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# **Town of Merrimac, Massachusetts**

Wetlands Protection Regulations

Effective 09-08-04



**Merrimac Conservation Commission**

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# **MERRIMAC WETLAND PROTECTION REGULATIONS**

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## **1.0 General Provisions**

### **1.1 Authority**

These Regulations are promulgated under the authority of the Home Rule Amendment Article LXXXIX (89), of the amendments of the Constitution of Massachusetts, 1966 as amended from time to time, and in accordance with the Merrimac Wetlands Bylaw and shall be effective upon fulfillment of all legal requirements.

### **1.2 Purpose**

The purpose of the Merrimac Wetlands Protection Bylaw (hereafter referred to as the "Bylaw") is clearly stated in Section 1.1 of the Bylaw. These Regulations are promulgated to ensure fairness, to create a uniformity of process and to clarify and define the provisions of the Bylaw, administered by the Merrimac Conservation Commission, hereafter called the "Commission" or "MCC".

Wetlands contribute to a number of public interests and are therefore protected by the Bylaw. The Bylaw identifies three additional public interests not recognized by the Massachusetts Wetlands Protection Act ("the Act" or "WPA"). These are: "the prevention and control of erosion and sedimentation, the protection of wildlife, and the protection of recreation". Any permit issued under the Bylaw and Regulations must therefore not adversely affect these additional public interests.

### **1.3 Jurisdiction**

The areas subject to protection under the Bylaw differ from those protected solely by the Act in that additional wetland resource areas are protected by the Bylaw, as well as the additional interests previously described. The additional areas subject to protection under the Bylaw include the Buffer Zone, Vernal Pools, Vernal Pool Habitat and Isolated Vegetated Wetlands that do not meet the definition of Bordering Vegetated Wetland under the Act.

The Town's wetland resource areas consist of:

1. any Isolated Vegetated Wetland;
2. any Vernal Pool and Vernal Pool Habitat;
3. any vegetated wetlands bordering on any creek, river, stream, pond or lake (bordering vegetated wetland);
4. any bank, beach, marsh, wet meadow, bog, or swamp;

5. any land under any creek, river, stream, pond or lake;
6. any 100-foot Buffer Zone of wetland areas 1-5 listed above;
7. any land subject to storm flowage, or flooding by groundwater or surface water;
8. and the 200-foot Riverfront Area.

The following waterbodies and contiguous 200-foot zones on either side of the mean high water elevations of these waterbodies have been identified by the Commission as having Riverfront Areas: Back River, Cobblers Brook, Presby's Creek, East Meadow River, and the Merrimack River.

Rivers or streams not referenced above or not otherwise depicted on the current revision of the Merrimac area USGS map may still have a 200-foot Riverfront Area associated with them per 310 CMR 10.58 (latest amendment), which the Commission has adopted by reference into these Regulations. Applicants shall evaluate said rivers or streams in accordance with 310 CMR 10.58(2) and this Bylaw and include such data in the submitted permit application.

#### **1.4 Fee Schedule**

The following fee schedule has been determined by the Commission to be commensurate with the expense of providing review services to applicants (exclusive of design review fees by expert engineers and consultants) and shall be paid at the time an application or other request for Commission approval is filed. These fees are in addition to and commensurate with those required by the Wetlands Protection Act (WPA) (except where otherwise noted). This fee schedule may be amended as necessary by majority vote of the Commission at any public hearing.

**NOTE:** Similar to 310 CMR 10.03(7), when the work involves activities within the Riverfront Area as well as another resource area or the Buffer Zone, the fee shall be determined by adding an additional 50% of the fee calculated for activities in another resource area(s) or the buffer zone to another resource area for each of the proposed activities within the Riverfront Area. When the work involves activities within the Riverfront Area but no other resource area, the fee shall be determined by adding the fees for each of the proposed activities within the Riverfront Area.

**Table 1-1: Bylaw Filing Fee Schedule**

WPA Filing Fee Category (per activity) <sup>(1)</sup>	Equivalent Bylaw Fee (per activity)
Notice of Intent/RDA - WPA Cat 1 Activity	<b>\$105</b> (add 50% if in Riverfront Area in addition to another resource area)
Notice of Intent/RDA - WPA Cat 2 Activity	<b>\$300</b> (add 50% if in Riverfront Area in addition to another resource area)
Notice of Intent/RDA - WPA Cat 3 Activity	<b>\$575</b> (add 50% if in Riverfront Area in addition to another resource area)
Notice of Intent/RDA - WPA Cat 4 Activity	<b>\$775</b> (add 50% if in Riverfront Area in addition to another resource area)
Notice of Intent/RDA - WPA Cat 5 Activity	<b>\$2 per ft.<sup>(2)</sup>/min. \$50/not to exceed \$1,000</b> (add 50% if in Riverfront Area in addition to another resource area)
Notice of Intent/RDA - WPA Cat 6 Activity	<b>\$1 per ft.<sup>(2)</sup>/min. \$100</b> (add 50% if in Riverfront Area in addition to another resource area)
ANRAD Filing	<b>\$1 per ft.<sup>(2)</sup>/min. \$100/max.\$3,000</b> (add 50% if in Riverfront Area in addition to another resource area)
Modification/Amendment Request	<b>\$100</b>
Partial Certificate of Compliance Request	<b>\$100</b>
Certificate of Compliance (2 <sup>nd</sup> request only; there is no charge for first request.)	<b>\$100</b>
Extension Permit Request	<b>\$100</b>
Emergency Certification Request	<b>\$100</b>

(1) Activity Category defined per CMR 310.0, section 10.03 par. 7. See Appendix B

(2) Per foot of delineated wetlands

### 1.5 *Officers and Members*

#### Officers

There shall be a Chair and Vice-Chair, who shall be elected by a majority vote of the eligible Commission members. The term of office shall be one year, commencing and ending with the second regular Commission meeting following the adjournment of the annual Town meeting. In the event of a vacancy, the Vice-Chair shall succeed to the position of Chair, and a new Vice-Chair shall be elected by the eligible Commission members.

### Members

New Commission members shall be appointed by the Board of Selectmen. The Commission shall offer its views to the Selectmen on the qualifications and suitability of potential candidates.

A quorum consists of a majority of the commission members who are serving in office at the time a vote is taken by the Commission. A majority vote of a quorum of the Commission shall constitute the decision of the Commission.

The members have such powers as are vested in them by any law or regulation, custom and practice.

### Committees

There shall be such committees as the Commission may decide are necessary for the efficient execution of its duties.

### Consultants

The Commission may, by vote at any public meeting, appoint consultants to the Commission as allowed in Section 1.13 of the Bylaw and in MGL Ch.40 S.8C. Such consultants shall not have the right to vote, nor to represent themselves as official members of the Commission, but shall have the right to participate in meetings and activities of the Commission, as the Chair (or Vice-Chair) may designate upon the advice and consent of the Commission.

### Associate Members

Associate members may be appointed by the Selectmen, in concert with the Conservation Commission and shall be designated as consultants in accordance with MGL Ch.40 S C. Notwithstanding the provisions of any general or special law to the contrary, the Board of Selectmen of the Town of Merrimac may appoint up to two alternate members of the Conservation Commission for a term of one year. When the Conservation Commission lacks a quorum for reasons of absence, inability to act or a conflict of interest, the Chairperson of the Conservation Commission may designate an alternate to sit on the Commission. The Commission shall offer its views to the Selectmen on the qualifications and suitability of potential candidates.

## 2.0 Definitions

Massachusetts General Laws, Chapter 40 Section C and Chapter 131, Section 40 (hereafter referred to as the "Act"), as well as 310 CMR 10.00 Wetlands Regulations are hereby incorporated by reference and made a part hereof, except as otherwise modified by the Merrimac Wetlands Bylaw and the Regulations promulgated herein and any subsequent amendments. The definitions provided in the WPA regulations 310 CMR 10.04 shall apply to the Bylaw and Regulations and as modified below:

1. Adjoining Land Area(s) means the Buffer Zone measured 100 feet horizontally from the boundary of any wetland resource area as defined by the Act or the Bylaw.
2. Alter shall include without limitation, the following actions when undertaken in areas subject to the Bylaw:
  - A. changing of pre-existing drainage characteristics, sedimentation patterns, flow patterns or flood retention characteristics;
  - B. placement of fill, excavation or re-grading;
  - C. destruction of plant life, including mowing, and the cutting and/or removal of trees or shrubs;
  - D. changing water temperature, biochemical oxygen demand or other physical or chemical characteristics of water;
  - E. any activities, changes or work which pollute or cause displacement of any body of water or groundwater;
  - F. any activities, changes or work which cause alteration of wildlife habitat.
3. Amendment means a change in the project that the Commission deems of sufficient magnitude that will require the imposition of additional conditions to ensure adequate protection of resource areas and interests covered under this Bylaw and Regulations (see Section 11.0).
4. Bordering Vegetated Wetlands protected under this Bylaw are freshwater wetlands that border on creeks, rivers, streams, ponds or lakes. The types of Bordering Vegetated Wetlands may include wet meadows, marshes, swamps and bogs. In addition to the minimum size requirement, Bordering Vegetated Wetlands must be comprised of the following three (3) delineation parameters:



- A. The vegetation community of a Bordering Vegetated Wetland consists of 50% or more wetland indicator plants. Wetland indicator plants are classified in the following categories: Facultative, Facultative+, Facultative Wetland-, Facultative Wetland, Facultative Wetland+, or Obligate Wetland (*source: Reed, P.B., 1988, "National List of Wetland Plants that Occur in Wetlands in Massachusetts", U.S. Fish & Wildlife Service, or it's most recent revision*) and wetland plants specifically indicated in the Act and,
  - B. Other indicators of hydrology including site inundation or saturation, water marks, drift lines, sediment deposits, oxidized rhizospheres, water-stained leaves, shallow root systems, buttressed tree trunks, recorded hydrologic data (stream or lake gauge, aerial photo, other) and plants that exhibit morphological adaptations to wetlands ( *source: Tiner, R. W., 1991, Bioscience 41: 236-247*) and,
  - C. Hydric Soils (*source: New England Hydric Soil Technical Committee, 1998, 2<sup>nd</sup> Edition, "Field Indicators for Identifying Hydric Soils in New England", New England Interstate Water Pollution Control Commission, or it's most recent version*).
5. Buffer Zone is that resource area which extends one-hundred feet (100') from the edge of those wetland resource areas identified in Section 1.0. However, it is possible that these resource areas will overlap in some instances (e.g. Riverfront Area and Land Subject to Flooding).
- A. 25' No-Disturbance Zone is that portion of the Buffer Zone which extends twenty-five feet (25') from the edge of those wetland resource areas identified in Section 1.3, however, it is possible that these resource areas will overlap in some instances (e.g. Riverfront Area and Land Subject to Flooding). Disturbance of any kind is prohibited within this Zone including but not limited to grading, landscaping, vegetation removal, grazing, dumping of landscaping debris, pruning, filling, excavating, roadway construction and/or driveway construction.
  - B. 50' No-Build Zone is that portion of the Buffer Zone which extends fifty-feet (50') from the edge of those wetland resource areas identified in Section 1.3, however, it is possible that these resource areas will overlap in some instances (e.g. Riverfront Area and Land Subject to Flooding). Construction of any kind is prohibited within this Zone including but not limited to foundations associated with single family homes, multi-family

dwellings, commercial and/or industrial buildings, porches, decks (i.e., footing, piling, sonotube), patios, house additions, building additions, pools, septic systems, sheds, and any other impermeable surface. Driveways, roadways, retaining walls and landscape boulder walls may be allowed in the 50-foot No-Build Zone when no other feasible location or alternative means of access exists.

- C. 50' Vernal Pool No-Disturbance Zone is that portion of the Buffer Zone which extends fifty feet (50') from the edge of an Vernal Pool which is situated in an upland location or, in situations where a wetland resource area encompasses the Pool, that area which extends 50' from the edge of Vernal Pool Habitat (see definition of Vernal Pool Habitat and Section 3.1). Disturbance of any kind is prohibited within this Zone including but not limited to grading, landscaping, vegetation removal, grazing, pruning, filling, excavating, roadway construction and/or driveway construction.
  - D. 75' Vernal Pool No-Build Zone is that portion of the Buffer Zone which extends seventy five feet (75') from the edge of an Vernal Pool which is situated in an upland location or, in situations where a wetland resource area encompasses the Pool that area which extends 75' from the edge of Vernal Pool Habitat (see definition of Vernal Pool Habitat and Section 3.1 of these Regulations). Construction of any kind is prohibited within this Zone including but not limited to foundations associated with single family homes, multi-family dwellings, commercial and/or industrial buildings, porches, decks (i.e., footing, piling, sonotube), patios, house additions, building additions, pools, septic systems, sheds, and any other impermeable surface. Driveways, roadways retaining walls and landscape boulder walls may be allowed in the 75-foot Vernal Pool No-Build Zone when no other feasible location or alternative means of access exists. Any permitted work shall not obstruct the migratory pathways of Vernal Pool breeders such as *Ambystomid* salamanders and wood frogs.
6. Burden of Proof means the applicant shall have the burden of proving by a preponderance of credible evidence that the work proposed in the application shall not have an unacceptable significant and/or cumulative effect upon the wetland values protected by this Bylaw. Failure to provide adequate evidence that the work proposed in the application shall not have an unacceptable significant and/or cumulative effect upon the wetland

values protected by this Bylaw shall be sufficient cause for the Commission to deny a permit or grant a permit with conditions.

7. Critical Area(s) In addition to those area(s) identified under “DEP’s SW Mgmt. Policy”, Section 401 of the US Clean Water Act and MA Surface Water Quality Standards (310 CMR 4.00 and 9.00), the Town of Merrimac has also determined that the Lake Attitash Watershed Area (as depicted on the Town’s Zoning Map) and the Buffer Zone associated with an Vernal Pool or Vernal Pool Habitat are “Critical Areas”.
8. Emergency Project means an activity undertaken to provide immediate protection to public health, safety and welfare.
9. Vernal Pool means a confined basin depression which, in most years, holds water for a minimum of two (2) consecutive months and is free of adult fish populations and has no permanently flowing outlet. These areas are essential breeding habitat, and provide other extremely important wildlife habitat functions during non-breeding season as well, for a variety of amphibian species such as wood frog and the spotted salamander, and are important habitat for other wildlife species. See Section 3.1 of these regulations.
10. Vernal Pool Habitat means that portion of a wetland resource area (excluding the Buffer Zone, which is also regulated as a wetland resource area under this Bylaw) within 100-feet of the mean annual boundaries of an Vernal Pool.
11. Extended Drought (or Drought) Coincides with an “Advisory” or more severe drought as declared by the MA Drought Management Task Force in accordance with a statewide drought management plan.
12. Growing Season means the entire period from March 15<sup>th</sup> to October 15<sup>th</sup>.
13. Isolated Vegetated Wetland is defined in Section 3.2 of these regulations.
14. Modification means a minor or insignificant project change (as determined by the Commission or the Conservation Administrator) that will not result in an adverse impact on the wetland resource areas and/or interests protected under the Act and this Bylaw.
15. Normal Maintenance of Land in Agricultural Use is defined under these regulations the same as it is in 310 CMR 10.04 (Agriculture) (b).
16. Permits shall collectively refer to Orders of Conditions, Order of Resource Area Delineation, Notice(s) of Non-Significance, Enforcement Order(s) and/or Determinations of Applicability.

17. Pond means any open body of fresh water with a surface area observed or recorded within the last ten years of at least 10,000 s.f. Ponds may be either naturally occurring or man made by impoundment, excavation or otherwise. Ponds shall contain standing water except for periods of extended drought. Periods of extended drought for purposes of this regulation shall be those periods, in those specifically identified geographic locations, determined to be at the "Advisory" or more severe drought level by the Massachusetts Drought Management Task Force, as established by the Executive Office of Environmental Affairs and the Massachusetts Emergency Management Agency in 2001, in accordance with the Massachusetts Drought Management Plan (MDMP). Notwithstanding the above, the following, man-made bodies of open water shall not be considered ponds in Merrimac: a) basins or lagoons which are part of wastewater treatment plants; b) swimming pools or other impervious man-made basins, 3) man made retention and detention basins that are part of a stormwater management system, and; individual gravel pits or quarries excavated from upland areas unless inactive for five or more consecutive years.
18. Public Hearing means a formal meeting, subject to statutory requirements, at which certain and specific determinations are made. A public hearing is required for a Notice of Intent and Abbreviated Notice of Resource Area Delineation under the Act and Bylaw but not for a Request for a Determination of Applicability (unless work or other activities are proposed, otherwise the Commission will hold a public meeting) and/or when in the opinion of the Commission a legally abutting individual's rights may be affected.
19. Public Meeting(s) are held when a formal public hearing is not required (e.g. Request for a Determination of Applicability where work is not proposed and the applicant is merely seeking a Determination from the Commission) and the Commission is not legally required to accept input from the public.
20. Recreation means passive recreation activities that do not conflict with or diminish other wetland values and functions. Examples include, without limitation, bird watching, nature studies, walking, hiking, canoeing, fishing, and hunting.
21. Revocation means to revoke an Order of Conditions issued under the Act and Bylaw.
22. River means any natural flowing body of water that empties into any ocean, lake, pond or other river. Rivers include streams that are perennial because surface water flows within them throughout the year. Rivers thus have a 200-foot Riverfront Area associated with them.

23. Riverfront Area is the area of land between a river's mean annual high water line measured horizontally outward from the river and a parallel line located 200 feet away. The Riverfront Area may include or overlap other resource areas or their Buffer Zones. The Riverfront Area does not have a Buffer Zone.
24. Stream means a body of flowing water, including brooks and creeks, which moves in a defined channel in the ground due to a hydraulic gradient, and which flows within, into or out of an area subject to Protection Under the Act or Bylaw. A portion of a stream may flow through a culvert or beneath a bridge. Such a body of running water which does not flow throughout the year (i.e., which is intermittent) is also considered a stream unless it is up-gradient of all bogs, swamps, wet meadows, and marshes or otherwise determined to be a river in accordance with Section 1.2 of the Merrimac Wetland Protection Bylaw and these Regulations.
25. Wetland Resource Area means those areas subject to protection under the Massachusetts Wetland Protection Act (MGL c.131 s.40) and the Merrimac Wetland Protection Bylaw (Section 1.2) and Regulations (Section 1.3).

### 3.0 Additional Wetland Resource Areas Protected Under the Bylaw and Regulations

#### 3.1 *Vernal Pools and Vernal Pool Habitat*

##### Preamble

Vernal Pools and their associated habitat are likely to be significant to the protection of wildlife and wildlife habitat. Vernal Pools constitute a unique and increasingly rare type of wetland that are inhabited by many species of wildlife, some of which are totally dependent on Vernal Pool Habitat for their survival. The wood frog (*Rana sylvatica*) and all species of mole salamanders (genus *Ambystoma*) that occur in Massachusetts breed exclusively in Vernal Pools. Areas in the immediate vicinity of the pool also provide these species with important non-breeding habitat functions, such as feeding, shelter, and over-wintering sites. Many other species of amphibians utilize Vernal Pool Habitat for breeding and non-breeding functions, although they are not restricted to this type of wetland. The protection of Vernal Pools is essential for the continued survival of wildlife species that are dependent upon this unique and threatened resource area.

##### Definition, Critical Characteristics and Boundary

A Vernal Pool means a confined basin depression which, in most years, holds water for a minimum of two (2) consecutive months and is free of adult fish populations and has no permanently flowing outlet. A confined basin depression is protected under the Bylaw as a Vernal Pool if it meets the biological and physical criteria identified in Appendix C and/or this Section of the regulations which provides guidelines for the identification of Vernal Pools in the Town of Merrimac.

Vernal Pool Habitat means that portion of a wetland resource area (excluding the Buffer Zone, which is also regulated as a wetland under this Bylaw) within 100-feet of the mean annual boundaries of an Vernal Pool.

**NOTE:** It is not necessary for a Vernal Pool to be located within another type of wetland resource area, or certified as a vernal pool by the MA Division of Fisheries and Wildlife, to be eligible for protection under this Bylaw.

#### Presumptions of Significance

Where a proposed activity involves the removing, filling, dredging or altering of a Vernal Pool or Vernal Pool Habitat, the Commission shall presume that the Vernal Pool or Vernal Pool Habitat is significant to the interests specified in the WPA and Section 1.2 of these regulations. This presumption is rebuttable and may be overcome upon a clear showing that the Vernal Pool or Vernal Pool Habitat does not play a role in the protection of said interests. In the event that the presumption is deemed to have been overcome, the Commission shall make a written determination to this effect, setting forth its grounds.

#### Performance Standards

1. **50-foot No-Disturbance Zone:** No activity shall be permitted within 50 feet of the delineated edge of a Vernal Pool or Vernal Pool Habitat (whichever is greater and/or more restrictive). Prohibited activities include, but are not limited to, grading, landscaping, vegetation removal, grazing, pruning, filling, excavating, roadway construction, and/or driveway construction.
2. **75-foot No-Build Zone:** No structures shall be permitted within 75-feet of the delineated edge of a Vernal Pool or Vernal Pool Habitat (whichever is greater). Structures include, but are not limited to foundations and footings associated with single family dwellings, multi-family dwellings, commercial and/or industrial buildings,

footings, pilings, impervious pads or sonotubes associated with porches, patios, decks, house additions, building additions, pools, septic system, sheds and any other impermeable surface. Driveways, roadways, retaining walls and landscape boulder walls may be allowed in the 75-foot No-Build Zone when no other feasible location or alternative means of access exists. Any permitted work shall not obstruct the migratory pathways of Vernal Pool breeders such as *Ambystomid* salamanders and wood frogs.

3. **100-foot Septic System Setback:** No septic system leaching field shall be permitted within 100-feet of the delineated edge of a Vernal Pool or Vernal Pool Habitat (whichever is greater) when the proposed septic system is located up gradient of the Vernal Pool. Any permitted work shall not obstruct the migratory pathways of Vernal Pool breeders such as *Ambystomid* salamanders and wood frogs.

### 3.2 *Isolated Vegetated Wetland*

#### Preamble

Isolated Vegetated Wetlands are likely to be significant to all of the interests identified in Section 1.1 of the Bylaw and are likely to support all of the functions and values identified for Bordering Vegetated Wetlands in 310 CMR 10.55(1). These interests include public or private water supply; groundwater; the prevention and control of flooding, erosion, sedimentation, storm damage, and/or pollution; and the protection of fisheries, wildlife, wildlife habitat, and recreation.

#### Definition, Critical Characteristics and Boundary

Isolated Vegetated Wetlands protected under this Bylaw are freshwater wetlands, of at least 2,000 sq. ft. in surface area, that do not border on creeks, rivers, streams, ponds or lakes. The types of Isolated Vegetated Wetlands may include wet meadows, marshes, swamps and bogs. In addition to the minimum size requirement, Isolated Vegetated Wetlands must be comprised of the following three (3) delineation parameters:

1. The vegetation community of an Isolated Vegetated Wetland consists of 50% or more wetland indicator plants. Wetland indicator plants are classified in the following categories: Facultative, Facultative+, Facultative Wetland-, Facultative Wetland, Facultative Wetland+, or Obligate Wetland (source: : Reed, P.B., 1988, "National List of Wetland Plants that Occur in Wetlands in Massachusetts", U.S. Fish & Wildlife Service, or it' most recent revision) and wetland plants specifically

