INLAND WETLANDS AND WATERCOURSES

REGULATIONS

Town of Middlefield, CT

July 4, 1988
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## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Title and Authority</td>
<td>5</td>
</tr>
<tr>
<td>Definitions</td>
<td>7</td>
</tr>
<tr>
<td>Inventory of Inland Wetlands and Watercourses</td>
<td>12</td>
</tr>
<tr>
<td>Permitted Uses as of Right, Nonregulated Uses, and Pre-Existing Uses</td>
<td>13</td>
</tr>
<tr>
<td>Activities Regulated Exclusively by the Commissioner of Environmental Protection</td>
<td>16</td>
</tr>
<tr>
<td>Regulated Activities to be Licensed</td>
<td>17</td>
</tr>
<tr>
<td>Application Requirements</td>
<td>18</td>
</tr>
<tr>
<td>Application Procedures</td>
<td>24</td>
</tr>
<tr>
<td>Public Hearings</td>
<td>26</td>
</tr>
<tr>
<td>Necessary Findings and Considerations for Decisions</td>
<td>28</td>
</tr>
<tr>
<td>Decision Process and Permit</td>
<td>33</td>
</tr>
<tr>
<td>Action by Duly Authorized Agent</td>
<td>37</td>
</tr>
<tr>
<td>Bond and Insurance</td>
<td>38</td>
</tr>
<tr>
<td>Enforcement</td>
<td>39</td>
</tr>
<tr>
<td>Amendments</td>
<td>41</td>
</tr>
<tr>
<td>Appeals</td>
<td>44</td>
</tr>
<tr>
<td>Topic</td>
<td>Section</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Conflict and Severance</td>
<td>Section 17</td>
</tr>
<tr>
<td>Other Permits</td>
<td>Section 18</td>
</tr>
<tr>
<td>Application Fees</td>
<td>Section 19</td>
</tr>
<tr>
<td>Records Retention and Disposition</td>
<td>Section 20</td>
</tr>
<tr>
<td>Effective Date of Regulations</td>
<td>Section 21</td>
</tr>
</tbody>
</table>

**Appendices**

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Definition of Agriculture</td>
<td>50</td>
</tr>
<tr>
<td>B</td>
<td>Vernal Pool Guidelines</td>
<td>51</td>
</tr>
<tr>
<td>C</td>
<td>Upland Review Guidelines</td>
<td>69</td>
</tr>
</tbody>
</table>
INTRODUCTION

The Inland Wetlands and Watercourses Agency was established by Town Ordinance in September of 1975 and currently consists of ten members (seven regular members and three alternate members). All members are appointed by the Board of Selectmen and serve three-year terms. Their responsibilities include attendance at Agency meetings and site inspections as well as the review of activities, applications and regulations. The Agency meets regularly each month at the Middlefield Community Center.

The Agency's authority to regulate inland wetlands and watercourses is derived from The Inland Wetlands and Watercourses Act, Public Act 155, codified at Section 22a-36 through 22a-45 of the Connecticut General Statutes. Those statutory sections lay out the basic requirements for inland wetlands and watercourses protection in Connecticut and authorize the adoption of regulations to fill in the details and procedures. The Commissioner of the Department of Environmental Protection has the primary authority to regulate inland wetlands and watercourses, but under Section 22a-42, any town may regulate them upon the creation of a local agency and the adoption of regulations that comport with the Statutes. Under Section 22a-42d, the Commissioner may revoke the local agency's authority if it fails to adequately protect inland wetlands and watercourses.

The Commissioner has published a model regulation to assist local agencies. Although local agencies are not required to follow the model, it helps them to conform to the Statutes and with good administrative practice. The basic structure of these regulations follows that of the model; Sections 1 through 6 define the scope of the regulations (what they cover and what they do not cover), as well as the "ground rules," such as the purposes they are to serve and the definitions of terms; Sections 7 through 12 describe the application, action, and administrative procedures for different kinds of permits; Sections 13 through 17 address issues which arise after the permit is granted or denied, or activities which predate the regulations (and so are comparable to having a "grandfathered" permit); Sections 18 through 22 contain miscellaneous provisions about the technical aspects of the regulations, such as how records are stored, what happens if there are parts of the regulations which conflict with other state or federal laws, how permits under these regulations relate to permits by other government agencies, and application fees. Each individual section may be summarized as follows:

Section 1, **Title and Authority**, is derived from Section 22a-36, and sets forth the purposes these regulations are required to achieve.

Section 2, **Definitions**, contains the definitions of terms that are used in these regulations. In any type of regulation, words are often defined in ways which are appropriate for the subject of regulation, but which may be different from the definition used in ordinary conversation. Also, many terms are defined in ways that allow greater brevity in the rest of the regulation, including many concepts under a
single, generic term. Therefore, it is a good idea to review these definitions before trying to read the rest of the regulations.

Section 3, **Inventory of Inland Wetlands and Watercourses**, describes the mapping of inland wetlands and watercourses and the procedure to follow to change or clarify that map. However, due to simple technical limitations, the map is only a broad illustration of major wetland areas, and cannot substitute for field identification of those areas defined as "inland wetlands" and "watercourses" in the Statutes and these regulations.

Section 4, **Permitted Uses as of Right, Nonregulated Uses and Pre-Existing Uses**, sets forth the kinds of activities that are either not covered by these regulations or are automatically permitted under them. These are drawn directly from the Statutes, but the application of these exemptions to particular situations is the duty of the Agency. Anyone who feels that a proposed activity is exempt, non-regulated or pre-existing should consult with the Wetlands Agent or the Agency to avoid misunderstandings.

Section 5, **Activities Regulated Exclusively by the Commissioner of Environmental Protection**, describes those activities in inland wetlands and watercourses that, while regulated, are not under the jurisdiction of the local Agency and require application to the State of Connecticut.

Section 6, **Regulated Activities to Be Licensed**, sets forth the basic requirement that, if the activity is not exempted under Section 4, an application for permit is required.

Section 7, **Application Requirements**, describes the initial application procedure for all permits and describes which kinds of activities can follow the "short form" and which must follow the "long form." The "short form" is for activities that, if done properly, do not pose a risk of significant impact to an inland wetland or watercourse, while the "long form" is for activities that do pose such a risk.

Section 9, **Public Hearings**, sets out the requirements for providing notice of hearings when they are to be held.

Section 10, **Necessary Findings and Considerations for Decision**, spells out the standards that the Agency is required to apply in making a decision on any application before it.

Section 11, **Decision Process and Permit**, describes the detailed procedures for making a decision and issuing a permit.

Section 12, **Action by Duly Authorized Agent**, describes the authority the Commission may delegate to its enforcement officer and the procedures accompanying the agent's decision.
Section 13, **Bond and Insurance**, contains the methods to insure that activities authorized under a permit are carried out correctly and that risk to the public is covered by insurance.

Section 14, **Enforcement**, explains the methods available to the Agency to compel compliance with the regulations and permits issued under them.

Section 15, **Amendments**, describes the procedure by which these regulations can be changed. This is drawn directly from the Statutes.

Section 16, **Appeals**, describes the procedure to be followed by persons who wish to challenge a decision of the Agency in Court, as authorized by the Statutes.

Section 17, **Conflict and Severance**, explains how to address situations where these regulations conflict with other applicable laws, or where some part of them is invalidated by a judicial decision.

Section 18, **Other Permits**, explains that merely obtaining a permit from these regulations does not eliminate the need to obtain any other permits which may be required from other agencies under other regulations or laws.

Section 19, **Application Fees**, contains the methods of calculating the application fees for different kinds of applications.

Section 20, **Records Retention and Disposition**, describes the procedures for that issue.

Section 21, **Effective Date of Regulations**, describes when these regulations become officially in force.

The function of the Middlefield Inland Wetlands and Watercourses Agency is not to obstruct any particular development or to stop people from using their land. Both the authorizing Statutes and the courts that have interpreted them emphasize that wetlands regulations are primarily regulatory in character, not prohibitory. In most cases, uses of land are capable of occurring in harmony with the protection of inland wetlands and watercourses, and the intent of these regulations is to define and achieve that harmony. In some cases, there are uses of land that so severely threaten these vital natural resources that they must not be permitted to occur under any circumstances, but those situations are rare.

Issues of wetland and watercourse impact are fundamentally issues of fact, and so applicants are urged to determine if they require the assistance of persons qualified to generate and evaluate those facts, such as a soils scientist, surveyor, engineer, or biologist. The timely involvement of such persons will usually permit a more rapid and successful processing of an application. Advice is available from the Wetlands
Agent, and, per Section 7.1 applicants are invited to meet directly with the Commission to informally discuss proposed activities and identify potential problems before they lead to delay or inconvenience.

No plant or animal on earth can live without some amount of fresh, clean water. Working together, the people of Middlefield can insure that quality development proceeds without endangering quality water.
Section 1
Title and Authority

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

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

1.3 The Inland Wetlands and Watercourses Agency of the Town of Middlefield was established in accordance with an ordinance adopted September 13, 1975
and shall implement the purposes and provisions of these regulations and the Inland Wetlands and Watercourses Act in the Town of Middlefield.

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

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

2.1 As used in these regulations:

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

"Agency" means the Inland Wetlands and Watercourses Agency of the Town of Middlefield, CT.

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

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

"Commission Member" means a member of the Inland Wetlands and Watercourses Agency of the Town of Middlefield.

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

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

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

"Designated Agent" shall be that person or persons designated as the Wetland Enforcement Officer by the Middlefield Inland Wetlands and Watercourses Agency to carry out its functions and purposes. Such Agent may include acting or backup agents designated by the Agency, including the Chairman or member(s) of the Agency.

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

"Essential to the farming operation" means that the proposed activity is necessary and indispensable to sustain farming activities on the farm, which activities are either existing or which are demonstrated by substantial evidence to be in progress. "Farming" shall be consistent with the definition

-7-
as noted in section 1-1(q) of the Connecticut General Statutes. (see Appendix A)

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

"Gardening" means the tilling of soil, planting, cultivating and harvesting of vegetable matter.

"Grazing" means using any tract of land to feed or supply farm animals with grass or pasture or to tend farm animals, or feeding or growing silage and herbage.

"Harvesting of Crops" means gathering plants or animals or plant or animal products which have been grown to be harvested.

"License" means the whole or any part of any permit, 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.

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

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

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

"Municipality" means the Town of Middlefield, Middlesex County, Connecticut.
"Nurseries" means places where plants are grown for sale, transplanting, or experimentation.

"Permit" see license

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

"Person" means any person, firm, partnership, association, corporation, limited liability company, company, organization or legal entity of any kind, including municipal corporations, governmental agencies or subdivisions thereof.

"Pollution" means harmful thermal effect or the contamination or rendering unclean or impure of any waters of the state by reason of any waste or other materials discharged or deposited therein by any public or private sewer or otherwise so as directly or indirectly to come in contact with any waters. This includes, but is not limited to, erosion and sedimentation resulting from any filling, land clearing or excavation activity.

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

"Regulated activity" means any operation within or use of a wetland or watercourse involving removal or deposition of material, or any obstruction, construction, alteration or pollution, of such wetlands or watercourses, but shall not include the specified activities in section 22a-40 of the Connecticut General Statutes. Furthermore:

1.) Any clearing, grubbing, filling, grading, paving, excavating, constructing, depositing or removal of material and discharging of storm water on the land within 100 (one hundred) feet measured horizontally from the boundary of any wetland or watercourse is a regulated activity.

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

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

"Rendering unclean or impure" means any alteration of the physical, chemical or biological properties of any waters of the state, including, but not limited to, change in odor, color, turbidity or taste.
"Significant impact" means any activity, including, but not limited to, the following activities that may have a major effect:

a. 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;
b. any activity that substantially changes, or has the potential to substantially change, the natural channel or may inhibit the natural dynamics of a watercourse system;
c. any activity that substantially diminishes, or has the potential to substantially diminish, 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;
d. any activity that is likely to cause or has the potential to cause substantial turbidity, siltation or sedimentation in a wetland or watercourse;
e. any activity that causes substantial diminution of flow of a natural watercourse or groundwater levels of the wetland or watercourse;
f. any activity that is likely to cause or has the potential to cause pollution of a wetland or watercourse; or

g. any activity that damages or destroys, or has the potential to damage or destroy, unique wetland or watercourse areas or such areas having demonstrable scientific or educational value.

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

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

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

"Town" means the Town of Middlefield, Middlesex County in the State of Connecticut.

"Vernal pool" or "vernal pool habitat" means naturally occurring confined basin depressions and their associated inland wetlands, if any, which depressions, during a year of normal rainfall, hold water for a minimum of two (2) continuous months during the spring and/or summer, and which are free of adult fish populations.

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

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

3.1 The map of wetlands and watercourses entitled "Town of Middlefield, Connecticut, Official Inland Wetlands and Watercourses Map, Effective Date 5/1/84" delineates the general location and boundaries of inland wetlands and the general location of watercourses. Copies of this map are available for inspection at the office of the Town Clerk or the Inland Wetlands Agency. In all cases, the precise location of wetlands and watercourses shall be determined by the actual character of the land, the distribution of wetland soil types and the location of watercourses. Such determinations shall be made, whenever possible, by field inspection and testing conducted by a certified soil scientist where soil classifications are required, or where watercourse determinations are required, or by other qualified individuals. The Agency may also use aerial photography, remote sensing imagery, resource mapping, soils maps, site inspection observations or other information in determining the location of the boundaries of wetlands and watercourses.

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

3.3 The Agency shall maintain a current inventory of regulated areas within the town. The Agency may amend its map as more accurate information becomes available.

3.4 All map amendments are subject to the public hearing process outlined in section 15 of these regulations.
Section 4
Permitted Uses as of Right, Nonregulated Uses, and Pre-Existing 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 section shall not be construed to include:
   1) road construction or the erection of buildings not directly related to the farming operation,
   2) relocation of watercourses with continual flow,
   3) filling or reclamation of wetlands or watercourses with continual flow,
   4) clear cutting of timber except for the expansion of agricultural crop land, or
   5) the mining of top soil, peat, sand, gravel or similar material from wetlands or watercourses for the purposes 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 a municipal planning, zoning or planning and zoning commission as of the effective date of promulgation of the municipal regulations pursuant to subsection (b) of section 22a-42a, or as of July 1, 1974, which ever is earlier, and further provided no residential home shall be permitted as of right pursuant to this subdivision unless the permit was obtained on or before July 1, 1987. The individual claiming a use of wetlands permitted as a right under this subsection shall document the validity of said right by providing a certified copy of the building permit and a site plan showing proposed and existing topographic contours, house and well locations, septic system, driveway, approval dates or other necessary information to document his entitlement;

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 two acres 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 and 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, whichever is earlier, provided such pipe is on property which is zoned as residential but which does not contain hydrophytic vegetation. For purposes of this subdivision, “maintenance” means the removal of accumulated leaves, soil, and other debris whether by hand or machine, while the pipe remains in place.

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, clear cutting, 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 shellfishing and cross-country skiing where otherwise legally permitted and regulated.

4.3 All activities in wetlands or watercourses involving filling, excavating, dredging, clear cutting, clearing, or grading or any other alteration or use of a wetland or watercourse not specifically permitted by this section and otherwise defined as a regulated activity by these regulations shall require a permit from the Agency in accordance with section 6 of these regulations, or for certain regulated activities located outside of wetlands and watercourses from the duly authorized Agent in accordance with section 12 of these regulations.

4.4 To carry out the purposes of this section, any person proposing a permitted operation and use or a nonregulated operation and use shall, prior to commencement of such operation and use, notify the Agency on a form provided by it, and provide the Agency with sufficient information to enable it to properly determine that the proposed operation and use is a permitted or nonregulated use of a wetland or watercourse. The Agency shall rule that the proposed operation and use or portion of it is a permitted or nonregulated operation and use or that the proposed operation and use is a regulated activity and a permit is required.

4.5 Any regulated activity or use legally existing prior to the effective date of these regulations shall be exempt and permitted to continue, provided that:
a. no new or additional regulated activity requiring a permit under the provisions of these regulations shall be permitted until such additional permit has been obtained from the Inland Wetlands and Watercourses Agency; and

b. where damage or hazardous conditions exist, the landowner may be required by the Agency to repair such damage or remedy such conditions as the Agency may direct.

Any exemption pursuant to this Section of the regulations shall be extinguished by non-sue after a period of one (1) year.
Section 5
Activities Regulated Exclusively by the Commissioner of Environmental Protection

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

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

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

5.4 The Commissioner of Environmental Protection shall have exclusive jurisdiction over the discharge of fill or dredged materials into the wetlands and watercourses of the state pursuant to section 401 of the Federal Clean Water Act, as amended, for activities regulated by the U.S. Army Corps of Engineers under section 404 of the Federal Clean Water Act.
Section 6
Regulated Activities to be Licensed

6.1 No person shall conduct or maintain a regulated activity without first obtaining a permit for such activity from the Inland Wetlands and Watercourses Agency of the Town of Middlefield, except as provided in section 6.3.

6.2 Any person found to be conducting or maintaining a regulated activity without the prior authorization of the Agency, or violating any other provision of these regulations, shall be subject to the enforcement proceedings and penalties prescribed in section 14 of these regulations and any other remedies as provided by law.

6.3 Applications which involve the repair or replacement of an existing septic system may be reviewed and acted upon by the wetlands Agent as short form applications, per section 8 of these regulations, but without appearing before the Agency, provided that the following requirements are met:

a. No point of the new or repaired septic system shall be any closer to the regulated area than any point of the pre-existing system.

b. There shall be no increase in bedrooms, dwelling units, or any other component of the use that would constitute an increase in septic discharge as determined under the Connecticut Public Health Code.

c. The Sanitarian, or the Connecticut Department of Health Services, as the case may be, has approved the design of the proposed repair or replacement.

d. All applicable requirements of these regulations, such as required erosion and sedimentation control measures, are met.

In acting upon any application under section 6.3, the Agent may consult with the Agency. Any person aggrieved by the decision of the Agent may appeal per section 12.2.
Section 7
Application Requirements

7.1 Any person intending to conduct a regulated activity or to renew or amend a permit to conduct such activity, shall apply for a permit on a form provided by the Agency. The application shall contain the information described in this section and any other information the Agency may reasonably require. Application forms may be obtained in the offices of the Middlefield Land Use Office.

The Agency 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 Agency. 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 Agency upon the future receipt, if any, of a formal application. Neither the applicant nor the Agency shall be in any way bound by any statement made during such pre-application meeting, nor shall the statement of any Agency member be deemed to be an indication of prejudgment or prejudice, it being acknowledged by the applicant that the Agency’s responses, like the request itself, are preliminary and subject to further change and refinement.

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

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

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

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

a. the applicant’s name, home and business mailing addresses and telephone numbers; if the applicant is a Limited Liability Corporation or a
Corporation the managing member's or responsible corporate officer's name, address, and telephone number;

b. the owner's name, mailing address and telephone number and written consent of the land owner if the applicant is not the owner of the land upon which the subject activity is proposed;

c. the applicant's interest in the land;

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

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

f. alternative(s) that 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. The site plan shall also include the depth to which removal or deposition operations are proposed as well as the existing and proposed finished grade of all slopes, including depth of proposed materials and the depth of excavations resulting from removal operations, and the manner in which material will be removed or deposited and/or any structure will be erected or a use will be carried out, including a detailed description of the nature of the proposed use;

h. names and mailing addresses of adjacent land owners as shown on the current records of the Middlefield Assessor's Office;

i. certification 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; and certification under seal by any land surveyor, professional engineer, soils scientist, or other licensed design professional that the information submitted by each such design professional is
accurate and in compliance with these regulations to the best of his/her knowledge and belief;
j. authorization for the members and Agent(s) of the Agency to inspect the subject land, at reasonable times, during the pendency of an application and for the life of the permit;
k. a completed DEP reporting form; the Agency shall revise or correct the information provided by the applicant and submit the form to the Commissioner of Environmental Protection in accordance with section 22a-39-14 of the Regulations of Connecticut State Agencies;
l. any other information the Agency deems necessary to the understanding of what the applicant is proposing; and
m. submission of the appropriate filing fee based on the fee schedule established in section 19 of these regulations.

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

a. site plans for the proposed activity and the land which will be affected thereby which show existing and proposed conditions, wetland and watercourse boundaries, land contours, boundaries of land ownership, proposed alterations and uses of wetlands and watercourses, and other pertinent features of the land and the proposed activity, prepared by a professional engineer, land surveyor, architect or landscape architect licensed by the state, or by such other qualified person;
b. engineering reports and analyses and additional drawings to fully describe the proposed activity including any filling, excavation, drainage or hydraulic modifications to watercourses and the proposed erosion and sedimentation control plan;
c. mapping of soil types consistent with the categories established by the National Cooperative Soil Survey of the U.S. Natural Resources Conservation Service; the wetlands shall be delineated in the field by a soil scientist and the soil scientist's field delineation shall be depicted on the site plans;
d. a description of the ecological communities and functions of the wetlands or watercourses involved with the application and the effects of the proposed activity on these communities and wetland functions;
e. a description of how the applicant will change, diminish, or enhance the ecological communities and functions of the wetlands or watercourses involved in the application and each alternative which would cause less or no environmental impact to wetlands or watercourses, and a description of why each alternative considered was deemed neither feasible nor prudent;
f. analysis of chemical or physical characteristics of any fill material; and
g. management practices and other measures designed to mitigate the impact of the proposed activity.

7.7 The applicant shall certify whether:

a. any portion of the property on which the regulated activity is proposed is located within 500 feet of the boundary of an adjoining municipality;
b. traffic attributable to the completed project on the site will use streets within the adjoining municipality to enter or exit the site;
c. sewer or water drainage from the project site will flow through and impact the sewage or drainage system within the adjoining municipality; or,
d. water run-off from the improved site will impact streets or other municipal or private property within the adjoining municipality.

7.8 An original and four (4) copies of all application materials shall be submitted to comprise a complete application unless an applicant is otherwise directed, in writing, by the Agency.

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

a. the application may incorporate the documentation and record of the prior application;
b. the application shall describe the extent of work completed at the time of filing and the schedule for completing the activities authorized in the permit;
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; and
e. the Agency may, prior to the expiration of a permit, accept an untimely application to renew such permit if the authorized activity is ongoing and allow the continuation of work beyond the expiration date if, in its judgment, the permit is likely to be renewed and the public interest or environment will be best served by not interrupting the activity.

7.10 Any application to renew a permit shall be granted upon request of the permit holder unless the Agency finds that there has been a substantial change in circumstances which requires a new permit application or an enforcement action has been undertaken with regard to the regulated activity.
for which the permit was issued provided no permit may be valid for more than ten years.

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

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

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

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

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

e. Nothing in this section shall be construed to prohibit the filing of a permit application or to require such written notice when the activity that is the subject of such permit application will occur on a portion of property that is not restricted under the terms of such conservation or preservation restriction.

It is the burden of the applicant to submit a complete application, and to demonstrate compliance with all criteria and requirement of these 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 by the Agency without prejudice to a future complete application.
7.12 In addition to compliance with the substantive criteria set forth in section 10 of these regulations, the Agency may also deny an application for a permit for procedural reasons when:

a. the granting of an application would be in conflict with any outstanding order issued by another regulatory agency (such as the Connecticut Department of Environmental Protection), a court of law, or other governmental authority having jurisdiction over the subject property and the proposed activity;
b. the application is so incomplete as to prevent the Agency from making a finding of compliance or noncompliance with the criteria set forth in section 10 of these regulations, or, in the case of a request pursuant to section 4, to make a determination concerning a permitted or non-regulated activity; or
c. the application has failed to comply with requirements of these regulations concerning the filing of a complete application form, fee, or other procedural requirements; or there is a defect in the public hearing, posting of signs, or other notices required by these regulations; or a conflict of interest is discovered; or there is a violation of the Connecticut Freedom of Information Act or there is some other procedural flaw or defect which jeopardizes the jurisdiction of the Agency or the validity of any decision reached on the application, which defect cannot reasonably be remedied.

Any denial under this section shall be without prejudice to a future application that does not exhibit such procedural defects or deficiencies.
Section 8
Application Procedures

8.1 All petitions, applications, requests or appeals shall be submitted to the Inland Wetlands and Watercourses Agency of the Town of Middlefield.

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

a. any portion of the property affected by a decision of the Agency is within five hundred feet of the boundary of an adjoining municipality;

b. a significant portion of the traffic to the completed project on the site will use streets within the adjoining municipality to enter or exit the site;

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

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

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

8.3 When an application is filed to conduct or cause to be conducted a regulated activity upon an inland wetland or watercourse, any portion of which is within the watershed of a water company as defined in section 25-32a of the Connecticut General Statutes, the applicant shall provide written notice of the application to the water company and the Commissioner of Public Health in a format prescribed by said commissioner, provided such water company or said commissioner has filed a map showing the boundaries of the watershed on the land records of the municipality in which the application is made and with the inland wetlands agency of such municipality. Such notice shall be made by certified mail, return receipt requested, and shall be mailed within seven days of the date of the application. The water company and the Commissioner of Public Health, through a representative, may appear and be heard at any hearing on the application. Documentation of such notice shall be provided to the Agency.

8.4 The date of receipt of a petition, application, request or appeal shall be the day of the next regularly scheduled meeting of the Agency, immediately following the day of submission to the Agency or its Agent of such petition, application, request or appeal or thirty-five days after such submission, whichever is sooner.
8.5 At any time during the review period, the applicant shall provide such additional information as the Agency may reasonably require. Requests for such additional information shall not stay the time limitations as set forth in subsection 11.2 of these regulations.

8.6 All applications shall be open for public inspection.

8.7 Incomplete applications may be denied.

8.8 At any time prior to final action by the Agency on an application for a permit, the applicant may withdraw such application by filing a written notice of withdrawal with the Agency.
Section 9
Public Hearings

9.1 The Agency shall not hold a public hearing on an application unless the Agency determines that the proposed activity may have a significant impact on wetlands or watercourses, a petition signed by at least twenty-five persons who are eighteen years of age or older and who reside in the municipality in which the regulated activity is proposed, requesting a hearing is filed with the Agency not later than fourteen (14) days after the date of receipt of such application, or the Agency finds that a public hearing regarding such application would be in the public interest. The Agency may issue a permit without a public hearing provided no petition provided for in this section is filed with the Agency on or before the fourteenth day after the date of receipt of the application. Such hearing shall be held no later than sixty-five (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 days, the first not more than fifteen days and not fewer than ten days, and the last not less than two days before the date set for the hearing in a newspaper having a general circulation in each town where the affected wetland and watercourse is located.

9.3 Notice of the public hearing shall be mailed by the applicant by certified mail, return receipt requested, to the owner(s) of record of abutting land, as shown in the records of the Middlefield Assessor's Office, no less than fifteen days prior to the day of the hearing, and proof of the receipt or attempted delivery of such notice(s) shall be presented by the applicant at the public hearing.

9.4 All applications for which a public hearing has been scheduled shall be required to post a minimum of one (1) sign notifying the public of the hearing relating to the application. The posting of all sign(s) shall be the responsibility of the applicant and shall be posted on the property in question in accordance with the following:

a. The sign(s) shall be posted at least seven (7) days prior to the date of the public hearing (eight days if the seventh day is a state holiday). The sign(s) shall be firmly secured to the ground to prevent vandalism. Parcels having frontage on more than one (1) street shall be required to provide one (1) sign on each street having frontage. The location of the sign(s) shall be shown on the site plan and approved by the Inland Wetlands and Watercourses Agency Agent.
b. The sign face shall be provided by the Agency, and shall be mounted on a durable mounting post provided by the Agency, the use of which by the application shall be secured by cash deposit to insure the return thereof.
c. The sign(s) shall advertise the date, time and place of the public hearing on the application.
d. The format for the sign shall be obtained at the Land Use Office.
e. The sign(s) shall be taken down within one (1) week after the public hearing is closed.
Section 10

Necessary Findings and Considerations for Decision

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

a. The application and its supporting documentation
b. Reports from other agencies and commissions including but not limited to the Town of Middlefield:

1. Conservation Commission
2. Planning, Zoning, or Planning and Zoning Commissions
3. Building Official
4. Health Officer
5. Water Pollution Control Authority

c. Comments on any application from the Conservation District, the Regional Planning Agency or other regional organizations (e.g. Council of Elected Officials); agencies in adjacent municipalities which may be affected by the proposed activity; or other technical agencies or organizations which may undertake additional studies or investigations
d. For an application for which a public hearing is held, public comments, evidence and testimony.

Non-receipt of comments from state agencies and commissions listed in subdivision 10.1b and 10.1c within the prescribed time shall neither delay nor prejudice the decision of the Agency.

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

a. the environmental impact of the proposed regulated activity on wetlands or watercourses;
b. the applicant’s purpose for, and any feasible and prudent alternatives to, the proposed regulated activity which alternatives would cause less or no environmental impact to wetlands or watercourses;
c. the relationship between the short term and long term impacts of the proposed regulated activity on wetlands or watercourses and the maintenance and enhancement of long-term productivity of such wetlands or watercourses;
d. Irreversible and irretrievable loss of wetland or watercourse resources which would be caused by the proposed regulated activity, including the extent to which such activity would foreclose a future ability to protect,
enhance or restore such resources, and any mitigation measures which may be considered as a condition of issuing a permit for such activity including, but not limited to, measures to (1) prevent or minimize pollution or other environmental damage, (2) maintain or enhance existing environmental quality, or (3) in the following order of priority: restore, enhance and create productive wetland or watercourse resources; e. the character and degree of injury to, or interference with, safety, health or the reasonable use of property, including abutting or downstream property, which is caused or threatened by the proposed regulated activity. This includes recognition of potential damage from erosion, turbidity, or siltation, loss of fish and wildlife and their habitat, loss of unique habitat having demonstrable natural, scientific or educational value, loss or diminution of beneficial aquatic organisms and wetland plants, the dangers of flooding and pollution, and the destruction of economic, aesthetic, recreational and other public and private uses and values of wetlands or watercourses to the community; and f. impacts of the proposed regulated activity on wetlands or watercourses outside the area for which the activity is proposed and future activities associated with or reasonably related to, the proposed regulated activity which are made inevitable by the proposed regulated activity and which may have an impact on wetlands and watercourses.

10.3 The Agency shall consider the following in the process of evaluating the environmental impact of the proposed activity:

a. the ability of the regulated area to continue to absorb, store or purify water or to prevent flooding and the projected effect on the water table and drainage patterns;
b. the effect of any material to be removed or deposited on flood control, water supply and quality and aquatic organisms;
a. increased erosion problems resulting from changes in grades, ground cover or drainage features;
b. the extent of additional siltation or leaching and its effect on water quality and aquatic life;
c. the influence of toxic materials on water supplies, aquatic organisms or wildlife;
d. changes in the volume, velocity, temperature or course of a waterway and the resulting effects on plant, animal and aquatic life;
e. the existing flood or stream channel encroachment lines and flood plains;
f. the changes to the physical, chemical and biological properties of the water or soil and their impact;
g. the importance of the area to the region with respect to water supply, water purification, flood control, natural habitat, recreation, open space and size;
h. the natural, historic, or economic features that might be damaged, destroyed, rendered inaccessible or otherwise affected by the proposed activity;

i. changes in the suitability of the area for recreational and aesthetic enjoyment; and


10.4 The Agency shall consider the following in the process of evaluating the importance of the area of the proposed regulated activity:

a. the existing or potential use of the area as a surface or ground water supply;

b. the extent to which the area serves as a recharge area or purifier of surface or ground waters;

c. the function of the area as part of the natural drainage system for the watershed;

d. the importance of the area as a natural feeding or breeding area;

e. the existing and potential use of the area for recreational purposes;

f. the existence of rare or unusual concentrations of botanical species;

g. the availability of other open spaces in the surrounding area;

h. irreversible and irretrievable commitments of resources that would be involved in the proposed activity. This requires recognition that the inland wetlands and watercourses of the town are a fragile natural resource, and that these areas may be irreversibly destroyed by deposition, filling and removal of material, by the diversion or obstruction of water flow, and by erection of structures for other uses; and

i. the suitability of such action to the area for which it is proposed. This requires the Agency to balance the need for economic growth of the town and the use of its land with the need to protect its environment and ecology for the people of the town and the benefit of generations yet unborn.

10.5 The Commission shall also evaluate the proposed action considering:

a. the alternatives to the proposed action, including a consideration of the alternatives which might enhance environmental quality, or have a less detrimental effect, and which could feasibly attain the basic objective of the activity. This should include, but is not limited to, the alternative of taking no action, or postponing action pending further study, and the alternative of requiring actions of a different nature which would provide similar benefits with different environmental impacts, such as using a different location for the activity. These alternatives shall be diagrammed on a site plan or drawing and submitted to the Agency as part of the application; and
b. the relationship between the short-term uses of the environment and the maintenance and enhancement of the long-term productivity, including consideration of the extent to which the proposed activity involves tradeoffs between short-term environmental gains at the expense of long-term loses, or vice versa, and consideration of the extent to which the proposed action forecloses future options.

10.6 In evaluating the preceding criteria, the Agency may consider or require measures that would mitigate the impact of the proposed regulated activity. Such measures include, but are not limited to, actions which would avoid adverse impacts or lessen impacts to wetlands and watercourses and which could be feasibly carried out by the applicant and would protect or enhance the wetland's or watercourse's natural capacity to support fish and wildlife, to prevent flooding, to supply and protect surface and ground waters, to control sedimentation, to prevent erosion, to assimilate wastes, to facilitate drainage, to control pollution, to support recreational activities and open space, and to promote public health and safety.

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

10.8 In the case of an application where the applicant has provided written notice pursuant to subsection 7.11.c of these regulations, the holder of the restriction may provide proof to the Agency that granting of the permit application will violate the terms of the restriction. Upon a finding that the requested land use violates the terms of such restriction, the Inland Wetlands Agency shall grant the permit approval.

10.9 In the case of an application where the applicant fails to comply with the provisions of subsections 7.11c or 7.11d of these regulations, (1) the party holding the conservation or preservation restriction, other than a state agency that holds such restriction, may, not later than fifteen (15) days after receipt of actual notice of permit approval, file an appeal with the inland wetland agency, subject to the rules and regulations of such agency relating to appeals. The inland wetlands agency shall reverse the permit approval upon a finding that the requested land use violates the terms of such restriction; or (2) the state agency that holds such restriction may, not later than thirty days after receipt of actual notice of permit approval, file an appeal with the inland wetlands agency, subject to the rules and regulations of such agency relating to appeals. The inland wetlands agency shall immediately reverse such permit approval if the commissioner of the state
agency that holds such restriction certifies that the land use authorized in such permit violates the terms of such conservation or preservation restriction.

10.10 In the case of an application which is denied on the basis of a finding that there may be feasible and prudent alternatives to the proposed regulated activity which have less adverse impact on wetlands or watercourses, the Agency shall propose on the record in writing the types of alternatives which the applicant may investigate provided this 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.

10.11 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.

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

10.13 In reaching its decision on any application after a public hearing, the Agency shall base its decision on the record of that hearing. Documentary evidence or other material not in the hearing record shall not be considered by the Agency in its decision. However, the Agency is not precluded from seeking advice from its own experts on information already in the record of the public hearing. A conclusion that a feasible and prudent alternative does not exist does not create a presumption that a permit should be issued. The applicant has the burden of demonstrating that his application is consistent with the purposes and policies of the Inland Wetlands and Watercourses Regulations of the Town of Middlefield and of Sections 22a-36 to 22a-45, inclusive, of the Connecticut General Statutes.

10.14 The Agency may deny any application, without prejudice to any future application for the same activity or property where a procedural flaw jeopardizes the jurisdiction of the Agency or the validity of the decision making process, such as a defective legal notice, failure to post signs, discovery of a conflict of interest, breach of the Connecticut Freedom of Information Act, or other non-substantive matters which cannot reasonably be remedied.
Section 11
Decision Process and Permit

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

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

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

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

11.5 If an activity authorized by an inland wetland permit also involves an activity which requires a zoning or subdivision approval, special zoning permit, or variance or special exception, under sections 8-3(g), 8-3c, or 8-26 of the Connecticut General Statutes, the Agency shall file a copy of the decision and report on the application with the Town of Middlefield Planning, Zoning,
or Planning and Zoning Commission within fifteen days of the date of the decision thereon.

11.6 Once commenced, the activity authorized in a permit shall be completed within one (1) year, provided that the Agency may set a lesser time in approving any permit, and the Agency may also grant one or more extensions of the time within which an activity may be completed after its commencement, up to the time of expiration of the permit itself. The Agency may also establish a specific time period within which any regulated activity shall be conducted, such as a particular season of the year, during certain rainfall or water table condition, and similar factors which could potentially affect the impact of the activity. Any permit issued by the Agency for the development of land for which an approval is required under section 8-3, 8-25 or 8-26 of the Connecticut General Statutes shall be valid for five years provided the Agency may establish a specific time period within which any regulated activity shall be conducted. Any permit issued by the Agency for any other activity shall be valid for not less than two years and not more than five years.

11.7 Any application to extend the expiration date of a previously issued permit or amend an existing permit shall be filed with the Agency at least sixty-five (65) days prior to the expiration date for the permit in accordance with Section 8 of these regulations. Any application for amendment, renewal or extension shall be made in accordance with this subsection provided:

a. The application may incorporate by reference the documentation and record of the original application;

b. the application shall state the reason why the authorized activities were not initiated or completed within the time specified in the permit;

c. the application shall describe any changes in facts or circumstances involved with or affecting wetlands or watercourses or the property for which the permit was issued;

d. if the Agency receives any request for extension of any time limit contained in this section after the expiration of such time limit, the Agency may deny such request and inform the party requesting the extension that a new permit application may be filed for action by the Agency. The Agency may accept an untimely application to extend the expiration date of a 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 extended and the public interest or environment will be best served by not interrupting the activity; 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; and

e. the Agency shall evaluate the application pursuant to Section 10 of these regulations and grant the application as filed, grant it with any terms or limitations, or deny it.
In acting on any extension, the Agency shall examine any changes in circumstance that might indicate the need for changes in the permit or in the original decision to grant such permit.

No permit shall be found to be invalid under this section except following a hearing with prior notice to the permit holder. Such notice shall be by certified mail, return receipt requested, mailed to the permit holder of record at least ten (10) days prior to the hearing. At such hearing which need not be a public hearing, the permit holder may introduce testimony or any other evidence to indicate that the permit has not violated the time limits of this section, and remains valid; or may apply for any extension of any such time period as provided herein; or may file a new application at that time.

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

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

11.10 General provisions in the issuance of all permits:

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

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

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

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

e. Permits are not transferable without the prior written consent of the Agency.
11.11 Upon the approval of any permit, no activity covered by such permit shall commence until the applicant files two (2) complete sets of final plans on mylar or other permanent, reproducible medium, and ten (10) sets on paper; and two (2) complete sets of all other documents, all of which shall be updated to reflect any conditions or modifications of approval, or any modification presented during the course of the approval process by the applicant. A copy of the motion for approval shall be reproduced, in its entirety, upon the said final plans. All sets of final plans and other documents shall be endorsed by the signatures of the Chairman and Secretary of the Agency, and one reproducible set and five (5) paper sets shall be returned to the applicant. Thereafter, all employees, agents, contractors or subcontractors of both the permit holder and the Town of Middlefield shall utilize only plans that have been so endorsed, and no amendment shall be valid without such endorsement. A copy of the motion or letter of approval shall be filed by the applicant in the office of the Town Clerk, indexed in the name of the owner(s) of record, and no activity shall commence, nor any permit to issued, until evidence of such filing has been provided to the Agent of the Agency.
Section 12
Action by Duly Authorized Agent

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

12.2 Any person receiving such approval from such Agent shall, within ten days of the date of such approval, publish, at the applicant's expense, notice of the approval in a newspaper having a general circulation in the town wherein the activity is located or will have an effect. Any person may appeal such decision of such Agent to the Agency within fifteen days after the publication date of the notice and the Agency shall consider such appeal at its next regularly scheduled meeting provided such meeting is no earlier than three business days after receipt by such Agency or its Agent of such appeal. Any person may appear and be heard at the meeting held by the Agency to consider the subject appeal. The Agency shall, at its discretion, sustain, alter, or reject the decision of its Agent or require an application for a permit in accordance with Section 7 of these regulations.
Section 13
Bond and Insurance

13.1 Upon approval of the application and prior to issuance of a permit, the applicant may, at the discretion of the Agency, be required to file a cash bond in such an amount and in a form approved by the Agency, said bond to be of sufficient sum to insure compliance with the permit, and to place the Agency in the position to perform both emergency and long-term remediation and restoration in the event that the applicant fails to comply with these regulations, or any permit issued hereunder, or any remediation orders issued by the Agency.

13.2 The cash bond shall be conditioned on compliance with all provisions of these regulations and the terms, conditions and limitations established in the permit. By acceptance of the permit, the applicant shall be deemed to consent to allowing the Agency or its Agents, employees, or contractors to enter onto the permit premises for the purpose of inspection, enforcement, and remediation as set forth in Section 15 of these regulations.

13.3 The Agency may require the applicant to certify that it has public liability insurance against liability which might result from the proposed operation or use of the wetlands or watercourses covering any and all damage which might occur within two (2) years of completion of such operations, in an amount commensurate with the regulated activity.
Section 14

Enforcement

14.1 The Agency may appoint an agent or agents to act in its behalf with the authority to inspect property, except the interior of a private residence or any residential accessory building, and issue notices of violation or cease and desist orders and carry out other actions or investigations necessary for the enforcement of these regulations. In carrying out the purposes of this section, the Agency or its duly authorized Agent shall take into consideration the criteria for decision under section 10.2 of these regulations.

14.2 To fulfill its statutory obligation to preserve and protect the Town's wetlands and watercourses, the Agency, or its Agent, may inspect, at reasonable hours, any of the Town's wetlands and watercourses provided that the Agency, or its Agent, has made every possible attempt to contact the property owner either in person, by telephone or registered mail in order to gain access to the wetlands or watercourses in question. The purpose of the inspection will be to ascertain whether any person is conducting or maintaining a regulated activity in violation of the Act or these regulations.

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

14.4 In the case of a property for which a permit has been issued, a permittee's refusal or failure to allow the Agency or its Agent to make reasonable inspections of the regulated activity shall constitute cause for the Agency or its duly authorized Agent to suspend or revoke the permit by following the procedures in subsection 15.4(b) of these regulations or to resort to any other enforcement procedures permitted by Section 15.4.

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

14.6 If the Agency or its duly authorized Agent finds that any person is conducting or maintaining any activity, facility or condition which is in violation of the Act or these regulations, or any permit issued hereunder, the Agency or its duly authorized Agent may:

a. Issue a written order by certified mail, return receipt requested, to such person conducting such activity or maintaining such facility or condition to immediately cease such activity or to correct such facility or condition. Within ten (10) calendar days of the issuance of such order the Agency
shall hold a hearing to provide the person an opportunity to be heard and show cause why the order should not remain in effect. The Agency shall consider the facts presented at the hearing and within ten (10) days of the completion of the hearing notify the person by certified mail that the original order remains in effect, that a revised order is in effect, or that the order has been withdrawn. The Agency shall publish notice of its decision in a newspaper having general circulation in the municipality. The original order shall be effective upon issuance and shall remain in effect until the Agency affirms, revises or withdraws the order. The issuance of an order pursuant to this 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 Agency, and prescribing the necessary action and steps to correct the violation including, without limitation, halting work in wetlands or watercourses. The Agency may request that the individual appear at the next regularly scheduled meeting of the Agency to discuss the unauthorized activity, and/or provide a written reply to the notice or file an application for the necessary permit. Failure to carry out the action(s) directed in a notice of violation may result in issuance of the order provided in section 14.3.a or other enforcement proceedings as provided by law.

c. Following a hearing as described in section 15.7, utilize the proceeds of any bond for the purpose of remedying and restoring the damage to any regulated area caused by any violation of these regulations or any permit issued hereunder.

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

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

15.2 An application filed with the Agency which is in conformance with the applicable inland wetlands regulations as of the date of the receipt of such application shall not be required thereafter to comply with any change in inland wetland regulations, including changes to setbacks and buffers, taking effect on or after the date of such receipt and any appeal from the decision of such Agency with respect to such application shall not be dismissed by the Superior Court on the grounds that such a change has taken effect on or after the date of such receipt. The provisions of this section shall not be construed to apply (1) to the establishment, amendment or change of boundaries of inland wetlands or watercourses or (2) to any change in regulations necessary to make such regulations consistent with the provisions of the Act as of the date of such receipt.

15.3 These regulations and the Town of Middlefield Inland Wetlands and Watercourses Map shall be amended in the manner specified in section 22a-42a of the Connecticut General Statutes, as amended. The Agency shall provide the Commissioner of Environmental Protection with a copy of any proposed regulations and notice of the public hearing to consider any proposed regulations or amendments thereto, except map amendments pursuant to subsection 16.4 of this section, at least thirty-five (35) days before the public hearing on their adoption. The fee schedule in section 19 shall apply to all applications for amendments.

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

a. the petitioner's name, mailing address and telephone number;
b. the owner(s)' name (if not the petitioner), address, telephone number, and a written consent to the proposed action set forth in the application;
c. the address, or location, of the land affected by the petition, including a description of the land in sufficient detail to allow identification of the disputed wetland or watercourse areas;
d. the names and addresses of adjacent property owners;
e. a map showing proposed development of the property;
f. the petitioner's interest in the land affected by the petition;
g. map(s) showing the geographic location of the land affected by the petition and the existing and the proposed wetland(s) and watercourse(s) boundaries on such land in accurate detail together with the documentation supporting such proposed boundary locations; and

h. the reasons for the requested action.

15.5 Any person who submits a petition to amend the Town of Middlefield, Connecticut, Official 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 Agency. If such person is the owner, developer or contract purchaser of the land that 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 and proposed wetland and watercourse boundaries.

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

15.7 A public hearing shall be held on petitions to amend the Inland Wetlands and Watercourses Map. Notice of the hearing shall be published in a newspaper having a general circulation in the municipality where the land that is the subject of the hearing is located at least twice at intervals of not less than two days, the first not more than fifteen days, nor less than ten days, and the last not less than two days before the date set for the hearing. A copy of such proposed boundary charge shall be filed in the office of the Town Clerk, for public inspection at least ten (10) days before such hearing. All materials including maps and documents relating to the petition shall be open for public inspection.

15.8 The Agency shall hold a public hearing on a petition to amend the regulations and the Inland Wetlands and Watercourses Map within sixty-five (65) days after receipt of such petition. The hearing shall be completed within thirty-five (35) days after commencement. The Agency shall act upon the changes
requested in such petition within sixty-five days after completion of such hearing. At such hearing, any person or persons may appear and be heard and may be represented by agent or attorney. The petitioner may consent to one or more extensions of any period specified in this subsection for the holding of the hearing and for action on such petition, provided the total extension of all such periods shall not be for longer than sixty-five days, or may withdraw such petition. Failure of the Agency to act within any time period specified in this subsection or any extension thereof shall not be deemed to constitute approval of the petition.

15.9 The Agency shall make its decision and state, in writing, the reasons why the change in the Inland Wetlands and Watercourses Map was made.
Section 16
Appeals

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

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

Section 17
Conflict and Severance

17.1 If there is a conflict among the provisions of these regulations, the provision that 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 Middlefield, the State of Connecticut or the Government of the United States including any approval required by the Connecticut Department of Environmental Protection and the U.S. Army Corps of Engineers. Obtaining such assents, permits or licenses is the sole responsibility of the applicant.
Section 19
Fees

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

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

19.3 The application fee is not refundable.

19.4 Definitions. As used in this section:

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

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

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

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

a. Regulated Activities:

   Residential Uses ... .................. ........ $120.00
   Plus .. .................. ........ $50.00/New Dwelling Unit(s)
   Plus Fee from Schedule A

   Commercial Uses........................... $240.00
   Plus Fee from Schedule A

   All Other Uses............................ $120.00
   Plus Fee from Schedule A

   Approval by Duly Authorized Agent......... $60.00

   Appeal of Duly Authorized Agent Decision.... $60.00

   Significant Activity Fee .................. $300.00

   Public Hearing Fee ........................ $175.00
Complex Application Fee. ... See below

The Agency may charge an additional fee sufficient to cover the cost of reviewing and acting on complex applications. Such fee may include, but not be limited to, the cost of retaining experts to analyze, review, and report on issues requiring such experts. The Agency or the duly authorized Agent shall estimate the complex application fee, which shall be paid pursuant to section 19.1 of these regulations within 10 days of the applicant’s receipt or notice of such estimate. Any portion of the complex application fee in excess of the actual cost shall be refunded to the applicant no later than 30 days after publication of the Agency’s decision.

b. Permitted and Nonregulated Uses:

Permitted Uses as of Right .................. $00.00

Nonregulated Uses ............................ $00.00

c. Regulation Amendment Petitions ........ $170.00
   (Does not include Notices or Regulation Advisories from DEP)

d. Map Amendment Petitions: ................ $150.00*
   Plus Fee from Schedule B

   *In addition the Agency reserves the right at its discretion to invoke the complex application fee for consultant review of the new wetland delineation.

e. Modification of Previous Approval .......... $60.00
   Renewal of Previous Approval ................ $60.00

SCHEDULE A. For the purpose of calculating the permit application fee, the area in this schedule A shall be added to the base fee as follows:

$25.00 per 100 square feet (or portion thereof) of inland wetland and/or watercourse proposed to be disturbed or impacted by the construction or implementation of project; plus

$2.50 per 100 square feet (or portion thereof) of proposed disturbed land within 100 lateral feet of all wetlands or 100 lateral fee of the high water mark of all watercourses; plus

$0.25 per 100 square feet (or portion thereof) of land that would be reasonably anticipated to be disturbed by the project and that is beyond 100 lateral feet of the wetland or watercourse but would be susceptible to erosion and could, therefore, impact wetlands and/or watercourses.
The area of land, wetland and/or watercourse to be amended, disturbed or impacted shall be calculated by a professional engineer and/or a professional land surveyor licensed to practice in Connecticut and submitted to the Commission with sufficient documentation or calculations to justify the conclusion. For the purposes of anyone other than a licensed land surveyor calculating the area of land, wetland and/or watercourse to be amended, disturbed or impacted:

a. a grid system using squares or rectangles a minimum dimension of ten feet (10') shall be used to measure the area of proposed activity;
b. no curved, triangular, trapezoidal, or other irregular shapes shall be used in the calculations; and
c. each estimated fee for subsection 19.5.a shall be rounded to the nearest $5.

The fees shall be estimated by the applicant and the calculations shall be submitted to the Agency with the application. The Agency, with or without the advice of their professional staff, shall determine the actual application fee based on the application plans, maps and other documents submitted by the applicant.

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

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

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

The Agency shall state upon its record the basis for all actions under this subsection.
Section 20
Records Retention and Disposition

20.1. The Agency and the Town Clerk for the Town of Middlefield shall retain complete administrative records of Agency actions and dispose of such records in accordance with the retention/disposition schedule set forth in subsection 20.2.

20.2 The public records administrator of the Connecticut State Library established the following new records retention/disposition schedules for municipal Inland Wetlands Agencies effective April 24, 1989:

<table>
<thead>
<tr>
<th>Record Title</th>
<th>Minimum Retention Required by Agency</th>
<th>Town Clerk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications (including (supporting materials)</td>
<td>Ten (10) Years</td>
<td>----</td>
</tr>
<tr>
<td>Endorsed Mylar Plans</td>
<td>Permanent</td>
<td>Permanent</td>
</tr>
<tr>
<td>Decision Letters</td>
<td>Ten (10) Years</td>
<td>Permanent</td>
</tr>
<tr>
<td>Approved Site Plans</td>
<td>Ten (10) Years</td>
<td>Permanent</td>
</tr>
<tr>
<td>Legal Notices</td>
<td>Ten (10) Years</td>
<td>Permanent</td>
</tr>
<tr>
<td>Staff and Public Testimony (Hearing Records)</td>
<td>Ten (10) Years</td>
<td>----</td>
</tr>
<tr>
<td>Minutes of Meetings &amp; Public Hearings</td>
<td>Fifteen (15) Years</td>
<td>Permanent</td>
</tr>
<tr>
<td>Tapes, Audio (Inland Wetland matters)</td>
<td>Ten (10) Years</td>
<td>----</td>
</tr>
<tr>
<td>Notice of Violations And Orders</td>
<td>Ten (10) Years</td>
<td>----</td>
</tr>
<tr>
<td>Text of Changes Adopted in Regulations General Correspondence Issued or Received</td>
<td>Continuous Update</td>
<td>----</td>
</tr>
<tr>
<td></td>
<td>Five (5) Years</td>
<td>----</td>
</tr>
</tbody>
</table>
Section 21
Effective Date of Regulations

21.1 These regulations, including the Inland Wetlands and Watercourses Map, application forms, fee schedule and amendments thereto, 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 Middlefield, which date shall be April 1, 2009.
APPENDIX A

Connecticut General Statutes Section 1-1(q)

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

Vernal Pool Guidelines
Part I
Excerpts from
The Protection of Vernal Pool Ecosystems
Town of Guilford, Connecticut
By:
The Guilford Conservation Commission
31 Park Street, Guilford, CT 06437

Background

The Importance of Vernal Pool Ecosystems

We often hear of habitat destruction occurring throughout the world in remote places affecting the survival of numerous species. Only recently have we recognized the value of smaller habitats and the role they play in preserving biological diversity, and that the destruction of these habitats and species that depend on them is occurring in our own back yard. One of these habitats is known as a "vernal pool ecosystem."

A vernal pool is a watercourse that has the following characteristics:

1) It occurs in a confined basin.
2) It does not support a fish population.
3) It supports or has the capability of supporting amphibian or invertebrate species that can only breed successfully in such watercourses. (such species are called obligate vernal pool species and include the Spotted salamander, Marbled salamander, Jefferson salamander complex, Wood frog and Fairy shrimp...

An array of species depends on vernal pools for breeding and survival. Vernal pools play a critical role in feeding migratory birds. Wood ducks rely on vernal pools for abundant food when other resources are scarce. However, it is the smaller organisms - the amphibians and invertebrates - that make vernal pools unique. Vernal pool species can be either obligate (they breed successfully only in vernal pools) or facultative (they can breed successfully both in vernal pools and in other aquatic systems).

Vernal pool ecosystems are important strands in the fabric of natural diversity. Because so many of the species they support are very sensitive to environmental degradation, vernal pool ecosystems merit special consideration for protection.

Vernal Pool Ecosystems

A vernal pool ecosystem is comprised of a vernal pool or an assemblage of vernal
pools with sufficiently large adjacent areas of vegetation (usually forest) to support the entire life-cycle of obligate vernal pool species. Many other species rely on vernal pools. If pools are degraded or isolated from adjacent habitat by roads and development, the number of species living in them plummets. To protect the organisms that depend on vernal pool ecosystems, it is necessary to protect both the pool and the adjacent forested area, preserving adult, juvenile, and larval habitat. Only by doing so will the community of vernal pool ecosystem species remain functional and intact.

**Vernal Pool Amphibians**

Vernal pool vertebrates such as salamanders, frogs and toads are focal points for species conservation. These species live in the adjacent forest but are dependent on vernal pools for successful breeding and development. These obligate vernal pool amphibians include the spotted salamander, marbled salamander, and Jefferson salamander complex (a Connecticut Species of Special Concern) [and] are found primarily where fish are absent. In order to develop and emerge from the pool before it dries, tadpoles and salamander larvae must constantly search for food. In the presence of fish, this activity makes them vulnerable and they are often eaten. Adult salamanders can live for as long as 15-20 years and breed in the same vernal pool throughout their reproductive lives, after breeding they return to adjacent forested habitat. Juvenile salamanders may wander as far as 800 yards from their birth site and often choose vernal pools other than their birth place for breeding. This juvenile dispersal makes vernal pool connectivity [...undisturbed or minimally disturbed corridors for organisms to travel between adjacent vernal pools] essential. Populations in isolated pools may decline following drought years if immigration from neighboring pools is prevented. In addition, connectivity preserves the genetic diversity of small populations while providing the adjacent habitat necessary for adult amphibians.

Another species that depends on vernal pools is the wood frog. These frogs live in forests rather than near lakes and streams and congregate at vernal pools to mate and lay their eggs. They have large tadpoles that emerge relatively quickly from the pool. Wood frogs are so sensitive to habitat disturbance and fragmentation that they may eventually disappear from forest patches smaller than 800-1000 acres because of disturbed habitat and interrupted migration corridors.

**Vernal Pool Invertebrates**

The most abundant organisms within a pool are the invertebrates (e.g. water beetles, fairy shrimp, snails, and dragonfly and damselfly nymphs). These creatures are predators as well as prey: diving beetle larvae can attack and kill tadpoles many times their size. The most notable invertebrates are fairy shrimp, graceful creatures that grow up to an inch long. As with many other vernal pool species, they are easy prey and are quickly eliminated by fish. The presence of adult fairy shrimp indicates that fish are absent from the pool.

-52-
Legislative Basis for Protection:

The basis for protective regulation is clear. The term "vernal," referring to vernal pools, is specifically mentioned in the definition section of...state law....

According to the State enabling legislation, "wetlands and watercourses are an interrelated web of nature essential to the existence of many forms of animal, aquatic and plant life. Unregulated activity has had and will continue to have a significant adverse impact on the environment and ecology, adversely affecting the ecological values and benefits for citizens now and forever more."

Recognizing the adverse effect of unregulated activity, one specific purpose of the wetlands and watercourses act is to prevent loss of "wildlife and vegetation and the destruction of the natural habitats thereof, 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."

The language in Connecticut's legislative act...explicitly recognize[s] the value and need to protect the biological integrity of wetlands and watercourses. Because they support a unique assemblage of species, vernal pool ecosystems are of critical importance in wetlands conservation as well as the preservation of overall regional biological diversity.

Protecting Vernal Pool Ecosystems

The maintenance of the physical and biological integrity of vernal pool ecosystems requires that a variety of factors be taken into consideration:

1) The integrity and purity of water supply to the pool.

2) The supply of food in the form of natural leaf litter that is the major source of energy for the organisms using this habitat.

3) The integrity of a large enough undisturbed area around the vernal pool to support obligate amphibian species as these species spend most of their life in the area adjacent to the pool.

4) Maintaining undisturbed or minimally disturbed corridors for organisms migrating to and between vernal pools because:

   a) Populations in isolated pools may decline following drought years if immigration from neighboring pools is prevented.

   b) Connectivity preserves the genetic diversity of small populations while providing the upland habitat necessary for adult amphibians.
c) Many obligate amphibian species migrate to their vernal pool *en masse* on rainy Spring nights making them quite vulnerable to a disturbance (such as road mortality) in their migration routes.

**Criteria for the Identification of Vernal Pools**

**Direct Indicators:** The species listed under categories A and B below are obligate vernal pool species - that is, species that are found only in vernal pools during all or part of their lifetimes, and that require vernal pools for their survival. They serve as *Direct Indicators* for the existence of a vernal pool ecosystem. *Documentation by a qualified individual of vernal pool utilization by these species is the preferred and most reliable method of identifying vernal pool ecosystems. It is also generally the easiest type of evidence to find in the field.*

Either one of the following (A or B) will verify the existence of a vernal pool ecosystem.

A. Existence of a seasonal or permanent watercourse in a confined basin depression that lacks a fish population, and shows evidence of breeding by any of the following amphibian obligate species (species that breed only in vernal pools. See Plate 1):

   a. Spotted salamander (*Ambystoma maculatum*)
   b. Jefferson salamander complex (*Ambystoma jeffersonianum* and hybrids)
   c. Marbled salamander (*Ambystoma opacum*)
   d. Wood frog (*Rana sylvatica*)

   Species a, b, and c are collectively known as mole salamanders.

   The presence of any of the following will be considered acceptable proof that a vernal pool is utilized for breeding purposes by one or more of the above-named species (See Plate 2):

   1. Breeding adults
      a. Wood frog - breeding chorus and/or mated pairs
      b. Mole salamanders-courting individuals and/or spermatophores
   2. Two or more egg masses of any of the above-named species
   3. Tadpoles or larvae of the above species
   4. Transforming juveniles
      a. Wood frog - tail stubs evident
      b. Mole salamanders - gill remnants or post-metamorphic pattern evident.

   **Or**
B. Existence of a seasonal or permanent watercourse in a confined basin depression that lacks a fish population, and the presence of fairy shrimp (*Anostraca*). These species spend their entire life-cycles in vernal pools.

**Indirect Indicators**: Though the use of Direct Indicators is the preferred and most reliable method of identifying vernal pool ecosystems and is also generally the easiest type of evidence to find in the field, these Direct Indicators may not be present depending on the season and prevailing weather conditions. In this case, other characteristics may be used to determine if an area is a potential vernal pool that could support obligate species...

The following characteristics indicate the existence of a potential vernal pool ecosystem.

C. Existence of a seasonal or permanent watercourse in a confined basin depression that lacks a fish population Evidence for this may include some or all of the following:

**Strong Evidence:**

a. Fingernail clam shells, caddis fly cases, snail shells, diving beetles, or evidence of other aquatic invertebrates among the leaf litter of the basin depression

b. Algal strands hanging from branches at or below the high water mark of the basin

c. Distinct waterline on the base of tree trunks or shrubs in or on the shore line of the basin

d. Wetland shrub or woody growth in the basin depression, e.g. button bush (*Cephalanthus occidentalis*)

**Weaker Evidence:**

e. Presence of an unvegetated or sparsely vegetated zone within the basin.

f. In the winter, a basin depression containing water or ice

g. Discolored water-stained "gray" leaf litter within the basin as distinguished from the "brown" leaves on the upland floor (before leaf fall in the autumn)

h. Mossy and/or grassy hummocks within the basin or along the immediate shore line of the basin depression

**Guidelines for the Protection of Vernal Pools**

[A] vernal pool's biologic value can be rated as high, moderate, and low based on the sum of the point value of the following criteria:
### Physical Rating Criteria

<table>
<thead>
<tr>
<th>Surface area of pool as measured from the perimeter or high water line:</th>
<th>Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than 2,500 ft$^2$ —</td>
<td>3</td>
</tr>
<tr>
<td>1000 - 2,500 ft$^2$ —</td>
<td>2</td>
</tr>
<tr>
<td>Less than 1000 ft$^2$ —</td>
<td>1</td>
</tr>
</tbody>
</table>

| Amount of undisturbed forest within the regulated area (Intact under story and ground cover): | |
| 23 - 30 acres —                                                   | 3           |
| 15 - 23 acres —                                                   | 2           |
| less than 15 acres —                                              | 1           |

| Closest road less than 500 feet distant. —                       | 0           |
| Closest road greater than 500 feet distant. —                    | 1           |
| Closest road greater than 1000 feet distant. —                  | 2           |

| Within 3000 feet of other vernal pool(s) or fishless wetland(s) with standing water > 2 months in the spring — | 1           |

| Uninterrupted inter-pool migration routes with undisturbed forest habitat, no paved roads, no ditches, and no slopes > 45 degrees — | 1           |

To the sum of the value of the above physical criteria add points based on either biological criteria or, in the absence of biological criteria due to the season of the year, points based on vegetation in the basin of the pool.

### Biological Rating Criteria

| Biologically diverse, meaning that there are at least three (3) obligate vernal pool species in the pool as referenced in Appendix B. — | 3           |

### Vegetation Rating Criteria

<table>
<thead>
<tr>
<th>Emergent woody shrubs, e.g. Buttonbush (<em>Cephalanthus occidentalis</em>)</th>
</tr>
</thead>
<tbody>
<tr>
<td>none —</td>
</tr>
<tr>
<td>Less than 25% —</td>
</tr>
<tr>
<td>Greater than 25% —</td>
</tr>
</tbody>
</table>

Adding all the point values associated with the above criteria we get the value of the pool as shown on the table below:
<table>
<thead>
<tr>
<th>Point Value</th>
<th>Pool Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 5</td>
<td>Low</td>
</tr>
<tr>
<td>6 to 10</td>
<td>Moderate</td>
</tr>
<tr>
<td>&gt; 10</td>
<td>High</td>
</tr>
</tbody>
</table>

**Protection Guidelines within the Regulated Area**

**High Rating:**

1. No disturbance within 100 feet of pool perimeter, including but not limited to septic systems. (Disturbance means decreasing the overstory or understory of the forest, or grubbing or removal of leaf litter, logs, branches, etc.)

2. From 100 to 650 feet, less than 20% disturbance.

3. Either no curbs or cape cod curbing (curbing with <45° slope within regulated area. Less than 500 vehicles average daily travel within regulated area. Prior to any road construction, data on the migratory routes of breeding species should be provided to the Commission.

4. No storm water discharge within less than 100 feet from pool

5. No chemical storage (fertilizers, pesticides, herbicides, salt, etc.) within 100 feet of pool.

6. No storm water discharge within 25 feet of any intermittent stream within the regulated area.

7. No barriers to migration such as silt fences or ditching within the regulated area unless danger of erosion is high. Prior to any placement of erosion control that may be a barrier to migration, data on the migratory routes of breeding species should be provided to the Commission.

**Moderate Rating:**

1. No disturbance within 50 feet of pool perimeter.

2. From 50 to 650 feet, less than 35% disturbance.

3. Either no curbs or Cape Cod curbing (curbing with <45° slope within regulated area. Less than 500 vehicles average daily travel within regulated area.

4. No storm water discharge within less than 50 feet from pool

5. No chemical storage (fertilizers, pesticides, herbicides, salt, etc.) within 100 feet of pool.

6. No storm water discharge within 25 feet of any intermittent stream within the regulated area.

7. No barriers to migration such as silt fences or ditching within the regulated area unless danger of erosion is high.

8. No septic systems within 75 feet of pool.

**Low Rating:**

1. No disturbance within 50 feet of pool perimeter.
2. From 50 to 650 feet, less than 50% disturbance.
3. One road with >500 vehicles average daily travel within regulated area.
4. No storm water discharge within less than 50 feet from pool
5. No chemical storage (fertilizers, pesticides, herbicides, salt, etc.) within 50 feet of pool.
6. No storm water discharge within 25 feet of any intermittent stream within the regulated area.
7. No barriers to migration such as silt fences or ditching within the regulated area unless danger of erosion is high.
8. No septic systems within 50 feet of pool.
"Vernal Pool" means a seasonal or permanent watercourse in a defined depression or basin, that lacks a fish population and supports or is capable of supporting breeding and development 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 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.

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,
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 development by any of the following obligate vernal pool breeding species:

- a. Spotted salamander (*Ambystoma maculatum*)
- b. Jefferson salamander complex (*Ambystoma Jeffersonianum x laterale* hybrid)
- 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 includes one or more of the following:

**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

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.
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.

e. Discolored water-stained “gray” leaf litter within the basin as distinguished from the “brown” leaves on the adjacent upland floor.

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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.
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.
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**

<table>
<thead>
<tr>
<th>Observation</th>
<th>Eggs</th>
<th>(Presence of)</th>
<th>Larvae</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obligate Vertebrate Vernal Pool Species</td>
<td></td>
<td>(Presence of)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spotted salamander (<em>Ambystoma maculatum</em>)</td>
<td></td>
<td>(Presence of)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jefferson salamander (<em>Ambystoma jeffersonianum</em>)</td>
<td></td>
<td>(Presence of)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marbled salamander (<em>Ambystoma opacum</em>)</td>
<td></td>
<td>(Presence of)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood frog (<em>Rana sylvatica</em>)</td>
<td></td>
<td>(Presence of)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastern Spadefoot Toad (<em>Scaphiopus h. holbrookii</em>)</td>
<td></td>
<td>(Presence of)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Invertebrate Vernal Pool Species**

Fairy Shrimp (*Anostraca sp.*)

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

__________________________________________________________________________

__________________________________________________________________________

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

__________________________________________________________________________

__________________________________________________________________________

Name: ____________________________________________

Signature: _______________________________________  

Date: ___________________________________________
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: ____________________________
Literature Cited


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


-67-


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


APPENDIX C