

Official
Town of Burlington Wetland Bylaw
Regulations

Adopted: January 23, 2014
Amended January 8, 2015

SECTION 1. AUTHORITY

These regulations are promulgated by the Town of Burlington Conservation Commission pursuant to the authority granted to it under the Town of Burlington Wetlands Protection Bylaw, Article XIV Section 1.0 (hereinafter referred to as the "Bylaw"). These regulations complement the Wetlands Protection Bylaw and shall have the force of law upon their adopted date.

SECTION 2. PURPOSE

The Burlington Wetlands Bylaw sets forth a public review and decision-making process by which activities affecting Areas Subject to Protection under said Bylaw are to be regulated in order to contribute to the following interests:

- protection of public and private water supply
- protection of groundwater supply
- flood control
- erosion and sedimentation control
- storm damage prevention including protection of water quality
- prevention and control of pollution
- protection of fisheries
- protection of wildlife habitat
- protection of rare species habitat, including rare plant and animal species
- protection of recreation and educational values

The purpose of these regulations is to define and clarify that process by establishing standard definitions and uniform procedures by which the Burlington Conservation Commission may carry out its responsibilities under the Bylaw. These regulations are intended solely for use in administering the Burlington Wetland Bylaw, Article XIV, Section 1.0; nothing contained herein should be construed as preempting, or precluding more stringent protection of wetlands or other natural resource areas by other local Bylaws, ordinances or regulations.

SECTION 3. JURISDICTION

3.1 Areas Subject to Protection under Burlington Bylaw Article XIV

The following areas are subject to protection under Article XIV of the Town of Burlington Bylaws:

- a) freshwater wetlands
- b) marshes
- c) wet meadows
- d) bogs

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- e) swamps
- f) vernal pools
- g) springs
- h) banks
- i) reservoirs
- j) lakes
- k) ponds
- l) rivers
- m) streams
- n) creeks
- o) land under water bodies (including f, i, j, k, l, m and n above)
- p) land subject to flooding by groundwater or surface water
- q) 200-foot riverfront areas
- r) land within 100 feet of areas listed in Section 3.1(a)-(p)

3.2 Activities Subject to Regulation Under Burlington Bylaw Article XIV

- a) Any activity proposed or undertaken which constitutes removing, filling, dredging, discharging into, removing vegetation, building upon, degrading, or otherwise altering any area specified in Section 3.1 is subject to regulation under the Bylaw and requires the filing of a Permit Application for Wetland Permit.
- b) Any activity proposed or undertaken outside the areas specified in Section 3.1 above shall not be subject to regulation under the Bylaw unless and until that activity actually alters an Area Subject to Protection specified in section 3.1 a-q above. If the applicant wishes to have the Conservation Commission determine whether an activity may be subject to regulation under the Bylaw, he or she shall submit a Request for Determination of Applicability pursuant to these regulations.

3.3 Stormwater Management Structures / Features

- a) Notwithstanding the provisions of Sections 3.1 and 3.2, any freshwater wetland, bank, land under water body, or land subject to flooding created for the purpose of stormwater management, shall not require the filing of a Permit Application to maintain the stormwater management system, provided that the work is limited to the maintenance of the stormwater management system, and conforms to a Permit issued by the Burlington Conservation Commission and that the area is not altered for other purposes.

SECTION 4. EXEMPTIONS & WAIVERS

4.1 Exemptions

- a) The Permit Application and Wetland Permit required by the Bylaw shall not be required for maintaining, repairing, or replacing, but not substantially changing or enlarging, an existing and lawfully located structure or facility used in the service of the public to provide electric, gas, water, telephone, or other telecommunication services, provided that written notice has been given to the Commission prior to the commencement of work, and provided that the work utilizes the best practical measures to avoid or minimize impacts to wetland resource areas outside the footprint of said structure or facility. A project proponent claiming that work to remove, fill, dredge or alter an area specified in Section 3.1 does not require the filing of a

Notice of Intent has the burden of establishing that the work is not subject to Regulation under the Burlington Wetlands Protection Bylaw.

- b) Within 21 days of commencement of an emergency project, an Application for Emergency Certification shall be filed with the Conservation Commission. No other Permit Application shall be required for projects necessary for the protection of the health and safety of the public, provided that: the work is to be performed by or has been ordered to be performed by an agency of the Commonwealth or a political subdivision thereof; advance notice, oral or written, has been given to the Conservation Commission or its agent prior to the commencement of the work or within 24 hours after commencement; and the work is performed only for the time and place certified by the Commission for the limited purposes necessary to abate the emergency. Upon failure to meet these and other requirements of the Commission, the Commission may, after notice and a public hearing, revoke or modify Emergency Certification and order restoration and mitigation measures.
- c) The Permit Application and Wetland Permit required by the Bylaw shall not be required for Riverfront Area exemptions under 310 CMR 10.58(6)(a and c through k). The minor activity exemptions listed in 310 CMR 10.58(6)(b) shall apply, except that construction of residential additions and swimming pools is not exempt.
- d) Other than stated in this section, exceptions provided in the Wetlands Protection Act (G.L. Ch. 131 Sec. 40) and regulations (310 CMR 10.00) shall not apply under the Bylaw.

4.2 Waivers

- a) The Commission may grant a waiver from any part of these regulations when issuing a Wetlands Permit 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 in the Bylaw. It shall be the responsibility of the applicant to provide the Commission with reasonable information which the Commission requests in order to enable the Commission to ascertain such adverse effects, and the failure of the applicant to furnish any information which has been so requested shall result in the denial of a request for a waiver pursuant to this subsection.
- b) The Commission may grant a waiver from these Regulations when it is necessary to avoid so restricting the use of the property as to constitute an unconstitutional taking without compensation.
- c) The Commission may impose conditions, safeguards, and limitations in a waiver to further protect the interests, intent, or purpose of the Bylaw.
- d) A waiver shall expire with the Wetland Permit, and may be reestablished only after notice and a new hearing pursuant to this section.

SECTION 5. BURDEN OF PROOF

The applicant for a Wetland Permit shall have the burden of proving by a preponderance of the credible evidence that the work proposed in the Permit Application will not have unacceptable significant or cumulative effect upon the resource area values protected by this Bylaw. Failure to provide adequate evidence to the Conservation Commission supporting this burden shall be sufficient cause for the Commission to deny a permit or grant a permit with conditions.

SECTION 6. DEFINITIONS

Terms not herein defined, the definition in 310 C.M.R. 10.00 shall apply.

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Abutter means the owner of land within 100 feet of project site in any direction, including land located across a street, way, creek, river, stream, brook, or canal.

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

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

Aggrieved means the same as person aggrieved.

Alter shall mean to change the conditions of any area subject to protection by this Bylaw and shall include but not be limited to one or more of the following actions upon the resource areas protected by this Bylaw:

- fill, removal, excavation or dredging of soil, sand, gravel or aggregate material of any kind;
- changing of pre-existing drainage characteristics, flushing characteristics, salinity distribution, sedimentation patterns, flow patterns and flood storage retention areas;
- drainage or lowering of the water level or water table; the dumping, discharging or filling with any material which could degrade the water quality;
- driving of pilings, erection of buildings or structures of any kind;
- placing of any obstruction that interferes with the flow of water;
- destruction, extensive trimming (defined as 20% or more of limbs or growth), or removal of plant life, vegetation, or trees;
- changing of water temperature, biochemical oxygen demand, nutrient concentration or chemical concentration and other natural characteristics of the receiving water;
- any activities, changes or work which pollutes any stream or body of water;
- application of pesticides and herbicides; or
- any activity, change or work which adversely effects groundwater or drinking water supply.

Applicant shall mean a person filing a Permit Application with the Commission.

Area Subject to Protection Under Article XIV: Section 1.0 means any area specified in Section 3.1. It includes resource areas listed in 3.1 a-q, and the buffer zone to those areas (except riverfront area, which does not have a buffer zone).

Bank is the portion of the land surface which normally abuts and confines a water body such as a river, stream, pond or vernal pool.. It occurs between a water body and a vegetated bordering wetland and adjacent flood plain, or, in the absence of these, it occurs between a water body and an upland.

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

Boundary means the perimeter border of an Area Subject to Protection Under Article XIV: Section 1.0.

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

Buffer Zone means that area of land extending 100 feet horizontally outward from the boundary of any area specified in Section 3.1. a – p.

Conditions means those requirements set forth in a Wetland Permit issued by a the Conservation Commission for the purpose of permitting, regulating or prohibiting any activity that removes, fills, dredges or alters an Area Subject to Protection.

Conservation Commission means that body comprised of members lawfully appointed pursuant to M.G.L. c. 40, § 8C.

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Creek means the same as a stream.

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

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

Determination of Applicability means a written finding by a Conservation Commission as to whether a site or the work proposed thereon is subject to the jurisdiction of the Burlington Wetland Bylaw (Article XIV: Section 1.0).

Dredge means to deepen, widen, or excavate, either temporarily or permanently.

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

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

General Performance Standards means those requirements established by these regulations for activities in or affecting each of the resource areas subject to protection under Article XIV and their 100-foot buffer zones.

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

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

Inner Buffer Zone means the area within 50 feet of a wetland resource area, other than river.

Isolated Wetlands means areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants, but do not border a water body.

Issuing Authority means the Conservation Commission

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

Land Subject to Flooding (both bordering and isolated) is defined in 310 CMR 10.57(2).

Land Under Water Bodies and Waterways means the bottom of, or land under, the surface of a creek, river, stream, pond, vernal pool, reservoir or lake. The upper boundary of LUWBW is the mean-annual high water line.

Majority means more than half of the members of the Conservation Commission then in office.

Mean Annual High-Water Line is defined as the elevation that surface waters typically reach on a yearly basis.

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

Mitigation means rectifying an adverse impact by repairing, rehabilitating, or restoring the affected resource area or compensating for an adverse impact by enhancing or providing replacement resource areas.

Permit Application means the form submitted to the Conservation Commission requesting a Wetlands Permit and as further described in Section 9 of these Regulations.

Pond means any open body of fresh water with a surface area observed or recorded within the last ten years of at least 2500 square feet. Ponds may be either naturally occurring or man-made by impoundment, excavation, or otherwise. Ponds may dry up seasonally. Notwithstanding the above, the following man-made bodies of open water shall not be considered ponds:

- basins or lagoons which are part of wastewater treatment plants;
- swimming pools or other impervious man-made basins; or
- stormwater ponds constructed in upland areas.

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

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

Protection of Fisheries means protection of the capacity of an Area Subject to Protection to prevent or reduce contamination or damage to fish and to serve as their habitat and nutrient source. Fish includes all species of finfish and shellfish.

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

Rare Species mean those vertebrate and invertebrate animal species and plant species officially listed as endangered, threatened, or of special concern by the Massachusetts Division of Fisheries and Wildlife under 321 CMR 10.60.

Regulatory stream means a stream shown on the map “Regulatory Streams of Burlington” dated 12/12/2013 and that has a 200-foot riverfront area. Streams not shown on the map are presumed to not have a riverfront area.

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

Request for Determination of Applicability means a written request made by any person to the Conservation Commission for a determination as to whether a site or work thereon is subject to the Burlington Wetland Bylaw and its regulations or the MA WPA.

Resource Area means any of the areas specified in Section 3.1 a-q. Resource areas other than riverfront have a buffer zone.

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

Riverfront Area means the area of land between a river or stream's mean annual high water line and a parallel line measured horizontally. The riverfront area may include or overlap other resource areas or their buffer zones. Rivers and streams that have a riverfront area are shown on the map in Appendix A.

Shelter means protection from the elements or predators.

Significant means plays a role. A resource area is significant to an interest identified in the Burlington Wetland Bylaw when it plays a role in the provision or protection, as appropriate, of that interest. Within the context of the protection of the riverfront area, no significant adverse impact means the activity meets the level of protection of the performance standards provided under these regulations.

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

Stream means a body of running water, including brooks and creeks, which moves in a definite channel in the ground due to a hydraulic gradient, and which flows within, into or out of an Area Subject to Protection. A portion of a stream may flow through a culvert or beneath a bridge. Such a body of running water may or may not flow throughout the year.

Vegetated buffer is a protective area that disperses and slow downs surface waters, filters out sediment and debris from surface runoff, prevents erosion into streams, increases the rate of water infiltration, provides travel corridors for wildlife to move from one type of habitat to another, absorbs and helps break the high velocity of flood waters that overtop stream banks, and captures sediments, nutrients and pathogens.

Vernal pool means confined basin depressions which, at least in most years, hold water for a minimum of two continuous months during the spring and/or summer, and which are free of adult fish populations, as well as the area within 100 feet of the mean annual high-water line of such depressions, whether or not such habitat is within any other area subject to protection.

Wetland Permit means the permit issued by the Burlington Conservation Commission under Article XIV and as further described in Section 9 of these Regulations.

Wildlife means all mammals, birds, reptiles, fish, invertebrates, and amphibians and, for the purposes of 310 CMR 10.37 and 10.59, all vertebrate and invertebrate animal species which are officially listed by the Massachusetts Division of Fisheries and Wildlife under 321 CMR 8.00 as endangered, threatened, or of special concern.

Wildlife habitat means those areas which, due to their plant community composition and structure, hydrologic regime, location, or other characteristics, provide important food, shelter, migratory or overwintering areas, or breeding areas for wildlife.

Work means the same as activity.

WPA means the Massachusetts Wetlands Protection Act (Chapter 131, section 40).

SECTION 7. TIME PERIODS

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

SECTION 8. ACTIONS TAKEN BY THE COMMISSION

Where the Bylaw states that a particular action (except receipt of a Permit Application) is to be taken by the Commission, that action is to be taken by more than half the members present at a meeting of at least a quorum. Where the Bylaw states that a Wetland Permit or notification shall be issued by the Commission, that action is to be taken by a majority of the members then in office, who need not convene as a body in order to sign said permit or notification, provided they met pursuant to the Open Meeting Law (G.L. Ch. 39 Sec. 23A-23C) when voting on the matter.

SECTION 9. APPLICATIONS AND WETLAND PERMITS

Applicants should consult with the Conservation Department prior to submission of a Permit Application, to ensure the proper application is filed.

Permit Application	When Filed	Wetland Permit / Document Issued	Denial Procedure
Burlington Bylaw Application	Filed alone when project is within jurisdiction of only locally-regulated resource areas. MUST accompany all other permit applications.	Burlington Bylaw Permit	Burlington Bylaw Denial issued

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Notice of Intent (NOI)	Typically used for projects with greater chance of disturbance to wetlands due to size and/or proximity or any work within a Riverfront Area.	Burlington Bylaw Permit and Order of Conditions OR Notice of Non-Significance	Burlington Bylaw Denial and Notice of Intent Denial issued
Request for Determination of Applicability (RDA)	Typically used for projects less likely to disturb an Area Subject to Protection.	Burlington Bylaw Permit and Negative Determination of Applicability	Burlington Bylaw Denial and Positive Determination of Applicability
Abbreviated Notice of Resource Area Delineation	Filed when an applicant wants to confirm the resource area boundaries within a project area.	Order of Resource Area Delineation	Order of Resource area Delineation Denial issued
Extension Request	Filed when a project will not be completed before a permit expires.	Extension	No Extension issued
Request for Certificate of Compliance	Filed when a project, which required filing an NOI, is completed.	Certificate of Compliance	No Certificate of Compliance issued
Emergency Certification Request	Filed for emergency projects necessary for the protection of public health or safety.	Emergency Certification	No Emergency Certification issued
Erosion and Sedimentation Control Permit Application (E&S) * issued by the Conservation Commission under the jurisdiction provided in the Stormwater Bylaw, Article XIV, Section 7.0.	Must be filed for any project which will result in greater than 10,000 square feet, or 500 cubic feet, of temporary or permanent earth disturbance. If an NOI is filed, a separate (E&S) is not needed.	Erosion and Sedimentation Control Administrative Permit or Erosion and Sedimentation Control Permit	Erosion and Sedimentation Control Permit Denial issued

- a) Any person who proposes work that will remove, fill, dredge, build upon, or alter any resource area shall, after consultation with the Conservation Department, submit a Permit Application and other application materials in accordance with the submittal requirements set forth in **Appendix B** of these regulations.
- b) The applicant for a Wetlands Permit shall have the burden of proving by a preponderance of the credible evidence that the work proposed in the Permit Application will not have unacceptable or cumulative effect upon the resource area values protected by the Bylaw. Failure to provide adequate evidence to the Commission supporting this burden shall be sufficient cause for the Commission to deny a permit or grant a permit with conditions.
- c) If the Commission determines that an application is incomplete or improper, it shall notify the applicant within 21 days of the date of receipt. The Commission may:
 1. return the application, in which case all required time periods for application processing will be terminated;

2. require additional information or materials be submitted within a specified period of time which shall be no later than the date of the scheduled public hearing;
 3. continue the public hearing, at the applicant's expense, for a period to be determined by the Commission.
- d) Abutter notification shall be in accordance with the Massachusetts Wetlands Protection Act (M.G.L. Ch.131, Section 40) and associated Regulations (310 CMR 10.00).
 - e) When a person filing a Permit Application is other than the owner, the application, the notice of the hearing, and the permit shall be sent by the Commission to the owner as well as to the person filing the application, and the applicant shall supply the Commission with the name and current address of the owner.
 - f) Upon receipt of the application materials the Commission shall issue a file number for the application. The designation of a file number shall not imply that the plans and supporting documents have been judged adequate for the issuance of a Permit but only that the minimum submittal requirements have been filed. When a Permit Application required under 310 CMR 10.00 is filed with the Wetland Permit Application, the MA D.E.P. file number shall be used.
 - g) In the event that only a portion of a proposed activity lies within a Resource Area or buffer zone to resource area, all aspects of the activity shall be described in the detail called for, including without limitation all requirements of the Burlington Erosion & Sedimentation Control Bylaw, unless there is a separate Burlington Erosion & Sedimentation Control Bylaw application..
 - h) Notwithstanding the foregoing, if the Commission determines that an activity outside a Resource Area has in fact altered a Resource Area, it may require an application including such plans, supporting calculations, and other documentation as are necessary to describe the entire activity.

SECTION 10. PUBLIC HEARING ON APPLICATION FOR WETLAND PERMIT

- a) For those applications for which a public hearing is required under the MA Wetlands Protection Act (M.G.L. Ch. 131 Sec. 40), a public hearing on an Application for Wetland Permit shall be held by the Commission within 21 days of receipt of the Permit Application and shall be advertised at the expense of the applicant at least seven days prior to the hearing in a newspaper of general circulation in the Town and in accordance with the requirements of the Open Meeting Law (M.G.L., Ch. 30A Sec. 18-25). Notice of the hearing shall be mailed by the Commission to the applicant and to the owner if other than the applicant.
- b) The Commission may combine its hearing under the Bylaw with the hearing conducted under the Wetlands Protection Act (G.L., Ch. 131 Sec. 40) and Regulations (310 CMR 10.00 et seq.).
- c) Public hearings may be continued as follows:
 1. with the consent of the applicant, to an agreed-upon date, which shall be announced at the hearing; or
 2. with the consent of the applicant, to a date uncertain or in excess of 30 days, provided that the applicant re-notifies abutters and provides for placement of a new legal advertisement at least one week before resumption of the public hearing.
- d) Public hearings must be continued to a future date in the absence of a DEP number.
- e) To provide adequate time for review, site visits and public input, the Commission will not generally open and close a public hearing in one night.
- f) The Commission reserves the right to require additional abutter notification and/or legal advertisements in cases where hearings are continued several times with no testimony.

SECTION 11. COORDINATION WITH OTHER BOARDS AND OFFICES

- a) Any person filing a Permit Application with the Commission shall provide a copy thereof at the same time, by certified mail return receipt requested or hand delivery, to the Planning Board, Board of Health, Engineering Department, and Board of Selectmen.
- b) The boards and offices referred to in Section 12.a above may file written comments and recommendations with the Commission, which the Commission shall take into account but which shall not be binding on the Commission. Any such written comments and recommendations that are not privileged will be available to the applicant and owner when they are filed with the Commission. The applicant and owner shall have the right to respond to such written comments and recommendations at a hearing of the Commission prior to final action.

SECTION 12. PERMIT REGULATING THE WORK

- a) Within 21 days of the close of the public hearing the Commission shall issue or deny the Permit or issue a Notice of Non-Significance if the Commission determines that the area on which the proposed work is to be done is not significant to any interest identified in the Bylaw.
- b) If the Permit is issued, it shall impose such conditions as are deemed necessary for the protection of one or more of the interests identified in the Bylaw. If an Order of Conditions is also being issued, conditions in the Order of Conditions may be adopted for the Bylaw Wetland Permit. The permit shall prohibit any activity or portion thereof that cannot be conditioned to protect said interests.
- c) The Permit shall impose conditions upon an activity or the portion thereof that will in the judgment of the Commission result in removing, dredging, filling, building upon, or altering a resource area, or altering a buffer zone to a resource area that will in the judgment of the Commission result in alterations of a resource area. The Permit shall impose conditions setting limits on the quantity and quality of stormwater discharge, utilizing MA DEP stormwater standards, to protect the interests identified in the Bylaw.
- d) If the Permit is denied, it shall be for one or more of the following reasons:
 - 1. for failure to meet the requirements of the Bylaw;
 - 2. for failure to submit necessary information or plans requested by the Commission;
 - 3. for failure to meet design specifications, performance standards, or other requirements in these Regulations;
 - 4. for failure to avoid or prevent unacceptable significant effects upon the Resource Area values protected by the Bylaw; or
 - 5. where no conditions are adequate to safeguard the wetland values protected by the Bylaw.
- e) A Permit shall expire three years from the date of issuance unless extended by the Commission.
- f) The Permit shall be signed by a majority of the Commission and shall be mailed or hand delivered to the applicant, his agent, or the owner of record.
- g) A copy of the plans describing the work and the Permit shall be kept on file by the Commission and shall be available to the public at reasonable hours.
- h) Prior to the commencement of any work permitted or required by the Permit, the Permit shall be recorded in the registry of Deeds or the land court for the district in which the land is located within the chain of title of the affected property. In the case of recorded land, the Permit shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of registered land, the Permit shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is to be done. Certification of recording shall be sent to the issuing authority. If work is

undertaken without the applicant first recording the Permit, the issuing authority may issue an Enforcement Order.

- i) For good cause the Commission may revoke or modify a Permit issued under the Bylaw after public notice and public hearing, and notice to the holder of the Permit.
- j) The Commission may combine the Permit or other action on an application issued under the Bylaw with the Order of Conditions issued under the Wetlands Protection Act (G.L., Ch. 131 Sec. 40).

SECTION 13. SECURITY

- a) As part of a Permit or waiver issued under the Bylaw, in addition to any security required by any other municipal or state board, agency, or official, the Commission may require that the performance and observance of the conditions imposed thereunder (including conditions requiring mitigation work) be secured wholly or in part by a proper bond or deposit of money or negotiable securities or other undertaking of financial responsibility sufficient in the opinion of the Commission. Such bond or surety, if required to be filed or deposited, shall be approved as to form and manner of execution by the Town Counsel, and as to sureties by the Town Treasurer, and shall be contingent upon the satisfaction of such conditions within the time frame of the permit and extension. Such bonds shall be approved by the Commission prior to the issuance of the permit and shall run for the duration of the permit.

SECTION 14. EXTENSION OF PERMIT

- a) The Commission may extend a Permit for one or more periods of up to three years. Requests for extension shall be made to the Commission in writing at least 30 days prior to the expiration of the Permit.
- b) The Commission may deny the request for an extension and require the filing of a new Permit Application for the remaining work in the following circumstances:
 - 1. where no work has begun on the project, except where such failure is due to an unavoidable delay, such as appeals, in the obtaining of other necessary permits;
 - 2. where new information, not available at the time the Permit was issued, has become available and indicates the permit is not adequate to protect the interests identified in the Bylaw;
 - 3. where incomplete work is causing damage to the interests identified in the Bylaw;
 - 4. where work has been done in violation of the Permit or these Regulations.
- c) The Extension Permit shall be signed by a majority of the Commission and shall be mailed or hand delivered to the applicant, his agent, or the owner of record.
- d) The Extension Permit shall be recorded in the Registry of Deeds or Land Court, as detailed in section 13(h). If work is undertaken without the applicant so recording the Extension Permit, the Commission may issue an Enforcement Order.

SECTION 15. AMENDMENTS AND CHANGES

- a) Amendments to an approved Wetland Permit shall require a public hearing, with all the advertising and notification requirements of a Wetland Permit or Notice of Intent.
- b) An amendment request will be denied where the Commission finds that proposed modifications will increase activities in wetlands resource areas, increase buffer zone disturbance, do not meet relevant performance standards, increase the potential for adverse impacts to protected interests, or are sufficiently different to warrant major changes in

conditions. Such finding will be stated in the Commission's decision.

- c) If the Commission decides to not amend an Order of Conditions, the applicant cannot appeal this decision under this bylaw.
- d) Where the Conservation Commission finds that proposed changes to an approved plan will not impact resource areas or significantly change imperviousness or stormwater runoff, the changes may be approved by the Conservation Commission as minor engineering changes without a public hearing. However, if the changes require amending the actual conditions, other than the plans of reference, an amendment shall be required.
- e) The Commission reserves the right to require an amendment in all cases in lieu of a minor engineering change.
- f) The Conservation Administrator may approve some minor plan changes administratively, at his/her discretion, if the changes do not increase impacts to buffer zones or resource areas, or reduce setbacks to resource areas.

SECTION 16. ENFORCEMENT

- a) The Commission, its agents, officers, and employees shall have authority to enter upon privately owned land at reasonable times for the purpose of performing their duties under the Bylaw and may make or cause to be made such examinations, surveys, or samplings as the Commission deems necessary, subject to the constitution and laws of the United States and the Commonwealth of Massachusetts.
- b) The Commission shall have authority to enforce the Bylaw, its regulations, and permits and waivers issued thereunder by violation notices, enforcement orders, civil and criminal court actions, and fines.
- c) Upon request of the Commission, the Board of Selectmen and the Town Counsel shall take legal action for the enforcement under the civil law. Upon request of the Commission, the Chief of Police shall take legal action for enforcement under criminal law.
- d) As an alternative to criminal prosecution, the Commission may elect to utilize the non-criminal disposition procedure set forth in G.L., Ch. 40 sec. 21D.
- e) Municipal boards and officers, including any police officer or other officer having police powers, shall have authority to assist the Commission in enforcement.
- f) Any person who violates any provision of the Bylaw, its regulations, and permits and enforcement orders issued thereunder, or has failed to obtain requisite Commission approval, may be fined not more than \$300 per day for each violation by the Commission, commencing the day on which the violation has been confirmed by the Commission or its agents. Each day or portion thereof during which the violation continues shall constitute a separate offense, and each provision of the Bylaw, regulations, permit, or waiver violated shall constitute a separate offense.
- g) When the Commission determines that an activity is in violation of the Bylaw or a permit issued under the Bylaw, the Commission may:
 - 1. issue an Enforcement Order; and/or
 - 2. hold an Administrative Hearing to consider whether the landowner should be fined for the violation;
 - 3. issue a fine.
- h) The Commission shall consider the following (but not limited to) as violations under the Burlington Wetland Bylaw and Regulations:
 - 1. unauthorized activity in a resource area
 - 2. unauthorized activity in a buffer zone

3. unauthorized activity after receiving a positive determination of applicability
 4. unauthorized activity beyond the scope of a negative determination or negative determination with conditions
 5. unauthorized activity after the expiration of an order of conditions
 6. violations or non-compliance with order of conditions or superseding order of conditions
 7. violations of continuing conditions on a certificate of compliance
 8. violations of enforcement orders
 9. leaving in place unauthorized fill, or otherwise failing to restore illegally altered land to its original condition
- i) An Enforcement Order issued under the Wetlands Protection Act (G.L., Ch. 131 Sec. 40) will constitute a warning that an Administrative Hearing and possible fine may result. In the appropriate case, the Commission may issue an Enforcement Order in lieu of or in addition to an Administrative Order.
- j) An Enforcement Order issued by the Commission shall be signed by a majority of the Commission. In a situation requiring immediate action, the Order may be signed by a single member or agent of the Commission. Such an Order must be ratified by a majority of the members at the next scheduled meeting of the Commission.
- k) The Commission shall take into account the nature of the violation as follows:
1. In the case where restitution is possible, each day or portion thereof during which a violation continues or is repeated shall constitute a separate offense, and each provision of the Bylaw or permit violated shall constitute a separate offense;
 2. In the case where restitution is impossible or inadvisable, the Commission will decide what procedural or legal remedies to take, in the case of destruction of vegetation perhaps requesting that all activity on the site cease until the vegetation has reemerged, grown, or otherwise replenished itself to the Commission's satisfaction.
 3. The notice of a fine or fines and explanation thereof, including the date from which daily violations may be counted, will be sent in writing to the responsible owner(s) by certified mail return receipt requested or hand delivery. The fine or fines are payable to the Town of Burlington within 21 days of the date of issuance of the notice.
 4. Commission reserves the right to adjust a fine in response to new information or new circumstances at an Administrative Hearing to which the owner will be given notice as above. A written notice of the adjustment of fine shall be sent to the owner by certified mail or hand delivered.
 5. The Commission may accept a written plan with timetable for full restitution of the violation and may then withhold sending the notice of fine(s) for a specified time period. If satisfactory restitution is not made in a timely manner, the notice of fines is retroactive.
 6. Unless otherwise stated in the Bylaw and regulations promulgated under the Bylaw, the definitions, procedures, and performance standards of the Wetlands Protection Act (G.L., Ch. 131 Sec. 40) and associated Regulations (310 CMR 10.00) as promulgated April 1, 1983, and as most recently amended, shall apply.
 7. Any person who purchases, inherits, or otherwise acquires real estate upon which work has been done in violation of the provisions of the Bylaw or in violation of any permit issued pursuant to the Bylaw shall forthwith comply with any such order or restore said land to its condition prior to said violation.

SECTION 17. CERTIFICATE OF COMPLIANCE

- a) Upon completion of the work for which a Permit was issued, the applicant may request in writing a Certificate of Compliance, certifying that the activity or portions thereof described in the application and plans has been completed in compliance with the Permit. If issued by the Commission, the Certificate of Compliance shall be signed by a quorum of the Commission.
- b) Unless otherwise specified, a request for Certificate of Compliance under the Wetlands Protection Act (M.G.L. Ch. 131, sec. 40) may also serve as a request for a Certificate of Compliance for the Burlington Wetland Permit.
- c) Prior to the issuance of a Certificate of Compliance, a site inspection shall be made by members or agents of the Commission.
- d) If the Commission determines, after review and inspection, that the work has not been done in compliance with the Permit, it may refuse to issue a Certificate of Compliance. Such refusal shall be issued in writing within 21 days of receipt of a request for a Certificate of Compliance, specifying the reasons for denial.
- e) If a project has been completed in accordance with plans stamped by a registered professional engineer, architect, landscape architect, or land surveyor, a written statement by such a professional person certifying compliance with the plans and Permit and setting forth what deviation, if any, exists from the plans approved in the Permit shall accompany the request for a Certificate of Compliance. Two dated sets of photographs depicting the property before and after all of the work has been completed shall be included in the engineer's certification.
- f) If the Permit contains conditions which continue past the completion of work, such as maintenance or monitoring, the Certificate of Compliance shall specify which, if any, of such conditions shall continue. The Certificate shall also specify to what portions of the work it applies, if it does not apply to all work regulated by the Permit.
- g) The applicant shall submit the Certificate of Compliance to the Registry of Deeds or the land court for the district in which the land is located within the chain of title of the affected property. In the case of recorded land, the Certificate of Compliance shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of registered land, Certificate of Compliance shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work was done. Certification of recording shall be sent to the Commission.

SECTION 18. APPEAL

The applicant; the owner, if not the applicant; any person aggrieved by a Permit; any owner of land abutting the parcel(s) on which the work is to be done; any ten residents of the Town; and/or the Town; may appeal the decision of the Commission under provisions of G.L., Ch. 249 Sec. 4. Such appeal shall be made within 21 days of the date of issuance of the Commission's decision. Notice of said appeal and a copy of the complaint shall be sent, by certified mail return receipt requested or hand delivery, to the Commission and the Town Counsel so as to be received within said 21 days.

SECTION 19. SEVERABILITY

- a) The invalidity of any section or provision of these regulations shall not invalidate any other section or provision thereof, nor shall it invalidate any permit or determination previously issued.
- b) If any Court of the Commonwealth shall invalidate any provision of the Bylaw or these regulations, the Commission shall promulgate additional regulations, or present amendments to

the Bylaw or regulations designed to comply with any court decision invalidating such provision or regulation at the next Town Meeting after such invalidation.

SECTION 20. EFFECTIVE DATE

These regulations shall become effective upon passage by the Commission, and the provisions of these regulations shall apply to all work performed after that date.

SECTION 21. PERFORMANCE STANDARDS FOR WORK IN OR NEAR WETLANDS

21.1 Banks

a) Preamble

1. Banks are likely to be significant to wildlife habitat, public or private water supply, groundwater supply, flood control, storm damage prevention, prevention of pollution, and the protection of fisheries.
2. 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.
3. 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 the bank's 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. Banks which drop off quickly or overhang the water's edge often contain numerous undercuts which are favorite hiding spots for fish.
4. Banks act to confine floodwaters during storms, preventing the spread of water to adjacent land. Because banks confine water during storms to an established channel, they maintain water temperatures and depths necessary for the protection of fisheries. The maintenance of cool water temperatures during warm weather is critical to the survival of many species. An alteration of a bank that permits water to spread frequently or consistently over a larger and shallower area increases the amount of property that is routinely flooded, as well as elevating water temperatures and reducing fish habitat within the main channel.
5. The topography, plant community composition and structure, and soil structure of banks together provide important food, shelter, migratory and overwintering areas, and breeding areas for wildlife. Topography plays a role in determining the suitability of banks to serve as burrowing or feeding habitat. Soil structure also plays a role in determining the suitability for burrowing, hibernation, and other cover. Bank topography and soil structure impact the bank's vegetative structure as well. Bushes and other undergrowth, trees, vegetation extending from the bank into the water, and vegetation growing along the water's edge are also important to a wide variety of wildlife. A number of tubers and berry bushes also grow in banks and serve as important food for wildlife. Finally, banks may provide important shelter for wildlife which needs to move between wetland areas.

b) Definitions, Critical Characteristics, and Boundaries

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

3. The physical characteristics of a bank are critical to the protection of the interests specified in Section 1.1 of the Wetland Bylaw.
 4. The upper boundary of a bank is the first observable break in the slope or the mean annual flood line, whichever is higher. The lower boundary of a bank is the mean annual low flow line.
- c) Presumptions
1. Where a proposed activity involves the removing, filling, dredging, or altering of a bank, the Commission shall presume that such area is significant to the interests specified above. This presumption is rebuttable and may be overcome upon a clear showing that the bank does not play a role in the protection of said interests. In the event that the presumption is deemed to have been overcome as to the protection of all the interests, the Commission shall make a written determination to this effect, setting forth its grounds on WPA Form 6 and a Burlington Bylaw decision. Land within 100 feet of a bank (200 feet in riverfront) is likely to be significant to the protection and maintenance of the bank, and therefore to the protection of the interests specified in the Preamble above.
- d) General Performance Standards
1. Where the presumptions set forth above are not overcome, any proposed work other than the maintenance of an already existing structure, permitted by the Commission on a bank or within 20 feet of the upper boundary of a bank, shall not impair the following unless granted a waiver:
 - i. the physical stability of the bank
 - ii. the water-carrying capacity of the existing channel within the bank
 - iii. groundwater and surface water quality
 - iv. the capacity of the bank to provide breeding habitat, escape cover, and food for fisheries
 - v. the capacity of the bank to provide important wildlife habitat functions
 2. A project or projects that (cumulatively) alter(s) up to 10% or fifty (50) feet (whichever is less) of the length of the bank on the site found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond the above threshold may be permitted if they will have no adverse effects on wildlife habitat as determined by procedures contained in 310 CMR 10.60.

21.2 Vegetated Wetlands, Bordering and Isolated (Wet Meadows, Marshes, Swamps, and Bogs)

a) Preamble

1. Freshwater wetlands are likely to be significant to public or private water supply, groundwater supply, flood control, storm damage prevention, prevention of pollution, and protection of fisheries and wildlife habitat.
2. The plant communities, soil, and associated low topography of freshwater wetlands remove or detain sediments, nutrients (such as nitrogen and phosphorous) and toxic substances (such as heavy metal compounds) that occur in runoff and flood waters.
3. 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 impact of nutrients and toxins until the cold weather period, when such impacts are less likely to reduce water quality.

4. Freshwater wetlands are areas where ground water discharges to the surface and where, under some circumstances, surface water discharges to the ground water. The profusion of vegetation and the low topography of freshwater wetlands slow down and reduce the passage of flood waters during periods of peak flows by providing temporary flood water storage, and by facilitating water removal through evaporation and transpiration. This process reduces downstream flood crests and resulting damage to private and public property. During dry periods the water retained in freshwater 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.
 5. Wetland vegetation provides shade that moderates water temperatures important to fish life. 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 over-bank flooding that occurs during peak flow periods (extreme storms), because most river and stream channels do not provide sufficient quantities of the microscopic plant and animal life required for food.
 6. Wetland vegetation supports a wide variety of insects, reptiles, amphibians, mammals, and birds that are a source of food for important game fish. Bluegills (*Lepomis macrochirus*), pumpkinseeds (*Lepomis gibbosus*), yellow perch (*Perca flavescens*), rock bass (*Ambloplites rupestris*), and all trout species feed upon nonaquatic insects. Large-mouth bass (*Micropterus salmoides*), chain pickerel (*Esox niger*), and northern pike (*Esox lucius*) feed upon small mammals, snakes, nonaquatic insects, birds, and amphibians.
 7. Freshwater wetlands are probably the Town's most important habitat for wildlife. The hydrologic regime, plant community composition and structure, soil composition and structure, topography, and water chemistry of freshwater wetlands provide important food, shelter, migratory and overwintering areas, and breeding areas for many birds, mammals, amphibians, and reptiles. A wide variety of vegetative wetland plants, the nature of which are determined in large part by the depth and duration of water, as well as soil and water composition, are utilized by various species as important areas for mating, nesting, brood rearing, shelter, and (directly and indirectly) food. The diversity and interspersed nature of the vegetative structure is also important in determining the nature of its wildlife habitat. Different habitat characteristics are used by different wildlife species during summer, winter, and migratory seasons.
- b) Definitions, Critical Characteristics, and Boundary
1. Vegetated wetlands in Burlington are freshwater wetlands. They may border on rivers, streams, or ponds, or may be isolated. The types of freshwater wetlands include riverine wetlands, marshes, wet meadows, bogs, and their boundaries are determined according to 310 CMR 10.55. Isolated areas of wetland under 500 square feet shall not be jurisdictional or regulated unless vernal pools.
 2. Hydric soils are those soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. For the purposes of these Regulations, wetland plant communities which have more than 50% of the plant community plants rated as FACW or wetter by the Fish and Wildlife

Service, and which also contain obligate wetland plants (even if not dominant), shall be presumed to be wetland soils.

3. The drainage classification of a soil shall be determined as designated in “Delineating Bordering Vegetated Wetlands under the Massachusetts Wetlands Protection Act” (March, 1995). The Commission recognizes however that some hydric soils in Burlington do not meet these published guidelines, and so reserves the right to make a case-by-case determination of a soil’s drainage classification. These unusual soils include: soils developed in red parent materials, recently deposited sediments, and soils formed in oxygenated groundwater seeps.
4. In situations where the natural vegetative community may have been destroyed, as for example by lawn or agricultural use, the Commission may determine an area to be a freshwater wetland on the basis of hydric soils alone or, at the request of the applicant or landowner, may defer the determination until the natural vegetation has regrown.

c) Presumptions

1. Where a proposed activity involves the removing, filling, dredging, or altering of a freshwater wetland, the Commission shall presume that such an area is significant to the interests specified above . This presumption is rebuttable and may be overcome upon a clear showing that the freshwater wetland does not play a role in the protection of said interests. In the event that the presumption is deemed to have been overcome as to the protection of all the interests, the Commission shall make a written determination to this effect, setting forth its grounds on WPA Form 6 and a Burlington Bylaw decision.
2. 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 specified in the Preamble above.

d) General Performance Standards

1. Replication. Where the presumption set forth above is not overcome, any proposed work in a freshwater wetland, other than non-vernal pool isolated wetlands under 500 square feet, shall not destroy or otherwise impair any portion of said area. Notwithstanding this, the Commission may issue a Permit allowing work that results in the alteration of up to 5,000 square feet of wetland.

In considering the alteration of up to 5,000 square feet of wetland, the Commission will use a sequential review process whereby the applicant must first show that all available alternatives to the proposed alteration have been considered. The Commission will ascertain whether no practicable alternative exists which would have less adverse impact on the vegetated wetland. Further, the Commission will seek to ascertain whether the proposed alteration will cause or contribute to significant degradation of wetlands by adversely impacting wildlife, ecosystem integrity, recreation, aesthetics, and economic values. If avoidance of the proposed alteration has been properly considered by the applicant, then the applicant must show that all appropriate and practicable steps will be taken to minimize the proposed wetlands alteration. Only after avoidance and minimization criteria are satisfied will the Commission consider mitigation. In establishing mitigation requirements, the Commission will strive to achieve a goal of no overall net loss of wetland values and functions.

When the Commission agrees that a proposed alteration is to be allowed, then said area will be replaced in accordance with the following general conditions, as well as any additional conditions the Commission deems necessary to ensure that the replacement area will function in a manner similar to the area being lost:

- i. The surface of the replacement area being created shall be at least twice (2:1) the area of the area to be filled.
- ii. The groundwater and surface water elevation of the replacement area shall be approximately equal to that of the lost area.
- iii. The overall horizontal configuration and location of the replacement area with respect to the bank shall be similar to that of the lost area.
- iv. The replacement area shall have an unrestricted hydraulic connection to the same water body or waterway associated with the lost area.
- v. The replacement area shall be located within the same general area of the water body or reach of the waterway as the lost area.
- vi. At least 75% of the surface of the replacement area shall be reestablished with indigenous wetland plant species within two growing seasons, and prior to said vegetative reestablishment any exposed soil in the replacement area shall be temporarily stabilized to prevent erosion in accordance with U.S. Soil Conservation Service methods.
- vii. The replacement area shall be provided in a manner that is consistent with all other general performance standards for each resource area described in these Regulations.
- viii. Replication area design, construction and monitoring shall be performed by a qualified wetland scientist or botanist approved by the Commission, with yearly monitoring and reporting to the Commission for a period of time specified in the Wetland Permit, but for no less than two full growing seasons.
- ix. If the Commission determines that it is unfeasible to create a replacement wetland on site, it may require the applicant to find an off-site replacement area in Burlington.
- x. Notwithstanding the above provisions, no project may be permitted that might have adverse effect on: (1) habitat sites of rare plants, as well as vertebrate or invertebrate species as identified on the Natural Heritage and Endangered Species Estimated Habitat Maps on file with the Commission and identified under "Estimated Habitats of Rare Wildlife" (310 CMR 10.59) of the state Wetlands Protection Act Regulations, (2) any portion of a bordering vegetated wetland that is within an Area of Critical Environmental Concern designated by the Secretary of Environmental Affairs under M.G.L. Ch. 21A, Sec. 2(7) and 310 CMR 12.00, or (3) within a certified vernal pool.
- xi. These provisions shall not apply to maintenance of stormwater detention, retention, or sedimentation ponds, or to maintenance of stormwater emergency dissipating structures, that have been constructed in accordance with a valid Order of Conditions.

21.3 Land Under Water Bodies and Waterways (Rivers, Streams, Ponds, Vernal Pools)

a) Preamble

1. Land under water bodies and waterways is likely to be significant to wildlife habitat, public and private water supply, groundwater supply, flood control, storm damage prevention, prevention of pollution, and protection of fisheries and wildlife habitat. Where such land is composed of concrete, asphalt, or other artificial impervious material, said land is likely to be significant to flood control and storm damage prevention.
 2. Where land under water bodies and waterways is composed of pervious material, such land represents a point of exchange between surface and groundwater.
 3. 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 substance such as heavy metal compounds.
 4. Land under water bodies and waterways, in conjunction with banks, serves to confine floodwater within a definite channel during the most frequent storms. Filling within a channel blocks flow, which in turn causes backwater and overbank flooding during such storms. An alteration of land under water bodies and waterways which causes water frequently to spread out over a larger area at a lower depth increases the amount of property that is routinely flooded. It also 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.
 5. Land under water bodies and waterways that is composed of gravel allows the circulation of cold, well oxygenated water necessary for the survival of important game fish species. River and stream bottoms with a diverse structure composed of gravel, large and small boulders, and rock outcrops provide escape cover and resting areas for game fish species. Such bottom structures also provide areas for the production of aquatic insects essential to fisheries.
 6. Land under ponds is vital to a large assortment of warm-water fish during spawning periods where they build nests on the bottom substrates within which they shed and fertilize their eggs.
 7. The plant community composition and structure, hydrologic regime, topography, soil composition, and water quality of land under water bodies and waterways provide important food, shelter, migratory, and overwintering areas, and breeding areas for wildlife. Certain submerged, rooted vegetation is eaten by waterfowl and some mammals. Some amphibians (as well as some invertebrate species eaten by vertebrate wildlife) attach their eggs to such vegetation. Some aquatic vegetation protruding out of the water is also used for nesting, and many species use dead vegetation resting on land under water but protruding above the surface for feeding and basking. Soil composition is also important for hibernation and for animals that burrow their tunnels under water. Hydrologic regime, topography, and water quality not only affect vegetation but also determine which species feed in an area.
- b) Definitions, Critical Characteristics, and Boundaries
1. Land under water bodies is the land beneath any creek, river, stream, pond, vernal pool or lake. Said land may be composed of organic muck or peat, fine sediments, gravel, rock, bedrock, concrete, asphalt, or other artificial impervious material.

2. The physical characteristics and location of land under water bodies and waterways specified in the subsection above (2.a) are critical to the protection of the interests specified in the Preamble to this category.
 3. The upper boundary of land under water bodies is the mean annual high water line.
- c) Presumptions
1. Where a project involves removing, filling, dredging, or altering any land under a water body or waterway, the Commission shall presume that such an area is significant to the interests specified in the Preamble above. This presumption is rebuttable and may be overcome upon a clear showing that said land does not play a role in the protection of said interests. In the event that the presumption is deemed to have been overcome as to the protection of all the interests, the Commission shall make a written determination to this effect, setting forth its grounds on WPA Form 6 and a Burlington Bylaw decision.
 2. Land within 100 feet of land under water bodies is likely to be significant to the protection and maintenance of the land under the water bodies, and therefore to the protection of the interests which these resource areas serve to protect.
- d) General Performance Standards
1. Where the presumptions set forth above are not overcome, any proposed work permitted by the Commission on land under water bodies or within 100 feet of land under water bodies shall not impair the following:
 - i. the water-carrying capacity within the defined channel, as provided by said land in conjunction with the banks;
 - ii. ground and surface water quality;
 - iii. the capacity of said land to provide breeding habitat, escape cover, and food for fisheries; or,
 - iv. the capacity of said land to provide any other important wildlife habitat functions (i.e. hibernation, migration).
 2. Notwithstanding the provisions of 4.a above, no project may be permitted which will have any adverse effect on habitat sites of rare plants, as well as vertebrate or invertebrate species as identified on the Natural Heritage and Endangered Species Estimated Habitat Maps on file with the Commission and identified under "Estimated Habitats of Rare Wildlife" (310 CMR 10.59) of the state Wetlands Protection Act Regulations, or within a certified vernal pool.
 3. The Commission may require 2:1 replication of altered land under water. When replication of land under water is not possible or is impractical, the Commission may require the creation of new bordering vegetated wetlands in a 2:1 ratio of new wetlands to lost LUW to partially mitigate the loss of any lost functions or values of the land under water.

21.4 Bordering Land Subject to Flooding

a) Preamble

1. Land bordering a waterway or water body subject to flooding is likely to be significant to flood control and storm damage prevention. Such land provides a temporary storage area for flood water that has overtopped the bank of a river, stream, or ditch, or the basin of a pond or pool.

2. During periods of peak runoff, flood waters are both retained (slowly released through evaporation and percolation) and detained (slowly released through surface discharge) by bordering land subject to flooding.
 3. Over time, incremental filling of bordering land subject to flooding increases the extent and level of flooding. Filling causes lateral displacement of ponded water onto contiguous properties, which may result in damage to said properties.
 4. Land subject to flooding is likely to be significant habitat for various plant and animal species.
- b) Definitions, Critical Characteristics, and Boundaries
1. Bordering land subject to flooding is an area with a low, flat topography adjacent to and subject to inundation by flood and is further defined in 310 CMR 10.57(2) .
 2. The topography and location of bordering land subject to flooding as specified in 2.a above make such lands critical to the protection of the interests specified in D.1 above. Where bordering land subject to flooding is significant to the protection of wildlife habitat, the physical characteristics as described in 310 CMR 10.57(1)(a) are critical to the protection of that interest.
 3. The boundary of bordering land subject to flooding is the estimated maximum lateral extent of flood water which will theoretically result from the statistical 100-year frequency storm. Said boundary shall be determined by reference to the most recently available flood profile data prepared for Burlington under the National Flood Insurance Program (NFIP), currently administered by the federal Emergency Management Agency (FEMA). Where NFIP profile data is unavailable, the boundary shall be the maximum lateral extent of flood water which has been observed or recorded. In the event of a conflict, the Commission may require the applicant to determine the boundary by engineering calculations.
- c) Presumptions
1. The boundary of bordering land subject to flooding as determined by NFIP shall be presumed accurate. This presumption may be overcome only by credible evidence from a registered professional engineer or other qualified professional.
 2. Where a proposed activity involves removing, filling, dredging, or otherwise altering land subject to flooding, the Commission shall presume that such an area is significant to the protection of the interests specified in D.1 above. This presumption is rebuttable and may be overcome only upon a clear showing that said land does not play such a role. In the event that the presumption is deemed to have been overcome as to the protection of all the interests, the Commission shall make a written determination to this effect, setting forth its grounds on WPA Form 6 and a Burlington Bylaw decision.
- d) General Performance Standards
1. Compensatory storage shall be provided for all flood storage volume that will be lost as the result of a proposed project within bordering land subject to flooding, when in the judgment of the Commission said loss will cause an increase or will contribute incrementally to an increase in the horizontal extent and level of flood waters during peak flows. Compensatory storage shall mean a volume not previously used for flood storage and shall be incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an

unrestricted hydraulic connection to the same waterway or water body. Further, with respect to waterways, such compensatory volume shall be provided within the same reach of the river or stream.

2. Work within bordering land subject to flooding, including the work required to provide compensatory storage, shall not restrict flows so as to cause an increase in flood stage or velocity.
3. Any activity undertaken on land subject to flooding shall not result in the following: (1) flood damage due to filling causing lateral displacement of water that would otherwise be confined; (2) an adverse effect on public or private water supply or groundwater supply, where said area is underlain by pervious material; (3) an adverse effect on the capacity of said area to prevent pollution of groundwater, where the area is underlain by pervious material covered by a mat of peat or muck; or (4) an impairment of the area's capacity to provide wildlife or rare plant species habitat.
4. A project or projects on a single lot that (cumulatively) alter(s) up to 10% or 5,000 square feet (whichever is less) of bordering land subject to flooding found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions.
5. Notwithstanding the above provisions, no project may be permitted that might have adverse effect on habitat sites of rare vertebrate or invertebrate species as identified on the Natural Heritage and Endangered Species Estimated Habitat Maps on file with the Commission and identified under "Estimated Habitats of Rare Wildlife" (310 CMR 10.59) of the state Wetlands Protection Act Regulations.

21.5 Isolated Land Subject to Flooding

a) Preamble

1. Isolated Land Subject to Flooding is an isolated depression or a closed basin which serves as a ponding area for run-off or high ground water which has risen above the ground surface. Such areas are likely to be locally significant to flood control and storm damage prevention. In addition, where such areas are underlain by pervious material they are likely to be significant to public or private water supply and to ground water supply.
2. 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. Finally, where such areas are vernal pool habitat, they are significant to the protection of wildlife habitat.
3. Isolated Land Subject to Flooding provides a temporary storage area where run-off and high ground water pond and slowly evaporate or percolate into the substrate. Filling causes lateral displacement of the ponded water onto contiguous properties, which may in turn result in damage to said properties.
4. Isolated Land Subject to Flooding, where it is underlain by pervious material, provides a point of exchange between ground and surface waters. Contaminants introduced into said area, such as septic system discharges and road salts, find easy access into the ground water and neighboring wells. Where these conditions occur and a mat of organic peat or muck covers the substrate of the area, said mat serves to detain and remove contaminants which might otherwise enter the ground water and neighboring wells.

5. Isolated Land Subject to Flooding, where it is vernal pool habitat, is an essential breeding site for certain amphibians which require isolated areas that are generally flooded for at least two continuous months in the spring and/or summer and are free from fish predators. Most of these amphibians remain near the breeding pool during the remainder of their lifecycle. Many reptiles, birds and mammals also feed here.
- b) Definitions, Critical Characteristics, and Boundaries
1. Isolated Land Subject to Flooding is an isolated depression or closed basin without an inlet or an outlet that was not approved and constructed as a stormwater basin. It is an area which at least once a year confines standing water to a volume of at least ¼ acre-feet and to an average depth of at least six inches. Isolated Land Subject to Flooding may be underlain by pervious material, which in turn may be covered by a mat of organic peat or muck.
 2. The characteristics specified herein and in 310 CMR 10.57(2)(b)1. are critical to the protection of the interests specified herein.
 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. In the event of a conflict of opinion regarding the extent of water confined in an Isolated Land Subject to Flooding, the applicant may submit an opinion certified by a registered professional engineer, supported by engineering calculations, as to the probable extent of said water. Said calculations shall be prepared in accordance with the general requirements set forth in 310 CMR 10.57(2)(a)3.a. through c., except that the maximum extent of said water shall be based upon the total volume (rather than peak rate) of run-off from the drainage area contributing to the Isolated Land Subject to Flooding and shall be further based upon the assumption that there is no infiltration of said run-off into the soil within the Isolated Land Subject to Flooding.
 4. The only portions of this resource area which shall be presumed to be vernal pool habitat are those determined under procedures established in 310 CMR 10.57(2)(a)5.
 5. The boundary of vernal pool habitat is that determined under procedures established in 310 CMR 10.57(2)(a)6.
- c) Presumptions
1. Where a project involves removing, filling, dredging or altering of Land Subject to Flooding (both Bordering and Isolated Areas) the issuing authority shall presume that such an area is significant to, and only to, the respective interests specified in 310 CMR 10.57(1)(a) and (b). This presumption may be overcome only upon a clear showing that said land does not play a role in the protection of said interests. In the event that the presumption is deemed to have been overcome as to the protection of all the interests, the Commission shall make a written determination to this effect, setting forth its grounds on WPA Form 6 and a Burlington Bylaw decision.
- d) General Performance Standards
1. A proposed project in Isolated Land Subject to Flooding shall not result in the following:
 - i. Flood damage due to filling which causes lateral displacement of water that would otherwise be confined within said area.
 - ii. An adverse effect on public and private water supply or ground water supply, where said area is underlain by pervious material.

- iii. An adverse effect on the capacity of said area to prevent pollution of the ground water, where the area is underlain by pervious material which in turn is covered by a mat of organic peat and muck.
 - iv. An impairment of its capacity to provide wildlife habitat where said area is vernal pool habitat, as determined by procedures contained in 310 CMR 10.60.
2. Notwithstanding the above provisions, no project may be permitted that might have adverse effect on habitat sites of rare vertebrate or invertebrate species as identified on the Natural Heritage and Endangered Species Estimated Habitat Maps on file with the Commission and identified under "Estimated Habitats of Rare Wildlife" (310 CMR 10.59) of the state Wetlands Protection Act Regulations.

21.6 Temporary Ponds and Vernal Pools

a) Preamble

1. Temporary ponds, found in flood plains and in saddles at the base of slopes, temporarily confine water during periods of high water table or high input from spring runoff, snowmelt, or heavy precipitation, and thus are likely to be locally significant for flood control, storm damage prevention, and groundwater and public and private water supply. Such wetlands are characteristically small, but there is no minimum threshold size and a given pool can vary in size from year to year depending upon the amount of rainfall or snowmelt.
2. Where such areas are underlain by pervious materials, they form a point of exchange between ground and surface water, and so are likely to be significant to public or private water supply and to groundwater supply. Where such land is underlain by pervious materials covered by a mat of organic peat and muck which detains and removes contaminants, it is likely to be significant in the prevention of pollution from substance such as herbicides, pesticides, fertilizers, road salts, and septic system discharges.
3. Many temporary ponds are vernal pools.
4. Vernal pools, which are temporary ponds that usually confine water for a minimum of two continuous spring months but lack vertebrate predators such as adult fish, are significant in the support of duckweed, caddis flies, and mollusks, thus providing habitat for members of the fingernail and pea clam family (*Sphaeriidae*), numerous amphibians, reptiles (including spotted turtle, painted turtle, and snapping turtle), fairy shrimp (*Eubranchipus* sp.), and a number of other animals.
5. Vernal pools extend 100 feet upgradient from the annual high water line. The Commission believes that protection of this 100 foot zone from the annual high water line is essential, as many vernal pool species spend over 90% of their lifecycle in upland forest.
6. Vernal pools, in addition, provide critical breeding habitat for the Jefferson salamander (*Ambystoma jeffersonianum*), blue-spotted salamander (*A. laterale*), marbled salamander (*A. opacum*), spotted salamander (*A. maculatum*), and wood frog (*Rana sylvatica*), as well as feeding and occasional breeding habitat for the gray treefrog (*Hyla versicolor*), spring peeper (*H. crucifer*), American toad (*Bufo americanus*), and four-toed salamander (*Hemidactylium scutatum*).

7. Land under vernal pools is crucial breeding habitat for amphibian species, and, as most of these amphibians remain near the breeding pool during the remainder of their lifecycle, areas immediately surrounding vernal pools are critical in serving all of the non-breeding habitat functions of amphibians that require the pools for breeding. Such areas also provide food for many reptiles, birds, and mammals.

b) Definitions, Critical Characteristics, and Boundaries

1. Temporary ponds and vernal pools constitute land that may not border on a river, stream, or pond, but that contain a depression or closed basin which holds water for an extended period of time or even continuously. The depression may occur in otherwise flat topography, where the water may pool to the surface at least once a year or may be contained in the top 24 inches of soil, or may occur on a down slope of a side-hill seep.
2. Temporary ponds typically produce a well-developed layer of organic matter, primarily through trapping airborne leaves in the fall. The presence of water-stained leaves in a dry depression is a good indicator that the area temporarily serves to pool water.
3. The vegetation and soil of temporary ponds may be like the vegetative community and hydric soil found in a freshwater wetland, or, if the presence of water is of short duration, the vegetation and soil may be facultative.
4. Unless a pond is a certified vernal pool, or evidence is presented that it qualifies to be certified, the minimum size threshold for a temporary pond is 2500 square feet. There is no minimum size threshold for vernal pools.
5. The boundary of a temporary pond shall be defined as one of the following (depending upon the available information), with the measuring method containing the largest area being adopted: 1) an area consisting of at least 50% of the natural vegetative community of obligate or facultative wetland species; 2) the broadest extent of pooling observed or recorded in said area; 3) the extent of the presence of water stained leaves; 4) the extent of the presence of caddis fly cases and/or fingernail or pea clams; 5) the area calculated by a professional Civil Engineer to be inundated by runoff from the 100-year storm; or, 6) the area of hydric soil. However, if the temporary pond is also a vernal pool, the boundary is 100 feet upgradient of the mean annual high water line.
6. Vernal pools are temporary ponds in the form of isolated depressions or closed basins which temporarily (for a minimum of two continuous spring months in most years) confine water during periods of high water table or high input from spring runoff, snowmelt, or heavy precipitation and, being free of adult fish populations and other vertebrate predators, support populations of non-transient macro-organisms, duckweed, caddis flies, and mollusks, and provide habitat for members of the fingernail and pea clam family (*Sphaeriidae*), numerous amphibians, reptiles (including spotted turtle, painted turtle, and snapping turtle), and a number of other animals.
7. Vernal pools may be defined by certification by the Massachusetts Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program, evidence presented to the Commission at a public hearing introduced by public comment or by the Commission itself.

c) Presumptions

1. The Commission presumes all temporary ponds to be potentially functioning vernal pools.
2. Where a proposed activity involves the removing, filling, dredging, or otherwise altering of a temporary pond, the Commission shall presume that such an area, as well as the area within 100 feet of the mean annual boundary of said wetland, is significant to the interests identified in the preamble and, in the case of vernal pools, to the protection of wildlife habitat, particularly amphibian breeding habitat. This presumption is rebuttable and may be overcome upon a clear showing that the temporary pond does not play a role in the protection of wildlife habitat. In the event that the presumption is deemed to have been overcome as to the protection of all the interests, the Commission shall make a written determination to this effect, setting forth its grounds on WPA Form 6 and a Burlington Bylaw decision.
3. Since a temporary pond may also be significant for the prevention of flooding and flood damage, protection of public and private water supplies and groundwater, and the prevention of pollution, if a presumption of wildlife habitat is overcome, a determination for these other interests may be considered.
4. Provided the temporary pond is not a vernal pool and is less than 2500 square feet in size, it is presumed not to be significant to the resource interests protected by the Bylaw.

d) General Performance Standards

1. Where the presumptions set forth above are not overcome, any proposed work permitted by the Commission on temporary ponds or within 100 feet of temporary ponds shall not result in the following:
 - i. Any impairment of the capacity of the temporary pond, as well as the area within 100 feet of the mean annual boundary of said temporary pond, to provide wildlife habitat.
 - ii. Flood damage due to filling that causes lateral displacement of water which would otherwise be confined within said area.
 - iii. An adverse effect of public and private water supply or groundwater supply, where said area is underlain by pervious material.
 - iv. An adverse effect on the capacity of said area to prevent pollution of groundwater, where said area is underlain by pervious material covered by a mat of organic peat and muck.
 - v. An adverse effect on specified wildlife habitat of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.59.
2. Where the presumptions set forth above are not overcome, any proposed work permitted by the Commission on a vernal pool (which extends 100 feet upgradient of the annual high-water line) or within 100 feet of a vernal pool shall not result in the following:
 - i. Any impairment of the capacity of the vernal pool to provide wildlife habitat.
 - ii. Flood damage due to filling that causes lateral displacement of water which would otherwise be confined within said area.
 - iii. An adverse effect of public and private water supply or groundwater supply, where said area is underlain by pervious material.

- iv. An adverse effect on the capacity of said area to prevent pollution of groundwater, where said area is underlain by pervious material covered by a mat of organic peat and muck.
 - v. An adverse effect on specified wildlife habitat of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.59.
3. The Commission also recognizes the jurisdiction of Massachusetts 401 water quality regulations and Surface Water Quality Standards. Under these regulations, no discharges of stormwater, fill, or other materials are allowed into vernal pools.

21.7 Riverfront Area

The Burlington Conservation Commission recognizes the functions and values associated with both perennial and intermittent streams and therefore regulates streams as Riverfront areas as shown and depicted on the map in Appendix A regardless of perennial or intermittent status.

a) Preamble

1. Riverfront areas are likely to be significant to protect the private or public water supply; to protect groundwater; to provide flood control; to prevent storm damage; to prevent pollution; to protect land containing shellfish; to protect wildlife habitat; and to protect the fisheries.
2. Land adjacent to rivers and streams can protect the natural integrity of these water bodies. The presence of natural vegetation within riverfront areas is critical to sustaining rivers as ecosystems and providing these public values. The riverfront area can prevent degradation of water quality by filtering sediments, toxic substances (such as heavy metals), and nutrients (such as phosphorus and nitrogen) from stormwater, nonpoint pollution sources, and the river itself. Sediments are trapped by vegetation before reaching the river. Nutrients and toxic substances may be detained in plant root systems or broken down by soil bacteria. Riverfront areas can trap and remove disease-causing bacteria that otherwise would reach rivers and coastal estuaries where they can contaminate shellfish beds and prohibit safe human consumption. Natural vegetation within the riverfront area also maintains water quality for fish and wildlife.
3. Where rivers serve as water supplies or provide induced recharge to wells, the riverfront area can be important to the maintenance of drinking water quality and quantity. Land along rivers in its natural state with a high infiltration capacity increases the yield of a water supply well. When riverfront areas lack the capacity to filter pollutants, contaminants can reach human populations served by wells near rivers or by direct river intakes. The capacity of riverfront areas to filter pollutants is equally critical to surface water supplies, reducing or eliminating the need for additional treatment. In the watershed, mature vegetation within riverfront areas provides shade to moderate water temperatures and slow algal growth, which can produce odors and taste problems in drinking water.
4. Within riverfront areas, surface water interaction with groundwater significantly influences the stream ecosystem. The dynamic relationship between surface and groundwater within the “hyporheic zone” sustains communities of aquatic organisms

which regulate the flux of nutrients, biomass and the productivity of organisms including fish within the stream itself. The hyporheic zone extends to greater distances horizontally from the channel in large, higher order streams with alluvial floodplains, but the interaction within this zone is important in smaller streams as well.

5. By providing recharge and retaining natural flood storage, as well as by slowing surface water runoff, riverfront areas can mitigate flooding and damage from storms. The root systems of riverfront vegetation keep soil porous, increasing infiltration capacity. Vegetation also removes excess water through evaporation and transpiration. This removal of water from the soil allows for more infiltration when flooding occurs. Increases in storage of floodwaters can decrease peak discharges and reduce storm damage. Vegetated riverfronts also dissipate the energy of storm flows, reducing damage to public and private property.
6. Riverfront areas are critical to maintaining thriving fisheries. Maintaining vegetation along rivers promotes fish cover, increases food and oxygen availability, decreases sedimentation, and provides spawning habitat. Maintenance of water temperatures and depths is critical to many important fish species. Where groundwater recharges surface water flows, loss of recharge as a result of impervious surfaces within the riverfront area may aggravate low flow conditions and increase water temperatures. In some cases, summer stream flows are maintained almost exclusively from groundwater recharge.
7. Small streams are most readily impacted by removal of trees and other vegetation along the shore. Riverfront areas are important wildlife habitat, providing food, shelter, breeding, migratory, and overwintering areas. Even some predominantly upland species use and may be seasonally dependent on riverfront areas. Riverfront areas promote biological diversity by providing habitats for an unusually wide variety of upland and wetland species, including bald eagles, osprey, and kingfishers. Large dead trees provide nesting sites for bird species that typically use the same nest from year to year. Sandy areas along rivers may serve as nesting sites for turtles and water snakes. Riverfront areas provide food for species such as wood turtles which feed and nest in uplands but use rivers as resting and overwintering areas. Riverfront areas provide corridors for the migration of wildlife for feeding or breeding. Loss of this connective function, from activities that create barriers to wildlife movement within riverfront areas, results in habitat fragmentation and causes declines in wildlife populations. Wildlife must also be able to move across riverfront areas, between uplands and the river.
8. Vernal pools are frequently found within depressions in riverfront areas. These pools are essential breeding sites for certain amphibians which require isolated, seasonally wet areas without predator fish. Most of these amphibians require areas of undisturbed woodlands as habitat during the non-breeding seasons. Some species require continuous woody vegetation between woodland habitat and the breeding pools. Depending on the species, during nonbreeding seasons these amphibians may remain near the pools or travel one-fourth mile or more from the pools. Reptiles, especially turtles, often require areas along rivers to lay their eggs. Since amphibians and reptiles are less mobile than mammals and birds, maintaining integrity of their habitat is critical. In those portions so extensively altered by human activity that their

important wildlife habitat functions have been effectively eliminated, riverfront areas are not significant to the protection of important wildlife habitat and vernal pool habitat.

9. Intermittent streams provide many of the same services as perennial streams that affect water quality and ecosystem health. These services include landscape hydrologic connections; surface and subsurface water storage and exchange; ground-water recharge and discharge; sediment transport, storage, and deposition; flood plain development; nutrient cycling; wildlife habitat including movement and migration corridors; support for vegetation communities that help stabilize stream banks and provide wildlife services; water supply and water quality filtering or cleansing; and stream energy dissipation associated with high-water flows that reduces erosion and improves water quality.
 10. In addition, riparian areas associated with ephemeral and intermittent streams help mitigate and control water pollution by removing pollutants and sediment from surface runoff (Sonoran Institute, 2007). Thus, these streams play a significant role in the physical, biological, and chemical integrity of an ecosystem and must be afforded the same importance as perennial streams.
- b) Definitions, Critical Characteristics and Boundaries
1. A Riverfront Area is the area of land between a river's mean annual high water line and a parallel line measured horizontally. The riverfront area may include or overlap other resource areas or their buffer zones. The riverfront area does not have a buffer zone.
 2. Rivers shown on the map in Appendix A have a 200-foot riverfront area for the entire length portrayed on the map, except for portions that are underground (culverted) for 200 feet or more.
 3. The riverfront area begins at the mean annual high water line, or top of bank, whichever is higher and extends horizontally 200 feet on each side. In low-gradient rivers that flow through wetlands, like sections of Vine Brook, the mean annual high water line shall be determined to be that annually inundated area where vegetation transitions from herbaceous and hydrophytic shrubs (like Buttonbush) to trees (usually red maples). These low-gradient streams and rivers are characterized by poorly defined or nonexistent banks, low-flow channels, oxbows and meanders, and flows frequently extend well outside the low-flow channel.
- c) Presumption
1. Where a proposed activity involves work within the riverfront area, the Commission shall presume that the area is significant to protect the private or public water supply; to protect the groundwater; to provide flood control; to prevent storm damage; to prevent pollution; to protect land containing shellfish; to protect wildlife habitat; and to protect fisheries. The presumption is rebuttable and may be overcome by a clear showing that the riverfront area does not play a role in the protection of one or more of these interests. In the event that the presumption is deemed to have been overcome as to the protection of all the interests, the issuing authority shall make a written determination to this effect, setting forth its grounds on WPA Form 6 and a Burlington Bylaw decision. Where the applicant provides information that the riverfront area at the site of the activity does not play a role in the protection of an

interest, the Commission may determine that the presumption for that interest has been rebutted and the presumption of significance is partially overcome.

d) Performance Standards

1. The applicant shall prove by a preponderance of the evidence that there are no practicable and substantially equivalent economic alternatives (as defined in 310 CMR 10.58) to the proposed project with less adverse effects on the interests identified in the Burlington Wetland Bylaw.
2. The work, including proposed mitigation, shall have no significant adverse impact (as defined in 310 CMR 10.58) on the riverfront area to protect the interests identified in the Burlington Wetland Bylaw.
3. Except as detailed below, exemptions and grandfathering provisions in 310 CMR 10.58 shall apply.
4. No non-utility project that requires substantial excavation within the riverfront area, such as a building foundation or an in-ground pool, shall be exempt from these regulations.
5. Proposed activity on previously developed lots within riverfront may require improvements to the riverfront, such as increasing the width of the naturally-vegetated inner riparian area, planting native trees or shrubs or removing impervious surfaces. Where there is no naturally vegetated streamside buffer on the lot, the Commission may require riparian restoration when permitting any additional work within riverfront on the lot.

21.8 Limited Projects

Notwithstanding the provisions of 22.A through 22.G above, the Commission may issue a Permit and impose such conditions as will contribute to the interests identified in the Bylaw permitting limited projects as specified in the state Wetlands Protection Act Regulations, 310 CMR 10.53 (3).

21.9 Buffer Zones

a) Preamble

1. Any project undertaken near a wetlands resource area has a high likelihood of altering that area, either immediately, as a consequence of construction, or over a longer period of time, as a consequence of daily operation of the completed project. Accordingly, these regulations require that any person intending to perform work within 100 feet of a resource area must submit to the Commission either a Request for Determination of Applicability or a Notice of Intent application with the Bylaw Wetland Permit Application. In this way the Commission has an opportunity to review the proposed project to determine whether any alteration of a neighboring resource area will occur, and whether any resulting alteration is in compliance with other applicable performance standards.
2. If, in response to a Request for Determination of Applicability, the Commission finds that work within the Buffer Zone will not alter the resource area, it may issue a Negative Determination of Applicability, with or without conditions.

b) Definitions and Critical Characteristics

1. The Buffer Zone is that area of land extending 100 feet *horizontally* outward from the boundary of all types of freshwater wetlands (bordering or isolated), bank, land under

water body, land subject to flooding (bordering or isolated), or water body (i.e. stream or pond) that does not have a riverfront area.

2. Vegetative cover and soils within the Buffer Zone filter runoff, thus protecting water quality within the resource area. The vegetation and soils may also slow surface runoff, thereby permitting infiltration of precipitation, thus maintaining the hydrologic regime to which the resource area is adapted.
3. Vegetative cover, soils, and topography may help to control the surface and groundwater regime in the resource area in a Buffer Zone even where drainage is not towards a resource area.
4. Vegetative cover in the buffer zone influences the vegetation within the resource area, as buffer zone trees provide shade to the wetland resource area, while landscaped buffer zones can introduce fertilizer nutrients, herbicides and undesirable non-native species to the resource area.

c) Presumptions

1. The Commission shall presume that work in the types of projects listed below, within the designated distances from a resource area, will result in alteration of the resource area. For purposes of the table below: “work” means filling, excavating, grading, operating construction equipment, vegetation removal, and storing or stockpiling earth or construction materials; “building” means a structure requiring a building permit.

<i>Type of Project</i>	<i>No-Disturb Distance</i>	<i>Building Set-back</i>
Residential lot (existing dwelling)	20 ft.	40 ft. or no closer than existing dwelling
New construction on residential lot	20 ft.	40 ft.
New Subdivision lot	20 ft.	40 ft.
Commercial/Industrial (new)	20 ft.	50 ft.
Commercial/Industrial (redevelopment)	20 ft.	50 ft. or no closer than existing structure
Driveways/Utilities	20 ft.	
Parking lot	20 ft.	
Other roads	20 ft.	

2. These presumptions are rebuttable and may be overcome upon a clear showing that the nature of the proposed work, special design measures, construction controls, or site conditions will prevent alteration of the resource area.
3. The following activities in the Buffer Zone are presumed not to alter a resource area provided the above setback distances are met:
 - i. landscape plantings of non-invasive species, provided that areas disturbed are mulched immediately and there is no change in grade;
 - ii. construction or installation of fences or structures not requiring a building permit;

- iii. percolation tests or soil borings carried out to gather information for submittal with a Notice of Intent application.
 4. These presumptions are rebuttable and may be overcome when the nature of the work or site conditions will result in alteration of the resource area unless special preventive measures are taken.
- d) General Performance Standards
1. Work within the Buffer Zone shall result in either no alteration of a resource area, or in alteration permitted by the Commission that complies with the applicable performance standards for the resource area and any other conditions the Commission may require to enforce those performance standards.
 2. All new construction projects shall meet the resource area no-disturb and building setbacks listed in the presumptions above unless the presumption is overcome.
 3. Vegetation, particularly mature trees, shall be preserved to the maximum extent possible. Where trees within the buffer zone are cut, the Commission may require plantings of new trees as mitigation.
 4. Cutting of trees in the buffer zone, other than removal of dead limbs or vista pruning, shall require the prior approval of the Conservation Department.
 5. Lots that were developed prior to the adoption of the 2013 Wetland Bylaw may not meet the no-disturb or building setbacks required by these regulations. The Commission may require any applicant for projects on pre-existing lots that do not meet the setbacks to increase the naturally-vegetated buffer to a resource area as part of the permitting process for new construction on the lot.
 6. The Commission may require that an applicant mitigates any tree cutting in the buffer zone by planting native tree species in at least a 1:1 ratio.
 7. For small projects such as single-family lots, point discharge of surface runoff within or through a Buffer Zone shall be controlled to minimize increase in peak flow in the watercourse downstream of the discharge point for the runoff, as determined for the 2-year, 10-year, and 100-year storms, and to cause no increase in flood elevations outside the project site. Massachusetts DEP stormwater management standards shall apply to non-residential projects and residential projects over four lots.
 8. Runoff from any new impervious surface within the buffer zone shall be infiltrated on site to the maximum extent possible.

SECTION 22. ENGINEERING AND CONSULTANT REVIEWS

As provided by GL Ch. 44 § 53G, the Burlington Conservation Commission may impose reasonable fees for the employment of outside consultants, engaged by the Conservation Commission, for specific expert services deemed necessary by the Commission to come to a final decision on an application submitted to the Conservation Commission pursuant to Burlington Wetland Bylaw, as it may be amended or enacted from time to time.

Funds received by the Conservation Commission pursuant to these rules shall be deposited with the town treasurer who shall establish a special account for this purpose. Expenditures from this special account may be made at the direction of the Conservation Commission without further appropriation as provided in GL Ch. 44 §53G. Expenditures from this account shall be made only in connection with the review of a specific project or projects for which a consultant fee has been collected from the applicant.

The Commission reserves the right to permit the applicant to pay the consultant fee(s) directly for smaller projects or in other appropriate situations.

Specific consultant services may include but are not limited to resource area boundary review, hydrogeologic and drainage analysis, impacts on municipal conservation lands and environmental or land use law. The consultant shall be chosen by, and report only to, the Commission and/or its Administrator. The Conservation Commission will consult with other Town Boards to avoid duplication.

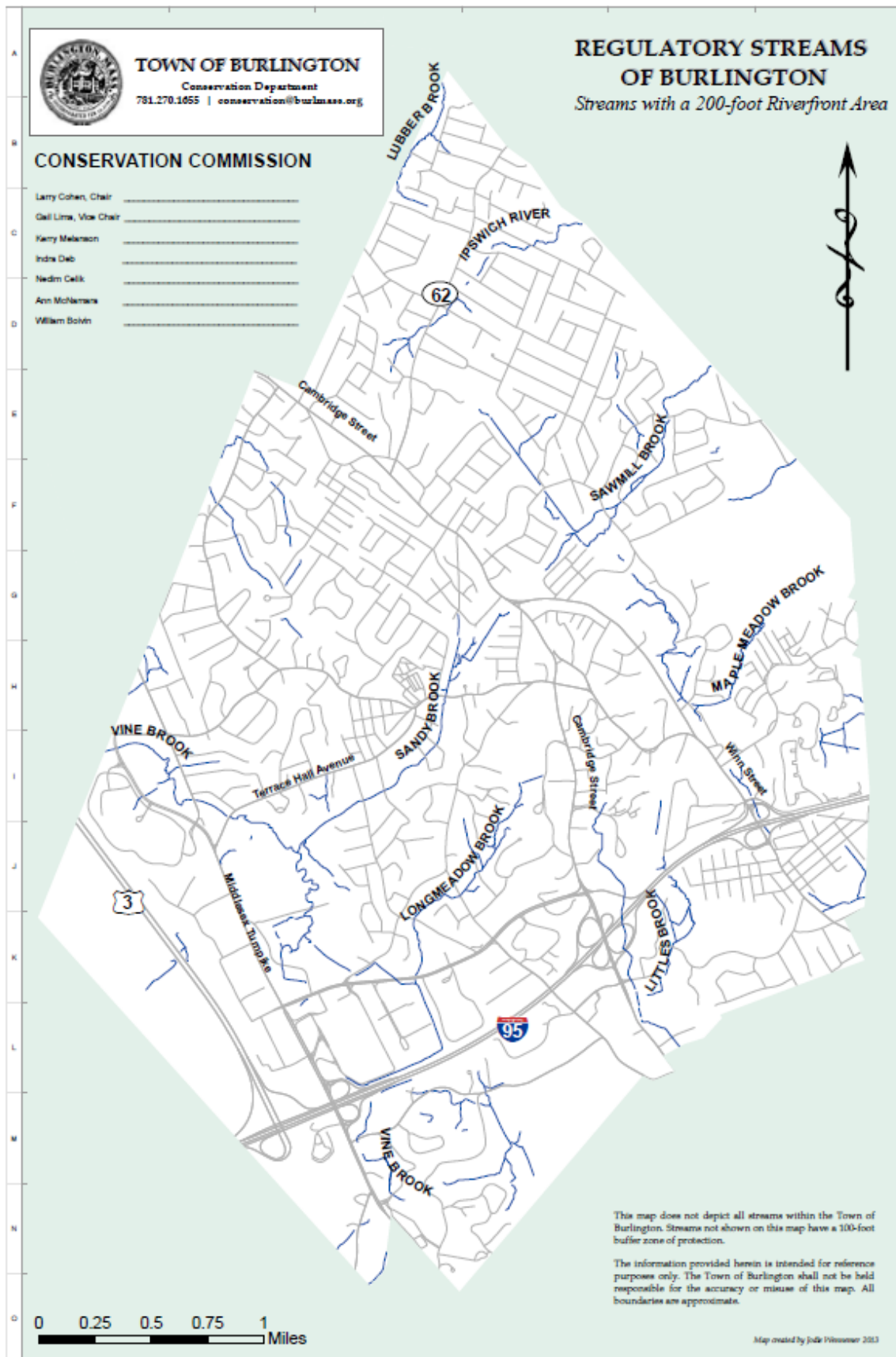
The Conservation Commission shall give written notice to the applicant of the selection of an outside consultant, which notice shall state the identity of the consultant, the amount of the fee to be charged to the applicant, and a request for payment of said fee in its entirety. If the applicant contests the choice of peer review consultant, the Bylaw provides for an appeal process. Such notice shall be deemed to have been given on the date it is mailed or delivered. No such costs or expenses shall be incurred by the applicant if the application or request is withdrawn within five days of the date notice is given.

The fee must be received in its entirety prior to the initiation of consulting services. The Commission may request additional consultant fees if necessary review requires a larger expenditure than originally anticipated or new information requires additional consultant services. Failure by the applicant to pay the consultant fee specified by the Commission shall be cause for the Commission to determine that the application is administratively incomplete (except in the case of an appeal). The Commission shall state such in a letter to the applicant. No additional review or action shall be taken on the permit request until the applicant has paid the requested fee.

SECTION 23. FEES

See Appendix C.

APPENDIX A – REGULATORY STREAMS MAP



APPENDIX B – FILING SUBMISSION REQUIREMENTS

REQUEST FOR DETERMINATION OF APPLICABILITY Submission Checklist and Guidelines

Each application package should include:

- Massachusetts Department of Environmental Protection WPA Form 1 – Request for Determination of Applicability
- Burlington Bylaw Article XIV Application Form
- Plot plan and/or map with detail sufficient to show all proposed work (construction and/or grading if applicable), lot lines, and general proximity of resource areas (all wetlands and/or floodplain)
- One complete set of mailing labels for abutting properties within 100' of project site (obtained at Assessor's Office, **NOT** certified)
- Filing fee – Check made payable to the Town of Burlington and turned into the Conservation Department as part of the original application package (see attached fee schedule)
- Telephone numbers of all contacts for the project
- Statement of limitations/impediments to access if applicable (e.g. fences, animals)

Guidelines for Submitting a Request for Determination of Applicability

When the original package is completed, make 13 copies of the application (excluding the abutters list) and staple each package together.

Submit the original plus 8 copies of the completed package to the Conservation Department.

Submit 1 copy of the completed package to the DEP Northeast Regional Office, 205B Lowell Street, Wilmington, MA 01887

Submit 1 copy of the completed package to each of the following departments: Planning, Engineering, Board of Health, and Selectmen. When delivering completed packages to Town departments, please have each department date stamp the stamp sheet.

NOTICE OF INTENT
Submission Checklist and Guidelines
Revised November 29, 2010

- Original NOI application package** with original signatures plus **8 complete submitted to the Conservation Department**. The NOI application package must contain the following:
 - Locus map
 - Assessor's map
 - FEMA map
 - 1=20" site plan stamped by a Registered Professional Engineer, detailing proposed work which must include the following (where applicable):
 - Buffer zone
 - Open water / streams
 - BLSF
 - BVW
 - 20' no disturb / erosion control boundary
 - Riverfront
 - Existing and proposed grades with 2ft contours
 - Wetlands replication
 - Runoff calculations and narrative of drainage patterns, volumes, characteristics
 - Pre and post construction calculations for 2, 10, and 100 year flood events
 - DEP Checklist for Stormwater Report (required of all projects)
 - Stormwater management report (where applicable)
 - Detailed soils, groundwater, hydrologic information (where applicable)
 - If wetland alteration is proposed, a detailed replication plan prepared by a professional wetland scientist
 - Landscape / planting plan
 - Burlington **Bylaw Application Form** with original signatures
 - **Abutter Notification Form**, copies to be sent by applicant to all abutters within 100 feet of project property
 - **DEP NOI Form 3 application** with original signatures
 - **DEP Wetland Fee Transmittal form**

- Complete list of abutters and 1 set of mailing labels** obtained from Assessor's department, for all abutters (including in adjacent towns where applicable) within 100 feet of project property

- Copies of NOI application package** to be delivered to the departments listed below, with completed stamp sheet submitted to the Conservation Department.
 - Planning
 - Engineering
 - Selectman's Office
 - Board of Health

- Copy of NOI application package** to be delivered to the MA DEP Northeast Regional Office, 205 B Lowell Street, Wilmington, MA 01887

- Burlington Bylaw fee and Town share of MA DEP fee

- State share of MA DEP fee sent to DEP Boston office

NOTIFICATION TO ABUTTERS UNDER THE MASSACHUSETTS WETLANDS PROTECTION ACT

In accordance with the second paragraph of Massachusetts General Laws, Chapter 131, § 40, as well as the Town of Burlington Bylaws, you are hereby notified of the following work within a resource area or within the 100' buffer zone of a resource area:

- A. The name of the applicant is: _____
- B. The address of the lot where the activity is proposed is: _____
- C. The applicant has filed a _____ Notice of Intent or a _____ Request for Determination _____ Resource Area Delineation Request with the Burlington Conservation Commission. Said permit applicant is seeking permission to conduct work within a wetland, water body or resource area or a buffer zone to a wetland, waterbody or resource area subject to protection under the Wetlands Protection Act (MGL c. 131, § 40), and/or the Town of Burlington Wetland Bylaws.
- D. Copies of the application may be examined at the office of the Burlington Conservation Commission, Town Hall, 25 Center Street, Burlington, MA between the hours of **8:30 a.m. - 4:30 p.m. on Monday, Tuesday & Thursday, 8:30 a.m. – 7:00 p.m. on Wednesday and 8:30 a.m. – 1:00 p.m. on Friday. Telephone: (781) 270-1655.**
- E. Copies of the application may be obtained from either (check one) the ___ applicant , or ___ the applicant's representative , by calling this telephone number (____) _____ on the following days of the week: _____ between the hours of: _____ and _____.
- F. Information regarding the date, time and place of the public hearing may be obtained from the Burlington Conservation Commission. Telephone: **(781) 270-1655**. If available from the applicant, check here ___ and see the information available in # E.

NOTE: At least five working days in advance, notice of the Public hearing will be published in **The Daily Time Chronicle**, Woburn, MA. The notice will include the hearing date, time and place, Notice of the Public Hearing will be posted in the Town Hall not less than forty-eight (48) hours in advance.

APPENDIX C - FEES
FEE SCHEDULE*
BURLINGTON WETLANDS BYLAW ARTICLE 14
Burlington Conservation Commission

Adopted 10/11/1988

Revised 2/14/2002

Revised 1/27/2011

1. Determination of Applicability:		
a.	Existing Single Family House Addition/Alteration/Buffer zone work/Resource area improvement	\$50
b.	New Single Family House	\$100
c.	New Subdivision Road/Drainage (>50 ft. from resource area)	\$100
d.	Monitoring Wells/Remediation/Etc.	\$100
e.	Commercial/Non-residential Construction	\$250
2. Notice of Intent (Abbreviated Notice of Intent):		
a.	Single Family House \$.50/sq. ft./wetlands altered	\$125 +
b.	Existing Single Family Home Addition/Alteration \$.50/sq. ft./wetlands altered	\$75 +
c.	Multi-family Structure (more than 2 residences) \$.50/sq. ft./wetlands altered	\$1000 +
d.	Subdivisions (road and utilities only, a per house fee—a. above—also applies) \$.50/sq. ft./wetlands altered.	\$1000 +
e.	Limited Projects ft./wetlands altered	\$1500 +\$.50/sq.
f.	Non-residential Projects (Commercial, Utility, Remediation, Etc.) \$.50/sq. ft./wetlands altered	\$1000 +
3. Abbreviated Notice of Resource Area Delineation:		
a.	Single family residential (under 20,000 ft ²) of wetland (\$50 min. - \$250 max.)	\$.50/linear foot
b.	Other (Residential lot over 20,000 ft ² , Commercial, Etc.) of wetland (\$50 min. - \$500 max.)	\$.50/linear foot
4. Extensions (OOC, ORAD):		
a.	Residential (one and two family only)	\$50
b.	Others	\$100
5. Minor Engineering Change		\$50
6. Amendment to Order of Conditions		\$100
7. Certificate of Compliance:		
a.	Single family residential	\$50
b.	Subdivisions, multi-family, commercial, etc.	\$100

**These fees are in addition to the filing fee for a Notice of Intent charged under M.G.L. Ch. 131, s. 40.*