

TOWN OF OLD LYME
INLAND WETLANDS AND WATERCOURSES REGULATIONS
Effective February 1, 2013

Table of Contents

| Section | | Page |
|-------------------|---|------|
| 1 | Title and Authority | 2 |
| 2 | Definitions | 3 |
| 3 | Inventory of Inland Wetlands and Watercourses | 7 |
| 4 | Permitted and Non-regulated Uses | 7 |
| 5 | Activities Regulated by the State | 9 |
| 6 | Regulated Activities to be Licensed | 9 |
| 7 | Application Requirements | 11 |
| 8 | Application Procedures | 14 |
| 9 | Public Hearings | 15 |
| 10 | Considerations for Decision | 15 |
| 11 | Decision Process and Permit | 17 |
| 12 | Action by Duly Authorized Agent | 19 |
| 13 | Bond and Insurance | 19 |
| 14 | Enforcement | 20 |
| 15 | Amendments | 21 |
| 16 | Appeals | 22 |
| 17 | Conflict and Severance | 23 |
| 18 | Other Permits | 23 |
| 19 | Application Fees | 23 |
| 20 | Effective Date of Regulations | 24 |
| | | |
| APPENDICES | | |
| A | CGS§1-1(q), Definition of Agriculture | 25 |
| B | CGS§8-7d, Hearing & Decisions | 26 |
| C | Fee Schedule | 28 |
| D | Obligate Vernal Pool Species | 29 |
| E | Criteria for Vernal Pool Identification | 30 |
| F | Vernal Pool Inventory Worksheet | 33 |
| G | Vernal Pool Impact Worksheet | 35 |
| H | Literature Cited | 37 |

Section 1

Title and Authority

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 imperiled 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 Old Lyme."
- 1.3 The Inland Wetlands and Watercourses Commission of the Town of Old Lyme was established in accordance with an ordinance adopted October 21, 1963 and shall implement the purposes and provisions of these regulations and the Inland Wetlands and Watercourses Act in the Town of Old Lyme.
- 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 Commission, or its agent, 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 Old Lyme 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 - the Inland Wetlands and Watercourses Act, Sections 22a-36 through 22a-45, inclusive of the Connecticut General Statutes, as amended.

Agency – see “Commission”

Applicant - any person, or his agents or representatives, seeking a permit to conduct, or cause to be conducted, regulated activities.

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

Buffer Area - an area adjoining a watercourse, 50 feet in width measured from the seasonal high water line of such watercourse, which is to remain in, allowed to revert to, or be restored to a natural vegetated condition, subject to certain conditions and exceptions in accordance with Section 6.7 of these Regulations.

Clear-cutting - the cutting of timber, in any given area, in a fashion which removes all or substantially all trees down to a two inch diameter at breast height. Compare to “Trimming” – “Thinning”.

Commission - the Inland Wetlands and Watercourses Commission of the Town of Old Lyme

Commissioner of Environmental Protection - the commissioner of the State of Connecticut Department

Continual flow - 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.

Discharge - emissions of any water, substance, or material into waters of the state whether or not such substance causes pollution.

Essential to the farming operation - 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. (Appendix A)

Feasible - able to be constructed or implemented consistent with sound engineering principles.

Habitats - areas or environments in which an organism or biological population normally lives or occurs.

Hydrophytic vegetation - perennial vascular aquatic plant having its over wintering buds underwater.

Lateral distance - the distance from one point to another measured on a horizontal plane.

License – see “Permit”

Management practice and Best Management Practices (BMP's) - 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 - any substance, solid or liquid, organic or inorganic, including but not limited to, soil, sediment, aggregate, land, gravel, clay, bog, peat, mud, debris, sand, refuse or waste.

Municipality – see “Town”.

Nurseries – a farm where plants are grown for sale, transplanting or experimentation.

Permit - the whole or any part of any license, certificate of approval or similar form of permission that may be required of any person by the provisions of sections 22a-36 to 22a-45, inclusive.

Permittee - the person to whom a license or permit has been issued.

Person - 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 - 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 - 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 - any operation within or use of a wetland or watercourse, including but not limited to a vernal pool, swamp, marsh and bog, 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 or Section 4 of these regulations. Furthermore, any clearing of vegetation, including clear cutting but not including trimming, and all grubbing, filling, excavation, earth-moving, grading, paving, excavating, constructing, depositing or removing of material and discharging of storm water on the land within the Upland Review Area. The Commission may rule that any activity that alters the existing rate or quality of any stormwater discharge or sheet flow conveyed to the upland review area is likely to impact or affect wetlands or watercourses and is a regulated activity. Also, the Commission may regulate activities in more distant upland areas if they find that the planned activities are of such scale and/or character that they are likely to impact or affect a wetland or watercourse. (See definition of “Upland Review Area” Section 6.7)

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 - 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.

Residential home - a building designed for permanent or seasonal occupancy as a dwelling and so occupied by one or more families.

Significant impact - any activity, including, but not limited to, the following activities that may have a major effect:

1. Any activity involving deposition or removal of material that 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 that 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 that is likely to cause or has the potential to cause substantial turbidity, siltation or sedimentation in a wetland or watercourse.
5. Any activity that causes a substantial diminution of flow of a natural watercourse or groundwater levels of the wetland or watercourse.
6. Any activity that is likely to cause or has the potential to cause pollution of a wetland or watercourse.
7. Any activity that damages or destroys unique wetland or watercourse areas or such areas having demonstrable scientific or educational value.

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

Submerged lands - those lands that are inundated by water on a seasonal or more frequent basis.

Swamps* - are watercourses that are distinguished by the dominance of wetlands trees and shrubs.

Town - the Town of Old Lyme

Trimming/Thinning – Cutting of trees, shrubs, or other woody vegetation not to exceed 50% of stems of trees or shrubs, in any one, canopy layer. Compare to clear cutting.

Upland Review Area - any area one hundred (100) feet (lateral distance) from wetlands or watercourses, or within four hundred (400) feet (lateral distance) from a vernal pool as defined in these regulations, or any activity that alters the natural hydrology of a site and impacts a wetland or watercourse. See definition of “Regulated Activity” and Section 6.7.

Vernal Pool - a seasonal or permanent body of standing water with the following characteristics: (a) occurs within a confined, natural or manmade depression or basin; (b) contains water for at least two consecutive months during the growing season, (c) typically lacks a fish population; and (d) supports or has the capability of supporting populations of vernal pool obligate species. The existence of a vernal pool shall be determined in the accordance with the criteria for identification set forth in the draft Connecticut Department of Environmental Protection, Bureau of Water Management document entitled, “Guidance to Connecticut’s Municipal Inland Wetlands and Watercourses Agencies Vernal Pool Definitions / Indicators”. See Appendix E. Note: all potential vernal pools that cannot be properly evaluated for confirmation as vernal pools (for reasons associated with season, etc.) are to be considered to be vernal pools for regulatory purposes, until such time as a proper determination can be made.

Vernal Pool Obligate Species - species that can only reproduce successfully in vernal pool habitats. See those species set forth in Appendix D.

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

Watercourses - 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 - 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 that possess an aquic (saturated) soil moisture regime as defined by the USDA Cooperative Soil Survey.

* Typical examples of Swamp, Marsh and Bog Species are listed in the booklet titled, “Inland Wetland Plants of Connecticut”, Wm. A. Neiring and R.H. Goodwin, for the Connecticut Department of Protection, May 1973.

Section 3
Inventory of Inland Wetlands and Watercourses

- 3.1 The map of inland wetlands and watercourses entitled “Old Lyme Conservation Commission Inland Wetlands and Watercourses Inventory”, “Adopted June 8, 1977” and “Revised October 28, 1986” delineates the general location and boundaries of inland wetlands and the general location of watercourses, hereinafter, “the map” are available for inspection at the office of the Town Clerk and in the Old Lyme Land Use office. 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 Commission 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 Commission 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 Commission may require such person to provide an accurate delineation of regulated areas in accordance with Section 15 of these regulations.
- 3.3 The Commission shall maintain a current inventory of regulated areas within the town. The Commission 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 purpose of sale;
 - b. a residential home (i) for which a building permit has been issued or (ii) on a subdivision lot, provided the permit has been issued or the subdivision has been approved by the town Planning Commission as of May 24, 1974, and further provided no residential home shall be permitted as of right pursuant to this subdivision unless the building permit was obtained on or before July 1, 1987.
 - c. boat anchorage or mooring, not to include dredging or dock construction;

- 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 site permitted anywhere in town and containing a residence. 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 through 22a-403 of the Connecticut General Statutes and;
- 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, which ever 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.

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; and
- b. outdoor recreation including play and sporting areas, golf courses, field trials, nature study, hiking, horseback riding, swimming, skin and scuba diving, camping, boating, water skiing, trapping, hunting, fishing and shell fishing, and cross-country skiing where otherwise legally permitted and regulated.

4.3 All regulated 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 Commission 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 non-regulated operation and use shall, prior to commencement of such operation and use, notify the Commission on a form provided by it, and provide the Commission with sufficient information to enable it to properly determine that the proposed operation and use is a permitted or nonregulated use of the wetland or watercourse. The Commission shall rule that the proposed operation and use or portion of it is a permitted or a non-regulated 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

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.

- 5.1 The Commissioner of Environmental Protection shall have exclusive jurisdiction over tidal wetlands designated and regulated pursuant to Section 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 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 Old Lyme or its duly authorized agent. See Section 12.
- 6.2 The map of inland wetlands and watercourses entitled “Old Lyme Conservation Commission Inland Wetlands and Watercourses Inventory”, “Adopted June 8, 1977” and “Revised October 28, 1986” shall serve as a guide to the wetlands and watercourses boundaries and shall be considered a part of these regulations, and copies of said map shall be available for inspection in the Office of the Town Clerk and in the Old Lyme Land Use office. Said map is generated for guidance and can not supercede on site field designation by a certified soil scientist, or in the case of vernal pool identification, a qualified individual.
- 6.3 The Commission and its agents, any consultants hired by the Commission to evaluate permit applications under these regulations, or, for site walks, the general public in the company of the commission, shall have the right of free access, at reasonable times, to the property under consideration. The property owner may require that such persons have a letter of authorization from the Wetlands Enforcement Officer or Chairman of the Commission prior to permitting such access. (See Section 8.8)

- 6.4 Changes in regulations, including boundaries, shall be made pursuant to Section 22a-42a(b) of the General Statutes and as described in Section 15 of these regulations.
- 6.5 No person shall conduct any activity in the Upland Review Area, within one hundred (100) feet (lateral distance) of any watercourse or wetland boundary or within four hundred (400) feet (lateral distance), of a vernal pool which activity would constitute a regulated activity if it were conducted within, or involved the use of, a wetland or watercourse, including, but not limited to a vernal pool, swamp, marsh or bog, without first obtaining a determination from the Commission that such activity does not constitute a regulated activity.
- 6.6 Any person found to be conducting or maintaining a regulated activity without the prior authorization of the Commission or its duly authorized agent, 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.

6.7 Activities in the Upland Review Area

- 6.7.1 No person shall conduct the following activities in a upland review area, except as provided in Section 6.7.2 below:
- a. the location of any building or structure, other than a single dock no more than four (4) feet in width for recreational access to open water and of the minimum length necessary for such access.
 - b. the installation of any septic system, including septic tanks, leaching structures, or connecting pipes;
 - c. the cutting of any existing vegetation, except for trimming and the maintenance or creation of a grass path four (4) feet in width and mowing no more than once per year for areas that are formal lawn on the effective date of these Regulations;
 - d. the installation of any paved surface or any other surface that increases the impervious character of the soil;
- 6.7.2 In any application for a regulated activity in accordance with these Regulations, which regulated activity is located on property that adjoins a watercourses, the Commission may:
- a. require, as mitigation for the proposed regulated activity, that previously disturbed buffer areas be allowed to revert to a natural condition or that such areas be re-vegetated with native plants to protect the watercourse from increased development on the adjacent areas or to enhance the natural functions of the watercourse;
 - b. require the removal of buildings or structures from the buffer area as compensatory mitigation for the construction of new or expanded buildings or structures in areas up-gradient from the watercourse;
 - c. allow specified activities within the buffer areas that would otherwise be prohibited by Section 6.7.1 above where the other forms of mitigation are incorporated into the application will reduce the impact of the proposed development on the watercourse or enhance its natural functions:

Section 7

Application Requirements

- 7.1.a. The Commission and the applicant may hold a pre-application meeting to discuss a proposed application. A pre-application meeting is recommended to facilitate the general consideration of factors and problems affecting the land before the applicant proceeds with an official application and the preparation of the final maps, plans and documents required for formal consideration by the Commission . The purpose of the pre-application meeting is purely to provide preliminary guidance to the applicant, and to identify areas of concern or further study, so as to minimize delay, expense and inconvenience to the public, the applicant, and the Commission upon the receipt, if any, of a formal application. Neither the applicant nor the Commission shall be in any way bound by any statement made during the pre-application meeting, nor shall the statement of any Commission member be deemed to be an indication of prejudgment or prejudice, it being acknowledged by the applicant that the Commission's responses, like the request itself, are preliminary and subject to further change and refinement. There shall be no vote or other formal action at any pre-application meeting, other than (1) referrals to other municipal, State, or Federal agencies for review and comment if deemed advisable by the Commission, and (2) whenever possible, the Commission should provide guidance as to whether the proposed activity may be a significant activity.
- 7.1.b 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 Commission. The application shall contain the information described in this section and any other information the Commission may reasonably require. Application forms may be obtained in the Old Lyme Land Use office.
- 7.2 If an application to the Town of Old Lyme Planning Commission for subdivision or re-subdivision of land involves land containing a wetland or watercourse; or if an application to the Zoning Commission involves any regulated activity, 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 Commission in accordance with this section, no later than the day the application is filed with such planning or zoning commission.
- 7.3 The application shall contain such information as is necessary for a fair and informed determination by the Commission.
- 7.4 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. alternatives 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 diagrammed 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 Commission and the general public when (and only when) accompanied by the Commission 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 Commission 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 Commission 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;

7.5 At the discretion of the Commission 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, including vernal pools, 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, blasting, 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.
- h. if an area exists that does or may have vernal pool characteristics, a Vernal Pool Inventory and Impact Worksheet shall be submitted. (See Appendix F & G)

7.6 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.

7.7 The information required by the Commission shall be furnished in sufficient copies to permit the Commission to carry out its duties under these regulations. At least eight (8) copies of a subdivision map and/or site plan map must be submitted for a final review of an application proposal, unless submission of fewer copies is approved by the Wetlands Enforcement Officer. Also, the Commission may request that all proposed roadway centerlines, wetland borders, watercourses, including vernal pool borders, location of all drainage facilities, septic area test pits, well locations, zoning setbacks and proposed house sites be staked in the field by the developer's engineer or surveyor to permit the Commission to view the proposed locations. The centerline shall be staked every one hundred (100) feet and the stakes shall show the roadway stations.

7.8 Any application to renew or amend an existing permit shall be filed with the Commission in accordance with Section 8 of these regulations at least sixty-five (65) days prior to the expiration date of the permit; however, that the commission may, for good cause shown, grant an extension retroactive to the original permit expiration date for late-filed extension requests.. Any application to renew or amend such 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;
- c. 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 Commission may, prior to the expiration of the 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.

7.9 Any application to renew a permit shall be granted upon request of the permit holder unless the Commission finds 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 may be valid for more than ten (10) years.

Section 8 Application Procedures

- 8.1 Except as provided in Section 12 of the Regulations, all petitions, applications, requests or appeals shall be submitted to the Commission.
- 8.2 The Commission shall, in accordance with Connecticut General Statutes section 8-7d(f), (See Appendix B), 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 commission is within five hundred (500) feet of the 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 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 (7) 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 (7) 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 Commission.
- 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 Commission, immediately following the day of submission to the Commission or its agent of such petition, application, request or appeal or thirty-five (35) 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 Commission may reasonably require. Requests for such additional information shall not stay the time limitations as set forth in subsection 11.2 of these regulations.

- 8.6 All applications shall be open for public inspection.
- 8.7 It is the burden of the applicant to submit a complete application, and to demonstrate compliance with all criteria and requirements of the Regulations and, accordingly, the applicant may submit such additional reports or information as may be required to satisfy that burden. Any application found to be incomplete may be denied without prejudice to a future complete application.
- 8.8 The filling of an application with the Commission shall be deemed to constitute permission by the applicant for the Commission or its agents to enter onto the subject property for the purpose of inspections and tests, and, if the Commission designates a formal site walk during the public hearing process, such permission shall allow the general public, in company with the Commission only, to inspect such property. The property owner shall be notified prior to any scheduled site walk of the Commission.

Section 9 Public Hearings

- 9.1 The Inland Wetlands Commission shall not hold a public hearing on an application unless the Commission determines that the proposed activity may have a significant impact on wetlands or watercourses, a petition signed by at least twenty-five (25) 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 with the Commission not later than fourteen (14) days after the date of receipt of such application, or the Commission finds that a public hearing regarding such application would be in the public interest. The Commission may issue a permit without a public hearing provided no petition provided for in this section is filed with the Commission on or before the fourteenth (14) day after the date of receipt of the application. Such hearing shall be held no later than sixty-five (65) 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 (2) days, the first not more than fifteen (15) days and not fewer than ten (10) days, and the last not less than two (2) 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.
- 9.3 The applicant shall mail notice of the public hearing to the owner(s) of record of abutting land and any land within 100' of the subject property, as such ownership is indicated on the most recent grand list, such notice to be mailed no less than fifteen (15) days prior to the day of the hearing. Applicant shall provide the Commission with proof of mailing at or before the day of the public hearing.
- 9.4 In the case of any application, which is subject to the notification provisions of subsection 8.3 of these regulations, a public hearing shall not be conducted until the clerk of the adjoining municipality(ies) has received notice of the pendency of the application. Proof of such notification shall be entered into the hearing record.

Section 10

Considerations for Decision

- 10.1 The Commission 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 Old Lyme:
 - i. Conservation Commission
 - ii. Planning or Zoning
 - iii. Building Official
 - iv. Health Officer
 - v. Other staff and agencies hired by the Town of Old Lyme
 - c. The Commission may also consider comments on any application from the Connecticut River Coastal Conservation District, Inc., the Connecticut River Estuary Regional Planning Agency or other regional planning organizations; 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 subdivisions 10.1.b and c above within the prescribed time shall neither delay nor prejudice the decision of the Commission.
 - e. 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 Commission 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 and 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 and 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;
 - f. impacts on the aquatic, plant or animal life and in habitats in wetlands or watercourses, provided that the Commission shall not deny or condition an application for a regulated activity in areas outside wetlands or watercourses on the basis of an impact or effect on aquatic, plants, or animal life unless such activity will likely impact or affect the physical characteristics of such wetlands or watercourses;

- g. 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;`

- 10.3 In the case of an application which received a public hearing pursuant to a finding by the Commission that the proposed activity may have a significant impact on wetlands or watercourses, a permit shall not be issued unless the Commission finds on the basis of the record that a feasible and prudent alternative does not exist. In making this finding the Commission shall consider the facts and circumstances set forth in subsection 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 Commission shall propose on the record in writing the types of alternatives which the applicant may investigate provided this subsection 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 commission 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 Commission 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 Commission in its decision. In the case of an application which is denied on the basis of a finding that there may be prudent and feasible alternatives to the proposed regulated activity which have less adverse impact on wetlands or watercourses, The Commission shall propose on the record in writing the types of alternatives which the applicant may investigate provided this provision shall not be constructed 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. The applicant has the burden of demonstrating that his application is consistent with the purposes and policies of these regulations and Sections 22a-36 to 22a-45, inclusive, of the Connecticut General Statutes.

Section 11

Decision Process and Permit

- 11.1 The Commission, 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 Commission 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 subsection, provided the total extension of all such periods shall not be for longer than sixty-five (65) days, or may withdraw such application. The failure of the Commission to act within any time period specified in this subsection, or any extension thereof, shall not be deemed to constitute approval of the application. An application deemed incomplete by the Commission shall be withdrawn by the applicant or denied by the Commission.
- 11.3 The Commission shall state upon its record the reasons and bases for its decision.
- 11.4 The Commission 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 Commission 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 (15) day period, the applicant may provide for the publication of such notice within ten (10) days thereafter.
- 11.5 If any 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 8-3(g), 8-3c, or 8-26 of the Connecticut General Statutes, the Commission shall file a copy of the decision and report on the application with the Town of Old Lyme Planning and/or Zoning Commission within fifteen (15) days of the date of the decision thereon. Connecticut General Statutes are available on-line at: (<http://www.cslib.org/psaindex.htm>)
- 11.6 Any permit issued by the Commission 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 (5) years provided the Commission may establish a specific time period within which any regulated activity shall be conducted. Any permit issued by the Commission for any other activity shall be valid for not less than two years and not more than five years.
- 11.7 No permit issued by the Commission shall be assigned or transferred without the written permission of the Commission.
- 11.8 If a bond or insurance is required in accordance with Section 13 of these regulations, the Commission may withhold issuing the permit until such bond or insurance is provided.
- 11.9 General provisions in the issuance of all permits:

- a. The Commission 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 Commission are subject to and do not derogate any present or future rights or powers of the Commission of the Town of Old Lyme, 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 Commission'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 Commission.

Section 12

Action by Duly Authorized Agent

- 12.1 The Commission may delegate to its duly authorized agent the authority to approve or extend an activity that is not located in the wetland or watercourses when such agent finds the conduct of such activity would result in no greater than 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 Commission and shall contain the information listed under Section 7.5 of these regulations and any other information the Commission 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 activity at any time.
- 12.2 Any person receiving such approval from such agent shall, within ten (10) 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 Commission within fifteen (15) days after the publication date of the notice and the Commission shall consider such appeal at its next regularly scheduled meeting provided such meeting is no earlier than three business days after receipt by such Commission of its agent of such appeal. Any person may appear and be heard at the meeting held by the Commission to consider the subject appeal. The Commission 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 Commission may require as a permit condition the filing of a bond with such surety in such amount and in a form approved by the Commission.
- 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 Commission may appoint an agent or agents to act on 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 Commission or its duly authorized agent shall take into consideration the criteria for the decision under Section 10.2 of these regulations.
- 14.2 The Commission or its duly authorized agent may make regular inspections at reasonable hours of all regulated activities for which permits have been issued 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 Commission or its duly authorized agent may make regular inspections at reasonable hours, subject to the protections of the United States and Connecticut Constitutions against unreasonable search or seizure. .
- 14.4 If the Commission 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 Commission 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 Commission 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 Commission 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 Commission 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 Commission affirms, revises or withdraws the order. The issuance of an order pursuant to this subsection 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 Commission, and prescribing the necessary action and steps to correct the violation including, without limitation, halting work in wetlands or watercourses. The Commission may request that the individual appear at the next regularly scheduled meeting of the Commission 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 Subsection 14.4a or other enforcement proceedings as provided by law.

- c. Require a bond of any person conducting or maintaining any activity, facility, or condition which is in violation of these regulations when such person has been ordered to restore the site to its original state, or ordered to remedy the violation in some other manner. .

14.5 The Commission 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 Commission 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 Commission 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 Commission's decision to suspend, revoke, or maintain a permit by certified mail within fifteen (15) days of the date of its decision. The Commission 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 Old Lyme may be amended, from time to time, by the Commission 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 Commission 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 Commission 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 constructed 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 Acts as of the date of such receipt.

15.3 These regulations and the "Town of Old Lyme Inland Wetlands and Watercourses Map" shall be amended in the manner specified in Section 22a-42a of the Connecticut General Statutes, as amended. The Commission 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 (35) days before the public hearing on the adoption.

15.4 Petitions requesting changes or amendments to the "Town of Old Lyme Inland Wetlands and Watercourses Map", 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, including vernal pools, 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 "Town of Old Lyme Inland Wetlands and Watercourses Map", 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 Commission. 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 subsection 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 proposed wetland and watercourse boundaries.
- 15.6 The Inland Wetland soils shall be delineated by a soil scientist and Watercourses by some 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 (2) days, the first not more than fifteen (15) days, nor less than ten (10) days, and the last not less than two (2) days before the date set for the hearing. All materials including maps and documents relating to the petition shall be open for public inspection and filed in the office of the town clerk at least ten (10) days before such hearing.
- 15.8 The Commission shall hold a public hearing on a petition to amend the regulations and the Inland Wetlands and Watercourses Map within sixty-five (65) days after receipt of such petition. The hearing shall be completed within thirty-five (35) days after commencement. The Commission shall act upon the changes requested in such petition within sixty-five (65) days after completion of such hearing. At such hearing, any person or persons may appear and be heard and may be represented by agency or attorney. The petitioner may consent to one or more extensions of any period specified in this subsection, provided the total extension of all such periods shall not be for longer than sixty-five (65) days, or may withdraw such petition. Failure of the Commission to act within any time period specified in this subsection or any extension thereof, shall not be deemed to constitute approval of the petition.

Section 16
Appeals

- 16.1 Appeal on actions of the Commission 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 Commission 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, subsection, subdivision or provision of these regulations shall not affect the validity of any other part that 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 Old Lyme, 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.
- 18.2 No person shall conduct any regulated activity within an inland wetland or watercourse, including vernal pools, nor within one hundred (100') feet (lateral distance) of the mapped boundary of a wetland or watercourses or within four hundred (400) feet (lateral distance) of a vernal pool thereof, in accordance with Section 6 hereinabove, if such regulated activity requires zoning or subdivision approval, without first having obtained a valid subdivision approval, special exception, site plan approval, variance, certificate of zoning compliance, variance, or other approvals required by the Old Lyme Zoning or Subdivision Regulations establishing that the proposal complies with the said Zoning or Subdivision Regulations and that the proposal is authorized to commence construction. .

Section 19
Application Fees

- 19.1 Method of payment. All fees required by these regulations shall be submitted to the Commission and made payable to the Town of Old Lyme at the time the application is filed. The Commission reserves the right to ask for a certified check or money order.

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

19.3 The application fee is not refundable.

19.4 Definitions. As used in this section:

Residential uses- activities carried out on property developed for housing or being developed to be occupied by permanent housing.

Commercial uses- 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- activities other than residential uses or commercial uses.

19.5 Fee Schedule. See Appendix C.

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

19.7 Waiver. The applicant may petition the Commission to waive, reduce or allow delayed payment of the fee.

- 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.

The Commission shall state upon its record the basis for all actions under this subsection.

Section 20

Effective Date of Regulations

21.1 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 Old Lyme.

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, proccession, 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, hoop houses 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

Hearing 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 subsection, 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 subsection (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 subsection (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 subsection (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 an 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 subsection shall not be construed to apply to any extension consented 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 or 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 Fee Schedule

A. Single Residential Lot

- Preliminary review by Commission without an application - \$0
- Pools, sheds, outbuildings, decks, porches, filling and/or grading - \$75
- House or any structure requiring excavation for a continuous foundation, septic system and driveway/parking within the regulated area - \$100
- Single wetland crossing/filling up to 150 sq.ft. measured from base of fill - \$150
- Any additional wetland crossing/filling in excess of 150 sq.ft. measured from base of fill - Add'l \$150

B. Subdivisions

- Preliminary review of any subdivision with no activity in the regulated area - \$75
- Review of subdivision with activity in the wetlands, watercourses and/or regulated area - \$250
- Single wetland crossing/filling up to and including 500 sq.ft. measured from base of fill - \$500
- Any additional wetland crossing/filling in excess of 500 sq.ft. measured from base of fill - Add'l \$200

C. Commercial/Industrial

- Review of any commercial or industrial development - \$250
- Single wetland crossing/filling up to and including 500 sq.ft. measured from base of fill - \$500
- Any additional wetland crossing/filling in excess of 500 sq.ft. measured from base of fill - Add'l \$200

D. Other

- Modification of Existing Permit (minor) - \$25
- Modification of previous approval (minor) - \$25
- Minor Activity IWWC Compliance Certificate - \$75
- Creation of a pond or wetlands - \$200
- Significant Activity Fee - \$375 (See Note #2 below)
- For public hearing for a non-significant activity - \$375.
- Technical Review or Legal Advice (See footnote 7 below)

Notes:

1. In the event that the proposed activity is not specifically defined in the fee schedule, the enforcement officer or the Commission will select the nearest equivalent activity and apply the appropriate fee.
2. In the event that the Commission judges that a proposed activity may have a significant impact and calls for a public hearing, there will be an additional fee for the applicant.
See significant activity fee above.
3. The applicant must file an application the day before the scheduled meeting of the Commission held on the 4th Tuesday of every month except December (no meeting).

4. The Commission must wait 15 days after the meeting in which the application is received before voting on the application.
5. Public Act 235 - an additional \$30 State "DEP" Fee is required for all applications
6. An additional \$43 "Town of Old Lyme" recording fee is required
7. The cost of technical reviews or legal advice shall be estimated by the Commission's consultants and/or counsel as soon after the filing of an application as possible, and the applicant shall provide the Commission with funds equal to 150% of the estimates in order to provide a contingency factor. All fees not used shall be reimbursed to the applicant. Failure to pay the estimated fees and contingency factor by the time of decision on the application shall constitute grounds for denial of the application as incomplete, per Section 1912 of these regulations.

APPENDIX D
Obligate Vernal Pool Species

1. Vertebrates

- a) Spotted salamander (*Ambystoma maculatum*)
- b) Jefferson salamander (*Ambystoma jeffersonianum x laterale hybrid*)
- c) Marbled salamander (*Ambystoma opacum*)
- d) Wood frog (*Rana sylvatica*)
- e) Eastern Spadefoot Toad (*Scaphiopus h. holbrookii*)

2. Invertebrates

- a) Fairy Shrimp (*Anostraca sp.*)

Appendix E - Criteria for Vernal Pool Identification ¹

Bureau of Water Management Connecticut Department of Environmental Protection

GUIDE TO CONNECTICUT'S MUNICIPAL INLAND WETLANDS AND WATERCOURSES AGENCIES (DRAFT) VERNAL POOL DEFINITION / INDICATORS

“Vernal Pool”¹ means a seasonal or permanent² watercourse³ in a defined depression or basin⁴, that lacks a fish population⁵ and supports or is capable of supporting⁶ breeding and development⁷ of amphibian or invertebrate species recognized as obligate to such watercourses.

¹ Because the term “vernal pool” is not entirely accurate, some have proposed the use of such terms such as “intermittent waterbody,” “ephemeral pool,” or “temporary pool” to describe this landscape feature. The term “vernal pool” is used here because “vernal” means “pertaining to spring” and it is in the spring that many of the ecologically significant activities take place in vernal pools.

² Most vernal pools are seasonal, drying out during the hotter summer months, but some have been found that remain filled with water all year round, or for a set of particularly wet years.

³ The term, “watercourse” is used here as it is defined in the Connecticut Inland Wetlands and Watercourses Act (CGS 22a-38) as “...rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent...”

⁴ Some vernal pool definitions further describe “depression” and “basin” as being “small” as most of the isolated woodland vernal pools are (usually less than 100 feet in diameter). The word “small” was excluded here because using this descriptor alone is too vague and including a minimum size may exclude valuable vernal pool habitats found within larger waterbodies. Additionally, a minimum time period for the presence of ponding was not included in this definition due to the difficulty in proving this requirement for regulatory purposes. It is assumed that if there is sufficient development of obligate species then the required inundation of water has occurred. Hydrologic indicators listed in the “indirect indicators” section can also be used to judge period of inundation based on indicated depths.

⁵ “Population” here is to mean a self-sustaining number of native fish.

A. Direct Indicators: The species listed under categories 1 and 2 require vernal pools for successful reproduction. They are recognized as obligate vernal pool species. They serve as direct indicators for the existence of a vernal pool ecosystem. Documentation of vernal pool utilization by these species is the most reliable method of identifying vernal pool ecosystems.

Either one of the following categories will confirm the existence of a vernal pool ecosystem:

Category I - Vertebrates

Existence of a seasonal or permanent watercourse in a defined depression or basin that lacks a fish population, and shows evidence of breeding and/or development⁸ by any of the following obligate vernal pool breeding species:

- a. Spotted salamander (*Ambystoma maculatum*)
- b. Jefferson salamander complex (*Ambystoma Jeffersonianum x laterale hybrid*⁹)
- c. Marbled salamander (*Ambystoma opacum*)
- d. Wood frog (*Rana sylvatica*)

As required by this method of identification, evidence of breeding and/or development for these obligate species include one or more of the following:

⁶ The need to include the phrase "...capable of supporting..." reflects the highly variable nature of vernal pools. A limited sampling of vernal pool hydrologic and biological characteristics may not reveal its "true identity" as a vernal pool due to its seasonal variability, short-term climatic variations, or natural population cycles. For example, it has been observed that particular vernal pools may support viable populations only periodically in a given set of years due to natural population dynamics. This capability would have to be determined through professional judgment.

⁷ This definition necessitates that the obligate species reach a development stage more advanced than simply successful breeding (i.e. egg laying). This includes reaching the tadpole, larval stage, or the more advanced juvenile stages of their lifecycle. Using the word "development" serves to preclude those situations where prolific and successful breeding takes place in less than ideal habitat (i.e. puddles, ruts, the "root ball" and depressions of toppled trees) wherein the eggs soon perish due to insufficient hydrology, predation, temperature, or other environmental parameters. However, as mentioned above, in very dry years even "true" vernal pools may become dry before amphibian development is completed.

⁸ Evidence of breeding alone could be used to confirm the existence of a vernal pool if, through professional judgment, it is determined that the pool would be capable of supporting successful development.

⁹ The hybridization of *A. jeffersonianum* (Jefferson salamander) and *A. laterale* (blue spotted salamander) provides a particular challenge when applied to the identification of vernal pools. For more information on this hybridization phenomenon, refer to Amphibians and Reptiles of Connecticut and Adjacent Regions, by Michael W. Klemens. *A. laterale* is not included as an obligate species here, as in other cases, because their breeding habitat requirements are markedly different than *A. jeffersonianum*, *A. maculatum* and *A. opacum*. Klemens points out that *A. jeffersonianum* / *A. laterale* hybrids are "...far more abundant than either parental species" in Connecticut.

BREEDING

1. Presence of breeding adults
 - a. Wood frog - breeding chorus and/or mated pairs
 - b. Obligate salamander - courting individuals and/or spermatophores
2. Two or more egg masses of any of the above-named species

DEVELOPMENT

3. Presence of tadpoles or larvae of the above species
4. Presence of transforming larvae and/or juveniles
 - a. Wood frog - tail stub event
 - b. Obligate salamanders - gill remnants evident

Category 2 - Invertebrates

Existence of a seasonal or permanent watercourse in a defined depression or basin that lacks a fish population and contains fairy shrimp (*Anostraca sp.*) or their eggs therein.

B. Indirect Indicators¹⁰: In the absence of direct indicators (typically when the pool may be dry from late summer through early fall, during the winter, or when climatic or landscape conditions inhibit the presence of direct indicators), the following indirect indicators may be used to gauge the likelihood that a watercourse is capable of supporting obligate vernal pool species. To be clear, it is intended that these indicators can be used to conclude, for regulatory purposes, that a particular watercourse is a vernal pool, but they cannot be used to absolutely confirm its presence, as a developing obligate vernal pool species would. The more indirect indicators present (especially indirect indicators “a” through “d”), the greater the likelihood that a particular watercourse is a vernal pool capable of supporting obligate vernal pool species.

Existence of a defined depression or basin that exhibits:

- a. Fingernail clam shells, snail shells, caddisfly cases, diving beetles or evidence of other aquatic invertebrates, among the leaf litter.
- b. Presence of algal strands hanging over branches, or silt-stained leaves attached to overhanging branches, at or below the historic high-water mark of the dry basin
- c. Dense wetland plant growth (e.g. buttonbush, bur-reed, etc.) in the interior of the basin or depression
- d. A distinct waterline on the base of tree trunks or shrubs in the basin

¹⁰ These indirect indicators are basically “clues” that one can use when the direct indicators are absent (perhaps due to seasonal constraints, short-term climactic conditions or variations in natural population fluctuations) to establish a certain probability that the landscape feature being inspected is a vernal pool. The weight that these “indirect indicators” can receive as evidence to the presence of a vernal pool during the permit process may vary according to the circumstances. For instance, if it is winter and direct indicators are not present, but there are enough indirect indicators present so that the wetlands agency and / or their consultants feel that it is more likely to offer vernal pool habitat during the breeding season, the applicant may want to agree with this opinion so that he or she can move forward with the permit process under the assumption that a vernal pool exists. Otherwise, the permit decision may have to be postponed until the breeding season to confirm the presence of obligate species.

- e. Discolored water-stained “gray” leaf litter within the basin as distinguished from the “brown” leaves on the adjacent upland floor
- f. Hummocks supporting moss, grass, sedges or woody growth along the edge of the basin or depression
- g. Unvegetated, low-lying area or areas in the basin interior
- h. Standing water or ice in the winter

Items “a” through “d” are to be considered strong indicators that show a higher probability for the existence of a vernal pool that holds water for a long enough period to support breeding and development of obligate species. Items “e” through “h” are indicators that might signify the presence of a vernal pool but do not provide sufficient evidence that the pool holds water long enough to support breeding and development of obligate species.

APPENDIX F
Vernal Pool Inventory Worksheet
 (please supply one sheet per vernal pool)

Applicant name _____

Property address _____

Approximate location of the vernal pool _____

Physical Characteristics

Size of Vernal Pool - Surface area measured from the perimeter of the high water line.

Greater than 2,500 ft. _____

1,000 – 2,500 ft. _____

Less than 1,000 ft. _____

Size of Upland Habitat - Amount of undisturbed forest adjacent to the pool or system.
 (Intact canopy and natural ground cover)

Greater than 30 acres _____

20 – 30 acres _____

15 – 20 acres _____

Less than 15 acres _____

Road Proximity - Distance to closest road.

Less than 500 feet _____

Greater than 500 feet _____

Greater than 1,000 feet _____

Closest Road Composition

Road is paved _____

Road has curbs _____

Connectivity to other Vernal Pools - Distance to next closest vernal pool.

Less than 500 feet to one other pool _____

Less than 1,000 feet to two or more pools _____

Biological Characteristics

| Observation | (Presence of) | | |
|--|----------------------|---------------|---------------|
| Obligate Vertebrate Vernal Pool Species | Eggs | Larvae | Adults |
| Spotted salamander (<i>Ambystoma maculatum</i>) | _____ | _____ | _____ |
| Jefferson salamander (<i>Ambystoma jeffersonianum</i>) | _____ | _____ | _____ |
| Marbled salamander (<i>Ambystoma opacum</i>) | _____ | _____ | _____ |
| Wood frog (<i>Rana sylvatica</i>) | _____ | _____ | _____ |
| Eastern Spadefoot Toad (<i>Scaphiopus h. holbrookii</i>) | _____ | _____ | _____ |
| Invertebrate Vernal Pool Species | | | |
| Fairy Shrimp (<i>Anostraca sp.</i>) | _____ | _____ | _____ |

Briefly describe all of the methods used to survey the vernal pool:

List date(s) of field visit(s):

Name: _____

Signature: _____

Date: _____

APPENDIX G
Vernal Pool Impact Worksheet
(please supply one per vernal pool)

Applicant name: _____

Property address: _____

Approximate location of vernal pool: _____

1. Does the proposed plan involve disturbance within 100 ft of a vernal pool? _____
 - a) If so, what is/are the type(s) of disturbance(s) proposed within this area?

2. Does the proposed plan involve disturbance within 400 ft of a vernal pool? _____
 - a) If so, what is/are the type(s) of disturbance(s) proposed within this area?

3. Review areas versus proposed disturbed areas:
 - a) What is the area, calculated in square feet, measured from the edge of the pool extending one hundred (100) feet from the edge of the pool? _____ sq. ft.
 - b) What is the area that is proposed to be disturbed within the above measured area? _____ sq. ft.
 - c) What is the area, calculated in square feet, measured from one hundred (100) feet from the edge of the pool to four hundred (400) feet from the edge of the pool? _____ sq. ft.
 - d) What is the area that is proposed to be disturbed within the above measured area? _____ sq. ft.

4. Does the proposed plan involve new road construction within 400 ft. of a vernal pool? _____
 - a) If so, will the new road(s) be paved? _____
 - b) Will the new road(s) be curbed? _____
 - c) What is the estimated daily traffic volume from 6 p.m. to 12 a.m.? ___ cars/hr

5. Does the proposed plan involve the installation of erosion and sedimentation control measures within 400 ft of a vernal pool? _____

6. Will the proposed project result in an **increase** or **decrease** in the surface or subsurface water flow to the vernal pool? _____

a) If so, by how much per 10 year storm event? _____ cu ft/sec

Name: _____

Signature: _____

Date: _____

APPENDIX H

Literature Cited

Calhoun, J.K., Aram and Klemens, W., Michael. "Best Development Practices (BDPs) For conserving pool-breeding amphibians in Residential and Commercial Developments in Northeast U.S. (2002)

Connecticut Conference of Municipalities. "Regulation Authority for Inland Wetlands Commissions". January 2003 issue of the "Habitat" published by Connecticut Association of Conservation and Inland Wetlands Commissions, Inc.

Deymaynadier, G., Phillip. and Malcolm L. Hunter Jr. "Effects of Silvicultural Edges on the Distribution and Abundance of Amphibians in Maine." Conservation Biology. 12: 340-351,1997.

Harris, L. Sandra. "Connecticut Wetland Resources" National Water Summary – Wetland Resources published by the U.S. Geological Survey

Hoskins, Douglas. "Connecticut's Regulation of Vernal Pools"
Vernal Pools Proceedings Workgroup Organized by the CT DEP and CACIWC.
49-50,1998.

Jackson, Scott. "Vernal Pools Protecting Hidden Resources"
Vernal Pools Proceedings Workgroup Organized by the CT DEP and CACIWC.
45-48,1998.

Klemens, W., Michael. "Ephemeral Wetlands – Ephemeral Protection".
Vernal Pools Proceedings Workgroup Organized by the CT DEP and CACIWC.
15-17,1998.

MacBroom, G. James. "Inland Wetlands and Watercourse Review Areas"
published by Connecticut Association of Conservation and Inland Wetlands Commissions, Inc. 3-
16,1998

MacBroom, James. "Evaluation of Upland Areas – A Five-Step Process". January 2003 issue of the "Habitat" published by Connecticut Association of Conservation and Inland Wetlands Commissions, Inc.

Pawlak, M., Edward. "Remote Sensing and Vernal Pools"
Vernal Pools Proceedings Workgroup Organized by the CT DEP and CACIWC.
20-21,1998.

Pedevillano, Cathy. "Habitat Values of New England Wetlands" published in May of 1995 by the U.S Fish & Wildlife Service in cooperation with the U.S. Army Corps of Engineers

Preston, Judy. "The Science Supporting Queach". January 2003 issue of the "Habitat" published by Connecticut Association of Conservation and Inland Wetlands Commissions, Inc.

Roznoy, Richard. "Wetlands "Buffers" Get New Life, Refuse to Die"
April 1999 issue of the Connecticut Lawyer

Semlitsch, D., Raymond. "Biological Delineation of Terrestrial Buffer Zones for Pond-Breeding Salamanders." Conservation Biology. 12: 1113-1119, 1998.

Sharp, Gregory. "Vernal Pool Habitats and Queach". January 2003 issue of the Habitat published by Connecticut Association of Conservation and Inland Wetlands Commissions, Inc.

Silbert, Jerry. "The Protection of Vernal Pool Ecosystems."
Unpublished. February, 2001

State of Connecticut Department of Environmental Protection. "Connecticut's Endangered, Threatened and Special Concern Species 1998." 5, 1998.

State of Connecticut Department of Environmental Protection. "1996 Amendments to the Inland Wetlands and Watercourses Act" published November of 1996, and "1999 Legislation and Regulation Advisory" published January of 2000 by the Bureau of Water Management.

State of Connecticut Department of Environmental Protection. The "Inland Wetlands and Watercourses Model Regulations" published by the Bureau of Water Management.

State of Connecticut Department of Environmental Protection. "Guidelines – Upland Review Area Regulations – Connecticut's Inland Wetlands & Watercourses Act" published June, 1997 by the Wetlands Management Section of the Bureau of Water Management.

"Vernal Pool Wetlands." (Insert to) Vernal Pools Proceedings Workgroup Organized by the CT DEP and CACIWC. 3-16, 1998.

Welsh, J. David. "Riparian Forest Buffers – Function and Design for Protection and Enhancement of Water Resources", published in 1991 by United States Department of Agriculture - Forest Service

Wrinn, H. David. "The Reach of Queach: Regulations Outside of Wetlands and Watercourses After Queach Corporation V. Inland Wetlands Commission, 258 Conn. 178 (2001)". January 2003 issue of the Habitat published by Connecticut Association of Conservation and Inland Wetlands Commissions, Inc.