver granted pursuant to Section 7 of these Rules and Regulations on a bank or on land within 100 feet of a bank shall not impair the following:

- a. the physical stability of the bank;
- b. the water carrying capacity of the existing channel within the bank;

- c. ground water and surface water quality; or

SECTION 20 FRESHWATER WETLANDS/VEGETATED WETLANDS/, WET MEADOWS, MARSHES, SWAMPS AND BOGS (Bordering and Isolated Freshwater Wetlands)

20.01 PREAMBLE

Freshwater/Vegetated wetlands are likely to be significant to wildlife, public or private water supply, to ground water supply, to flood control, to storm damage prevention, to prevention of pollution, to the protection of fisheries and to the protection of shellfish and wildlife.

The plant communities, soils and associated low, flat topography of vegetated wetlands remove or detain sediments, nutrients (such as nitrogen and phosphorous) and toxic substances (such as heavy metal compounds) that occur in run-off and flood waters.

Some nutrients and toxic substances are retained for years in plant root systems or in the soils. Others are held by plants during the growing season and released as the plant 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.

Freshwater/vegetated wetlands are areas where ground water discharges to the surface and where, under some circumstances, surface water discharges to the ground water.

The profusion of vegetation and the low, flat topography of vegetated wetlands slow down and reduce the passage of flood waters during periods of peak flow by providing temporary flood water storage, and by facilitating water removal through evaporation and transpiration. This 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 and streams, which in turn is important to the protection of water quality and water supplies.

Wetland vegetation provides shade that moderates water temperatures important to fishlife. Wetlands flooded by adjacent water bodies and waterways provide flood, breeding habitat and cover for fish. Fish populations in the larval stage are particularly dependent upon food provided by overbank flooding which occurs during peak flow periods (extreme storms), because most river and stream channels do not provide quantities of the microscopic plant and animal life required.

Wetland vegetation supports a wide variety of insects, reptiles, amphibians, mammals and birds which are a source of food for important game fish. Bluegills (*Lepomis macrochirus*), pumpkinseeds (*Lepomis gibbosus*), yellow perch (*Perca flavescens*), rock bass (*Ambloplites rupestris*) and all trout species feed upon nonaquatic insects. Largemouth bass (*Micropterus salmoides*), chain pickerel (*Esox niger*) and northern pike (*Esox lucius*) feed upon small mammals, snakes, nonaquatic insects, birds and amphibians. These wetlands are also important to the protection of rare and endangered and other wildlife species. Vegetated wetlands, together with land within 100 feet of a vegetated wetland, serve to moderate and alleviate thermal shock and pollution resulting from runoff from impervious surfaces which may be detrimental to

wildlife, fisheries, and shellfish downstream of the vegetated wetland.

Land within 100 feet of a vegetated wetland is likely to be significant to the protection and maintenance of vegetated wetlands, and therefore to the protection of the interests which these Resources Areas serve to protect.

20.02 DEFINITION, CRITICAL CHARACTERISTICS AND BOUNDARY

Freshwater wetlands are vegetated wetlands. The types of freshwater wetlands are wet meadows, marshes, swamps and bogs. They are areas where the topography is low and flat, and where the soils are annually saturated. The ground and surface water regime and the vegetational community which occur in each type of freshwater wetland are specified in Section 20.02 (b)(1-4), below. Said Resource Areas shall be protected whether or not they border surface waters. These resources should be defined through and one of the criteria listed below.

- a. The physical characteristics of vegetated wetlands, as described in the foregoing subsection (2)(a), are critical to the protection of the interests specified in Section 21 (1) above.
- b. The boundary of vegetated wetlands is the line within which 50 percent or more of the vegetational community consists of the wetland plant species.
- c. Hydric soils
 1. The term bog, as used in this section, shall mean areas 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* spp.) and where the vegetational community is made up of a significant portion of one or more of, but not limited to nor necessarily including the following vegetation: 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 augustifolia* and *K. polifolia*), leatherleaf (*Chamaedaphne calyculata*), orchids (*Arethusa*, *Calopogon*, *Pogonia*), pitcher plants (*Sarracenia purpurea*), sedges (*Cyperaceae*), sundews (*Drosera* spp.), sweet gale (*Myrica gale*), white cedar (*Chamaecyparis thyoides*).
 2. Emergent Swamps, The term swamps, as used in this section, shall mean areas where ground water 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 including the following vegetation: 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*), willow (*Salicaceae*).

3. The term wet meadow, as used in this section where ground water 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 the following vegetation: blue flag (*Iris*), vervain (*Verbena*), thoroughwort (*Eupatorium*), dock (*Rumex*), false loosestrife (*Ludwigia*), hydrophilic grasses (*Poaceae*), loosestrife (*Lythrum*), marsh fern (*Dryopteris thelypteris*), rushes (*Juncaceae*), sedges (*Cyperaceae*), sensitive fern (*Onoclea sensibilis*), smartweed (*Polygonum*).
4. The term marshes, as used in this section, shall mean areas 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 the following vegetation: arums (*Araceae*), bladder worts (*Utricularia*), bur reeds (*Sparganiaceae*), button rush (*Cephalanthus occidentalis*), cattails (*Typha*), duck weeds (*Lemnaceae*), eelgrass (*Vallisneria*), frog bits (*Hydrocharitaceae*), horsetails (*Equisetaceae*), hydrophilic grasses (*Poaceae*), leatherleaf (*Chamaedaphne calyculata*), pickerel weeds (*Pontederiaceae*), pipeworts (*Eriocaulon*), pond weeds (*Potamogeton*), rushes (*Juncaceae*), sedges (*Cyperaceae*), smartweeds (*Polygonum*), sweet gale (*Myrica gale*), water milfoil (*Haloragaceae*), water lilies (*Nymphaeaceae*), water starworts (*Callitrichaceae*), water willow (*Decodon verticillatus*).

Section 20.03 PERMITTED ACTIVITIES; WAIVERS

No activity, other than the maintenance of an already existing structure, which will result in the building within or upon, removing, filling, or altering of a vegetated wetland, or of land within 25 feet of a vegetated wetland, shall be permitted by the Conservation Commission, except for activity which is allowed under a waiver pursuant to Section 7 hereof and in accordance with Section 21.2(b) of the By-law.

Any activity which is allowed under a waiver granted pursuant to Section 7 of these Rules and Regulations upon or within 100 feet of a vegetated wetland shall not impair in any way the vegetated wetland's ability to perform any of the functions set forth in Section 3.02(1) hereof.

SECTION 21 LAND UNDER WATER BODIES (Under any Stream, Pond or Lake, Natural or Man Made)

21.01 PREAMBLE

Land under water bodies and waterways is likely to be significant to wildlife, public and private water supply, to ground water supply, to flood control, to storm damage prevention, to prevention of pollution and to the protection of fisheries. Where land under water bodies and waterways is composed of pervious material, such land represents a point of exchange between surface and ground water.

The physical nature of land under water bodies and waterways is highly variable, ranging from deep organic and fine sedimentary deposits to rocks and bedrock. The 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 above. They also serve as traps for toxic substances (such as heavy metal compounds).

Land under water bodies and waterways, in conjunction with banks, serves to confine floodwater within a definite channel during the most frequent storms. Filling within this channel blocks flows which in turn causes backwater and overbank flooding during such storms. An alteration of land under water bodies and waterways that causes water to frequently spread out over a larger area at a lower depth increases the amount of property which is routinely flooded. Additionally, it results in an elevation of water temperature and a decrease in habitat in the main channel, both of which are detrimental to fisheries, particularly during periods of warm weather and low flows.

Land under rivers, streams and creeks that is composed of gravel allows 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 provides escape cover and resting areas for game fish species. Such bottom type also provides areas for the production of aquatic insects essential to fisheries.

Land under ponds and lakes is vital to a large assortment of warm water fish during spawning periods. Species such as largemouth bass (*Micropterus salmoides*), small mouth bass (*Micropterus dolomieu*), blue gills (*Lepomis macrochirus*), pumpkinseeds (*Lepomis gibbosus*), black crappie (*Promoxis nigromaculatus*) and rock bass (*Ambloplites rupestris*) build nests on the lake and bottom substrates within which they shed and fertilize their eggs.

Land within 100 feet of any bank abutting land under a water body is likely to be significant to the protection and maintenance of land under a water body, and therefore to the protection of the interests which these Resource Areas serve to protect.

21.02 DEFINITION, CRITICAL CHARACTERISTICS AND BOUNDARIES

Land under water bodies is the land beneath any creek, river, stream, pond or lake. Said land may be composed of organic muck or peat, fine sediments, rocks of bedrock.

The physical characteristics and location of land under water bodies and waterways specified in the foregoing subsection (2)(a) are critical to the protection of the interests specified in Section 3.03(1) above.

The boundary of land under water bodies is mean low water level.

21.03 PERMITTED ACTIVITIES; WAIVERS

No activity, other than the maintenance of an already existing structure, which will result in the building within or upon, removing, filling, dredging or altering of land under a water body shall be permitted by the Commission, except for activity which is allowed under a waiver pursuant to Section 7 hereof.

Any activity which is allowed under a waiver granted pursuant to Section 7 of these Rules and

Regulations on land under a water body shall not impair the following:

- a. The water carrying capacity within the defined channel, which is provided by said land in conjunction with the banks;
- b. Ground and surface water quality; or
- c. The capacity of said land to provide breeding habitat, escape cover and food for fisheries/shellfish.

SECTION 22 LAND SUBJECT TO FLOOD (Both Bordering and Isolated Areas)

22.01 PREAMBLE

- a. Bordering Land Subject to Flooding:

Bordering land subject to flooding is an area which floods from a rise in a bordering waterway or water body. Such areas are likely to be significant to flood control and storm damage prevention.

Bordering land subject to flooding provides a temporary storage area for flood water which has overtopped the bank of the main channel of a creek, river or stream or the basis of a pond or lake. During periods of peak run-off, flood waters are both retained (i.e., slowly released through evaporation and percolation) and detained (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.

- b. Isolated Land Subject to Flooding:

Isolated land subject to flooding is an isolated depression or a closed basin which serves as a ponding area for run-off or high ground water which has risen above the ground surface. Such areas are likely to be locally significant to flood control and storm damage prevention. In addition, where such areas are underlain by pervious material they are likely to be significant to public or private water supply and to ground water supply. Where such areas are underlain by pervious material covered by a mat of organic peat and muck, they are also likely to be significant to the prevention of pollution. Isolated land subject to flooding provides important breeding habitat for amphibians and some rare plants. Isolated land subject to flooding provides a temporary storage area where run-off and high ground water pond and slowly evaporate or percolate into the substrate. Filling causes lateral displacement of the ponded water onto contiguous properties, which may result in damage to said properties.

Isolated land subject to flooding, where it is underlain by pervious material, provides a point of exchange between ground and surface waters. Contaminants introduced into said area, such as septic system discharges and road salts, find easy access into the ground water 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 ground water and neighboring wells.

22.02 DEFINITIONS, CRITICAL CHARACTERISTICS AND BOUNDARIES

a. **Bordering Land Subject to Flooding:**

1. See Section 23 (1) a
2. The topography and location of bordering land subject to flooding specified in the foregoing subsection (2)(a)(1) are critical to the protection of the interests specified in Section 23(1)(a) above.
3. The boundary of bordering land subject to flooding is the estimated maximum lateral extent of flood water which will theoretically result from the statistical 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, successor to the U.S. Department of Housing and Urban Development). Said boundary, so determined, 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. Where NFIP Profile data is unavailable, the boundary of bordering land subject to flooding shall be the maximum lateral extent of flood water which has been observed or recorded.

b. **Isolated Land Subject to Flooding:**

1. See Section 22.01 (b) and as defined in the Wetlands Protection By-Law
2. The characteristics specified in the foregoing subsection 22. 02 (b) (1) are critical to the protection of the interests specified in Section 22.01 (b).
3. The boundary of isolated land subject to flooding is the perimeter of the largest observed or recorded volume of water confined in said area.

22.02 PERMITTED ACTIVITIES; WAIVERS

No activity, other than the maintenance of an already existing structure, which will result in the building within or upon, removing, filling, dredging or altering of land subject to flooding shall be permitted by the Commission unless compensatory storage is provided for or the activity is allowed under a waiver pursuant to Section 7 hereof.

Any activity which is allowed under a waiver granted pursuant to Section 7 of these Rules and Regulations on land subject to flooding 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. Adverse effect on public and private water supply or ground water supply, where said area is underlain by pervious material; or
- c. An adverse effect on the capacity of said area to prevent pollution of the ground water,

where the area is underlain by pervious material which in turn is covered by a mat of organic peat and muck.

SECTION 23 VEGETATION REMOVAL AND REPLACEMENT

- a. Findings: Vegetation in a resource area protected by the Bylaw is significant for wildlife, wildlife habitat and water quality. In addition, vegetation controls flood and storm damage, thereby mitigating potential impacts of climate change. Vegetation provides food, shelter, socialization, shade, water detention, sediment control, bank stabilization, biodiversity, pollutant uptake, evapotranspiration of water, aesthetics, and atmospheric purification. In addition, plant size ordinarily is proportional to habitat value; i.e., large wooded trees are of greatest habitat value, followed by bushes, and then ground cover. Thus, an adequate quantity of vegetation must be maintained so that resource areas protected by the Bylaw can provide the resource area values protected by the Bylaw, including, but not limited to: flood control, storm damage prevention, pollution abatement, wildlife protection, aesthetic value, and recreation.
- b. No vegetation in a resource area protected by the Bylaw shall be damaged, extensively pruned, or removed without written approval by the Commission and in-kind replacement. Extensive pruning is defined as removal of 20% or more of limbs or growth. For extensive pruning or removal of vegetation because of an Imminent Risk to Public Health and Safety, in-kind replacement shall be to the extent practicable as determined by the Commission (See Section 9 of these Regulations for Emergency Certification).
- c. "In-kind replacement" shall refer to a combination of species type and surface area as defined by the area delineated by the drip line of the affected plant(s). "In-kind" means the same type and quantity of plant species that was removed, extensively pruned, or damaged, unless compelling evidence is presented in writing that explains why the resource area values under the Bylaw are promoted through an alternative proposal, and planted within the same resource area or another resource area located in close proximity on the project site. Notwithstanding the foregoing, only non-invasive plant species shall be planted as replacements.
- d. The criteria for removal of vegetation follow. In all instances, the reasons for removal must be expressed in writing before the removal. In administering this standard, the Commission shall consider species selection, location, and timing of the plantings.
 1. Health of Vegetation - Vegetation in a state of irreversible decay, or undesirable vegetation present as a result of unintentional lack of maintenance may be offered as a reason(s) for removal.
 2. Bank or Slope Stabilization - A bank or slope stabilization plan requires the restructuring of soils occupied by vegetation.
 3. Invasive Species - The vegetation being removed is an aggressive, invasive, or non-native species as confirmed by wetlands scientist or as listed on a wetlands plant list acceptable to the Commission, such as, but not limited to that published by the United States Fish and Wildlife Service.

4. Ecological Restoration - The vegetation is being removed as part of a project whose primary purpose is to restore or otherwise improve the natural capacity of a resource area to protect and sustain the interests of the Bylaw; also called Resource Area Enhancement.
 5. Vegetation Replacement - The vegetation is being removed and replaced elsewhere on the project site or within the same resource area, only if the Commission determines that such removal and replacement does not decrease the resource area's contribution to the resource area values protected by the Bylaw.
 6. Imminent Risk to Public Health and Safety - The vegetation is an imminent risk to public health or safety or property as confirmed in writing and submitted to the Commission by the Medway Tree Warden, Fire Department Representative, Public Safety Officer, or a certified arborist.
- e. Application for Removal. For all projects, the application for vegetation removal shall be submitted as part of the application for permit or Notice of Intent as described by the Bylaw and these regulations. At a minimum, the application will include:
1. Narrative - The narrative shall describe the existing conditions, the proposed planting plan, the list of existing and proposed species, the size of existing and proposed species, and number of plants before and after the revegetation event. The narrative shall also provide the rationale for the removal, by addressing the criteria D1 through D6 above, and discuss the proposed maintenance plan (see (7) below).
 - a. Affirmation of the Revegetation Activities
 2. All plans for revegetation must be accompanied by written testimony and scaled diagram from a certified arborist or wetland scientist or landscape architect. At a minimum, this document must include the following information:
 - a. Is the vegetation removal necessary? (See D. above)
 - b. How much surface area of the vegetation will be removed (ft²-based on drip line)?
 - c. How many individual plants will be removed by species; *i.e.*, is the species list submitted with the NOI correct?
 - d. Planting Plan The proposed planting plan must be drawn to scale and identify properly the resource area and buffer zone and the project site. It must include the locations of each replacement species and the number of each species proposed for planting (in table form). The planting plan and procedures shall comply with the American Standards for Nurserymen, Inc. or equivalent. It must also include the location of the erosion control devices used during the restoration event. A brief narrative must accompany this planting plan describing the storage location of all motorized equipment. The planting plan shall show the estimated tree canopies after 15 years of growth, the specific names, sizes and locations of trees to be planted, and the total area of square feet of the area shaded by tree canopies. In determining the

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shaded area, measure the shaded area assuming that the shaded area is only that area directly under the drip line.

- e. Existing Species List -Each species existing before the restoration shall be listed in terms of area of coverage (ft²) and number of individual plants and either height or dbh as specified in the tables below.
- f. Replacement Species List - The replacement of vegetation shall be according to the following table (derived from the American Standards for Nurserymen, Inc.), unless the Applicant proves that the amount of replacement vegetation will not survive or contribute in the long-term to resource area values. A rationale for the species and size choice must be provided if the replacement is not "in-kind". Native species are the preferred; invasive species are not allowed. Replacement plant materials shall conform to the requirements described in the latest edition of American Standard for Nursery Stock, which is published by the American Association of Nurseryman ("AAN"). Replacement size shall be most common available substantial size, as approved by the Commission. Vegetation replacement is not considered successful until the replacement plants have survived three full growing seasons. For extensive pruning or removal of vegetation because of an Imminent Risk to Public Health and Safety, in-kind replacement shall be to the extent practicable as determined by the Commission (See Section 9 of these Regulations for Emergency Certification).

1. Tree:

| | Existing Trunk (dbh) | Replacement Quantity |
|---------|-------------------------|-------------------------|
| | 3 to 8 inches | 1 |
| | 8 to 20 inches | 2 |
| For all | > 20 inches | 3 |

trees:

- a. If a plant is well grown with a single stem, well-shaped and bushy, and has sufficient well-spaced side branches to give it weight and good bud qualities, it is an acceptable plant.
- b. On multi-stem trees, height shall be defined as the measurement taken from the ground level to the average uppermost point of grown of the plant.
- c. All replacement plants shall have ball sizes which are of a diameter and depth to encompass enough of the fibrous and feeding root system as necessary for the fully recovery of the plant once planted.
- d. Sapling trees shall include deciduous trees with a dbh of 1 inch and less; evergreens of 2 feet or less and shall be replaced at the discretion of the Commission so as to reach an equivalent area of coverage and soil retention.

2. For Shrubs:

The replacement of shrubs (bushes) shall be with bushes and shrubs of equivalent size. For bushes, the replacement must be well grown with a single stem, well-shaped and bushy, and have sufficient well-spaced side branches to give it weight and good bud quality as per the American Association of Nurserymen standards.

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- g. Rationale for Removal - Describe why the interests of wetlands protection are advanced by the revegetation plan.
- h. Maintenance Plan - Vegetation replacement is not considered successful until the replacement plants have survived three full growing seasons. The maintenance plan shall describe how the restoration will be evaluated annually for three years and reported to the Commission. The Commission reserves the right to require a revised replanting plan, or additional plantings on an annual basis in the event that the revegetation plants decay or die.
- i. The Commission may require one or more of the following measures to protect vegetation during work:
 - 1. Tree protection fencing – Prior to commencing work, four (4) foot-high snow fencing shall be installed and secured with wooden stakes (2” x 4” or 2” x 3”) or 6-foot steel channel posts so as to create an enclosure at the dripline of tree(s) or other distance as the site conditions allow to be protected. Such fencing shall be securely erected, be vertically plumb and be maintained for the duration of the project and shall protect individual trees or groups of trees.
 - 2. Tree protection blanket – “BarkSavers” or similar armored blankets shall be installed and maintained according to product specifications.
 - 3. No existing trees shall be used for crane stay, guys or other fastening.
 - 4. Vehicles shall not be parked below the canopy of any existing tree or where damage may result to existing trees or tree roots.
 - 5. Construction materials shall not be stored beneath existing trees.
 - 6. Following completion of work, have a certified arborist monitor the health of trees on site for possible damage and take measures to repair damage.
 - 7. Prior to work, preparation of a tree protection plan showing summary of all trees on site (including dbh, species, extent of canopy, roots and health) and specifying whether each tree shall be saved or lost.
- j. The Commission may require the placement of permanent bounds (e.g., granite or metal) to demarcate all or part of a resource area or vegetation mitigation area.
- k. The requirements of this section shall be met commensurate with the nature, scope, type, and cost of the proposed project or activity.

SECTION 24 WETLAND FILLING AND REPLICATION

24.01 PREAMBLE

In order to protect the values inherent in wetland areas, it is the intent of the By-Law to preserve wetlands, surface water bodies and other Resource Areas as functioning wetland systems. Filling of wetlands is therefore prohibited except when mitigated by wetlands replication, as permitted in this Section 4.

Wetland filling/replication in order to make lands buildable, as by fulfilling septic setbacks, flood elevations requirements or other construction setbacks or to achieve lot area requirements, is prohibited.

The following information shall be provided for the evaluation of proposed replication of Vegetated Wetlands. All information needed will be determined on an individual case basis. Projects proposing disruption of any area subject to the By-Law may be required to replicate not only the function, but its material characteristics, properties and vegetative cover. Inability to do so, where required, may be cause for denial.

The information to be supplied shall include a description of the existing conditions of the area under consideration for alteration as well as for any proposed area(s) for replication. The proposed created wetland is to be described according to all parameters below including expected goals and a schedule for a three year scope of monitoring and maintenance.

24.02 PARAMETERS FOR DESCRIPTION OF REPLICATION

a. HYDROLOGY

1. Brief history of the water/land relationship in the area describing any natural or manmade changes made over time.
2. Description of the macro topography and its relationship to catchment, flood magnitude, storage, estimates of annual average, as well as 2, 10, and 100 year storm flow volume of surface runoff.
3. Description of surficial geology and topography as it might relate to surface, channel or standing water.
4. Measurement of streamflow velocity, channel morphology and bed load, with seasonal fluctuations for 2, 10, and 100 year storm event (intermittent stream courses and ditches included).
5. Include groundwater contribution to streamflow (baseflow). Velocity of flow through various stations in the wetland should be measured as appropriate for project scope.
6. Areas of open water should be measured for seasonal variations in depth, size, shape and relationship to wind direction (fetch).

b. WATER QUALITY

1. Water quality assessment statement of existing conditions, seasonal fluctuations and any proposals for duplication or enhancement.
2. Additional measurements and analyses may be required based on project scope and site conditions

c. VEGETATION

1. Listing of species by both common and scientific names and percentage cover for Freshwater Wetlands. Proposed plantings should include a minimum of two wetland species indigenous to the site.
2. Accurate flagging of existing and proposed BVW boundary at 10 foot intervals, using a numbered flag system.
3. Plan to accomplish 75% of original cover percentage after two complete growing seasons.
4. Description of cover type for BVW, differentiating between woody, emergent, submergent and floating vegetation.
5. Measurement of stem density for woody species expressed as greater than or less than a given number of stems per meter square for BVW.
6. Description of plant vigor by visual determination in the field such as stunted, sparse growth, yellowing, strong, healthy, etc. for BVW.
7. General description of surrounding area cover types and density within 100 feet.
8. Proposal for stations from which yearly photographs will be taken during monitoring period and submitted to the Commission to demonstrate success.
9. Depth of heavy/intense root zone and relationship of roots to saturated soils and water table during growing seasons.

d. SOILS

1. General description of the geology, topography, physiographic and hydrogeologic setting for each wetland type and surrounding landscape.
 2. Soils profile morphology (to 3 feet or impervious material), including soil color, texture, degree of humification, structure, depth, induration/compaction, special features - (mottling, depth to water table, bearing capacity), relationship of special features to root zone.
 3. Relate observed field characteristics to published information or determine for each soil horizon, physical parameters including

porosity, hydraulic conductivity, and bulk density.

4. Determine chemical parameters including PH, conductivity, total phosphorus, total nitrogen, and organic carbon.

5. Include plan for soil type and characteristic replication.

6. Plan for toxins testing if preliminary evidence suggests possibility of contamination.

e. ANIMAL HABITAT

1. Description of slopes or any topographical variations.
2. Abundance of cavities suitable for burrowing either in open area or within confines of root/soil systems.
3. Description (size and number) of mud flats and other exposed areas.
4. Amount or number of gravel, rocks, boulders, bedrock outcroppings and rocks protruding from submerged soils.
5. Edible plants on or within 20 feet of BVW (of high wildlife food value for vertebrates).
6. Percentage of area shaded by tree canopy or dense shrub layer.
7. Percent of ground cover and depth of leaf litter.
8. Number and size (diameter at breast height) of standing trees with cavities, as well as diameter of such cavities.
9. General description of land within 25 feet of BVW on each adjacent lot, including natural environment, level of development, distance from BVW or man-made structures.
10. Percentage of wetland marsh or bog (if any) that is overhung by tree and shrub branches and height of such branches (under 3 feet, 3 to 6 feet, above 6 feet) including dead trees.
11. Number and size of dead vegetation lying or extending into BVW which is suitable for basking, perching or for cover.
12. Identification of any migratory area (area used by wildlife moving from one habitat to another).

f. PERFORMANCE STANDARDS

To ensure the continuity in wetland ecological systems, the following conditions shall be

considered proper wetland replication standards:

1. Replacement area shall be created during the same year and season as the wetland is filled/alterd and other construction is begun.
2. A wetland specialist with at least 2 years experience with installing wetland replacement areas and a biology background shall supervise the installation.
3. The Certificate of Compliance will not be issued for at least two full growing seasons after installation.
4. Written reports shall be submitted at the beginning of each season stating the condition of erosion controls and documenting the vigor and density of growth.
5. An as-built report, along with an as-built plan, shall be submitted and shall include excavation date and processes, wetland soil depth, planting (and replanting) dates and percentage of cover of individual species.
6. Changes by the applicant may be permitted upon review by the Commission if the project does not work.

SECTION 25 BUFFER ZONE ADJACENT UPLAND RESOURCE AREA

25.01 PRESUMPTION CONCERNING TITLE 5 OF THE MASSACHUSETTS ENVIRONMENTAL CODE AND MORE STRINGENT LOCAL BOARD OF HEALTH REGULATIONS

A subsurface sewage disposal system that is constructed in compliance with the requirements of Title 5 (310 CMR 15.00, et seq.) or more stringent Medway Board of Health requirements, shall be presumed to protect any and all interests identified in the By-Law.

25.02 PRESUMPTION OF SIGNIFICANCE OF THE 100 FOOT BUFFER ZONE.

Land within the 100 foot Buffer Zone is presumed to be significant to the protection of the adjacent Resource Area and therefore to the protection of the interests protected by the By-Law. Section 26 hereof sets forth the regulations applicable to the 100 foot buffer zone.

All distances shall be measured from the natural edge of the Resource Area, and no setbacks may be obtained by filling, altering or relocating a Resource Area.

SECTION 26 REGULATION GOVERNING ACTIVITY IN THE 100 FOOT BUFFER ZONE

26.01 PREAMBLE

Unaltered buffer zones protect the important functions and values of contiguous wetland resources. Scientific research and the Commission's own experience in reviewing a wide variety of projects, clearly demonstrates that alteration and construction activities within the buffer zone

consistently results in destructive and cumulative impacts on the Resource Areas. Buffers are significant to all Resource Areas and to all of the Interests Protected by the By-Law. The preponderance of available scientific research indicates that:

- a. Forested/unaltered buffers are essential for wetland protection.
- b. Forested buffers provide shade to adjacent wetlands and waterbodies, moderating temperature fluctuations and increasing the waters ability to hold oxygen and support life.
- c. Wetland buffers reduce the adverse impacts of adjacent land uses to wetlands. They provide habitat for plants and animals, preserve wetland characteristics and protect water quality.
- d. Buffer effectiveness increases with buffer width.
- e. Land use associated with significant construction need greater buffers.
- f. Buffers of less than 50 feet are generally ineffective in protecting wetlands.
- g. Buffer widths effective in preventing significant water quality impacts to wetlands are generally 100 feet or greater.
- h. Buffers from 50 to 150 feet are necessary to protect a wetland from direct human disturbance/encroachment (including by abandoned or dumped construction material, dumped debris, cut or burned vegetation, filled areas, excavation, trampled paths, adjacent residence expanding).
- i. The most effective buffers are flat. Slopes of 15% or more will require a greater buffer.
- j. Buffers trap and filter sediment, nutrients and chemicals from surface runoff and shallow groundwater.
- k. Root systems and plant stems within the buffer slow water velocity, decrease erosion and channelization and keep soils porous, permitting absorption into the ground and reducing flooding potential.
- l. The buffers capacity to absorb large amounts of water allows percolation to deeper aquifers, replenishing groundwater supplies
- m. Microbes in organic forest soils convert nitrate into nitrogen gas through denitrification.

26.02 PREVENTION OF POLLUTION, PROTECTION OF GROUNDWATER AND PUBLIC AND PRIVATE WATER SUPPLY, PROTECTION OF STREAMS, PONDS, OTHER BODIES OF WATER AND FISHERIES, AND WATER QUALITY MANAGEMENT

The role that a protective buffer zone plays in the maintenance of viable wetland Resource Areas has been frequently discussed in the scientific literature. Omernik (1977) thoroughly documented the dramatic increase in nitrogen and phosphorous loading to wetlands and water bodies as their adjacent watersheds are cleared. Water quality, it was demonstrated, can be better maintained if protective buffer strips are preserved along the edges of surface water bodies.

As surface runoff from developed sites flows toward a wetland resource area, the buffer zone can provide a site where eroded sediments settle, where nutrients from fertilizers are absorbed onto soil elements, and where transition zone vegetation can uptake unbound nutrients preventing nuisance algae blooms in adjacent waters (Harris and Gosselink, 1989).

Nutrients are by no means the only pollutant which may degrade wetland Resource Areas. Surface runoff from developed sites carries a diverse and potent pollution load: hydrocarbons, lawn chemicals, metals, bacteria, and viruses are common constituents (Diamond and Nilson, 1988). While it has been demonstrated that wetlands can play an effective role in

cleansing pollutant loads (Nickerson, 1978), little is known of the assimilative capacity of wetland systems in accommodating the broad spectrum of nonpoint pollutants in a given watershed. Indeed, evidence of our swamping of the natural thresholds for wetland resiliency abound.

26.03 WILDLIFE

The transitional assemblage of trees, shrubs and groundcover (containing both wetland and upland elements) frequently found in buffer zones has been found significant to the support of a greater number of native and specialist wildlife species in the interior of Resource Areas which they border. Put another way, similar habitats provide a gradual transition zone that is not as inhospitable as an abrupt habitat edge (Harris, 1984). It seems that the relationship between the width of the transitional buffer zone along a bordering marsh, for example, and the provision of optimum wildlife habitat for its native marsh fauna is a proportional one. On the other hand, more common edge species, including many opportunistic exotics and generalists may find their habitat proportionately diminished.

26.04 CUMULATIVE EFFECTS

Cumulative effects result from individually minor but collectively significant actions taking place over a period of time (Council on Environmental Quality, 1978). While the By-Law provides that the Commission may deny any project which will have a significant cumulative effect on a wetland or its values, our permit-level activities (i.e., site disturbance) are difficult to measure on the scale of cumulative impacts (i.e., watersheds) (Gosselink & Lee, 1989). Thus, techniques employed for individual permit review are not robust enough to resolve potential significant cumulative impacts, even though it may be clear that the collective impact of many such proposals could adversely affect or imperil a wetland Resource Area. A reasonable hedge against the cumulative impact is the ascription of a flanking undisturbed buffer of suitable width.

26.05 STORM DAMAGE PREVENTION/FLOOD CONTROL

The imposition of a flanking undisturbed buffer zone of suitable width is found both advisable and necessary in maintaining the functions and characteristics of freshwater wetlands to control floods, prevent storm damage, control sedimentation and erosion.

26.06 MINIMUM PERFORMANCE STANDARDS

As set forth more specifically below, it is the intent of the Commission to protect, either by condition or by legal restriction, as much of the 100 foot buffer zone as possible. Regardless, the first 25 feet of the buffer zone closest to the wetland line will be considered by the Commission to be of primary concern within the buffer.

- a. No Disturb Setback. Except as permitted by the Commission, no work shall be allowed within 25 feet of wetland resource areas identified in these rules and regulations (exclusive of the 100 foot buffer zone). This provision shall establish a permanent vegetative buffer between wetland resource areas and developed areas. No removal of vegetation will be permitted within this 25 foot setback except as specifically waived by the Commission under Section 29.

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- b. No Build Setback. No structure shall be built within 25 feet from any Resource Area.(exclusive of the 100 foot buffer zone) without a waiver by the Commission under Section 7. Structures are discouraged between 25 and 50 feet from any Resource Area (exclusive of the 100 foot buffer zone). A 75-foot minimum No Build Setback shall apply under any of the following circumstances:
 - 1. the Commission identifies a critical wildlife, fish or plant habitat;
 - 2. the Resource Area is located within a Water Resource Protection Overlay District, Zone II, or an ACEC;
 - 3. the Buffer Zone includes a slope that cannot be conditioned to protect the Resource Area;
 - 4. the Commission otherwise identifies a sensitive receptor Resource Area.
- c. These Rules and Regulations shall not be construed to preclude access paths, vista pruning or construction of water-dependent structures within the buffer zone, any of which may be permitted at the Commission's discretion.

SECTION 27 VERNAL POOLS

27.01 PREAMBLE

The conservation of vernal pools and their wildlife may be fundamental to the overall preservation of biodiversity in the northeastern forests, and not just to the conservation of few selected amphibian species. The topography, soil structure, plant community composition and structure, and hydrologic regime of vernal pools can provide the following important wildlife habitat functions.

Vernal pools are productive hatcheries for terrestrial amphibians (e.g., salamanders, toads and frogs) which make up a significant part of the adjacent upland wildlife. Every year in early spring, on the first big rainy night, thousands of salamanders, wood frogs, and other amphibians migrate out from the forest to breed in the vernal pools where they were born. Adult amphibians only inhabit the vernal pools for a few weeks out of the year in the spring or fall. The rest of the year they live upland in the adjacent upland forest sometimes more than 600 meters away from their vernal pool. After the female lays her eggs and they hatch, young salamanders and frogs remain in the pool until it dries in the summer. In pools that remain flooded, some young salamanders may overwinter in the pools. The animals that survive the pool stage leave the vernal pool for the forest. Like their parents, once they reach maturity, they will come back to the same vernal pool every year to breed. The adjacent upland buffer habitat is important for many other vernal pool species as well, including wood frogs, spadefoot toads, Blandings turtles, and spotted turtles, all of which are found in the Town of Medway.

Vernal pools provide food, water, breeding space, shelter, security, movement, and over-wintering areas for amphibians and other vernal pool species.

Vernal pools have a variety of plant associations, and are integrally associated with terrestrial plant communities and land uses.

There is no evidence that diversity increases with increasing numbers of vernal pools in a region. Large vernal pools and those with long-hydroperiods have more species than some smaller pools, but overall species diversity throughout a given geographic area depends on the

diversity of species occurring in vernal pools.

Small vernal pools limit isolation of larger ponds and help protect species that are specialized for small, short-cycle pools and are not found in large, semi-permanent sites.

27.02 DEFINITIONS; BOUNDARIES; IDENTIFICATION

The term vernal pool is defined in Section 4 and 27 of the Regulations.

The vernal pool boundary of such depression is the highest observed water surface elevation. When this actual line is not clearly visible, other factors such as water stained leaves, historical evidence, ground photographs, aerial photographs or other physical characteristics may be used.

The buffer zone, as it relates to a vernal pool, means the land within 100 feet horizontally landward from the perimeter or outer border of the vernal pool.

Systematic field observation has shown that virtually all basins that possess the characteristics defining a vernal pool under the Regulations host breeding vernal pool species. Therefore, the Commission will presume that a vernal pool habitat exists if the physical characteristics of a wetlands conform to those defined for vernal pools in the By-Law or, if it is so indicated as such in the *Massachusetts Aerial Photo Survey of Potential Vernal Pools*. The presumption of significance may be overcome by the presentation of evidence deemed credible by the Commission and which in the judgment of the Commission demonstrates that the basin or depression, or the adjacent upland resource area, does not provide those habitat functions specified in the By-Law or these Rules and Regulations.

27.03 PERFORMANCE STANDARDS

Any alteration of a vernal pool or the 100 foot buffer adjacent to any vernal pool is prohibited. These regulations notwithstanding, the Commission will consider proposals within the buffer zone of a vernal pool on a site specific basis, but only if all practical alternatives to such alteration have been investigated, and if the applicant has shown by a preponderance of the credible evidence that the proposed activity will not have unacceptable significant or cumulative effects within the protected resource area or buffer zone on the identified interests.

SECTION 28 RIVERFRONT

The Commission accepts and adopts the definitions, requirements, and performance standards for Riverfront Area as specified in the Massachusetts Department of Environmental Protection's Wetlands Regulations in 310 C.M.R. 10.58.

SECTION 29 WAIVERS

The Conservation Commission may, in its discretion, grant waivers from the operation of one or more of these Rules and Regulations pursuant to this Section 29. Such waivers shall be granted only in accordance with the provisions of this section.

A waiver may be granted only for the following reasons and upon the following conditions:

- a. The Conservation Commission may grant a waiver from these rules and regulations upon a preponderance of evidence showing by the applicant that any proposed work, or its natural and consequential impacts and effects, will not have any adverse effect upon any of the interests protected by the By-Law. It shall be the responsibility of the applicant to provide the Conservation Commission with any and all information which the Commission may request, in order to enable the Commission to ascertain such adverse effects, the failure of the applicant to furnish any information which has been so requested shall result in the denial of a request for a variance pursuant to this subsection.
- b. The Conservation Commission may grant a waiver from these rules and regulations when it is necessary to avoid so restricting the use of the property as to result in an unconstitutional taking without compensation. If an application for a waiver pursuant to this Section 29 is received by the Conservation Commission, the Commission may request an opinion from Town Counsel as to whether the application of these regulations to a particular case will result in such a taking without compensation.
- c. The Conservation Commission may grant a waiver from these rules and regulations upon a preponderance of evidence presented by the applicant that any proposed work will have an overriding public benefit.

SECTION 30 WILDLIFE HABITAT

The Town of Medway accepts and adopts the definitions, requirements, and performance standards for wildlife habitat as specified in the Massachusetts Department of Environmental Protection's Wetlands Regulations in 310 CMR 10.00.

SECTION 31 CLIMATE RESILANCY

The Town of Medway operates three groundwater wells in order to supply potable drinking water to the majority of its residents. The public system of wells, distribution lines and storage tanks was not designed nor intended to provide the added capability of unrestricted irrigation of lawns. Such water withdrawal, particularly during the growing season, depletes groundwater levels within the associated recharge zones and can directly impact the hydrology of adjacent wetlands and bodies of water. The Commission finds that tight water conservation measures are needed to prevent such impacts to Resource Area under its jurisdiction. Therefore, the Commission reserves the right to limit the lawn area within the areas under the Commission's jurisdiction associated with development proposals and to impose irrigation restrictions that it deems adequate.

SECTION 32 ECOLOGICAL RESTORATION

The Commission may allow ecological restoration projects as defined and provided in 310 CMR 10.00.

SECTION 33 STORMWATER MANGEMENT

Work or activity specified in a request for determination of applicability or an application for a permit and subject to the Bylaw shall meet, at a minimum and to the extent practicable, the best management practices for stormwater management as set forth in the Stormwater Standards of the Massachusetts Department of Environmental Protection. The Commission may in its sole

discretion require the applicant to provide a runoff plan and calculations using the NOAA Atlas 14 method, and based on the two, ten-year, fifty-year and one-hundred-year-flood frequency event period. Calculations shall show existing and proposed runoff conditions for comparative purposes and include a narrative on the proposed project's impact on climate change resilience of the resource area (see Section 31).

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

SECTION 34 SEVERABILITY

"If any provision of these Rules and Regulations, in whole or in part, is held to be invalid or unenforceable by a court of competent jurisdiction, the other provisions of these Rules and Regulations shall remain in full force and effect."

- a. The invalidity of any section or provision of the Bylaw or of these regulations shall not invalidate any other section or provisions thereof, nor shall it invalidate any permit which previously has been issued.
- b. If any Court of the Commonwealth shall invalidate any provisions of the Bylaw or of these regulations, the Conservation Commission may promulgate additional rules and regulations or present to the next Town Meeting after such invalidations, amendments to the Bylaw or regulations which are designed to comply with any Court decision invalidating such provisions or regulations, as the case may be.

SECTION 35 EFFECTIVE DATE

The effective date of these rules and regulations shall be June 25, 2020, and the provisions of these rules and regulations shall apply to all work performed, and all applications or requests for determination of applicability received on or after that date.

LITERATURE CITED

Brady, Pond R. Buchsbaum. 1989. Buffer zones: the environment's last defense. Mass. Audubon Society. 15 pp.

Gosselink, J. and L. Lee. 1989. Cumulative impact in Bottomland Hardwood Forests. *Journal of Wetland Scientists* (9): 95—174.

Harris, L. 1984b. *The Fragmented Forest: Island Biogeography Theory and the Preservation of Biotic Diversity*. University of Chicago Press, Chicago, IL

Harris, L. and J.G. Gosselink. 1989. Cumulative impacts of bottomland hardwood conversion on hydrology, water quality, and terrestrial wildlife. In *Ecological Processes and Cumulative Impacts: Illustrated by Bottomland Hardwood Wetland Ecosystems*. Lewis Publishers, Inc., Chelsea, MI. In press.

Nickerson, N. 1978. Freshwater wetlands: their nature and importance to man. *New England Environmental Network*. 8 pp.

Oerlemans, J. 1989. A projection of future sea level. *Climatic Change* (15): 151—74.

Omerik, J. 1977. Nonpoint source stream nutrient level relationships: a nationwide study. Corvallis Environmental Research Lab., Office of Research Development, U.S. Environmental Protection Agency, Corvallis, OR. EPA-600/3-77-105.

Stewart, R. 1989. Causes and estimates of sea-level rise with changing climate. In *oceanography 1988*, UNAM press, Mexico. p 65-6

Diamond, R.S. and D.J.Nilson. 1988. Buffer Delineation Method for Coastal Wetlands in New Jersey. *Symposium on Coastal Water Resources*. American Water Resources Association.

Sharp, G.A. 2002 Vernal Pools, Queach, and Preserving Biodiversity through Upland Regulation

Calhoun, A.J.K. and M.W. Klemens, 2002. Best development practices: Conserving pool-breeding amphibians in residential and commercial developments in the northeastern United States. MCA Technical Paper No. 5

www.massaudobon.org/Nature - Vernal Pools

California Native Plant Society 1994, Policy and Guidelines on Vernal Pool Mitigation

www.lastgreatplaces.org/berkshire/diversity/art6188.html Vernal Pool