Inland Wetlands and Watercourses Regulations

Town of Berlin
Berlin, Connecticut

Effective Date: May 24, 2012
# INLAND WETLANDS AND WATERCOURSES REGULATIONS

## FOR

## THE TOWN OF BERLIN

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**APPENDIX A**

**APPENDIX B**

**APPENDIX C**
Section 1
Title and Authority

1.1 The inland wetlands and watercourses of the State of Connecticut are an indispensable and irreplaceable but fragile natural resource with which the citizens of the state have been endowed. The wetlands and watercourses are an interrelated web of nature essential to an adequate supply of surface and underground water; to hydrological stability and control of flooding and erosion; to the recharging and purification of groundwater; and to the existence of many forms of animal, aquatic and plant life. Many inland wetlands and watercourses have been destroyed or are in danger of destruction because of unregulated use by reason of the deposition, filling or removal of material, the diversion or obstruction of water flow, the erection of structures and other uses, all of which have despoiled, polluted and eliminated wetlands and watercourses. Such unregulated activity has had, and will continue to have, a significant, adverse impact on the environment and ecology of the state of Connecticut and has and will continue to imperil the quality of the environment thus adversely affecting the ecological, scenic, historic and recreational values and benefits of the state for its citizens now and forever more. The preservation and protection of the wetlands and watercourses from random, unnecessary, undesirable and unregulated uses, disturbance or destruction is in the public interest and is essential to the health, welfare and safety of the citizens of the state. It is, therefore, the purpose of these regulations to protect the citizens of the state by making provisions for the protection, preservation, maintenance and use of the inland wetlands and watercourses by minimizing their disturbance and pollution; maintaining and improving water quality in accordance with the highest standards set by federal, state or local authority; preventing damage from erosion, turbidity or siltation; preventing loss of fish and other beneficial aquatic organisms, wildlife and vegetation and the destruction of the natural habitats thereof; deterring and inhibiting the danger of flood and pollution; protecting the quality of wetlands and watercourses for their conservation, economic, aesthetic, recreational and other public and private uses and values; and protecting the state’s potable fresh water supplies from the dangers of drought, overdraft, pollution, misuse and mismanagement by providing an orderly process to balance the need for the economic growth of the state and the use of its land with the need to protect its environment and ecology in order to forever guarantee to the people of the state, the safety of such natural resources for their benefit and enjoyment and for the benefit and enjoyment of generations yet unborn.

1.2 These regulations shall be known as the "Inland Wetlands and Watercourses Regulations of the Town of Berlin."

1.3 The Inland Wetlands and Watercourses Agency of the Town of Berlin was established in accordance with an ordinance adopted March 18, 1974 and shall implement the purposes and provisions of these regulations and the Inland Wetlands and Watercourses Act in the Town of Berlin.

1.4 These regulations have been adopted and may be amended, from time to time, in accordance with the provisions of the Inland Wetlands and Watercourses Act and these regulations.

1.5 The Agency shall enforce the Inland Wetlands and Watercourses Act and shall issue, issue with terms, conditions, limitations or modifications, or deny permits for all regulated activities in the Town of Berlin pursuant to Sections 22a-36 to 22a-45, inclusive, of the Connecticut General Statutes, as amended.
Section 2
Definitions

2.1 As used in these regulations:

"Act" means the Inland Wetlands and Watercourses Act, Sections 22a-36 through 22a-45, inclusive, of the Connecticut General Statutes, as amended.

"Agency" means the Inland Wetlands and Watercourses Commission of the Town of Berlin.

"Bogs" are watercourses distinguished by evergreen trees and shrubs underlain by peat deposits, poor or very poor drainage, and highly acidic conditions.

"Clear-cutting" means the harvest of timber in a fashion which removes all trees down to a two inch diameter at breast height.

"Commission member" means a member of the Inland Wetlands and Watercourses Commission in the Town of Berlin.

"Commissioner of Environmental Protection" means the commissioner of the State of Connecticut Department of Environmental Protection.

"Continual flow" means a flow of water which persists for an extended period of time; this flow may be interrupted during periods of drought or during the low flow period of the annual hydrological cycle, June through September, but it recurs in prolonged succession.

"Deposit" includes, but shall not be limited to fill, grade, dump, place, discharge or emit.

"Designated Agent" means an individual(s) designated by the agency to carry out its functions and purposes.

"Discharge" means emission of any water, substance, or material into wetlands and/or waters of the state whether or not such substance causes pollution.

"Disturb the natural and indigenous character of the land" means that the activity will significantly alter the inland wetlands and watercourses by reason of removal or deposition of material, clear cutting, alteration or obstruction of water flow, or will result in the pollution of the wetland or watercourse.

"Essential to the farming operation" means that the proposed activity is necessary and indispensable to sustain farming activities on the farm.

"Farming" shall be consistent with the definition as noted in Section 1-1(q) of the Connecticut General Statutes. (see Appendix A)

“Feasible” means able to be constructed or implemented consistent with sound engineering principles.
"Intermittent watercourse" means those waterways which are characterized by non-persistent flow. For purposes of these regulations, intermittent watercourses are delineated by one or more of the following characteristics:

1. A defined permanent channel with the evidence of scour or deposits of recent alluvium or detritus.
2. The presence of standing or flowing water for a duration longer than a particular storm incident. Ordinarily, the presence of water is supported by a component, however small, of groundwater outflow or exfiltration.
3. The presence of, or ability to support the growth of hydrophytic vegetation.

"License" means the whole or any part of any permit, certificate of approval or similar form of permission which may be required of any person by the provisions of Sections 22a-36 to 22a-45, inclusive.

"Management practice" means a practice, procedure, activity, structure or facility designed to prevent or minimize pollution or other environmental damage or to maintain or enhance existing environmental quality. Such management practices include, but are not limited to: erosion and sedimentation controls; restrictions on land use or development; construction setbacks from wetlands or watercourses; proper disposal of waste materials; procedures for equipment maintenance to prevent fuel spillage; construction methods to prevent flooding or disturbance of wetlands and watercourses; procedures for maintaining continuous stream flows; confining construction that must take place in watercourses to times when water flows are low and fish and wildlife will not be adversely affected.

"Marshes" are watercourses that are distinguished by the absence of trees and shrubs and the dominance of soft-stemmed herbaceous plants. The water table in marshes is at or above the ground surface throughout the year and areas of open water six inches or more in depth are common, but seasonal water table fluctuations are encountered.

"Material" means any substance, solid or liquid, organic or inorganic, including but not limited to soil, sediment, aggregate, land, gravel, clay, bog, mud, debris, sand, refuse or waste.

"Municipality" means the Town of Berlin.

"Nurseries" means places where plants are grown for sale, transplanting, or experimentation.

"Permit" see license.

"Permittee" means the person to whom a license has been issued.

"Person" means any person, firm, partnership, association, corporation, limited liability company, company, organization or legal entity of any kind, including municipal corporations, governmental agencies or subdivisions thereof.
"Pollution" means harmful thermal effect or the contamination or rendering unclean or impure of any waters of the state by reason of any waste or other materials discharged or deposited therein by any public or private sewer or otherwise so as directly or indirectly to come in contact with any waters. This includes, but is not limited to, erosion and sedimentation resulting from any filling, land clearing or excavation activity.

"Prudent" means economically and otherwise reasonable in light of the social benefits to be derived from the proposed regulated activity provided cost may be considered in deciding what is prudent and further provided a mere showing of expense will not necessarily mean an alternative is imprudent.

"Regulated activity" means any operation within or use of a wetland or watercourse involving removal or deposition of material, or any obstruction, construction, alteration or pollution, of such wetlands or watercourses, but shall not include the specified activities in section 22a-40 of the Connecticut General Statutes. Furthermore, the Agency or its duly appointed Agent, may rule that any clearing, grubbing, filling, grading, paving, excavating, constructing, depositing or removing of material, discharging of storm water or any other activity within such Upland Review Area, or in any other non-wetland or non-watercourse area, is likely to impact or effect wetlands or watercourses and is a regulated activity.

"Regulated area" means any wetlands or watercourses as defined in these regulations.

"Remove" includes, but shall not be limited to drain, excavate, mine, dig, dredge, suck, grub, clear cut timber, bulldoze, dragline or blast.

"Rendering unclean or impure" means any alteration of the physical, chemical or biological properties of any waters of the state, including, but not limited to, change in odor, color, turbidity or taste.

"Significant impact" means any activity, including, but not limited to, the following activities which may have a major effect or significant impact on the area for which an application has been filed, or on another part of the inland wetland or watercourse system:

1. Any activity involving deposition or removal of material which will or may have a substantial effect on the wetland or watercourse or on wetlands or watercourses outside the area for which the activity is proposed.
2. Any activity which substantially changes the natural channel or may inhibit the natural dynamics of a watercourse system.
3. Any activity which substantially diminishes the natural capacity of an inland wetland or watercourse to: support aquatic, plant or animal life and habitats; prevent flooding; supply water; assimilate waste; facilitate drainage; provide recreation or open space; or perform other functions.
4. Any activity which causes, or is likely to cause, substantial turbidity, siltation or sedimentation in a wetland or watercourse.
5. Any activity which causes, or is likely to cause, substantial diminution of flow of a natural watercourse or groundwater levels of the wetland or watercourse.
6. Any activity which is likely to cause, or has the potential to cause, pollution of a wetland or watercourse.
7. Any activity which damages or destroys unique wetland or watercourse areas or such areas having demonstrable scientific or educational value.

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"Soil scientist" means an individual duly qualified in accordance with standards set by the federal Office of Personnel Management.

"Swamps" are watercourses that are distinguished by the dominance of wetland trees and shrubs.

"Submerged lands" means those lands which are inundated by water on a seasonal or more frequent basis.

"Town" means the Town of Berlin.

"Upland Review Area" means an area of land of non-wetland or non-watercourse within 50' measured horizontally (perpendicularly) from the boundary of any wetland or watercourse.

"Waste" means sewage or any substance, liquid, gaseous, solid or radioactive, which may pollute or tend to pollute any of the wetlands and watercourses of the Town.

"Watercourses" means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs, and all other bodies of water, natural or artificial, vernal or intermittent, public or private, which are contained within, flow through or border upon the Town or any portion thereof not regulated pursuant to Sections 22a-28 through 22a-35, inclusive, of the Connecticut General Statutes. Intermittent watercourses shall be delineated by a defined permanent channel and bank and the occurrence of two or more of the following characteristics: (a) evidence of scour or deposits of recent alluvium or detritus, (b) the presence of standing or flowing water for a duration longer than a particular storm incident, and (c) the presence of hydrophytic vegetation.

"Wetlands" means land, including submerged land as defined in this Section, not regulated pursuant to Sections 22a-28 through 22a-35, inclusive, of the Connecticut General Statutes, which consists of any of the soil types designated as poorly drained, very poorly drained, alluvial and floodplain by the National Cooperative Soils Survey, as it may be amended from time to time, of the Natural Resources Conservation Service of the U.S. Department of Agriculture (USDA). Such areas may include filled, graded, or excavated sites which possess an aquic (saturated) soil moisture regime as defined by the USDA Cooperative Soil Survey.
Section 3

Inventory of Inland Wetlands and Watercourses

3.1 The map of wetlands and watercourses entitled "Inland Wetlands and Watercourses Map, Town of Berlin, Connecticut" delineates the general location and boundaries of inland wetlands and the general location of watercourses. Copies of this map are available for inspection at the office of the Town Clerk or the Agency. In all cases, the precise location of wetlands and watercourses shall be determined by the actual character of the land, the distribution of wetland soil types and location of watercourses. The Agency may use aerial photography, remote sensing imagery, resource mapping, soils maps, site inspection observations or other information in determining the location of the boundaries of wetlands and watercourses.

3.2 Any person may petition the Agency for an amendment to the map. All petitions for a map change shall be submitted in writing and shall include all relevant facts and circumstances which support the change. The petitioner shall bear the burden of proof regarding the proposed map amendment. Such proof may include, but not be limited to aerial photography, remote sensing imagery, resource mapping or other available information. The Agency may require such person to provide an accurate delineation of regulated areas in accordance with Section 15 of these regulations.

3.3 The Agency, or its designated Agent(s), shall maintain a current inventory of regulated areas within the town. The Agency may amend its map as more accurate information becomes available.

3.4 All map amendments are subject to the public hearing process outlined in Section 15 of these regulations.

Section 4

Permitted Uses as of Right & Nonregulated Uses

4.1 The following operations and uses shall be permitted in inland wetlands and watercourses, as of right:

a. grazing, farming, nurseries, gardening and harvesting of crops and farm ponds of three acres or less essential to the farming operation, and activities conducted by, or under the authority of, the Department of Environmental Protection for the purposes of wetland or watercourse restoration or enhancement or mosquito control. The provisions of this subdivision shall not be construed to include road construction or the erection of buildings not directly related to the farming operation, relocation of watercourses with continual flow, filling or reclamation of wetlands or watercourses with continual flow, clear cutting of timber except for the expansion of agricultural crop land, the mining of top soil, peat, sand, gravel or similar material from wetlands or watercourses for the purposes of sale;

b. a residential home (A) for which a building permit has been issued or (B) on a subdivision lot, provided the permit has been issued or the subdivision has been approved by a municipal planning, zoning or planning and zoning commission as of the effective date of
promulgation of the municipal regulations pursuant to Sub-Section (b) of Section 22a-42a, or as of July 1, 1974, which ever is earlier, and further provided no residential home shall be permitted as of right pursuant to this subdivision unless the permit was obtained on or before July 1, 1987;
c. boat anchorage or mooring;
d. uses incidental to the enjoyment and maintenance of residential property, such property defined as equal to or smaller than the largest minimum residential lot size permitted anywhere in the municipality provided that in any town where there are no zoning regulations establishing minimum residential lot sites, the largest minimum lot site shall be two acres. Such incidental uses shall include maintenance of existing structures and landscaping, but shall not include removal or deposition of significant amounts of material from or onto a wetland or watercourse, or diversion or alteration of a watercourse;
e. Construction and operation, by water companies as defined by Section 16-1 of the Connecticut General Statutes or by municipal water supply systems as provided for in chapter 102 of the Connecticut General Statutes, of dams, reservoirs and other facilities necessary to the impounding, storage and withdrawal of water in connection with public water supplies except as provided in Sections 22a-401 and 22a-403 of the Connecticut General Statutes;
f. Maintenance relating to any drainage pipe which existed before the effective date of any municipal regulations adopted pursuant to Section 22a-42a of the Connecticut General Statutes or July 1, 1974, whichever is earlier, provided such pipe is on property which is zoned as residential but which does not contain hydrophytic vegetation. For purposes of this subdivision, "maintenance" means the removal of accumulated leaves, soil, and other debris whether by hand or machine, while the pipe remains in place; and

4.2 The following operations and uses shall be permitted, as nonregulated uses in wetlands and watercourses, provided they do not disturb the natural and indigenous character of the wetland or watercourse by removal or deposition of material, alteration or obstruction of water flow or pollution of the wetland or watercourse:

a. conservation of soil, vegetation, water, fish, shellfish and wildlife;
b. outdoor recreation including play and sporting areas, golf courses, field trials, nature study, hiking, horseback riding, swimming, skin diving, camping, boating, water skiing, trapping, hunting, fishing and shellfishing where otherwise legally permitted and regulated; and
c. The installation of a dry hydrant by, or under the authority of, a municipal fire department, provided such dry hydrant is only used for firefighting purposes, and there is no alternative access to a public water supply. For purposes of this section, "dry hydrant" means a nonpressurized pipe system that: (A) is readily accessible to fire department apparatus from a proximate public road, (B) provides for the withdrawal of water by suction to such fire department apparatus, and (C) is permanently installed into an existing lake, pond or stream that is a dependable source of water.

4.3 All activities in wetlands or watercourses involving filling, excavating, dredging, clear cutting, clearing, or grading or any other alteration or use of a wetland or watercourse not specifically permitted by this Section and otherwise defined as a regulated activity by these regulations shall require a permit from the Agency in accordance with Section 6 of these regulations, or for certain regulated activities located outside of wetlands and watercourses from the duly authorized agent in accordance with Section 12 of these regulations.
4.4 To carry out the purposes of this Section, any person proposing a permitted operation and use or a nonregulated operation and use shall, prior to commencement of such operation and use, notify the Agency on a form provided by it, and provide the Agency with sufficient information to enable it to properly determine that the proposed operation and use is a permitted or nonregulated use of a wetland or watercourse. The Agency shall rule that the proposed operation and use or portion of it is a permitted or nonregulated operation and use or that the proposed operation and use is a regulated activity and a permit is required.

Section 5
Activities Regulated Exclusively by the Commissioner of Environmental Protection

5.1 The Commissioner of Environmental Protection shall have exclusive jurisdiction over regulated activities in or affecting wetlands or watercourses, undertaken by any department, agency or instrumentality of the State of Connecticut, except any local or regional board of education, pursuant to Sections 22a-39 or 22a-45a of the Connecticut General Statutes.

5.2 The Commissioner of Environmental Protection shall have exclusive jurisdiction over tidal wetlands designated and regulated pursuant to Sections 22a-28 through 22a-35 of the Connecticut General Statutes, as amended.

5.3 The Commissioner of Environmental Protection shall have exclusive jurisdiction over activities authorized under a dam repair or removal order issued by the Commissioner of Environmental Protection under Section 22a-402 of the Connecticut General Statutes or a permit issued by the Commissioner of Environmental Protection under Sections 22a-403 of the Connecticut General Statutes. Any person receiving such dam repair or removal order or permit shall not be required to obtain a permit from a municipal wetlands agency for any action necessary to comply with said dam order or to carry out the activities authorized by said permit.

5.4 The Commissioner of Environmental Protection shall have exclusive jurisdiction over the discharge of fill or dredged materials into the wetlands and watercourses of the state pursuant to Section 401 of the Federal Clean Water Act, as amended, for activities regulated by the U.S. Army Corps of Engineers under Section 404 of the Federal Clean Water Act.

Section 6
Regulated Activities to be Licensed

6.1 No person shall conduct or maintain a regulated activity without first obtaining a permit for such activity from the Inland Wetlands and Watercourses Commission of the Town of Berlin.

6.2 The Commission shall regulate any operation within, or use of, a wetland or watercourse involving removal or deposition of material, or any obstruction, construction, alteration or pollution, of such wetlands or watercourses, and any other regulated activity, unless such operation or use is permitted or non-regulated pursuant to Section 4 of these regulations.
6.3 Any person found to be conducting or maintaining a regulated activity without the prior authorization of the Agency, or violating any other provision of these regulations, shall be subject to the enforcement proceedings and penalties prescribed in Section 14 of these regulations and any other remedies as provided by law.

Section 7
Application Requirements

7.1 Any person intending to conduct a regulated activity or to renew or amend a permit to conduct such activity, shall apply for a permit on a form provided by the Agency. The application shall contain the information described in this Section and any other information the Agency may reasonably require. Application forms may be obtained in the Public Works/Town Engineering Office of the Berlin Town Hall.

7.2 If an application to the Town of Berlin Planning and Zoning Commission for subdivision or resubdivision of land involves land containing a wetland or watercourse, the applicant shall, in accordance with Section 8-3(g), 8-3c, or 8-26, as applicable, of the Connecticut General Statutes, submit an application for a permit to the Agency in accordance with this Section, no later than the day the application is filed with such planning and zoning commission.

7.3 The application shall contain such information as is necessary for a fair and informed determination thereon by the Agency.

a. The Agency may require additional technical assistance in evaluating an application submitted in accordance with these regulations if it finds that the nature and intensity of development may have a significant impact on the site and its surrounding areas and/or that Town staff will not be able to complete a technical and/or legal review of an application in the time period prescribed by State Statute.

b. The expense of the additional technical and/or legal assistance shall be estimated by the Agency, based on a preliminary estimate prepared by a qualified party or expert, and the estimated cost of reviewing the application times one hundred-fifty percent (150%) shall be paid by the applicant and deposited with the Commission or its designated agent. Such deposit shall be made prior to review of the application and/or submission.

c. Upon completion of the technical and/or legal review and final action by the Inland Wetlands and Watercourses Commission on the application, the Town shall determine the costs incurred for the review and refund the excess monies to the applicant. Applicants shall not be responsible for costs incurred for technical assistance which exceed one hundred-fifty percent (150%) of the Commission's estimate.

7.4 A prospective applicant may request the Agency to determine whether or not a proposed activity involves a significant impact activity.

7.5 All applications shall include the following information in writing or on maps or drawings:

a. the applicant's name, home and business mailing addresses and telephone numbers; if the applicant is a Limited Liability Corporation or a Corporation the managing member's or responsible corporate officer's name, address, and telephone number;
b. the owner’s name, mailing address and telephone number and written consent of the land owner if the applicant is not the owner of the land upon which the subject activity is proposed;

c. the applicant’s interest in the land;

d. the geographical location of the land which is the subject of the proposed activity and a description of the land in sufficient detail to allow identification of the inland wetlands and watercourses, the area(s) (in acres or square feet) of wetlands or watercourses to be disturbed, soil type(s), and wetland vegetation;

e. the purpose and a description of the proposed activity and proposed erosion and sedimentation controls and other management practices and mitigation measures which may be considered as a condition of issuing a permit for the proposed regulated activity including, but not limited to, measures to (1) prevent or minimize pollution or other environmental damage, (2) maintain or enhance existing environmental quality, or (3) in the following order of priority: restore, enhance and create productive wetland or watercourse resources;

f. alternative which would cause less or no environmental impact to wetlands or watercourses and why the alternative as set forth in the application was chosen; all such alternatives shall be diagramed on a site plan or drawing;

g. a site plan showing the proposed activity and existing and proposed conditions in relation to wetlands and watercourses and identifying any further activities associated with, or reasonably related to, the proposed regulated activity which are made inevitable by the proposed regulated activity and which may have an impact on wetlands or watercourses;

h. names and mailing addresses of adjacent land owners;

i. statement by the applicant that the applicant is familiar with all the information provided in the application and is aware of the penalties for obtaining a permit through deception or through inaccurate or misleading information;

j. authorization for the members and agents of the Agency to inspect the subject land, at reasonable times, during the pendency of an application and for the life of the permit;

k. a completed DEP reporting form; the Agency shall revise or correct the information provided by the applicant and submit the form to the Commissioner of Environmental Protection in accordance with Section 22a-39-14 of the Regulations of Connecticut State Agencies;

l. any other information the Agency deems necessary to the understanding of what the applicant is proposing; and

m. submission of the appropriate filing fee based on the fee schedule established in Section 19 of these regulations.

7.6 At the discretion of the Agency or its agent, or when the proposed activity involves a significant impact, additional information, based on the nature and anticipated effects of the activity, including but not limited to the following, is required:

a. site plans for the proposed activity and the land which will be affected thereby which show existing and proposed conditions, wetland and watercourse boundaries, land contours, boundaries of land ownership, proposed alterations and uses of wetlands and watercourses, and other pertinent features of the land and the proposed activity, prepared by a professional engineer, land surveyor, architect or landscape architect licensed by the state, or by such other qualified person;
b. engineering reports and analyses and additional drawings to fully describe the proposed activity including any filling, excavation, drainage or hydraulic modifications to watercourses and the proposed erosion and sedimentation control plan;

c. mapping of soil types consistent with the categories established by the National Cooperative Soil Survey of the U.S. Natural Resources Conservation Service; the wetlands shall be delineated in the field by a soil scientist and the soil scientist's field delineation shall be depicted on the site plans;

d. a description of the ecological communities and functions of the wetlands or watercourses involved with the application and the effects of the proposed activity on these communities and wetland functions;

e. a description of how the applicant will change, diminish, or enhance the ecological communities and functions of the wetlands or watercourses involved in the application and each alternative which would cause less or no environmental impact to wetlands or watercourses, and a description of why each alternative considered was deemed neither feasible nor prudent;

f. analysis of chemical or physical characteristics of any fill material; and

g. management practices and other measures designed to mitigate the impact of the proposed activity.

7.7 The applicant shall certify whether:

a. any portion of the property on which the regulated activity is proposed is located within 500 feet of the boundary of an adjoining municipality;

b. traffic attributable to the completed project on the site will use streets within the adjoining municipality to enter or exit the site;

c. sewer or water drainage from the project site will flow through and impact the sewage or drainage system within the adjoining municipality; or,

d. water run-off from the improved site will impact streets or other municipal or private property within the adjoining municipality.

7.8 Nine (9) copies of all application materials shall be submitted to comprise a complete application unless an applicant is otherwise directed, in writing, by the Agency.

7.9 Any application to extend, renew, or amend an existing permit shall be filed with the Agency in accordance with Section 8 of these regulations at least sixty-five (65) days prior to the expiration date of the permit. Any application to renew or amend such an existing permit shall contain the information required under Section 7 of these regulations provided:

a. the application may incorporate the documentation and record of the prior application;

b. the application shall describe the extent of work completed at the time of filing and the schedule for completing the activities authorized in the permit;

d. the application shall state the reason why the authorized activity was not initiated or completed within the time specified in the permit;

d. the application shall describe any changes in facts or circumstances involved with or affecting wetlands or watercourses or use of the land for which the permit was issued;

e. the Agency may, prior to the expiration of a permit, accept an untimely application to renew such permit if the authorized activity is ongoing and allow the continuation of work beyond the expiration date if, in its judgment, the permit is likely to be renewed and the public interest or environment will be best served by not interrupting the activity;
7.10 Any application to renew a permit shall be granted upon request of the permit holder unless the Agency finds that there has been a substantial change in circumstances which requires a new permit application or an enforcement action has been undertaken with regard to the regulated activity for which the permit was issued provided no permit shall be valid for more than ten years, and further provided that any permit issued prior to July 1, 2011 that did not expire prior to May 9, 2011 shall be valid for no more than fourteen years.

7.11 For any permit application involving property subject to a conservation restriction or preservation restriction, the following shall apply:

   a. for purposes of this section, "conservation restriction" means a limitation, whether or not stated in the form of a restriction, easement, covenant or condition, in any deed, will or other instrument executed by, or on behalf of, the owner of the land described therein, including, but not limited to, the State (or any political subdivision of the State), or in any order of taking such land whose purpose is to retain land or water areas predominantly in their natural, scenic or open condition, or in agricultural, farming, forest or open space use.

   b. for purposes of this section, "preservation restriction" means a limitation, whether or not stated in the form of a restriction, easement, covenant or condition, in any deed, will, or other instrument, executed by, or on behalf of, the owner of land, including, but not limited to, the State, or any political subdivision of the State, or in any order of taking of such land whose purpose is to preserve historically significant structures or sites.

   c. no person shall file a permit application, other than for interior work in an existing building, or for exterior work on an existing building, that does not expand, or alter, the footprint of such existing building, relating to property that is subject to a conservation restriction, or a preservation restriction, unless the applicant provides proof that the applicant has provided written notice of such application, by certified mail, return receipt requested, to the party holding such restriction, including but not limited to, any State agency that holds such restriction, not later than sixty days prior to the filing of the permit application.

   d. in lieu of such notice, pursuant to subsection 7.11c, the applicant may submit a letter from the holder of such restriction, or from the holder's authorized agent, verifying that the application is in compliance with the terms of the restriction.

Section 8
Application Procedures

8.1 All petitions, applications, requests or appeals shall be submitted to the Inland Wetlands and Watercourses Commission in the office of the Town Engineer of the Town of Berlin.

8.2 The Agency shall, in accordance with Connecticut General Statutes Section 8-7d(f), notify the clerk of any adjoining municipality of the pendency of any application, petition, appeal, request or plan concerning any project on any site in which:

   a. any portion of the property affected by a decision of the agency is within five hundred feet of the boundary of an adjoining municipality;
b. a significant portion of the traffic to the completed project on the site will use streets within the adjoining municipality to enter or exit the site;

c. a significant portion of the sewer or water drainage from the project on the site will flow through and significantly impact the drainage or sewerage system within the adjoining municipality; or

d. water run-off from the improved site will impact streets or other municipal or private property within the adjoining municipality.

Such notice shall be made by certified mail, return receipt requested, and shall be mailed within seven days of the date of receipt of the application, petition, appeal, request or plan.

8.3 When an application is filed to conduct or cause to be conducted a regulated activity upon an inland wetland or watercourse, any portion of which is within the watershed of a water company as defined in Section 16-1 of the Connecticut General Statutes, the applicant shall provide written notice of the application to the water company provided such water company has filed a map showing the boundaries of the watershed on the land records of the municipality in which the application is made and with the inland wetlands agency of such municipality. Such notice shall be made by certified mail, return receipt requested, and shall be mailed within seven days of the date of the application. The water company, through a representative, may appear and be heard at any hearing on the application. Documentation of such notice shall be provided to the Agency.

8.4 The date of receipt of a petition, application, request or appeal shall be the day of the next regularly scheduled meeting of the Agency, immediately following the day of submission to the Agency or its agent of such petition, application, request or appeal or thirty-five days after such submission, whichever is sooner.

8.5 At any time during the review period, the applicant shall provide such additional information as the Agency may reasonably require. Requests for such additional information shall not stay the time limitations as set forth in Sub-Section 11.2 of these regulations.

8.6 All applications shall be open for public inspection.

8.7 Incomplete applications may be denied.

Section 9
Public Hearings

9.1 The inland wetlands agency shall not hold a public hearing on an application unless the inland wetlands agency determines that the proposed activity may have a significant impact on wetlands or watercourses, a petition signed by at least twenty-five persons who are eighteen years of age or older and who reside in the municipality in which the regulated activity is proposed, requesting a hearing is filed and validated with the inland wetlands agency not later than fourteen days after the date of receipt of such application, or the inland wetlands agency finds that a public hearing regarding such application would be in the public interest. The inland wetlands agency may issue a permit without a public hearing provided no petition provided for in this Section is filed with the inland wetlands agency on or before the fourteenth day after the date of receipt of the application. Such hearing shall be held no later than sixty-
five days after the receipt of such application. All applications and maps and documents relating thereto shall be open for public inspection. At such hearing any person or persons may appear and be heard.

9.2 Notice of the public hearing shall be published at least twice at intervals of not less than two days, the first not more than fifteen days and not fewer than ten days, and the last not less than two days before the date set for the hearing in a newspaper having a general circulation in each town where the affected wetland and watercourse is located.

Section 10
Considerations for Decision

10.1 The Agency may consider the following in making its decision on an application:

a. The application and its supporting documentation
b. Reports from other agencies and commissions including but not limited to the Town of Berlin:
   1. Conservation Commission
   2. Planning, Zoning, or Planning and Zoning Commissions
   3. Building Official
   4. Health Officer
c. The Agency may also consider comments on any application from the Hartford County Soil and Water Conservation District, the Mid-state Regional Planning Agency or other regional organizations (i.e. Council of Elected Officials); agencies in adjacent municipalities which may be affected by the proposed activity, or other technical agencies or organizations which may undertake additional studies or investigations.
d. Non-receipt of comments from state agencies and commissions listed in subdivision 10.1b and 10c above within the prescribed time shall neither delay nor prejudice the decision of the Agency.
e. For an application for which a public hearing is held, public comments, evidence and testimony.

10.2 Criteria for Decision. In carrying out the purposes and policies of Sections 22a-36 to 22a-45, inclusive, of the Connecticut General Statutes, including matters relating to regulating, licensing and enforcing of the provisions thereof, the Agency shall take into consideration all relevant facts and circumstances, including but not limited to:

a. the environmental impact of the proposed regulated activity on wetlands or watercourses;
b. the applicant’s purpose for, and any feasible and prudent alternatives to, the proposed regulated activity which alternatives would cause less or no environmental impact to wetlands or watercourses.
c. the relationship between the short term and long term impacts of the proposed regulated activity on wetlands or watercourses and the maintenance and enhancement of long-term productivity of such wetlands or watercourses.
d. Irreversible and irretrievable loss of wetland or watercourse resources which would be caused by the proposed regulated activity, including the extent to which such activity would foreclose a future ability to protect, enhance or restore such resources, and any mitigation measures which may be considered as a condition of issuing a permit for such activity including, but not limited to, measures to (1) prevent or minimize pollution or other
environmental damage, (2) maintain or enhance existing environmental quality, or (3) in the following order of priority: restore, enhance and create productive wetland or watercourse resources;
e. the character and degree of injury to, or interference with, safety, health or the reasonable use of property which is caused or threatened by the proposed regulated activity; and
f. impacts of the proposed regulated activity on wetlands or watercourses outside the area for which the activity is proposed and future activities associated with or reasonably related to, the proposed regulated activity which are made inevitable by the proposed regulated activity and which may have an impact on wetlands and watercourses.

10.3 In the case of an application which received a public hearing pursuant to a finding by the Agency that the proposed activity may have a significant impact on wetlands or watercourses, a permit shall not be issued unless the Agency finds on the basis of the record that a feasible and prudent alternative does not exist. In making this finding the Agency shall consider the facts and circumstances set forth in Sub-Section 10.2 of this Section. The finding and the reasons therefore shall be stated on the record in writing.

10.4 In the case of an application which is denied on the basis of a finding that there may be feasible and prudent alternatives to the proposed regulated activity which have less adverse impact on wetlands or watercourses, the Agency shall propose on the record in writing the types of alternatives which the applicant may investigate provided this Sub-Section shall not be construed to shift the burden from the applicant to prove that he is entitled to the permit or to present alternatives to the proposed regulated activity.

10.5 For purposes of this Section, (1) “wetlands and watercourses” includes aquatic, plant or animal life and habitats in wetlands or watercourses, and (2) “habitats” means areas or environments in which an organism or biological population normally lives or occurs.

10.6 A municipal inland wetlands agency shall not deny or condition an application for a regulated activity in an area outside wetlands or watercourses on the basis of an impact or effect on aquatic, plant, or animal life unless such activity will likely impact or affect the physical characteristics of such wetlands or watercourses.

10.7 In reaching its decision on any application after a public hearing, the Agency shall base its decision on the record of that hearing. Documentary evidence or other material not in the hearing record shall not be considered by the Agency in its decision.

10.8 In the case of an application where the applicant has provided written notice pursuant to subsection 7.11c of these regulations, the holder of the restriction may provide proof to the inland wetlands agency that granting of the permit application will violate the terms of the restriction. Upon a finding that the requested land use violates the terms of such restriction, the inland wetlands agency shall not grant the permit approval.

10.9 In the case of an application where the applicant fails to comply with the provisions of subsections 7.11c or 7.11d of these regulations, (1) the party holding the conservation preservation restriction, other than a State agency that holds such restriction, may, not later than fifteen days after receipt of actual notice of permit approval, file an appeal with the inland wetlands agency, subject to the rules and regulations of such agency relating to appeals. The inland wetlands agency shall reverse the permit approval upon a finding that the request land use violates the
terms of such restriction.; or (2) the State agency that holds such restriction may, not later than thirty days after receipt of actual notice of permit approval, file an appeal with the inland wetlands agency, subject to the rules and regulations of such agency relating to appeals. The inland wetlands agency shall immediately reverse such permit approval if the commissioner of the State agency that holds such restriction certifies that the land use authorized in such permit violates the terms of such conservation or preservation restriction.

10.10 Nothing in sub-sections 7.11c or 7.11d of these regulations shall be construed to prohibit the filing of a permit application or to require such written notice when the activity that is the subject of such permit application will occur on a portion of property that is not restricted under the terms of such conservation or preservation restriction.

Section 11
Decision Process and Permit

11.1 The Agency, or its duly authorized agent acting pursuant to Section 12 of these regulations, may, in accordance with Section 10 of these regulations, grant the application as filed or grant it upon other terms, conditions, limitations or modifications of the regulated activity designed to carry out the purposes and policies of the Act, or deny the application. Such terms may include any reasonable measures which would mitigate the impacts of the regulated activity and which would (a) prevent or minimize pollution or other environmental damage, (b) maintain or enhance existing environmental quality, or (c) in the following order of priority: restore, enhance and create productive wetland or watercourse resources.

11.2 No later than sixty-five (65) days after receipt of an application, the Agency may hold a public hearing on such application. At such hearing any person or persons may appear and be heard and may be represented by agent or attorney. The hearing shall be completed within thirty-five (35) days of its commencement. Action shall be taken on applications within thirty-five (35) days after completion of a public hearing. In the absence of a public hearing, action shall be taken on applications within sixty-five (65) days from the date of receipt of the application. The applicant may consent to one or more extensions of the periods specified in this Sub-Section, provided the total extension of all such periods shall not be for longer than sixty-five (65) days, or may withdraw the application. The failure of the Agency to act within any time period specified in this Sub-Section, or any extension thereof, shall not be deemed to constitute approval of the application. An application deemed incomplete by the Agency shall be withdrawn by the applicant or denied by the Agency.

11.3 The Agency shall state upon its record the reasons and bases for its decision.

11.4 The Agency shall notify the applicant and any person entitled to such notice of its decision within fifteen (15) days of the date of the decision by certified mail, return receipt requested, and the Agency shall cause notice of its order in the issuance or denial of the permit, to be published in a newspaper having general circulation in the town wherein the inland wetland or watercourse lies. In any case in which such notice is not published within such fifteen day period, the applicant may provide for the publication of such notice within ten days thereafter.

11.5 If an activity authorized by an inland wetland permit also involves an activity which requires a zoning or subdivision approval, special zoning permit, or variance or special exception, under Sections 8-5(g), 8-5c, or 8-26 of the Connecticut General Statues, the Agency shall file a copy
of the decision and report on the application with the Town of Berlin Planning, Zoning, or Planning and Zoning Commission within fifteen days of the date of the decision thereon.

11.6 Any permit issued by the Agency for the development of land for which an approval is required under Section 8-3, 8-25 or 8-26 of the Connecticut General Statutes shall be valid for five years provided the Agency may establish a specific time period within which any regulated activity shall be conducted. Any permit issued by the Agency for any other activity shall be valid for not less than two years and not more than five years. Any permit issued by the Agency prior to July 1, 2011 that was in effect and did not expire prior to May 9, 2011 shall be valid for a period not less than nine years after the date of such approval.

11.7 No permit issued by the Agency shall be assigned or transferred without the written permission of the Agency.

11.8 If a bond or insurance is required in accordance with Section 13 of these regulations, the Agency may withhold issuing the permit until such bond or insurance is provided.

11.9 General provisions in the issuance of all permits:

a. The Agency has relied in whole or in part on information provided by the applicant and if such information subsequently proves to be false, deceptive, incomplete or inaccurate, the permit may be modified, suspended or revoked.

b. All permits issued by the Agency are subject to and do not derogate any present or future rights or powers of the Agency or the Town of Berlin, and convey no rights in real estate or material nor any exclusive privileges, and are further subject to any and all public and private rights and to any federal, state, and municipal laws or regulations pertinent to the subject land or activity.

c. If the activity authorized by the Agency’s permit also involves an activity which requires zoning or subdivision approval, special permit, variance or special exception under Sections 8.3(g), 8-3c, or 8-26 of the Connecticut General Statutes, no work pursuant to the wetland permit may begin until such approval is obtained.

d. In constructing the authorized activities, the permittee shall implement such management practices consistent with the terms and conditions of the permit as needed to control storm water discharges and to prevent erosion and sedimentation and to otherwise prevent pollution of wetlands and watercourses.

e. Permits are not transferable without the prior written consent of the Agency.

Section 12
Action by Duly Authorized Agent

12.1 The Agency may delegate to its duly authorized agent the authority to approve or extend a license for an activity that is not located in a wetland or watercourse when such agent finds that the conduct of such activity would result in no greater that a minimal impact on any wetlands or watercourses provided such agent has completed the comprehensive training program developed by the Commissioner of Environmental Protection pursuant to Section 22a-39 of the Connecticut General Statutes. Requests for such approval shall be made on a form provided by the Agency and shall contain the information listed under Section 7.5 of these regulations and any other information the Agency may reasonably require. Notwithstanding the provisions for
receipt and processing applications prescribed in Sections 8, 9 and 11 of these regulations, such agent may approve or extend such an activity at any time.

12.2 Any person receiving such approval from such agent shall, within ten days of the date of such approval, publish, at the applicant's expense, notice of the approval in a newspaper having a general circulation in the town wherein the activity is located or will have an effect. Any person may appeal such decision of such agent to the Agency within fifteen days after the publication date of the notice and the Agency shall consider such appeal at its next regularly scheduled meeting provided such meeting is no earlier than three business days after receipt by such Agency or its agent of such appeal. Any person may appear and be heard at the meeting held by the Agency to consider the subject appeal. The Agency shall, at its discretion, sustain, alter, or reject the decision of its agent or require an application for a permit in accordance with Section 7 of these regulations.

Section 13
Bond and Insurance

13.1 The Agency may require, as a permit condition, the filing of a bond with such surety in such amount and in a form approved by the Agency.

13.2 The bond or surety shall be conditioned on compliance with the provisions of these regulations and the terms, conditions and limitations established in the permit.

Section 14
Enforcement

14.1 The Agency may appoint an agent or agents to act in its behalf with the authority to issue notices of violation or cease and desist orders, and carry out other actions or investigations necessary for the enforcement of these regulations. In carrying out the purposes of this Section, the Agency, or its duly authorized agent, shall take into consideration the criteria for decision under Section 10.2 of these regulations.

14.2 The Agency, or its agent, may make regular inspections at reasonable hours of all regulated activities for which permits have been issued with the consent of the property owner or the authorized agent of the owner during the life of the permit.

14.3 In the case in which a permit has not been issued or a permit has expired, the Agency, or its agent, may make regular inspections (at reasonable hours) with the consent of the property owner, or the authorized agent of the property owner.

14.4 If the Agency, or its duly authorized agent, finds that any person is conducting or maintaining any activity, facility or condition which is in violation of the Act or these regulations, the Agency, or its duly authorized agent, may:

a. issue a written order by certified mail, return receipt requested, to such person conducting such activity or maintaining such facility or condition to immediately cease such activity or to correct such facility or condition. Within ten (10) calendar days of the issuance of such order the Agency shall hold a hearing to provide the person an opportunity to be heard and
show cause why the order should not remain in effect. The Agency shall consider the facts presented at the hearing and within ten (10) days of the completion of the hearing notify the person by certified mail that the original order remains in effect, that a revised order is in effect, or that the order has been withdrawn. The Agency shall publish notice of its decision in a newspaper having general circulation in the municipality. The original order shall be effective upon issuance and shall remain in effect until the Agency affirms, revises or withdraws the order. The issuance of an order pursuant to this Sub-Section shall not delay or bar an action pursuant to Section 22a-44(b) of the Connecticut General Statutes, as amended.

b. issue a notice of violation to such person conducting such activity or maintaining such facility or condition, stating the nature of the violation, the jurisdiction of the Agency, and prescribing the necessary action and steps to correct the violation including, without limitation, halting work in wetlands or watercourses. The Agency may request that the individual appear at the next regularly scheduled meeting of the Agency to discuss the unauthorized activity, and/or provide a written reply to the notice or file an application for the necessary permit. Failure to carry out the action(s) directed in a notice of violation may result in issuance of the order provided in Section 14.3.a or other enforcement proceedings as provided by law.

14.5 The Agency may suspend or revoke a permit if it finds that the permittee has not complied with the terms, conditions or limitations set forth in the permit or has exceeded the scope of the work as set forth in the application including application plans. Prior to revoking or suspending any permit, the Agency shall issue notice to the permittee, personally or by certified mail, return receipt requested, setting forth the facts or conduct which warrants the intended action. The Agency shall hold a hearing to provide the permittee an opportunity to show that it is in compliance with its permit and any and all requirements for retention of the permit. The permittee shall be notified of the Agency’s decision to suspend, revoke, or maintain a permit by certified mail within fifteen (15) days of the date of its decision. The Agency shall publish notice of the suspension or revocation in a newspaper having general circulation in the municipality.

Section 15
Amendments

15.1 These regulations and the Inland Wetlands and Watercourses Map for the Town of Berlin may be amended, from time to time, by the Agency in accordance with changes in the Connecticut General Statutes, or regulations of the Connecticut Department of Environmental Protection, or as new information regarding soils and inland wetlands and watercourses becomes available.

15.2 An application filed with the Agency which is in conformance with the applicable inland wetlands regulations as of the date of the receipt of such application shall not be required thereafter to comply with any change in inland wetland regulations, including changes to setbacks and buffers, taking effect on or after the date of such receipt and any appeal from the decision of such Agency with respect to such application shall not be dismissed by the Superior Court on the grounds that such a change has taken effect on or after the date of such receipt. The provisions of this Section shall not be construed to apply (1) to the establishment, amendment or change of boundaries of inland wetlands or watercourses or (2) to any change in regulations necessary to make such regulations consistent with the provisions of the Act as of the date of such receipt.
15.3 These regulations and the Town of Berlin Inland Wetlands and Watercourses Map shall be amended in the manner specified in Section 22a-42a of the Connecticut General Statutes, as amended. The Agency shall provide the Commissioner of Environmental Protection with a copy of any proposed regulations and notice of the public hearing to consider any proposed regulations or amendments thereto, except map amendments, at least thirty-five days before the public hearing on their adoption.

(Note: Application fee schedules shall be adopted as Agency regulations or as otherwise provided by town ordinance.)

15.4 Petitions requesting changes or amendments to the "Inland Wetlands and Watercourses Map, Berlin, Connecticut, shall contain at least the following information:

a. the petitioner's name, mailing address and telephone number;
b. the address, or location, of the land affected by the petition;
c. the petitioner's interest in the land affected by the petition;
d. map(s) showing the geographic location of the land affected by the petition and the existing and the proposed wetland(s) and watercourse(s) boundaries on such land in accurate detail together with the documentation supporting such proposed boundary locations; and
e. the reasons for the requested action.

15.5 Any person who submits a petition to amend the Inland Wetlands and Watercourses Map, Berlin, Connecticut, shall bear the burden of proof for all requested map amendments. Such proof may include, but is not limited to, professional interpretation of aerial photography and remote sensing imagery, resource mapping, soils mapping, or other information acceptable to the Agency. If such person is the owner, developer or contract purchaser of the land which is the subject of the petition, or if such person is representing the interests of such an owner, developer or purchaser, in addition to the information required in Sub-Section 15.4, the petition shall include:

a. the name, mailing address and telephone number of the owner(s) of such land and owner(s) agent or other representative;
b. the names and mailing addresses of the owners of abutting land;
c. documentation by a soil scientist of the distribution of wetland soils on said land. Such documentation shall at a minimum include the report of the soil scientist documenting the location of wetland soils on the land and a map of the said land indicating the flag locations set by the soil scientist and defining the boundaries of wetland soil types; and
d. map(s) showing any proposed development of the land in relation to existing and proposed wetland and watercourse boundaries.

15.6 Watercourses shall be delineated by a soil scientist, geologist, ecologist or other qualified individual.

15.7 A public hearing shall be held on petitions to amend the Inland Wetlands and Watercourses Map. Notice of the hearing shall be published in a newspaper having a general circulation in the municipality where the land that is the subject of the hearing is located at least twice at intervals of not less than two days, the first not more than fifteen days, nor less than ten days,
and the last not less than two days before the date set for the hearing. All materials including maps and documents relating to the petition shall be open for public inspection.

15.8 The agency shall hold a public hearing on a petition to amend the regulations and the Inland Wetlands and Watercourses Map within sixty-five days after receipt of such petition. The hearing shall be completed within thirty-five days after commencement. The agency shall act upon the changes requested in such petition within sixty-five days after completion of such hearing. At such hearing, any person or persons may appear and be heard and may be represented by agent or attorney. The petitioner may consent to one or more extensions of any period specified in this Sub-Section, provided the total extension of all such periods shall not be for longer than sixty-five days, or may withdraw such petition. Failure of the agency to act within any time period specified in this Sub-Section or any extension thereof, shall not be deemed to constitute approval of the petition.

15.9 The Agency shall make its decision and state, in writing, the reasons why the change in the Inland Wetlands and Watercourses Map was made.

Section 16
Appeals

16.1 Appeal on actions of the Agency shall be made in accordance with the provisions of Section 22a-43 of the Connecticut General Statutes, as amended.

16.2 Notice of such appeal shall be served upon the Agency and the Commissioner of Environmental Protection.

Section 17
Conflict and Severance

17.1 If there is a conflict among the provisions of these regulations, the provision which imposes the most stringent standards for the use of wetlands and watercourses shall govern. The invalidity of any word, clause, sentence, Section, part, Sub-Section, subdivision or provision of these regulations shall not affect the validity of any other part which can be given effect without such invalid part or parts.

17.2 If there is a conflict between the provisions of these regulations and the provisions of the Act, the provisions of the Act shall govern.

Section 18
Other Permits

18.1 Nothing in these regulations shall obviate the requirements for the applicant to obtain any other assents, permits or licenses required by law or regulation by the Town of Berlin, the State of Connecticut or the Government of the United States including any approval required by the Connecticut Department of Environmental Protection and the U.S. Army Corps of Engineers. Obtaining such assents, permits or licenses is the sole responsibility of the applicant.
Section 19
Application Fees

19.1 Method of Payment. All fees required by these regulations shall be submitted to the Agency by certified check or money order payable to the Town of Berlin at the time the application is filed with the Agency.

19.2 No application shall be granted or approved by the Agency unless the correct application fee is paid in full or unless a waiver has been granted by the Agency pursuant to Sub-Section 19.7 of these regulations.

19.3 The application fee is not refundable.

19.4 Definitions. As used in this Section:

"Residential Uses" means activities carried out on property developed for permanent housing or being developed to be occupied by permanent housing.

"Commercial uses" means activities carried out on property developed for industry, commerce, trade, recreation, or business or being developed to be occupied for such purposes, for profit or nonprofit.

"Other uses" means activities other than residential uses or commercial uses.

19.5 Fee Schedule. Application fees shall be based on the following schedule:

a. Regulated Activities (without a public hearing): .......... ..........$110.00
b. Regulated Activities (with a public hearing): .......... ..........$210.00
c. Map Amendment Petitions (requires a public hearing): .......... $210.00 plus .......... .......... .......... .......... $10.00 per acre of amendment

19.6 Exemption. Boards, commissions, councils and departments of the Town of Berlin are exempt from all fee requirements.

19.7 Waiver. The applicant may petition the Agency to waive, reduce or allow delayed payment of the fee. Such petitions shall be in writing and shall state fully the facts and circumstances the Agency should consider in its determination under this Sub-Section. The Agency may waive all or part of the application fee if the Agency determines that:

a. The activity applied for would clearly result in a substantial public benefit to the environment or to the public health and safety and the applicant would reasonably be deterred from initiating the activity solely or primarily as a result of the amount of the application fee, or
b. The amount of the application fee is clearly excessive in relation to the cost to the Town for reviewing and processing the application.
c. The applicant has shown good cause.

The Agency shall state upon its record the basis for all actions under this Sub-Section.
Section 20
Effective Date of Regulations

20.1 These regulations are effective upon filing in the Office of the Town Clerk and publication of a notice of such filing in a newspaper having general circulation in the Town of Berlin.

Date of Adoption: May 3, 2012
Effective Date: May 24, 2012
APPENDIX A

Connecticut General Statute Section 1-1(q)

Except as otherwise specifically defined, the words “agriculture” and “farming” shall include cultivation of the soil, dairying, forestry, raising or harvesting any agricultural or horticultural commodity, including the raising, shearing, feeding, caring for, training and management of livestock, including horses, bees, poultry, fur-bearing animals and wildlife, and the raising or harvesting of oysters, clams, mussels, other molluscan shellfish or fish; the operation, management, conservation, improvement or maintenance of a farm and its buildings, tools and equipment, or salvaging timber or cleared land of brush or other debris left by storm, as an incident to such farming operations; the production or harvesting of maple syrup or maple sugar, or any agricultural commodity, including lumber, as an incident to ordinary farming operations or the harvesting of mushrooms, the hatching of poultry, or the construction, operation or maintenance of ditches, canals, reservoirs or waterways used exclusively for farming purposes; handling, planting, drying, packing, packaging, processing, freezing, grading, storing or delivering to storage or to market, or to a carrier for transportation to market, or for direct sale any agricultural or horticultural commodity as an incident to ordinary farming operations, or, in the case of fruits and vegetables, as an incident to the preparation of such fruits or vegetables for market or for direct sale. The term “farm” includes farm buildings, and accessory buildings thereto, nurseries, orchards, ranges, greenhouses, hoophouses and other temporary structures or other structures used primarily for the raising and, as an incident to ordinary farming operations, the sale of agricultural or horticultural commodities. The term “aquaculture” means the farming of the waters of the state and tidal wetlands and the production of protein food, including fish, oysters, clams, mussels and other molluscan shellfish, on leased, franchised and public underwater farm lands. Nothing herein shall restrict the power of a local zoning authority under Chapter 124.
APPENDIX B

Connecticut General Statute Section 8-7d

Hearings and decisions. Time limits. Day of receipt. Notice to adjoining municipality. (a) In all matters wherein a formal petition, application, request or appeal must be submitted to a zoning commission, planning and zoning commission or zoning board of appeals under this chapter, a planning commission under chapter 126 or an inland wetlands agency under chapter 440 and a hearing is required or otherwise held on such petition, application, request or appeal, such hearing shall commence within sixty-five days after receipt of such petition, application, request or appeal and shall be completed within thirty-five days after such hearing commences, unless a shorter period of time is required under this chapter, chapter 126 or chapter 440. Notice of the hearing shall be published in a newspaper having a general circulation in such municipality where the land that is the subject of the hearing is located at least twice, at intervals of not less than two days, the first not more than fifteen days or less than ten days and the last not less than two days before the date set for the hearing. In addition to such notice, such commission, board or agency may, by regulation, provide for notice to persons who own or occupy land that is adjacent to the land that is the subject of the hearing. All applications and maps and documents relating thereto shall be open for public inspection. At such hearing, any person or persons may appear and be heard and may be represented by agent or by attorney. All decisions on such matters shall be rendered within sixty-five days after completion of such hearing, unless a shorter period of time is required under this chapter, chapter 126 or chapter 440. The petitioner or applicant may consent to one or more extensions of any period specified in this Sub-Section, provided the total extension of all such periods shall not be for longer than sixty-five days, or may withdraw such petition, application, request or appeal.

(b) Notwithstanding the provisions of Sub-Section (a) of this Section, whenever the approval of a site plan is the only requirement to be met or remaining to be met under the zoning regulations for any building, use or structure, a decision on an application for approval of such site plan shall be rendered within sixty-five days after receipt of such site plan. Whenever a decision is to be made on an application for subdivision approval under chapter 126 on which no hearing is held, such decision shall be rendered within sixty-five days after receipt of such application. Whenever a decision is to be made on an inland wetlands and watercourses application under chapter 440 on which no hearing is held, such decision shall be rendered within sixty-five days after receipt of such application. The applicant may consent to one or more extensions of such period, provided the total period of any such extension or extensions shall not exceed sixty-five days or may withdraw such plan or application.

(c) For purposes of Sub-Section (a) or (b) of this Section and Section 7-246a, the date of receipt of a petition, application, request or appeal shall be the day of the next regularly scheduled meeting of such commission, board or agency, immediately following the day of submission to such commission, board or agency or its agent of such petition, application, request or appeal or thirty-five days after such submission, whichever is sooner. If the commission, board or agency does not maintain an office with regular office hours, the office of the clerk of the municipality shall act as the agent of such commission, board or agency for the receipt of any petition, application, request or appeal.
(d) The provisions of Sub-Section (a) of this Section shall not apply to any action initiated by any zoning or planning and zoning commission regarding adoption or change of any zoning regulation or boundary.

(e) Notwithstanding the provisions of this Section, if an application involves an activity regulated pursuant to Sections 22a-36 to 22a-45, inclusive, and the time for a decision by a zoning commission or planning and zoning commission established pursuant to this Section would elapse prior to the thirty-fifth day after a decision by the inland wetlands agency, the time period for a decision shall be extended to thirty-five days after the decision of such agency. The provisions of this Sub-Section shall not be construed to apply to any extension consented to by an applicant or petitioner.

(f) The zoning commission, planning commission, zoning and planning commission, zoning board of appeals or inland wetlands agency shall notify the clerk of any adjoining municipality of the pendency of any application, petition, appeal, request or plan concerning any project on any site in which: (1) Any portion of the property affected by a decision of such commission, board or agency is within five hundred feet of the boundary of the adjoining municipality; (2) a significant portion of the traffic to the completed project on the site will use streets within the adjoining municipality to enter or exit the site; (3) a significant portion of the sewer or water drainage from the project on the site will flow through and significantly impact the drainage or sewerage system within the adjoining municipality; or (4) water runoff from the improved site will impact streets or other municipal or private property within the adjoining municipality. Such notice shall be made by certified mail, return receipt requested, and shall be mailed within seven days of the date of receipt of the application, petition, request or plan. Such adjoining municipality may, through a representative, appear and be heard at any hearing on any such application, petition, appeal, request or plan.
APPENDIX C

Guidelines, Upland Review Area Regulations
Connecticut’s Inland Wetlands & Watercourses Act
GUIDELINES
UPLAND REVIEW AREA REGULATIONS
CONNECTICUT'S INLAND WETLANDS & WATERCOURSES ACT

June, 1997

Wetlands Management Section
Bureau of Water Management
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(Printed on Recycled Paper)
To: Municipal Inland Wetland Agencies

From: Charles E. Berger, Director
Inland Water Resources Division

Date: June 30, 1997

Under the Inland Wetlands and Watercourses Act, Connecticut's municipalities regulate proposed development activities in or affecting wetlands and watercourses. In support of the municipal wetland agencies, DEP’s Wetlands Management Section provides a comprehensive Wetlands Management Training Program for wetland agency commissioners and Model Regulations for local inland wetland programs. *Guidelines for Upland Review Area Regulations* was published in accordance with sections 22a-42(d) and 22a-42a(f) of the General Statutes to assist Connecticut’s inland wetland agencies in developing and implementing municipal regulations for activities proposed on uplands around wetlands or watercourses.

The guide was drafted in response to inquiries from wetland agency members, river management groups, the regulated community, and other interest persons, for guidance in implementing what are popularly called buffer or setback provisions in wetland regulations. The guide uses the term *upland review area* to describe the non-wetland or non-watercourse area in which certain types of activities, as defined in municipal regulations, are regulated activities. Other terms for describing this area are used in municipal regulations. We selected the term *upland review area* because it best conveys the regulatory scheme under the inland wetlands statutes wherein a wetland agency reviews regulated activities case-by-case and approves or disapproves them on their merits.

For further information about DEP's Inland Wetlands Management Programs, please call (860) 424-3019.
Guidelines for Upland Review Area Regulations
Under Connecticut’s Inland Wetlands and Watercourses Act

Wetlands and Uplands: an Introduction

The relationship between a wetland or watercourse and its surrounding upland is complex. Upland land clearing, excavating, filling and other construction activities if not properly planned and executed can have significant impacts on adjacent wetlands and watercourses. Under the Inland Wetlands and Watercourses Act, the municipal wetlands agency has broad authority to issue permits not only for activities in wetlands or watercourses themselves, but for activities located elsewhere when such activities are likely to impact or affect wetlands or watercourses. It is the department's policy to encourage municipal wetland agencies to review proposed activities located in upland areas surrounding wetlands and watercourses wherever such activities are likely to impact or affect wetlands or watercourses.¹

An understanding of how certain activities in upland areas affect wetlands and watercourses has led most towns to adopt regulations requiring wetland agency review of proposed development adjacent to wetlands and watercourses.² Such regulations are optional under the Act, but serve to inform the public as to the circumstances under which a wetlands permit is required of activities proposed adjacent to a wetland or watercourse.³

While requiring a permit for specified activities within defined upland review area boundaries, these wetland agencies still maintain their authority to regulate proposed activities located in more distant upland areas if they find that the activities are likely to impact or affect a wetland or watercourse.

The purpose of these guidelines is to assist municipal wetlands agencies to review and revise their wetlands and watercourses regulations, if necessary. As such, the guidelines provide a foundation for consistency in municipal regulations and permitting activities. They are not intended to substitute for reasoned evaluation and judgement by municipal wetlands agencies of the local wetland and watercourse resources, the conditions surrounding those resources, and the types of activities which are likely to impact or affect those resources. Nor are they intended to guide wetlands agencies through the decision making process for acting on permits. Both these topics are more appropriately addressed in detail through the department's Inland Wetlands Management Training Program for wetland agency commissioners and their staff. Wetlands agencies are reminded that they should review proposed changes in their inland wetlands and watercourses regulations with their town attorney.
Model Municipal Upland Review Area Regulations

In addition to implementing the law to protect wetlands and watercourses, regulations inform the public on what to expect if one proposes an activity in or affecting a wetland or watercourse in the subject town. Upland review area regulations reduce or eliminate the need for case-by-case rulings by providing notice as to what activities need wetland permits. By specifying where a permit is required, such regulations foster consistency and are convenient for the public. In determining the boundaries for its upland review area regulations, the wetland agency should consider the specific kinds of development activities on uplands which are likely to impact or affect wetlands and watercourses and the nature of that impact or affect.

An upland activity which is likely to impact or affect wetlands or watercourses is a *regulated activity* and should be identified as such in the regulations. In identifying upland review area regulated activities, the wetlands agency must apply the standard established under section 22a-42a(f) of the General Statutes and find that the activity is "... likely to impact or affect wetlands or watercourses." Examples of upland regulated activities are included in the models below. In implementing its upland review area regulations, the wetland agency must be cognizant that certain proposed activities, which are permitted uses as of right or as nonregulated uses under section 22a-40 of the General Statutes, are not regulated and do not require a permit from the wetlands agency under the Inland Wetlands and Watercourses Act.

There are a number of ways that the boundaries of an upland review area may be defined in regulations. In selecting its approach, the wetland agency should consider the special nature of their town's wetland and watercourse resources, the purposes and intent of the Inland Wetlands and Watercourses Act, and how the regulations will be implemented.

Three models for upland review area regulations are presented below. The first model provides that certain specified activities if conducted within a specified distance measured from any wetland or watercourse are regulated activities. As such, the first model is the basic model and easiest to implement. The second model expands upon that basic model by identifying specific wetland and watercourse resources of special concern and providing site specific review area widths for those resources. This model should be used where the wetland agency believes additional protection though a wider review area is needed or to take existing land development or uses into account with a narrower review area. The third model adds to the basic model a slope and soil factor in determining the site specific width or location of the upland review area. The first and second models are easily understood and implemented, while the third is technically complex and not easily implemented without trained staff.

Note that the first sentence of each model definition below is the definition of the term *regulated activity* taken from section 22a-38(13) of the Inland Wetlands and Watercourses Act and, as such, its meaning may not be changed in municipal inland wetlands regulations.
Model Regulation Options

Model I. “Regulated activity” means any operation within or use of a wetland or watercourse involving removal or deposition of material, or any obstruction, construction, alteration or pollution, of such wetlands or watercourses, but shall not include the specified activities in section 22a-40 of the Connecticut General Statutes. Furthermore, any clearing, grubbing, filling, grading, paving, excavating, constructing, depositing or removing of material and discharging of storm water on the land within _____ feet measured horizontally from the boundary of any wetland or watercourse is a regulated activity. The Agency may rule that any other activity located within such upland review area or in any other non-wetland or non-watercourse area is likely to impact or affect wetlands or watercourses and is a regulated activity.

Model II. “Regulated activity” means any operation within or use of a wetland or watercourse involving removal or deposition of material, or any obstruction, construction, alteration or pollution, of such wetlands or watercourses, but shall not include the specified activities in section 22a-40 of the Connecticut General Statutes. Furthermore, any clearing, grubbing, filling, grading, paving, excavating, constructing, depositing or removing of material and discharging of storm water on the land within the following upland review areas is a regulated activity:

1. within _____ feet measured horizontally from the ordinary high water mark of Town Lake, Smith Lake or Pine Meadow Pond;
2. within _____ feet measured horizontally from the ordinary high water mark of Ledge Brook and of Big Trout Brook between the Route 51 and Main Street Bridges over Big Trout Brook.
3. within _____ feet measured horizontally from the boundary of the wetlands comprising Great Swamp;
4. within the area enclosed by the _____ foot contour elevation surrounding Ice Pond Bog; such contour is depicted on the Inland Wetlands and Watercourses Map for the Town of _____;
5. within _____ feet measured horizontally from the boundary of any other wetland or watercourse.

The Agency may rule that any other activity located within such upland review area or in any other non-wetland or non-watercourse area is likely to impact or affect wetlands or watercourses and is a regulated activity.

Model III. “Regulated activity” means any operation within or use of a wetland or watercourse involving removal or deposition of material, or any obstruction, construction, alteration or pollution, of such wetlands or watercourses, but shall not include the
specified activities in section 22a-40 of the Connecticut General Statutes. Furthermore, any clearing, grubbing, filling, grading, paving, excavating, constructing, depositing or removing of material and discharging of storm water in the following areas is a regulated activity:

(1) on land within ____ feet measured horizontally from the boundary of any wetland or watercourse, provided
(2) if the slope of such land exceeds 5%, within the distance measured horizontally from the boundary of the wetland or watercourse equal to ____ feet plus an additional 5 feet for each 1% increase in slope greater than 5%, but not more than __[e.g., 200]____ feet;
(3) on land designated on the Inland Wetlands and Watercourses Map of the Town of __________ as containing highly erodible soils.

The Agency may rule that any other activity located within such upland review area or in any other non-wetland or non-watercourse area is likely to impact or affect wetlands or watercourses and is a regulated activity.

Considerations in Establishing Upland Review Areas

Regulated Activities

The Inland Wetlands and Watercourses Act (Sections 22a-36 through 22a-45a of the General Statutes) defines regulated activity to mean:

"... any operation within or use of a wetland or watercourse involving the removal or deposition of material, or any obstruction, construction, alteration or pollution of such wetlands or watercourses, but shall not include the specified activities in section 22a-10 of the Connecticut General Statutes."  

In addition to activities located in a wetland or watercourse, any activity located in a non-wetland or non-watercourse area which is likely to impact or affect a wetland or watercourse may be deemed to be a regulated activity (unless the activity is a use permitted as of right or as a nonregulated activity). However, the likelihood of an activity having a substantive impact on a wetland or watercourse will depend on a number of factors, including the nature of the wetland or watercourse, the activity, soils and slope of the land, and would generally decrease with increasing distance of the activity from the wetland or watercourse. At some point, impacts from that activity on wetlands and watercourses would be expected to become de minimis and not measurable.

The DEP believes that a 100 foot-wide upland review area is sufficient for reviewing construction
activities in areas surrounding wetlands or watercourses because most of the activities which are likely to impact or affect these resources will be located in that area. However, based on the special factors of concern to a wetlands agency, e.g., wetland and watercourse values, slope, soils, existing development, etc., a greater or lesser distance may be appropriate for a particular municipality. However, beyond 100 feet it is neither practical nor desirable, from a wetlands and watercourses management perspective, to automatically require an inland wetlands permit for all construction activities. It must be emphasized that other municipal authorities and mechanisms involving planning, zoning and subdivision decisions and plans of conservation and development, play a role in addressing the broader watershed issues.

**Upland Review Areas, Setbacks and Buffers**

In a number of municipal inland wetlands regulations, upland review areas are referred to as setbacks or buffers. We chose the term *upland review area* to describe the non-wetland or non-watercourse area in which certain activities would be regulated because it best conveys the regulatory scheme under the wetlands statutes wherein a wetland agency reviews regulated activities case-by-case and approves or disapproves them on their merits. The inland wetland statutes do not authorize a blanket prohibition of *all* activities either in the wetlands or in upland review, buffer or setback areas.

**Use of Upland Review Area Regulations**

Most municipal wetland agencies have already adopted some form of upland review area regulations. Such regulations are based on a presumption that the regulated activity will have an adverse impact on the adjacent wetland or watercourse. A person proposing to conduct a regulated activity has the burden to demonstrate to the wetlands agency that the impacts of his proposal are consistent with the purposes and provisions of the Inland Wetlands and Watercourses Act and, therefore, that he is entitled to the permit. An applicant who successfully documents to the satisfaction of the wetlands agency that his proposed activities are fully consistent with the purposes and provisions of the Inland Wetlands and Watercourses Act is entitled to receive a permit. The factors the wetlands agency must consider in making its decision on the application are prescribed in section 22a-41 of the General Statutes.

**The Role of the Upland Review Area in Protecting Wetlands and Watercourses**

Upland areas surrounding wetlands or watercourses function in a number of ways to protect these resources. An understanding of these functions and how they potentially may be impacted by construction activity or development is necessary for the wetlands agency to adopt an upland review area and subsequently regulate activities therein. Since the functions will vary depending on the specific project site, each permit application will be different and must be reviewed on its individual merits.
Control Non-point Source Pollution

*Vegetation and natural soils foster removal of nutrients, sediments, particulates, and other potential pollutants and pathogens from storm-water runoff thereby protecting water quality.

*Sediments arising from road sanding and construction activities are trapped.

*Flood flows, stream bank erosion, and storm-water discharges to wetlands and watercourses are attenuated.

*Separating distances from wetlands or watercourses allow for treatment of wastewaters.

Protect Aquatic Habitat

*Wind-thrown trees, dropped branches and detritus create important habitat for aquatic organisms within watercourses.

*Stabilize under cutting stream banks, providing shelter for fish and other aquatic organisms.

*Riparian areas are an essential component of habitat and for mammals, birds, amphibians, reptiles, invertebrates and other wetland animals.

*Watercourses are allowed to meander naturally without endangering development.

Control Temperature

*Shrubs and trees shade wetlands and watercourses and help maintain cold water aquatic habitats in summer and insulate them from deep frost in winter.

*Water temperatures suitable for fish spawning and egg and fry development are maintained.

*Cooler water supports higher dissolved oxygen.

Provide Food for Aquatic Life

*Decomposing leaves and detritus contribute to the food chain, especially of aquatic insects.

*Insects falling from branches feed fish and other aquatic life.
Insulate Fish and Wildlife From Human Activities

*Potential for human interference with fish and wetland wildlife is reduced

Provide a Corridor Linking Wetlands and Watercourses

*Wildlife habitats are continuous, not fragmented or isolated, allowing for migratory habits of wetland wildlife

Examples of Regulated Activities in Upland Review Areas and Their Potential Wetland or Watercourse Impacts

Keep in mind that the substance and significance of an impact will vary from site to site and may decrease with increasing distance from the wetland or watercourse.

Clearing, grubbing and grading

*Loss of stream shading
*Increased surface water temperature
*Loss of food source for aquatic organisms
*Loss of riparian habitat/diminished in stream habitat value
*Increased storm-water runoff
*Reduced capacity to remove nutrients and other impurities from runoff
*Soil erosion/sedimentation
*Destabilization of stream banks
*Increased disturbance of aquatic and wetland animals
*Release of nutrients bound in the soil
*Loss of instream habitat diversity from wind-thrown trees and branches

Paving

*Increased storm-water runoff/discharge
*Decreased ground-water recharge, reduced stream flow during dry seasons
*Non-point source of water pollution, including petroleum products from motor vehicles
*Source of sand and grit from storm water discharges
*Disruption of fish spawning and fish-egg incubation
*Periodic disturbance from maintenance of storm-water management system
*Thermal loading in watercourses

Excavating

*Soil erosion/sedimentation
*Altered surface and ground-water discharge patterns and quantity
* Diversion or dewatering of wetland/watercourse
* Destabilization of watercourse channels

**Filling**

* Diversion of surface water drainage/dewatering
* Loss of flood-water storage
* Increased flooding or flood hazards
* Increased stream erosion
* Erosion of fill material
* Sedimentation

**Constructing**

* Soil erosion/deposition
* Disturbance of adjacent fish and wildlife habitats
* Increased non-point sources of water pollution
* Fragmentation of wetland/watercourse habitats

**Depositing material**

* Erosion/loss of material into regulated area
* Leaching/pollution potential
* Disturbance of adjacent aquatic habitats
* Alteration of riparian habitats
* Other impacts similar to filling and constructing

**Removing material**

* Discharge/loss of material to regulated area
* Modification of riparian habitats
* Surface drainage changes
* Other impacts similar to clearing, grubbing or grading

**Discharging storm water**

* Water quality - discharge of road sands/grit; oils; grease
* Water quantity - flow attenuation; velocity dissipation
* Erosion/sedimentation
* Assimilation of potential pollutants
* Change in receiving stream water temperature
* Increase velocity of runoff and decrease travel time to the receiving watercourse
* Nuisance flooding
Determining Upland Review Area Boundaries

Due to the variability of Connecticut's landscape features, even within the same watershed, and the multiplicity of regulated activities which may be involved in site development, it is not practical to establish separate upland review area boundary distances for each category or type of regulated activity. Instead, the upland review area should be of sufficient width to ensure that it will encompass the activities that are most likely to impact or affect the adjacent wetlands or watercourses. It is recommended that upland review area boundaries be delineated using a uniform distance measured horizontally and perpendicular from the ordinary high water mark of a lake, pond, river or stream or from a wetland soil boundary.

The upland review area width adopted by the wetlands agency may be wider or narrower than the 100 foot width recommended by DEP. DEP encourages municipal wetlands agencies base their upland review area widths giving due consideration to local landscape factors including the value, or importance, of wetland or watercourse resources, extent of existing land use and, if a wetland agency deems it to be practicable, on the slope and soils of the land to be developed or other factors.

To be enforceable, the upland review areas must be adopted in the town’s inland wetlands and watercourses regulations following the procedures described under section 22a-42a of the General Statutes. Importantly, the upland review area regulations must be easy to understand by a property owner and easy to implement by the inland wetlands agency (should it need to take an enforcement action), as well as by any other interested person.

A uniform review area width has the advantage of simplicity over a variable width in that it is easier to delineate, understand and administer. The disadvantage of a variable, non-uniform, width upland review area regulation is that its inherent complexity may make the regulation difficult to establish and subsequently administer. Ordinarily, the agency will need a professional staff person to delineate and enforce variable upland review area regulations. Also, citizens may be confused using a variable approach and disagreements over the actual location on the ground of the outer limit of the upland review area may complicate permit and enforcement proceedings. Verification of the upland review area location is particularly important in an enforcement action where the burden is on the agency to prove that there is a violation of its regulations. For these reasons, the department urges caution in adopting complex upland review area boundaries (e.g., Model Option III, above).

While it is desirable for upland review areas to be depicted on the town’s official inland wetlands and watercourses map, depending on the type of review area adopted, actual mapping may not be necessary provided appropriate narrative description is included in the town’s inland wetlands and watercourses regulations and such provisions are clearly referenced on the official map. Wetlands agency regulations governing wetlands maps and the official wetlands maps themselves should state that such wetlands and watercourses maps were prepared for information purposes only and that the actual character of the land shall govern the agency’s jurisdiction thereon. The
official wetlands and watercourses maps should also clearly reference or depict all upland review
areas which have been adopted by the agency.

**Boundary Factors**

There are a number of factors which should be considered in defining upland review area
boundaries. For unique situations, such as with an important bog, the boundary of the review area
could be set by using an elevation contour encompassing the subject area. In addition, upland
review areas may be wider or narrower for specified wetlands or watercourses. For example, an
upland review area for a significant wetland or watercourse habitat or for wetlands and
watercourses located in a public water supply watershed could be set wider than a review area for
wetlands or watercourses located in other less critical areas.

* Significant Wetland and Watercourse Resources

All wetlands have intrinsic value, some wetland areas being more or less ecologically
valuable than others. But if a wetland or watercourse is known to be ecologically
significant, or to have a critical function or value such as in flood control or as habitat for
an endangered species, a wider, more protective, upland review area may be appropriate.
Unique wetland and watercourse values such as in research, education or recreation may
also warrant a wider upland review area.

DEP encourages all towns to evaluate their wetlands resources. To that end, DEP offers
training guidance on a methodology for identifying the relative importance of the wetlands
and watercourses in a town or within a watershed. (See: DEP Bulletin #9 Method for the
Evaluation of Inland Wetlands in Connecticut, 1989) This methodology uses
mathematical and word expressions to assign relative “wetland value units” (WVU) to a
number of the common wetland and watercourse functions. The following functions are
defined in DEP Bulletin #9:

- Flood Control
- Ecological Integrity
- Wildlife Habitat
- Fish Habitat
- Nutrient Retention and Sediment Trapping
- Education Potential
- Visual/Esthetic Quality
- Agricultural Potential
- Forestry Potential
- Water Based Recreation
- Ground-water Use Potential
- Shoreline Anchoring and Dissipation of Erosive Forces
- Noteworthiness, including public water supply watersheds
In addition, guidance on vernal pools is provided in a recent publication by the Connecticut Forest Stewardship Program and the University of Connecticut Cooperative Extension System titled *Identification and Protection of Vernal Pool Wetlands of Connecticut*. Both of the above referenced publications are available from the DEP Bookstore, 79 Elm Street, Hartford, phone 860-424-3555.

* Slope

By enlarging the width of the upland review area in proportion to its slope upward from the wetland or watercourse, the wetland agency may have a better opportunity to protect wetlands and watercourses from sedimentation originating from upland construction activities. For example, wherever the minimum 100 foot upland review area slope exceeds 5%, regulations could add 5 feet (or other reasonable measure) of review area distance *horizontally* for each 1% increase in slope. Thus, if the basic 100 foot wide review area has a 15% slope upward from the ordinary high water line or wetland soil boundary, an additional 50 feet would be added to the horizontal width of the upland review area (5ft/1% x 10% = 50ft). Similarly, where the land slopes away (downward) from the regulated area, e.g., as in the case of a hill-side seep wetland, the width of the review area could be reduced.

In general, the greater the slope of the land being developed, the greater the potential threat of damage to adjacent wetlands and watercourses from erosion and sedimentation. However, in practice, unless a town already has good town-wide topographic mapping, calculating a slope parameter for a town-wide map of the upland review area boundary would require considerable professional engineering expertise.

A practical approach to using the slope factor may be for wetland agencies to assert their jurisdiction case-by-case over major construction activities on any steeply sloped areas located outside the upland review area where wetlands and watercourses may be threatened by sedimentation caused by erosion at upland construction sites. Such sedimentation is deemed to be pollution and may be cause for an enforcement action under the inland wetlands statutes (see definition of regulated activity above).

* Soils

Combined with slope, the type of soil found adjacent to wetlands and watercourses is an important factor in how development may affect adjacent wetlands or watercourses. Soil characteristics such as texture, cohesiveness and organic content influence the creation of rill and gully formation as a result of erosion by water. In turn, this creates a potential for sedimentation of adjacent wetlands and watercourses. The United States Department of Agriculture, Natural Resources Conservation Service, has compiled lists of highly erodible soil map units which can be located using their published soil surveys. While these lists were compiled primarily for agricultural applications, they may also be useful in evaluating the erosion potential from construction activity.
Also, the permeability of a particular soil, the rate at which groundwater travels through a soil, is an important consideration when evaluating the potential for an upland review area to renovate wastewater discharges to the ground water that may subsequently discharge to a wetland or watercourse. This may be an important consideration when septic system leaching fields or storm water infiltration trenches are proposed adjacent to wetlands or watercourses.

For more information on highly erodible soils, refer to *Highly Erodible Soil Map Units of Connecticut*, USDA-NRCS (1986). For more information on soil permeability characteristics, contact your local USDA-Natural Resource Conservation Service Center (call 860-487-4011 for the center near you). Information on ground-water as it relates to sewage treatment can be found in *Seepage and Pollutant Renovation* (DEP Bulletin # 7) and *Carrying Capacity of Public Water Supply Watersheds* (DEP Bulletin # 11).

Except when soils are used to define wetlands, regulation of development based on soil characteristics is largely a responsibility of the town sanitarian and the planning and zoning commission(s). However, where highly erodible soils are located adjacent to wetlands and watercourses, erosion and sedimentation control is especially critical and should also be addressed by the wetland agency.

Upland review area boundaries based on soil characteristics should be depicted as such on the official inland wetlands and watercourses map for the subject town.

* Floodplain Limits

The landward boundary of a mapped floodplain, such as delineated by the 100-year flood mapped by the National Flood Insurance Program, has been determined using a theoretical design flood on the subject watercourse. Mapped flood limits have no direct relation to the location of wetlands or smaller watercourses on the floodplain. Also, the floodplain boundaries for most small watercourses have not been mapped. For these reasons, flood insurance floodplain maps may not reflect a reasonable boundary of the upland review area.

* Urban Areas and Existing Development

Existing development of the area surrounding wetlands and watercourses has, more likely than not, already had an impact on the upland area’s ability to protect those resources. Degraded conditions should not be used to justify further degradation. The wetlands or watercourses themselves may have been filled or modified for storm water or flood control. For these reasons any remaining fringe of undisturbed area between the wetland or watercourse and existing upland development may be all that there is to buffer adjacent water resources from further degradation from new development. In such urban areas, particular attention should be given to how storm water discharges are managed so as to minimize the opportunity for pollution and alteration of wetland or watercourse habitats.
New development in urban areas that contain degraded wetlands or watercourses, may provide an opportunity to improve these degraded resources while mitigating the impact of the new development. This can be accomplished by habitat restoration or enhancement or by using storm water management system retrofits that are designed to improve the quality of the storm water discharge.

Endnotes

1. This document was prepared in response to inquiries from municipal wetland commissioners, the Rivers Advisory Committee, the regulated community and other interested persons for guidance on implementing setback and buffer provisions in municipal regulations adopted under Connecticut’s Inland Wetlands and Watercourses Act. Section 22a-42d of the General Statutes directs the department to provide guidance for the implementation of Section 22a-42a(f) of the General Statutes.

2. Over 80% of Connecticut’s municipal wetlands agencies have regulations governing regulated activities in areas surrounding wetlands or watercourses.

3. Section 22a-42a(c)(2) of the General Statutes provides that a wetlands agency may delegate approval authority for non-significant activities proposed in upland review areas to its agent provided such agent has had DEP training.

4. Section 22a-42a(f) provides that the wetlands agency has jurisdiction over those activities proposed in the upland review area which are “... likely to impact or affect wetlands or watercourses.” In documenting the necessity for regulating specific activities conducted in upland review areas, it is not sufficient to merely assert that the activity “may” impact or affect wetlands or watercourses.

5. Contact DEP for a copy of Inland Wetlands and Watercourses Model Regulations. DEP’s Model Regulations provide a comprehensive guide for implementing the Inland Wetlands and Watercourses Act through municipal wetland agency regulations. Model Regulations is updated as needed to reflect current legislation.

6. “Ordinary high water mark” means a mark on the land caused by the presence and action of water, which presence and action is so common and usual and so long continued in all ordinary years so as to mark upon the land a distinction between the abutting upland and the watercourse. Such mark may be found by examining the bed and bank of any watercourse and ascertaining thereon an abrupt change in the characteristics of soil or vegetation or slope of the land. This term should be defined in municipal wetlands regulations.

7. Percent slope is most simply determined by dividing the difference in elevation between two points by the distance between the points (i.e., rise/run) and multiplying the result by 100. If a slope factor is used in regulations, the regulations must provide guidance as to how the slope should be measured in the field e.g., on shortest straight line transect from any wetland or watercourse boundary to the highest up gradient point on the land to be developed; number and location of transects; and, in recognition that
the actual slope of the land is not uniform, methods for averaging of slope over a site.

8. In implementing upland review area regulations, the wetlands agency must be cognizant of the “uses as of right” provisions of section 22a-40 of the General Statutes. Under section 22a-40, certain activities are uses of wetland and watercourses as of right or as a nonregulated use. Such uses are not regulated and do not require a permit from the wetland agency. For example, subdivision (4) of section 22a-40(a) prescribes that certain “… uses incidental to the enjoyment and maintenance of residential property …” are permitted as of right: “[s]uch uses shall include maintenance of existing structures and landscaping but shall not include removal or deposition of significant amounts of material from or onto a wetland or watercourse or diversion or alteration of a watercourse.” Other uses permitted as of right include certain agricultural and forestry uses, boat anchorage and mooring, certain water company activities and maintenance of drainage pipes which pre-date the regulations. Nonregulated uses include a number of conservation and recreational activities. Persons proposing such uses should seek confirmation from the municipal wetlands agency that their proposed project does not require a permit.

9. DEP has not adopted an upland review area provision for state agency actions because, unlike municipal wetland agencies which have only one opportunity to review a project, DEP has a number of opportunities during both planning and permitting of state agency projects. DEP reviews state agency projects under the Environmental Policy Act (Findings of No Significant Impact, Environmental Impact Statements) and several permit programs under Title 22a and 25 of the General Statutes. As partners in state government, state agencies generally act cooperatively to address environmental issues. Utilizing its technical resources, the State strives to apply site specific best management practices during the different planing and regulatory reviews.

10. Depending on the wetland agency, upland review area widths range from 25 feet up to 650 feet from wetland or watercourse boundaries.

11. Section 22a-41 of the Inland Wetlands and Watercourses Act established the criteria for decision on permit applications as follows: In carrying out the purposes and policies of sections 22a-36 to 22a-45, inclusive, of the Connecticut General Statutes, including matters relating to regulating, licensing and enforcing of the provisions thereof, the Agency shall take into consideration all relevant facts and circumstances, including but not limited to:

   a. the environmental impact of the proposed regulated activity on wetlands or watercourses;
   b. the applicant’s purpose for, and any feasible and prudent alternatives to, the proposed regulated activity which alternatives would cause less or no environmental impact to wetlands or watercourses;
   c. the relationship between the short term and long term impacts of the proposed regulated activity on wetlands or watercourses and the maintenance and enhancement of long-term productivity of such wetlands or watercourses;
   d. irreversible and irretrievable loss of wetland or watercourse resources which would be caused by the proposed regulated activity, including the extent to which such activity would foreclose a future ability to protect, enhance or restore such resources, and any mitigation measures which may be considered as a condition of issuing a permit for such
activity including, but not limited to, measures to (1) prevent or minimize pollution or other environmental damage, (2) maintain or enhance existing environmental quality, or (3) in the following order of priority: restore, enhance and create productive wetland or watercourse resources;

e. the character and degree of injury to, or interference with, safety, health or the reasonable use of property which is caused or threatened by the proposed regulated activity; and

f. impacts of the proposed regulated activity on wetlands or watercourses outside the area for which the activity is proposed and future activities associated with or reasonably related to, the proposed regulated activity which are made inevitable by the proposed regulated activity and which may have an impact on wetlands or watercourses.

Additionally, if the wetlands agency holds a hearing because it found that the subject activity may have a significant impact, the wetlands agency may not grant the permit unless it finds that the activity is acceptable under the criteria listed above and that there is no less environmentally damaging feasible and prudent alternative.

12. Under Section 22a-42a(b) of the General Statutes, the wetlands agency must provide the DEP with a copy of notice of its hearing on proposed regulations and a copy of the proposed regulations no less than 35 days prior to the hearing thereon. DEP must review and approve all proposed wetland agency regulations except proposed map revisions.

13. The methodology described in DEP Bulletin #9 is a resource planning tool intended to be used for town-wide or watershed-wide assessments of wetland resources and is not designed to be used by applicants or wetlands agencies to evaluate the significance of the impact of activities proposed in permit applications.

14. Section 22a-329 of the General Statutes provides that regulations adopted by a municipality pursuant to CGS Secs. 8-2 and 8-25 shall require that proper provisions be made for soil erosion and sediment control.
Agency Mission

The mission of the Department of Environmental Protection (DEP) is to conserve, improve and protect the natural resources and environment of the State of Connecticut and to do this in a way that encourages the social and economic development of Connecticut while preserving the natural environment and the life forms it supports in a delicate, interrelated and complex balance, to the end that the state may fulfill its responsibility as trustee of the environment for present and future generations. The DEP achieves its mission through regulation, inspection, enforcement and licensing procedures which help control air, land and water pollution in order to protect health, safety and welfare. The Department also improves and coordinates the state's environmental plans, functions and educational programs in cooperation with the federal, regional and local governments, other public and private organizations and concerned individuals, while managing and protecting the flora and fauna for compatible uses by the citizens of the state.