

RULES AND REGULATIONS OF THE SHARON CONSERVATION COMMISSION

Amended July 1, 2021

SECTION 1 INTRODUCTION

1.01 Authority

These Rules and Regulations of the Sharon Conservation Commission (together with any amendments thereto) are promulgated under the authority of the Home Rule Amendment, Article LXXXIX (89), of the amendments to the Constitution of the Commonwealth of Massachusetts, 1966, 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 Town's Wetlands Protection Bylaw (the bylaw), which is Article 262 of the Town's bylaws. The bylaw sets forth a public review process by which activities having an impact or cumulative effect upon the wetlands, surface and groundwater resources of the Town of Sharon are regulated. In addition, the bylaw identifies additional public interests not recognized by (and expands other interests identified in) the Massachusetts Wetland Protection Act. These additional public interests are: erosion and sedimentation control, protection of surrounding land, home or buildings, protection of rivers, streams, ponds and other bodies of water, water quality enhancements, scenic vistas, recreation, and aesthetics.

These Rules and Regulations are intended to compliment and clarify provisions of the bylaw 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 Commission recognizes that environmental review is necessarily a site-specific process. The Commission intends that applicants have maximum flexibility in design and freedom to employ innovative techniques to minimize adverse environmental impacts of various projects.

The laws referred to in the Rules and Regulations include:

- a) The Massachusetts Wetlands Protection Act, G.L. Ch. 131 §40, and the regulations promulgated thereunder (codified at 310 CMR 10.00)

- b) The most recent flood profile data available from the National Flood Insurance Program currently administered by the Federal Emergency Management Agency (FEMA);
- c) The Massachusetts Environmental Policy Act (MEPA), G.L. Ch. 30 §§61-62H, and the regulations promulgated thereunder (codified at 301 CMR 11);
- d) The Massachusetts laws governing designated Areas of Critical Environmental Concern, G.L. Ch. 21A §2(7) and the regulations promulgated thereunder (codified at 301 CMR 12.00);
- e) MGL Chapter 91
- f) The Open Meeting Law – MGL c. 30A §§ 18 – 25
- g) Public Records Law – MGL c. 66 § 10 and MGL c 4 §7 clause 26
- h) Applicable portions of Sharon’s Zoning Bylaw and the rules and regulations promulgated thereunder; and
- i) Applicable portions of the rules and regulations of the Sharon Board of Health.

Applicants are presumed to be familiar with the above-referenced laws. Copies of applicable Town bylaws may be accessed on-line or obtained from Sharon’s Town Clerk or the Commission. Copies of Massachusetts laws and regulations may be accessed on-line or obtained from the State Capitol in Boston. The Commission will provide guidance on the above laws upon request.

Pre-application conferences and site visits, especially for large, complex or unusual projects, are encouraged by the Commission. Field reviews of wetland resource delineation and consideration of certain variance requests, prior to filing, is appropriate.

1.03 Jurisdiction

The Resource Areas protected by the bylaw are set forth in Section 262-3 of the bylaw and differ from those protected by the Massachusetts Wetlands Protection Act in that additional areas are protected by the bylaw. 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. In addition, the buffer zone surrounding a Resource Area is itself deemed to be a Resource Area protected by the bylaw.

1.04 Definitions

ALTER – Includes, without limitation, the following actions when undertaken to, upon, within or affecting resource areas protected by the bylaw:

- (1) Removal, excavation or dredging of soil, much, humus, sand, gravel, or aggregate materials of any kind;
- (2) Changing of pre-existing drainage characteristics, flushing characteristics, sedimentation patterns, flow patterns and flood retention characteristics;
- (3) Drainage or other disturbance of water level or water table;
- (4) Dumping, discharging or filling with any material which may degrade water quality, alter elevation or interfere with the functioning of wetland, floodplains, bank or bodies of water;
- (5) Driving of piles or erection, expansion or repair of buildings or structures of any kind;
- (6) Placing of obstructions or objects in a body of water, whether or not they interfere with the flow of water;
- (7) Destruction of plant life, including cutting or trimming of trees and shrubs. Plant life shall include those species specified in the Wetlands Protection Act, MGL c. 131 § 40 and the plant life that is significant to physical stability of the bank, flood control, storm damage prevention, prevention of pollution and /or protection of fisheries and wildlife habitat;
- (8) Changing of water temperature, biochemical oxygen demand (BOD), or other physical, biological or chemical characteristics of any ground- or surface-waters;
- (9) Any activities, changes, or work which may cause or tend to contribute to pollution of any body of water or groundwater;
- (10) Incremental activities which have, or may have, a cumulative adverse impact on the resource areas protected by the bylaw.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: those critical areas and resources designated by the Commonwealth of Massachusetts for the purpose of long-term preservation, management and use or stewardship under authority granted by G.L. Ch. 21A §2(7) and the regulations promulgated thereunder (codified at 301 CMR 12.00).

AREA SUBJECT TO PROTECTION UNDER THE BYLAW: those areas defined in the Massachusetts Wetlands Protection Act or Section 262-3 of the bylaw. It is used synonymously with Resource Area.

APPLICANT: any person making a filing, or on whose behalf a filing is submitted.

AQUATIC NUISANCE: undesirable or excessive substances or populations that interfere with the recreational or ecological potential of a body of water or interfere with the natural resources thereof and that shall include, but not be limited to, rooted aquatic vegetation and algae populations,

decennia mussels, spiny water fleas, and any other invasive species that the Commission deems to be problematic.

AQUIFER RECHARGE AREAS: those areas composed of permeable stratified sand and gravel and certain wetlands that collect precipitation or surface water and then carry it to aquifers.

BANK: an area which normally abuts and confines a water body; the lower boundary being the mean annual low flow level, and the upper boundary being the first observable break in the slope or the mean annual flood level, whichever is higher.

BEACH: a naturally occurring shoreline with an un-vegetated bank.

BEST AVAILABLE MEANS: the most up-to-date technology or the best designs, measures or engineering practices that have been developed and that are commercially available. "Best available" shall not be defined by economics.

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

BORDERING VEGETATED WETLANDS (BVW): Bordering vegetated wetlands are freshwater wetlands. These are resource areas where groundwater discharges to the surface and where, under some circumstances, surface water discharges to the groundwater. Vegetated/ freshwater wetlands are likely to be significant to public or private water supply, to groundwater supply, to flood control, to storm damage prevention, to prevention of pollution, to the protection of fisheries, to the protection of shellfish, and wildlife. The physical characteristics of vegetated wetlands are critical to the protection of interests specified in MGL c. 131 § 40. 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. Said resource area shall be protected whether or not they border surface waters.

BOUNDARY: the limits of an area subject to protection under the bylaw.

BROOK: considered the same as stream.

BUFFER ZONE: the land within one hundred (100) feet horizontally landward from the perimeter or outer border of any resource area, as defined in this bylaw and the Commission's rules and regulations.

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 Orders of Conditions.

COMMISSION: the Conservation Commission of the Town of Sharon, a lawfully constituted agency established pursuant to MGL c. 40 § 8C to regulate and control activities governed by this bylaw.

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

CREEK: the same as stream.

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.

MASSDEP: the Massachusetts Department of Environmental Protection.

DETERMINATION OF APPLICABILITY: a written finding, following a public hearing by the Commission, as to whether a site or the work proposed thereon is subject to the jurisdiction of the bylaw. A finding will be one of the following:

- (1) Positive Determination: a written finding that an area on which the proposed work is to be done, or the activity thereon, will cause a significant impact to one or more of the interests protected by the bylaw.
- (2) Negative Determination: a written finding that an area on which proposed work is to be done, or the activity thereon, will not cause a significant impact to any of the interests protected under the bylaw.
- (3) Negative Determination with Conditions: a written finding that the work proposed on the area allowed under the Conditions prescribed by the Commission, will not cause a significant impact to any of the interests protected by the bylaw.

ENFORCEMENT ORDER/VIOLATION NOTICE: issued to any owner, applicant or agent in the event of a violation of this bylaw, the Massachusetts Wetlands Protection Act or any order issued thereunder.

EXTENDED DROUGHT: any period of four or more months during which the average rainfall for each month is 50 percent or less of the ten year average for that same month.

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

FLOOD CONTROL: preventing or reducing flooding and flood damage.

FRESHWATER WETLANDS: are vegetated wetlands and consist of any area of at least 2,000 square feet where surface and/or ground water, or ice at or near the surface of the ground, supports a plant community dominated (at least 50 percent) by wetland species and/or exhibits other evidence of hydrology. They are otherwise defined in MGL c. 131 § 40.

GROUNDWATER PROTECTION DISTRICT: area designated to protect, preserve, and maintain the existing and potential groundwater supply and groundwater recharge areas; to preserve and protect current and potential sources of water supply for public health and safety; and to conserve the natural resources of the town and to prevent environmental pollution.

GROUNDWATER SUPPLY: water below the earth's surface in the zone of saturation.

INTERESTS PROTECTED BY THE BYLAW: those interests specified in Section 262-1 of the bylaw.

INVASIVE PLANT AND ANIMAL SPECIES: species not native to the Resource Area whose presence threatens the integrity of natural communities and the survival of indigenous plant and animal species.

ISOLATED LAND SUBJECT TO FLOODING: an isolated depression or closed basin without an inlet or an outlet. It is an area which at least once a year confines standing water to a volume of ¼ acre-feet and to an average depth of at least six (6) inches. The area may be underlain by pervious material which in turn may be covered by a mat of organic peat or muck.

ISOLATED WETLAND: an area of at least 2,000 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 other evidence of hydrology though the area does not border surface waters.

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: an area with low, flat topography adjacent to and inundated by flood waters rising from creeks, rivers, streams, ponds or lakes. It extends from the banks of these waterways and water bodies; where bordering vegetated wetlands occur, it extends from such wetland.

LAND UNDER WATER BODIES AND WATERWAYS: the bottom of, or land under the surface of, any creek, river, stream, pond or lake.

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

MASSACHUSETTS WETLANDS PROTECTION ACT: MGL c. 131 § 40 and the regulations promulgated thereunder (codified at 310 CMR 10.00)

MEAN ANNUAL BOUNDARY: with respect to vernal pools, the highest observed water surface elevation.

MEPA: Massachusetts Environmental Policy Act, MGL c. 30 §§ 61-62, and the regulations promulgated thereunder as codified at 310 CMR 11.00.

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

ORDER: an Order of Conditions and/or Order of Resource Area Delineation, Superseding, Order or Final Order, issued pursuant to the Massachusetts Wetlands Protection Act and/or the bylaw.

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 and/or the bylaw.

ORDER OF RESOURCE AREA DELINEATION: the document issued in recordable form by the Commission indicating acceptance of the marked boundaries designating areas subject to protection under the bylaw, as defined herein.

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

PERSON: Includes any individual, group of individuals, association, partnership, corporation, company, business organization, trust, estate, the federal government or agencies thereunder to the extent subject to Town bylaws, the Commonwealth or political subdivisions thereof to the extent subject to Town bylaws, administrative agencies, public or quasi-public corporations or bodies, the Town of Sharon, and any other legal entity, its legal representatives, agents or assigns.

PLAN: 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 bylaw 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 bylaw.

POND: any open body of fresh water with a surface area observed or recorded within the last ten (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, as defined herein. 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;
- c) individual gravel pits or quarries excavated from upland areas unless inactive for five or more consecutive years.

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

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: the protection of any plant or animal species listed as endangered, threatened or of special concern, or on the Watch List by Mass Wildlife's Natural Heritage and Endangered Species Program; listed as Federally Endangered or Federally Threatened by the U.S. Fish and Wildlife Service; deemed locally threatened in writing by the Commission; and the protection of

the ability of any Resource Area to provide food, breeding habitat, or escape cover for species falling within the definition of wildlife.

PUBLIC WATER SUPPLY: any source or volume of surface or groundwater demonstrated to be in public use, or approved for water supply pursuant to G.L. Ch. 111 § 160 by MassDEP, or shown to have a potential for public use.

QUORUM: more than half of the filled seats on the Commission.

RARE SPECIES: includes all species listed as endangered, threatened, or of special concern by the Massachusetts Division of Fisheries and Wildlife, regardless whether the site in which they occur has been previously identified by the Division.

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 bylaw.

RESOURCE AREA: those areas defined in the Massachusetts Wetlands Protection Act or Section 262-3 of the bylaw. Resource Area is used synonymously with Area Subject to Protection under the Bylaw.

RIVER: a natural flowing body of water that empties into any lake, pond, ocean or other river and which flows throughout the year, including but not limited to the following: Beaver Brook, Billings Brook, Canoe River, Little Canoe River, Devil's Brook, Massapoag Brook, Puffer Brook, School Meadow Brook, Spring Meadow Brook, Sucker Brook, Traphole Brook, in their entirety throughout the Town of Sharon.

RIVERFRONT AREA: as defined in the MGL c. 131 Section 40.

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: a body of running water, including brooks and creeks, which move in a definite channel in the ground due to hydraulic gradient. A stream may flow through a culvert or beneath a bridge. A body of running water which does not flow throughout the year is termed an intermittent stream.

VEGETATED WETLANDS: see Freshwater Wetlands.

VERNAL POOL: includes, in addition to scientific definitions found in the regulations under the Massachusetts Wetlands Protection Act, any confined basin or depression not occurring in existing lawns, gardens, landscaped areas or driveways which at least in most years, holds water for a minimum

of two continuous months during the spring and/or summer, contains at least 200 cubic feet of water at some time during most years, is free of adult predatory fish populations, and provides essential breeding and rearing and other important wildlife habitat functions for amphibian, reptile or other vernal pool community species, regardless of whether the site has been mapped and/or certified by the Division of Fisheries and Wildlife. The boundary of the resource area for vernal pools shall be 100 feet outward from the mean annual high-water line defining the depression.

WATERCRAFT: a vehicle using a water jet pump or similar machinery (e.g., jet-ski type vehicle) as its primary source of propulsion.

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

WILDLIFE: living things and especially mammals, birds, reptiles, amphibians and fish, as well as invertebrates, which are neither human nor domesticated, and living in their natural environment.

SECTION 2. GENERAL PROVISIONS

1. The Conservation Commission is comprised of seven (7) members appointed by the Selectmen.
2. Any correspondence and/or submittal (including any Filing) should be addressed to:

Sharon Conservation Commission
219 Massapoag Ave.
Sharon, MA 02067

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 Clerk Office in the Town Hall, where it should be date stamped. Three copies of each submittal shall be made to the Conservation Commission.

3. Filing fees required for application under the Massachusetts Wetlands Protection Act are determined by the State and filing fees for the town of Sharon are set forth in the bylaw as follows:

- 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) Bylaw Fee to the Town - determined by the Commission's Rules and regulations
- d) Advertising Fee to the Town – determined by the Commission's Rules and Regulations.

Refer to the Commission's website at www.townofsharon.net for the current fee structure.

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.

- 4. Unified forms for filing under both the Massachusetts Wetlands Protection Act and under the bylaw are available from the Commission. Alternatively, the State forms may be used provided their headings are modified to include the Sharon Wetlands Protection Bylaw beneath the words "Massachusetts Wetlands Protection Act".
- 5. The public hearing held under the provisions of the Massachusetts Wetlands Protection Act shall serve simultaneously as the hearing under the bylaw. Public notices of hearings to be conducted for an applicant are to be inserted in a local newspaper by the Commission. 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 as requested may result in a denial of the project by the Commission.
- 6. Any filing must deal with the entire project, including intended full build-out. A project that is submitted piece-meal will be considered incomplete, and the commission may deny the project. All proximate, adjoining, opposing or generally contiguous lots must be included under a single Filing, if they are under the control of the same owner. For a subdivision, the entire filed subdivision, and adjoining subdivisions under the control of the same owner but not yet built, shall be considered the same project.
- 7. The applicant should provide a statement with respect to the effect of the project on the interests protected under the Massachusetts Wetlands Protection Act and the bylaw.
- 8. An applicant shall provide a written statement describing construction methodology, including the type of machinery and construction equipment to be used, access way to the project site, proposed construction time tables, and other information the Commission deems pertinent.

9. An applicant proposing alteration of any Resource Area may be required to replicate not only the function of the area to be altered, but its physical properties, characteristics, and vegetative cover. Inability to do so, where required may be cause for denial. The commission, in issuing an Order of Conditions that requires wetlands replication will normally require security, as permitted by Section 262-4(E) of the bylaw, to assure the successful reestablishment of the lost wetlands. At least 75% of the replicated plant species shall survive through two (2) growing seasons and shall be viable prior to release of said security. Replication shall be carried out in accordance with an approved replication plan.
10. No filling of freshwater wetlands will be allowed for the purposes of securing any wetland regulatory setback requirements or to meet any "high and dry" zoning requirement for a buildable lot.
11. Plans, drawings, sketches, and calculations shall be dated and signed by the person(s) responsible for their preparation. Calculations shall be independently checked by the applicant or the applicant's representative, with the checker identified. Any calculation done by computer program shall be done by an industry-standard program, which shall be identified, or the program and its logic shall be submitted with the calculations. All such programs shall fully identify input data, and intermediate and final results. Plans and drawings involving the practice of surveying or engineering shall be stamped, signed and dated by the appropriate design or surveying professional, who shall be registered in the Commonwealth of Massachusetts.
12. Projects requiring filings under MEPA because of State funding, or the need for State permits, must have the actions of the MEPA filings complete prior to the close of any hearing on a Filing before the Commission, or the Commission may deny the project on the basis of inadequate project information. A project requiring an Environmental Notification Form (ENF) under MEPA because it exceeds the MEPA review thresholds relative to areas protected by the Massachusetts Wetlands Protection Act shall have filed the ENF and completed any actions, including an Environmental Impact Report (EIR), as a result of the filing, prior to the close of any hearing on a Filing before the Commission, or the Commission may deny the project on the basis of inadequate project information and the desire to ensure that a State permit is obtained.
13. The Commission may order independent investigation, engineering hydro-geological, legal or other review of the filing and/or the site at the applicant's expense. No investigation, engineering hydro-geological or other study or review shall commence until such time as the applicant has agreed in writing to pay the specified study and/or review costs. Selection of a consultant to perform the required work shall be subject to the approval of the Commission.
14. Determinations of Applicability are valid for a three year period from the date of issuance and cannot be extended. If a Negative Determination of Applicability had been rendered by the

Commission for a particular project, construction must be completed within the three year period or the applicant must make another Filing with the Commission.

15. Formal actions by the Commission are under the authority of both the Massachusetts Wetlands Protection Act and the bylaw. Such actions are usually the same under either authority, but need not be because of different interests and authority granted by each law. Appeals of any Commission actions by any applicant or interested parties must be sought under both authorities: the DEP under the Massachusetts Wetlands Protection Act and to the Superior Court under the bylaw.
16. An Order of Conditions or a negative Determination of Applicability must be filed at the Registry of Deeds in order to be valid under the bylaw. An applicant is expected to file either the Determination of Applicability or the Order of Conditions within the statutory appeal period (10 calendar days) and must supply the Commission with the particulars of the recording within 7 calendar days after the recording.
17. The Commission may require, in an Order of Conditions, that an applicant place a conservation restriction or easement upon such applicant's unaltered Resource Areas, in order to prevent future alteration to these Resource Areas.
18. 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. The Commission may grant an extension of time to a valid Order of Conditions upon written request justifying the need for an extension and indicating the reasons construction was not completed within the permitted time. A request for an extension, received after the expiration date of an Order, will be denied by the Commission, unless there are extenuating circumstances satisfactory to the Commission. A request for an extension must be received by the Commission in sufficient time for the Commission to act, normally at least a month prior to the expiration date.
19. An applicant who makes a Filing thereby grants to the Commission, and its agents, the right of entry to the property of concern to determine applicable facts and evidence sufficient for the Commission to make a Determination or issue an Order of Conditions and to check for any non-compliance with State law or the bylaw.
20. Any order of Conditions issued under the bylaw may be revoked by the Commission for good cause after notice to the holder of the Order, public notice, and public hearing.
21. The Commission may in its discretion, issue an Order of Conditions under the bylaw while it has denied an Order of Conditions under the Massachusetts Wetlands Protection Act. This circumstance would normally occur when the Commission has to procedurally deny an applicant an

Order under the Massachusetts Wetlands Protection Act because requested alterations exceed local authority under the Massachusetts Wetlands Protection Act, yet the Commission believes the project ultimately is approvable at the State level and finds it approvable under the bylaw.

22. The Commission may, in its discretion, issue an Order of Conditions under the Massachusetts Wetlands Protection Act while it has denied an Order under the bylaw. This circumstance would normally occur when the Commission has to deny an Order under the bylaw because an interest protected under the bylaw is not adequately protected.
23. The Commission may amend these Rules and Regulations after public notice and public hearing.
24. Presumption concerning Title 5 of the Massachusetts Environmental Code and more stringent local Board of Health regulations.
 - a) 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 Sharon Board of Health requirements, shall be presumed to protect any and all interests identified in the bylaw.
 - b) Land within 100 feet of a Resource Area is, however, likely to be significant to the protection of the Resource Area. Prohibiting work in this buffer prevents the pollution, degradation and/or contamination of Sharon's surface and groundwater resources, and public and private water supply.
 - c) Therefore, notwithstanding the presumption set forth in (a) above, the leaching facility of any new sewerage disposal system shall not be constructed within 100 feet of a Resource Area. This set-back distance shall not be required for the renovation or replacement (but is required for the substantial enlargement) of a septic system constructed prior to the effective date of the bylaw and/or these Rules and Regulations if no alternative location is available on the lot. Such replacement or renovation is subject to the approval of the Board of Health with prior notice to the Commission.
 - d) 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.
25. Presumption of Significance of the 100 foot Buffer Zone.
 - a) Land within 100 feet of a Resource Area is presumed to be significant to the protection of the Resource Area and therefore to the protection of the interests protected by the bylaw. Section 5.06 hereof sets forth the regulations applicable to the 100 foot buffer zone.

b) 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.

26. Area of Critical Environmental Concern (ACEC)

a) Portions of the Canoe River Aquifer, Watson Pond and Lake Sabbatia ACEC; and the Fowl Meadow Ponkapoag Bog ACEC lie within the Town of Sharon. Applicants are advised of the following heightened review thresholds associated with projects located within an ACEA: 310 CMR 10.55(4) (e). Any proposed work shall not destroy or otherwise impair any portions of a Bordering Vegetated Wetland that is within an ACEC designated by the Secretary of Environmental Affairs under G.L. Ch. 21A § 2(7) and 301 CMR 12.00.

b) Applicants should also note that following guidelines that apply to 310 CMR 10.55(4) (e):

1. supersedes the provisions of 310 CMR 10.55(4)(b) and (4)(c) (i.e., eliminates the ability to fill up to 5,000 or 500 square feet of Bordering vegetated Wetlands, with conditions, within an ACEC;
2. shall not apply if presumption set forth in 310 CMR 10:53(3) is overcome;
3. applies only to Bordering vegetated Wetlands, and;
4. does not prohibit filling Bordering Vegetated Wetlands in an ACEC if such work can be authorized under any other section of the regulations promulgated under the Massachusetts Wetlands Protection Act. For example, it does not prevent an applicant from receiving an Order of Conditions under the limited project for roadway crossings (310 CMR 10:52(3) (e)). It does not prohibit work proposed under 310 CMR 10:53(3) (b) (i.e., water dependent limited projects). It shall not apply to maintenance of stormwater detention, retention or sedimentation ponds or maintenance of stormwater dissipating structures that have been constructed in accordance with a valid Order of Conditions.

c) ACEC boundary maps are available for inspection at the office of the Conservation Commission.

d) It should be noted that variance requests from these Rules and Regulations, concerning proposals within the aforementioned ACECs will be more difficult to obtain.

27. The Commission believes that the spread of invasive species affecting ponds and lakes is enhanced by the presence of watercraft which utilize a water jet pump as the main source of propulsion. Given the negative impact of invasive species upon water bodies within the Town of Sharon, the use of such watercraft which rely on a water jet pump or similar machinery (e.g., jet-ski type vehicle) as its primary source of propulsion, is prohibited from use on Lake Massapoag throughout the year.

28. The Town of Sharon operates groundwater wells to supply potable drinking water to the majority of its residents.
29. The Commission may limit the lawn area associated with development proposals and impose irrigation restrictions that it deems adequate in order to protect and preserve the hydrology of wetlands and water.
30. Delineation of a Resource Area (other than pursuant to an Abbreviated Notice of Resource Area Delineation) approved by the Commission without a project proposal is for planning purposes only and does not constitute final Resource Area boundary delineation. Final approval of a Request for Resource Area Delineation during periods of the year other than the growing season may be delayed or denied by the Commission.

SECTION 3. REGULATIONS FOR INLAND WETLANDS

3.01 Inland Banks (Naturally Occurring Banks and Beaches)

(1) Preamble

Banks are likely to be significant to wildlife, public or private water supply, to groundwater 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 groundwater discharges to the surface and where, under some circumstances, surface water recharges the groundwater.

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, escape cover, and food, all of which are significant to the protection of fisheries and wildlife. Banks which drop off quickly or overhang the water's edge often contain numerous undercutts, 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 shallower 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.

(2) Definition, Critical Characteristics and Boundary

a) A bank is the portion of land surface which normally abuts and confines a water body. It occurs between a water body and a bordering vegetated 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.

b) 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 3.01 (1) hereof.

c) 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.

(3) Permitted Activities; Variances

a) 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 50 feet of any bank, shall be permitted by the Commission, except for activity which is allowed under a variance from these Rules and Regulations granted pursuant to Section 7 hereof.

b) Any activity which is allowed under a variance 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:

1. the physical stability of the bank;
2. the water carrying capacity of the existing channel within the bank;
3. ground water and surface water quality; or
4. the capacity of the bank to provide breeding habitat, escape cover, and food for fisheries/wildlife.

3.02 Freshwater Wetlands/Vegetated Wetlands, Wet Meadows, Marshes, Swamps and Bogs (Bordering and Isolated Freshwater Wetlands)

(1) Preamble

Freshwater/vegetated wetlands are likely to be significant to 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, 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 phosphorus) and toxic substances (such as heavy metal compounds) that occur in run-off and flood waters.

Some nutrients and toxic substances are detained for years in plant root systems or in the soils. Others are held by plants during the growing season and released as the plants decay in the fall and winter. This latter phenomenon delays the impacts of nutrients and toxins until the cold weather period, when such impacts are less likely to reduce water quality.

Freshwater/vegetated wetlands are areas where groundwater 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 reduced 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 food, 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. 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 run-off 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 Resource Areas serve to protect.

(2) Definitions, Critical Characteristics and Boundary

a) 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 Sections 3.02(2)(c)(1) through 3.02(2)(c)(4), below. Said Resource Area shall be protected whether or not they border surface waters.

b) The physical characteristics of vegetated wetlands, as described in the foregoing section (2)(a), are critical to the protection of the interests specified in Section 3.02(1) above.

c) The boundary of vegetated wetlands is the line within which 50 percent or more of the vegetational community consists of the wetland plant species identified in Section 3.02(2)(c)(1) through 3.02(2)(c)(4), below:

1. The term bogs, 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 all, of the following plants or groups of plants: aster (*Aster nemoralis*), azaleas (*Rhododendron canadense* and *R. viscosum*), black spruce (*Picea mariana*), bog cotton (*Eriophorum*), cranberry (*Vaccinium macrocarpon*), high-bush blueberry (*Vaccinium corymbosum*), larch (*Larix laricina*), laurels (*Kalmia augustifolia* and *K. polifolia*), orchids (*Arethusa*, *Calopogon*, *Pogonia*), pitcher plants (*Sarracenia purpurea*), sedges (*Cyperaceae*), sundews (*Drosera* ae), sweet gale (*Myrica gale*), white cedar (*Chamaecyparis thyoides*).

2. The term swamps, as used in this section shall mean areas where groundwater is at or near the surface if the ground for a significant part of the growing season or where run-off water from surface drainage frequently collects above the soil surface, and where a significant part of the vegetational community is made up of, but not limited to nor necessarily include all of the following plants or groups of plants: alders (*Alnus*), ashes (*Fraxinus*), Azaleas (*Rhododendron*

canadense and *R. viscosum*), black alder (*Ilex verticillata*), black spruce (*Picea mariana*), button bush (*Cephalanthus occidentalis*), American or white elm (*Ulmus Americana*), White Hellebore (*Veratrum viride*), hemlock (*Tsuga Canadensis*), high-bush 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 shall mean areas where groundwater is at the surface for a significant part of the growing season and near the surface throughout the year and where a significant part of the vegetational community is composed of various grasses, sedges, and rushes; made up of, but not limited to nor necessarily including all, of the following plants or groups of plants: blue flag (*Iris*), vervain (*Verbena*), thoroughwort (*Eupatorium*), dock (*Rumex*), false loosestrife (*Ludwigia*), hydrophilic grasses (*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 water or running water during the growing season and where a significant part of the vegetational community is composed of, but not limited to nor necessarily including all, of the following plants or groups of plants: arums (*Araceae*), bladder worts (*Utricularia*), bur reeds (*Sparganiaceae*), button bush (*Cephalanthus occidentalis*), cattails (*Typha*), duck weeds (*Lemnaceae*), eelgrass (*Vallisneria*) frog bits (*Hydrocharitaceae*), horsetails (*Equisetaceae*), hydrophylic grasses (*Poaceae*), leatherleaf (*Charmaedaphne calyculata*), pickerel weeds, (*Pontederiaceae*), pipeworts (*Eriocaulon*), pond weeds (*Potamogeton*), rushes (*Juncaeae*), smartweeds (*Polygonum*), sweet gale (*Myrica gale*), water milfoil (*Haloragaceae*), water lilies (*Nymphaeaceae*), water starworts (*Callitrichaceae*), water willow (*Decodon verticillatus*).

(3) Permitted Activities; Variance

a) 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 50 feet of a vegetated wetland, shall be permitted by the Conservation Commission, except for activity which is allowed under a variance pursuant to Section 7 hereof.

b) Any activity which is allowed under a variance 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 ability of the vegetated wetland to perform any of the functions set forth in Section 3.02(1) hereof.

3.03 Land Under Water Bodies (Under any Stream, Pond, or Lake, Natural or Man Made)

(1) Preamble

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

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 flood water 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.

(2) Definition, Critical Characteristics and Boundaries

- a) 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 or bedrock.
- b) 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.
- c) The boundary of land under water bodies is mean low water level.

(3) Permitted Activities; Variances

- a) 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 variance pursuant to Section 7 hereof.
- b) Any activity which is allowed under a variance granted pursuant to Section 7 of the Rules and Regulations on land under a water body shall not impair the following:
 - 1) the water carrying capacity within the defined channel, which is provided by said land in conjunction with the banks;
 - 2) ground and surface water quality;
 - 3) the capacity of said land to provide breeding habitat, escape cover, and food for fisheries/shellfish.

3.04 Land Subject to Flood (Both bordering and Isolated Areas)

(1) 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 groundwater 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 groundwater 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 groundwater 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 discharge and roads salts, find easy access into the groundwater and neighboring wells. Where these conditions occur and a mat of organic peat or muck covers the substrate of the area, said mat serves to detain and remove contaminants which might otherwise enter the groundwater and neighboring wells.

(2) Definitions, Critical Characteristics and Boundaries

(a) Bordering Land Subject to Flooding

1. Bordering land subject to flooding is an area with low, flat topography adjacent to and inundated by flood waters rising from creeks, rivers, streams, ponds or lakes. It extends from the banks of these waterways and water bodies; where bordering vegetated wetlands occur, it extends from such wetland.
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 3.04(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. Isolated land subject to flooding is an isolated depression or closed basin without an inlet or an outlet. It is an area which at least once a year confines standing water. Isolated land subject to flooding may be underlain by pervious material, which in turn may be covered by a mat of peat or muck.
2. The characteristics specified in the foregoing subsection (2)(b)(1) are critical to the protection of the interests specified in Section 3.04 (1)(b) above.
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.

(3) Permitted Activities; Variance

- a) 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 variance pursuant to Section 7 hereof.
- b) Any activity which is allowed under a variance granted pursuant to Section 7 of the Rules and Regulations on land subject to flooding shall not result in the following:
 1. flood damage due to filling which causes lateral displacement of water that would otherwise be confined within said area;
 2. an adverse effect on public and private water supply or groundwater supply, where said area is underlain by pervious material; or
 3. an adverse effect on the capacity of said area to prevent pollution of the groundwater, where the area is underlain by pervious material which in turn is covered by a mat of organic peat and muck.

SECTION 4. WETLAND FILLING AND REPLICATION

4.01 Preamble

In order to protect the values inherent in wetland areas, it is the intent of the bylaw 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 land buildable, as by fulfilling septic setbacks, flood elevation requirements or other construction setbacks or to achieve 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 bylaw may be required to replicate not only the function, but its physical 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 (3) year scope of monitoring and maintenance.

The Commission, in issuing an Order of Conditions that requires wetland replication, will normally require security as permitted by the bylaw, to assure successful re-establishment of lost wetlands. At least 75% of the surface of the replication area shall be re-established with indigenous wetland plant species through two (2) growing seasons and shall be functioning prior to release of said security.

4.02 Parameters for Description of Replication

(1) Hydrology

- a) Brief history of the water/land relationship in the area describing any natural or man-made changes made over time.
- b) Description of the macro topography and its relationship to catchment, flood magnitude, storage, estimates of annual average, as well as 2, 4, 10, and 100 year storm flow volume of surface run-off.

- c) Description of surface geology and topography as it might relate to surface, channel or standing water.
- d) 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).
- e) Include groundwater contribution to streamflow (baseflow). Velocity of flow through various stations in the wetland should be measured.
- f) Areas of open water should be measured for seasonal variations in depth, size, shape and relationship to wind direction (fetch).
- g) Accurate field flagging surveyed to plan, at 10 foot intervals, at the boundary of the 10 and 100 year flood elevations. (Elevations to be calculated if FEMA data is unavailable.)
- h) Measurement of seasonal levels of precipitation and statement regarding precipitation water quality.

(2) Water Quality

- a) Water quality assessment statement of existing conditions, seasonal fluctuations and any proposals for duplication or enhancement.
- b) Include measurements for the following parameters (these may include estimates based on professional experience, for seasonal fluctuations interpolation) for standing in-flowing and outflowing water:

Fecal Coliform	Dissolved Oxygen
Fecal Streptococci	Nitrate Nitrogen
Ammonia Nitrogen	Total Phosphorus
Chloride	Total Alkalinity
Conductivity	Temperature
PH	Total Suspended Solids

(3) Vegetation

- a) 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.

- b) Accurate flagging of existing and proposed BVW boundary at 10 foot intervals, using a numbered flag system.
- c) Plan to accomplish 75% of original cover percentage after two complete growing seasons.
- d) Description of cover type for BVW, differentiating between woody, emergent, submergent and floating vegetation.
- e) Measurement of stem density for woody species expressed as greater than or less than a given number of stems per meter square for BVW.
- f) Description of plant vigor by visual determination in the field such as stunted, sparse growth, yellowing, strong, healthy, etc. for BVW.
- g) General description of surrounding area cover types and density within 100 feet.
- h) Proposal for stations from which yearly photographs will be taken during monitoring period and submitted to the Commission to demonstrate success.
- i) Depth of heavy/intense root zone and relationship of roots to saturated soils and water table during growing season.

(4) Soils

- a) General description of the geology, topography, physiographic and hydrogeologic setting for each wetland type and surrounding landscape.
- b) Soils profile morphology (to 3 feet or impervious materials), 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.
- c) Relate observed field characteristics to published information or determine for each soil horizon, physical parameters including porosity, hydraulic conductivity, and bulk density.
- d) Determine chemical parameters including PH, conductivity, total phosphorus, total nitrogen, and organic carbon.
- e) Include plan for soil type and characteristic replication.
- f) Plan for toxins testing if preliminary evidence suggests possibility of contamination.

(5) Animal Habitat

- a) Description of slopes or any topographical variations.
- b) Abundance of cavities suitable for burrowing either in open areas, or within confines of root/soil systems.
- c) Description (size and number) of mud flats and other exposed areas.
- d) Amount or number of gravel, rocks, boulders, bedrock outcroppings and rocks protruding from submerged soils.
- e) Edible plants on or within 20 feet of BVW (of high wildlife food value for vertebrates).
- f) Percentage of area shaded by tree canopy or dense shrub layer.
- g) Percentage of ground cover and depth of leaf litter.
- h) Number and size (diameter and breast height) of standing trees with cavities, as well as diameter of such cavities.
- i) General description of land within 50 feet of BVW on each adjacent lot, including natural environment, level of development, distance from BVW or man-made structures.
- j) 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 – 6 feet, above 6 feet) including dead trees.
- k) Number and size of dead vegetation lying or extending into BVW which is suitable for basking, perching, or for cover.
- l) Identification of any migratory area (area used by wildlife moving from one habitat to another).

(6) Performance Standards

To ensure the continuity in wetland ecological systems, the following conditions shall be considered proper wetland replication standards:

- a) Replacement area shall be created before wetland is filled/alterd and other construction is begun.
- b) A wetland specialist with at least two (2) years' experience with installing wetland replacement areas and biology background shall supervise the installation.

- c) The Certificate of Compliance will not be issued for at least two (2) full growing seasons after installation.
- d) 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.
- e) An as-built report, along with an as-built plan, shall be submitted and shall include excavation date and process, wetland soils depth, planting (and replanting) dates and percentages of cover of individual species.
- f) A performance bond will be required sufficient to cover expense of a consultant, excavation and revegetation.
- g) Changes by the applicant may be permitted upon review by the Commission if the project does not work.

SECTION 5. REGULATION GOVERNING ACTIVITY IN THE 100 FOOT BUFFER ZONE

5.01. 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 result in destruction and cumulative impacts on the Resource Areas. Buffers are significant to all Resource Areas and to all of the Interests Protected by the bylaw. The preponderance of all available scientific research indicates that:

- Forested/unaltered buffers are essential for wildlife protection.
- Forested buffers provide shade to adjacent wetlands and water bodies, moderating temperature fluctuations and increasing the ability for water to hold oxygen and support life.
- Buffer effectiveness increases with buffer width.
- Land use associated with significant construction need greater buffers.
- Buffers of land less than 50 feet are general ineffective in protecting wetlands.
- Buffer widths effective in preventing significant water quality impacts to wetlands are generally 100 feet or greater.
- Buffers from 50 to 100 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 expansion).
- The most effective buffers are flat. Slopes of 15% or more will require a greater buffer.

- Buffers trap and filter sediment, nutrients and chemicals from surface run-off and shallow groundwater.
- 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.
- The capacity for buffers to absorb large amounts of water allows percolation to deeper aquifers, replenishing groundwater supplies.
- Microbes in organic forest soils convert nitrate into nitrogen gas through de-nitrification.

5.02 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. Omerik (1977) thoroughly documented the dramatic increase in nitrogen and phosphorus loading to wetlands and water bodies as their adjacent wetlands 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 run-off 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 run-off from developed sites carries a diverse and potent population 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.

5.03 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 habitat 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.

5.04 Cumulative Effects

Cumulative effects result from individually minor but collectively significant actions taking place over a period of time (Council an Environmental, 1978). While the bylaw 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 and 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.

5.05 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 storms, and control sedimentation and erosion.

5.06 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. The first 50 feet of the buffer zone closest to the wetland line will be considered by the Commission to be of primary concern. This area will be regulated as though it were part of the Resource Area.

Additionally, the Commission administers the following setbacks within the 100-foot buffer zone:

A. Construction Setback

The construction or installation of a structure on any “undisturbed land” within the 100-foot buffer zone of a resource area is prohibited.

As of July 1, 2021, “undisturbed land”;

1. does not contain a pre-existing structure or building;
2. is comprised of natural vegetative cover (i.e. plants, trees, grasses); and

3. may be a portion of an existing developed industrial, commercial, institutional, or residential use property.

B. Alteration Setback

Any activity proposed within the 100 foot buffer zone of a resource area on a “previously developed lot” (the term “previously developed lot” is defined as a lot or parcel designated by the Town of Sharon Assessor’s Office containing a pre-existing structure(s) or building(s) that was formerly constructed for industrial, commercial, institutional, or residential use) may be permitted through a Request for Determination or Notice of Intent filing, provided that the following conditions are met:

1. Alteration within the buffer zone is limited to 5,000 square feet or 10% of the buffer zone cumulative area on the lot, whichever is less;
2. At a minimum, proposed alteration complies with the local No-Disturb Setbacks (refer to 5.06(C)).
3. Erosion and sedimentation controls are provided at the limit of work to protect resource areas.
4. The buffer zone where the project is proposed does not border any vernal pool, public water supply or ACEC;
5. The buffer zone does not contain estimated wildlife habitat indicated on the most recent Estimated Habitat Map of State-listed Rare Wetlands Wildlife;
6. Stormwater is managed according to the Massachusetts Stormwater Management Handbook and local rules and regulations.

C. No-Disturb Setback.

1. A 25 to 50 foot minimum for previously developed lots where any alteration is proposed within an already disturbed area (a lawn area, for example).
2. A 50 foot minimum for new site development on previously undisturbed land area.
3. A 75 foot minimum under any of the following circumstances:
 - the Commission identifies a critical wildlife, fish, or plant habitat;
 - the Resource Area is located within a Water Resource Protection Overlay District, Zone II, or an ACEC;
 - the Commission otherwise identifies a sensitive receptor Resource Area.

D. These Rules and Regulations shall not be construed to preclude access paths, vista pruning, or construction of public utility services or structures within the buffer zone, any of which may be permitted at the Commission's discretion.

SECTION 6 VERNAL POOLS

6.01 Preamble

There is a tremendous diversity of species in vernal; pools. 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 (i.e., 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 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 over-winter in the pools. The animals that survive the pool stage leave the vernal pool for the forest. 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 (which are of special concern), spadefoot toads, Blandings turtles, and spotted turtles, all of which are found in the Town of Sharon.

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 number of vernal pools in a region. Large vernal pools and those with long hydro-periods have more species than some smaller pools, but overall species diversity throughout a given geographic area depends on the diversity of the 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.

6.02 Definitions; Boundaries: Identification

1. The term vernal pool is defined in Section 2.7 of the bylaw and includes the area within 100 feet of the mean annual boundary of such depression.

2. The mean annual boundary of such depression is in the highest observed water surface elevation. When this actual line is not clearly visible, other factors such as water-stained leaves, or other characteristics may be used.

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

4. Systematic field observation has shown that virtually all basins that possess the characteristics defining a vernal pool under the bylaw host breeding vernal pool species. Therefore, the Commission will presume that a vernal pool habitat exists if physical characteristics of a wetland conform to those defined for vernal pool in the bylaw 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 bylaw or these Rules and Regulations.

6.03 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.

SECTION 7 VARIANCES

The Commission may, in its discretion, grant variances from the operation of one or more of these Rules and Regulations pursuant to this Section 7. Such variances are intended to be granted only in rare and unusual cases, and shall be granted only in accordance with the provisions of this section.

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

a) The Commission may grant a variance from these Rules and Regulations upon a clear and convincing 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 bylaw. It shall be the responsibility of the applicant to provide the 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 Commission may grant a variance from the 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 variance pursuant to this Section 7 is received by the Commission, the Commission may request an opinion from Town Counsel as to whether the application of the Regulations to a particular case will result in such taking without compensation.

c) The Commission may grant a variance from these Rules and regulations upon clear and convincing presentation by the applicant that any proposed work will have an overriding public benefit.

SECTION 8 **FILING REQUIREMENTS**

8.01 **General**

The following sections are 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 bylaw. 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.

8.02 **Fees**

In addition to the statutory fees required for filings under MGL c. 131, § 40, the Commission establishes the following fees for action under the Wetlands Protection Bylaw:

- (1) Request for Determination of Applicability, and its determination - \$50.00
- (2) Filing an Abbreviated Notice of Intent, and the resulting Order of Conditions or Notification of Non-Significance - \$100.00
- (3) Filing a Notice of Intent, and the resulting Order of Conditions or Notification of Non-Significance - \$30.00 per acre of the entire parcel (governed by the deed(s) recorded in

the Registry, or registered in the Land Court, and designated in the Notice of Intent). Acreage shall be as shown on Board of Assessors maps, rounded to the nearest acre; minimum fee shall be \$200.00

(4) Request for Extension permit, and the resulting permit - \$50.00

(5) Request for a Certificate of Compliance and the Resulting Certificate - \$50.00

To issue an original Certificate of Compliance for a project completed more than three years ago - \$100.00

Fees are payable by cash or check to the Town of Sharon at the time of request or filing, and are not refundable. Town, county, state or federal projects are exempt from fees. The Commission, upon a majority vote, may waive fees in the event of hardship or other

8.03 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 equals 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 man-made, 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 nay flood plains showing on the Town’s 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 dashed blue line

c) The delineation of all applicable buffer zones/setbacks including, without limitations, the first 50 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 the extent of disturbance by square feet, or linear feet, as applicable. Plans shall depict the following:

1. area to be dredged: outline in red
2. area to be filled: outline in brown
3. area to be altered in any way other than dredging and filling: outline in black

e) Existing stone walls, buildings, rock ridges, rock outcroppings, and hiking trails, cart paths and walkways.

f) Location, extent and area of all existing and proposed structures, roadways, including their names, driveways, paved areas, septic systems including the 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 recourse protection districts and water supply districts per Town Zoning Bylaws.

o) Location and identification of all soil test pits, soil borings, and monitoring wells, including pertinent 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.

q) As applicable, location(s) and extent of wetland 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 replacement area, as well as all applicable elevations are to be shown.

s) Site plan, or other plan, shall show 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 Commission or its agent, the following conditions must be met:

1. stakes in place indicating the corners of houses or other structures nearest the wetland Resource Area(s);
2. stakes in place and identified which indicate the septic tank and leaching field locations;
3. stakes in place and marked indicating limit of work;
4. lot number or house number should be clearly posted at the site location;
5. edges of all Resource Areas shall be delineated in accordance with Section 8.02 (3) and (4) hereof; and
- 6) specific directions to locate the property shall be given to the Commission upon a Filing.

Upon completion of the staking, the Commission office should be notified so that a site inspection shall be arranged prior to any scheduled public hearing. Failure to have the stakes as identified above may result in non-review by the Commission and thereby delay of any intended project.

8.04 Drainage Considerations

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

1. Calculations should be supplied for 1, 10, 25, and 100-year interval storms. Methodology and information sources shall be supplied. (The Soil Conservation Services method is preferred.) Calculations should show pre-development and post-development conditions for comparative purposes, demonstrating that there is no increase in peak run-off for a 10-year frequency storm. A map needs to be supplied to indicate all drainage sub-basins used in the calculations.
2. Drainage should be designed on a 10-year frequency basis for storm drains and retention basins; on a 25-year frequency 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:
 - a) control run-off at source areas, before concentration, and not only at the point of concentration;
 - b) use infiltrative techniques wherever possible, including leaching catch basins, porous paving material driveways, and retention basins;
 - c) employ vegetated wetlands as receivers for drainage from paved areas, rather than water bodies, wherever possible, using appropriate erosion control measures;
 - d) use open ditches, where feasible, instead of conduits; and
 - e) 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:
 1. the loss of wildlife habitat;
 2. an increase in flood levels exceeding 1 inch within a 24-hour period immediately following a storm event; or
 3. flooding of downstream areas nor run-off backwater effect on upstream areas.
3. 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 wetland systems for storm water storage in new developments when the effective surface area of the wetland system is less than 20,000 square feet.
4. Projects within the Town's 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 concentration which cause the Safe Drinking Water Standards, as set by the Commonwealth of Massachusetts or the federal Environmental Protection Agency, to be exceeded.

5. All projects must show the methods of handling roof, driveway and other paved area run-off.
6. 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.

8.05 Stream Relocation or Channelization Considerations

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 conditions.
- c) Existing and proposed vegetation within a stream and on its bank 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 non 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.

8.06 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 Appeal. 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.

A copy shall be provided in the same manner to the Commission of the adjoining municipality, if the application or RDA pertains to property within 300 feet of that municipality.

SECTION 9 **EFFECTIVENESS**

These Rules and Regulations have been amended by the Commission on, and are effective as of July 1, 2021.