

PREFACE TO REVISIONS TO THE MASSACHUSETTS WETLANDS
REGULATIONS (310 CMR 10.00)
RELATING TO THE DEFINITION OF “EXTENDED
DROUGHT” AND DISTINGUISHING “PERENNIAL RIVERS”
FROM “INTERMITTENT STREAMS.”

Note: The following is a preface to, but does not form, a part of the Wetlands Protection Act Regulations (310 CMR 10.00).

Introduction

The Wetlands Protection Act (M.G.L. c. 131, § 40) was amended in 1996 to provide additional protection for rivers, defined in the Act as “any natural flowing body of water that empties to any ocean, lake, pond, or other river and which flows throughout the year.” Since promulgating regulations in 1997, the Department of Environmental Protection (Department) has found that the original regulatory criteria do not clearly distinguish perennial rivers that flow throughout the year from intermittent streams that do not flow throughout the year. Many factors embodied in the original regulations, such as soil types or the presence or absence of macroinvertebrates, cannot practically be used to distinguish between perennial and intermittent streams. Other factors, such as stream gages, have limited usefulness due to their limited geographic extent. Still other factors, such as watershed size, are relevant but need to be modified based upon more recent research.

The Department has also found that the original definition of extended drought, which was based solely on precipitation data, does not accurately reflect the role of groundwater and stream flow during drought conditions. Extremely dry conditions existed in most of Massachusetts in the summer of 1999, leading to some of the lowest river and stream flows ever recorded. Even though many federal and state agencies declared droughts, the Wetlands Protection Act definition was not triggered in most communities because of brief but heavy summer rainstorms – rainstorms that fulfilled the regulatory precipitation numbers but did not provide sufficient recharge to restore groundwater or stream flow levels.

In order to address the issue of perennial rivers and drought, the Department formed a technical advisory committee with representatives from various interest groups, and with research and technical support provided by the United States Geologic Survey (USGS) and the Massachusetts Department of Environmental Management (DEM). The technical advisory committee spent more than two years searching for an approach that was based upon sound science and could also be implemented at the local level. This approach, based primarily on watershed size and surficial geology, is described below and is embodied in the new regulations.

It is also important to note that many intermittent streams still receive protection under the Wetlands Protection Act through applicable resource area performance standards for land under water, bank, land subject to flooding, and often, bordering vegetated wetlands. The distinction between perennial and intermittent flow pertains only to whether the stream has an associated riverfront area.

The Rulemaking Process

Drought conditions across the Commonwealth in late 2001 prompted the Department to adopt changes to the extended-drought provisions as an emergency regulation in December 2001. The Department then conducted four regional public hearings on the emergency-drought provisions as well as the perennial river versus intermittent stream changes. The Department received public comments through March 29, 2002. Thirty-eight parties commented on the proposed amendments. Of those, thirty-one commentators generally supported the proposed amendments or requested clarification of certain provisions. Six parties commented against the proposed amendments, and one party requested additional time to review and comment. Based upon a careful review and consideration of the comments, the Department has made some changes to the public hearing draft as described below.

Preface: continued

Summary and Rationale of the New Regulations

A. Perennial Rivers and Intermittent Streams:

1. Watershed Size and Surficial Geology.

The Department and its technical advisory committee concluded field observations alone cannot be used to predict whether a small stream is likely to flow throughout the year. Given permitting time constraints, the Department also concluded that it would be unworkable to devise a system based entirely on stream flow observations made during the late summer or early fall, when water levels are often at their lowest. Aside from the practical difficulties with this approach, observations made during this period may not be definitive when the conditions are unusually wet or unusually dry compared to long-term records.

To explore other options, the Department contracted with the USGS to research watershed characteristics that might be useful in classifying streams, such as drainage area, mean basin slope, length of stream, urbanized land cover, and the percentage of sands and gravels in the watershed. This research revealed that the most important characteristics for predicting whether a river flows throughout the year are watershed size (drainage area) and surficial geology (the percentage of sands and gravel in the watershed). As a result of this research, as well as independent analysis and field-testing by the Department, the Department and its technical advisory committee agreed that watershed size and surficial (subsurface) geology could reliably be used to predict whether a stream will flow year-round. There is a strong correlation between watersheds greater than or equal to one square mile and streams that are predicted to flow 99% of the time. There is also a strong correlation between watersheds with a high percentage of stratified drift (sands and gravels) and streams that flow 99% of the time. These two factors, as well as a fail-safe field observation provision, have been incorporated into the new regulations.

USGS continues to refine its statistical methodology to better predict the probability of a stream flowing year-round. Once completed, the Department plans to use this information to produce stream maps that will eliminate reliance on the USGS topographic maps. Since this process will take several years, the regulatory changes described herein are necessary to address perennial versus intermittent determinations during the interim.

2. USGS Topographic Maps and STREAMSTATS.

The new regulations continue to rely upon an initial review of USGS topographic maps. Although these maps were not specifically developed to delineate perennial rivers from intermittent streams, the Department believes it is important to base initial reviews on maps that are widely available to Conservations Commissions and the regulated community. The regulations then provide for adjustments to stream status based upon watershed size, watershed geology, and field observations of no flow. Under the new regulations, streams that are shown as perennial on USGS topographic maps are classified as perennial. Streams that are shown as intermittent, or not shown at all, are classified based upon watershed size. If the watershed size is greater than or equal to one square mile, the stream is perennial. If the watershed size is less than one square mile, the stream is most likely intermittent.

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Some intermittent streams with a watershed size of between one-half and one square mile may be shown to be perennial if the USGS STREAMSTATS model predicts a positive flow or if the watershed contains at least 75% stratified drift. STREAMSTATS is a new statistical tool developed by USGS that can be accessed through the USGS web site at <http://ma.water.usgs.gov/streamstats/>. This web site provides valuable stream flow information to applicants and regulators alike. STREAMSTATS incorporates watershed size and geology into its calculations, and can be used to analyze the probability that a stream flows on a year-round basis at a particular location. That probability is reported in terms of flow duration statistics. Flow duration statistics indicate the percentage of time stream flows are equaled or exceeded at a given stream location. For example, if a stream's flow at the 99% flow duration is five cubic feet per second, the stream's flow is predicted to be greater or equal to that discharge rate 99% of the time. Streams with a predicted flow rate greater than or equal to 0.01 cubic feet per second at the 99% flow duration rate are considered perennial. The 99th percentile is the best available statistical expression of the statutory language "flows throughout the year."

Some commentators requested that the Department require use of the STREAMSTATS tool exclusively, and abandon reliance on USGS topographic maps. While the Department may take this approach in the future, we are concerned about USGS's ability to handle the high demands this would place on its web site. In addition, STREAMSTATS cannot work if the stream's centerline has not been digitized. Thus, streams located in many southeastern communities (a list of watersheds is included in the regulations), as well as smaller, unmapped streams throughout the state, cannot be analyzed using STREAMSTATS. In those communities, watershed size and surficial geology must be analyzed using available maps.

Other commentators expressed concerns about using STREAMSTATS in small watersheds, particularly those below 1.61 square miles. This number represents the smallest watershed size for which USGS has calculated "error bands" to accompany the STREAMSTATS package. After consultation with USGS, plus field-testing on small streams, the Department believes that STREAMSTATS properly estimates stream flow in watersheds down to one-half square mile in size. The regulations reflect this lower limit. Similarly, the regulations place a one-half square mile size limit on watersheds in which stratified drift percentages must be taken manually or electronically from surficial geology maps.

3. Direct Observations of No Flow.

Even though watershed size and geology are the most important characteristics for determining stream status, the methods outlined above are still "predictive" and may be overcome by direct observation. As a fail-safe mechanism, any stream must be classified as intermittent if it is observed not flowing for four days in a consecutive 12-month period, unless the observation occurs during a period of extended drought or the stream is significantly affected by withdrawals, impoundments, or other man-made flow reductions or diversions. In such cases, the observations become less probative in determining the stream's classification and the stream should be classified based upon its status under the regulations absent the observation.

Some commentators questioned the requirement for four observation days rather than one, and questioned the stringency of the required documentation. The Department believes that four days (approximately 1% of days in a year) is a reasonable requirement that is rationally related to the best statistical evidence available to predict a stream's status. The new regulation is also meant to ensure that field observations are reliable, credible, and well documented. In the past, the Department has too often struggled with poorly documented and irreconcilable observations from opposing parties. The regulations also clarify what is meant by "flow."

Preface: continued

4. Perennial Streams with Very Small Watersheds.

Some commentators requested that the regulations include a method for proving that streams with very small watersheds (i.e. less than one square mile) flow throughout the year.

These streams may emanate from springs, or in areas such as Cape Cod, they may draw upon a large regional groundwater aquifer system. Regardless of watershed size, these streams are considered perennial under the regulations if they are shown as perennial on USGS topographic maps. For those streams shown as intermittent, or not shown at all, they may be considered perennial if the watershed size is at least one-half square mile and it meets either the STREAMSTATS or stratified drift provisions. The stratified drift provisions have been broadened in the final regulations to encompass the entire state rather than a more limited list of watersheds. Streams that do not fit into these categories must be classified as intermittent. Unfortunately, proving that a stream is perennial by direct observation requires multiple observations made in the late summer and early fall months over many years, and the Department could not craft a workable provision to accommodate those timeframes.

B. Extended Drought.

The definition of “extended drought” has been amended to coincide with an “Advisory” or more severe drought as declared by the Massachusetts Drought Management Task Force in accordance with a statewide drought management plan. This change was made on an emergency basis, effective December 21, 2001, and is now incorporated into the permanent regulations. The plan has five drought action levels based upon multiple indicators such as stream flow, groundwater elevations, precipitation, snow pack, wild fire danger, crop moisture availability, reservoir levels, and the Palmer Drought Severity Index. The Task Force will issue written statements when a drought develops, when drought levels change, and when the drought ends. Monthly maps will be prepared by DEM detailing the geographic extent of the drought and the corresponding drought level. Drought information is published on the web at <http://www.state.ma.us/dem/programs/rainfall/index.htm>.

Some commentators questioned whether the regulations should be tied to a more severe drought level than “Advisory.” Prior to promulgating these final regulations, the Department conducted a return period analysis to determine how often an Advisory level of drought would occur compared to a drought declared under the original regulation’s definition based solely on precipitation. The analysis found that the probability of a drought declaration at a number of locations under the new system is less likely, or statistically the same, compared to the old definition. However, the geographic extent and duration of the drought may increase under the new system, as it reflects the time necessary for groundwater and stream flow levels to recover. The Department is satisfied that the new statewide system more accurately portrays stream flow conditions, will be more easily used, provide consistent analysis, and will not lead to more frequent drought declarations than the original regulations.

Many commentators expressed concern with the language concerning withdrawals, impoundments, and diversions. The Department has modified this language slightly in response to comments, and is also planning to develop guidance on this issue. First, the Department has retained the concept that the Legislature meant to protect rivers that would flow throughout the year in their natural condition. Property owners cannot raise the flashboards or otherwise manipulate the water flowing long enough to claim a stream is intermittent and escape riverfront jurisdiction. Man-made changes in stream flow should be investigated when streams that are predicted to flow perennially are observed dry. However, the Department has added the word “significant” to stress that the stream’s apparent change in status (i.e. a perennial stream is observed intermittent) must be directly related, and in most cases, proximate, to the withdrawal, impoundment, or other flow reduction or diversion. In other words, “but for” the withdrawal, impoundment, or other flow reduction or diversion, the stream would be perennial. The regulation also clarifies that the changes must be man-made.

(PAGES 321 AND 322 ARE RESERVED FOR FUTURE USE)

310 CMR 10.00: WETLANDS PROTECTION

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Appendices: Prefaces to Previous Regulatory Revisions

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Maintenance and Improvement of Land in Agricultural Use; 1993

Preface to Wetlands Regulatory Revisions Effective January 1, 1994

10.01: Introduction and Purpose

(1) Introduction. 310 CMR 10.00 is promulgated by the Commissioner of the Massachusetts Department of Environmental Protection pursuant to the authority granted under The Wetlands Protection Act, M.G.L. c. 131, § 40. 310 CMR 10.00 shall complement M.G.L. c. 131, § 40, and shall have the force of law.

310 CMR 10.01 through 10.10 provide definitions and procedures. 310 CMR 10.01 through 10.10 pertains to both inland and coastal areas subject to protection under M.G.L. c. 131, § 40. 310 CMR 10.21 through 10.60 provide standards for work within those areas. 310 CMR 10.21 through 10.37 pertains only to coastal areas and 310 CMR 10.51 through 10.60 pertains only to inland areas. A project may be subject to regulation under 310 CMR 10.00 in which case compliance with all applicable regulations is required.

(2) Purpose. M.G.L. c. 131, § 40 sets forth a public review and decision-making process by which activities affecting Areas Subject to Protection Under M.G.L. c. 131, § 40 are to be regulated in order to contribute to the following interests:

- protection of public and private water supply
- protection of ground water supply
- flood control
- storm damage prevention
- prevention of pollution
- protection of land containing shellfish
- protection of fisheries
- protection of wildlife habitat

The purpose of 310 CMR 10.00 is to define and clarify that process by establishing standard definitions and uniform procedures by which conservation commissions and the Department may carry out their responsibilities under M.G.L. c. 131, § 40. Applicants and issuing authorities shall use forms provided by the Department to implement 310 CMR 10.00.

310 CMR 10.00 is intended solely for use in administering M.G.L. c. 131, § 40; nothing contained herein should be construed as preempting or precluding more stringent protection of wetlands or other natural resource areas by local by-law, ordinance or regulation.

10.02: Statement of Jurisdiction

(1) Areas Subject to Protection Under M.G.L. c. 131, § 40. The following areas are subject to protection under M.G.L. c. 131, § 40:

- | | | |
|--|-------------------------|--|
| <p>(a) Any bank,
any freshwater wetland,
any coastal wetland,
any beach,
any dune,
any flat,
any marsh,
or any swamp</p> | <p>bordering
on</p> | <p>the ocean
any estuary
any creek
any river
any stream
any pond
or any lake</p> |
|--|-------------------------|--|
- (b) Land under any of the water bodies listed above
- (c) Land subject to tidal action
- (d) Land subject to coastal storm flowage
- (e) Land subject to flooding
- (f) Riverfront area.

(2) Activities Subject to Regulation Under M.G.L. c. 131, § 40.

(a) Activities Within the Areas Subject to Protection Under M.G.L. c. 131 § 40. Except for minor activities within the riverfront area meeting the requirements of 310 CMR 10.58(6)(b), any activity proposed or undertaken within an area specified in 310 CMR 10.02(1) which will remove, fill, dredge or alter that area is subject to Regulation under M.G.L. c. 131, § 40 and requires a filing of a Notice of Intent.

(b) Activities Within the Buffer Zone. Any activity other than minor activities identified in 310 CMR 10.58(6)(b) proposed or undertaken within 100 feet of an area specified in 310 CMR 10.02(1)(a) (hereinafter called the Buffer Zone) which, in the judgement of the issuing authority, will alter an Area Subject to Protection Under M.G.L. c. 131, § 40 is subject to regulation under M.G.L. c. 131, § 40 and requires the filing of a Notice of Intent. [See also

10.02: continued

310 CMR 10.05(3)(a)2.] The areas subject to jurisdiction identified in 310 CMR 10.02(1)(b) to (f) do not have a buffer zone. Minor activities within the buffer zone meeting the requirements of 310 CMR 10.58(6)(b) are not subject to regulation under M.G.L. c. 131, § 40.

NON-TEXT PAGE

10.02: continued

(c) Activities Outside the Areas Subject to Protection Under M.G.L. c. 131, § 40 and the Buffer Zone. Any activity proposed or undertaken outside the areas specified in 310 CMR 10.02(1) and outside the Buffer Zone is not subject to regulation under M.G.L. c. 131, § 40 and does not require the filing of a Notice of Intent unless and until that activity actually alters an Area Subject to Protection Under M.G.L. c. 131, § 40.

In the event that the issuing authority determines that such activity has in fact altered an Area Subject to Protection Under M.G.L. c. 131, § 40, it shall impose such conditions on the activity or any portion thereof as it deems necessary to contribute to the protection of the interests identified in M.G.L. c. 131, § 40.

(3) Notwithstanding the provisions of 310 CMR 10.02(1) and (2), any bordering vegetated wetland, bank, land under water, land subject to flooding, or riverfront area created for the purpose of stormwater management shall not require the filing of a Notice of Intent or a Request for Determination of Applicability to maintain the stormwater management system, provided that the work is limited to the maintenance of the stormwater management system and conforms to an Order of Conditions issued after April 1, 1983 and that the area is not altered for other purposes.

Commentary

The Department has determined that activities within Areas Subject to Protection Under M.G.L. c. 131, § 40 are so likely to result in the removing, filling, dredging or altering of those areas that preconstruction review is always justified, and that the issuing authority shall therefore always require the filing of a Notice of Intent for said activities.

The Department has determined that activities within 100 feet of those areas specified in 310 CMR 10.02(1)(a) are sufficiently likely to alter said areas that preconstruction review may be necessary. Therefore, a request for a Determination of Applicability must be filed for all activities within the Buffer Zone. The issuing authority shall then make a determination as to whether the activity so proposed will alter an Area Subject to Protection Under M.G.L. c. 131, § 40 and, if so, shall require the filing of a Notice of Intent for said activities. The issuing authority shall not require the filing of a Notice of Intent if it determines that the activity proposed within the Buffer Zone will not alter an Area Subject to Protection Under M.G.L. c. 131, § 40.

The Department has determined that activities outside the Areas Subject to Protection Under M.G.L. c. 131, § 40 and outside the Buffer Zone are so unlikely to result in the altering of Areas Subject to Protection Under M.G.L. c. 131, § 40 that preconstruction review is not required, and therefore the issuing authority shall not regulate said activities unless and until they actually result in the altering of an Area Subject to Protection Under M.G.L. c. 131, § 40.

10.03: General Provisions

(1) Burden of Proof.

(a) Any person who files a Notice of Intent to perform any work within an Area Subject to Protection Under M.G.L. c. 131, § 40 or within the Buffer Zone has the burden of demonstrating to the issuing authority:

1. that the area is not significant to the protection of any of the interests identified in M.G.L. c. 131, § 40; or
2. that the proposed work within a resource area will contribute to the protection of the interests identified in M.G.L. c. 131, § 40 by complying with the general performance standards established by 310 CMR 10.00 for that area.
3. that proposed work within the buffer zone will contribute to the protection of the interests identified in M.G.L. c. 131, § 40, except that proposed work which lies both within the riverfront area and within all or a portion of the buffer zone to another resource area shall comply with the performance standards for riverfront areas at 310 CMR 10.58. For minor activities as specified in 310 CMR 10.58(6)(b) within the riverfront area or the buffer zone to another resource area, the Department has determined that additional conditions are not necessary to contribute to the protection of the interests identified in M.G.L. c. 131, § 40.

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(b) Any person who requests the issuing authority to regulate work taking place outside an Area Subject to Protection Under M.G.L. c. 131, § 40 and outside the Buffer Zone has the burden of demonstrating to the satisfaction of the issuing authority that the work has in fact altered an Area Subject to Protection Under M.G.L. c. 131, § 40.

(2) Burden of Going Forward. The burden of going forward means having to produce at least some credible evidence from a competent source in support of the position taken. This burden shall be upon the person contesting the Department's position when the Department has been requested to hold an adjudicatory hearing. In the event that under the provisions of 310 CMR 10.03 two or more persons have the burden of going forward, said burden may be placed on all or any number of them, in the discretion of the hearing officer.

(3) Presumption Concerning 310 CMR 15.000: Subsurface Disposal of Sanitary Sewage (Title 5). A subsurface sewage disposal system that is to be constructed in compliance with the requirements of 310 CMR 15.000 *Subsurface Disposal of Sanitary Sewage (Title 5)*, or more stringent local board of health requirements, shall be presumed to protect the eight interests identified in M.G.L. c. 131, § 40, but only if none of the components of said system is located within the following resource areas:

- (a) Coastal.
 - 1. coastal bank
 - 2. coastal beach
 - 3. coastal dune
 - 4. salt marsh
 - (b) Inland.
 - 1. wet meadows
 - 2. marsh
 - 3. swamp
 - 4. bog
- bordering
on any

creek
river
stream
pond
lake

and only if the soil absorption system of said system is set back at least 50 feet horizontally from the boundary of said areas, as required by 310 CMR 15.211 (*Title 5*), or a greater distance as may be required by more stringent local ordinance, by-law or regulation. To protect wildlife habitat within riverfront areas, the soil absorption system shall not be located within 100 feet of the mean annual high-water line unless there is no alternative location on the lot which conforms to 310 CMR 15.000 without requiring a variance as determined by the local Board of Health, with less adverse effects on resource areas.

This presumption, however, shall apply only to impacts of the discharge from a sewage disposal system, and not to the impacts from construction of that system, such as erosion and siltation from the excavation, placement of fill, or removal of vegetation. Impacts from construction shall be minimized by the placement of erosion and sedimentation controls during excavation, limiting the placement of fill, confining the removal of vegetation to that necessary for the footprint of the system, and taking other measures deemed necessary by the issuing authority.

The setback distance specified above shall be determined by measuring from the boundary of the area in question, from the contour at the mean annual flood elevation in inland areas, or from the top of a coastal bank or the contour at the highest spring tide elevation in coastal areas, whichever is further from the water body.

The setback distance specified above shall not be required for the renovation or replacement (but is required for the substantial enlargement) of septic systems constructed prior to the effective date of 310 CMR 10.00, provided no alternative location is available on the lot and such work has been approved by the local board of health or the Department, as required by law.

This presumption may be overcome only by credible evidence from a competent source that compliance with 310 CMR 15.000: *Subsurface Disposal of Sanitary Sewage (Title 5)* or more stringent local requirements will not protect the interests identified in M.G.L. c. 131, § 40.

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(4) Presumption Concerning Point-Source Discharges. If the Department has issued a permit pursuant to M.G.L. c. 21, § 43, in conjunction with a federal NPDES (National Pollutant Discharge Elimination System) permit for any new point-source discharge of pollutants, or will issue such a permit, prior to commencement of the discharge, the effluent limitations established in the permit shall be presumed to protect the eight interests identified in M.G.L. c. 131, § 40 with respect to the effects of the discharge on water quality. The permit and any subsequent amendments thereto shall be referenced in the Order and deemed incorporated therein.

This presumption shall apply only to impacts of the discharge from the source, and not to impacts from construction of the source.

This presumption may be overcome only by credible evidence from a competent source that said effluent limitations will not protect the interests identified in M.G.L. c. 131, § 40.

(5) Presumption of Significance. Each Area Subject to Protection Under M.G.L. c. 131, § 40 is presumed to be significant to one or more of the interests identified in M.G.L. c. 131, § 40. These presumptions are rebuttable and are set forth in 310 CMR 10.21 through 10.60.

For riverfront areas, the issuing authority may find that the presumptions of significance are partially rebutted as provided in 310 CMR 10.58(3).

(6) Presumption Concerning Application of Herbicides.

(a) Any application of herbicides within any Area Subject to Protection Under M.G.L. c. 131, § 40 or the Buffer Zone associated with a structure or facility which is:

1. existing and lawfully located;
2. used in the service of the public; and
3. used to provide electric, gas, water, telephone, telegraph and other telecommunication services

shall be presumed to constitute work performed in the course of maintaining such structure or facility, and shall be accorded the exemption of such work under M.G.L. c. 131, § 40, only if the application of herbicides to that structure or facility is performed in accordance with such plans as are required by the Department of Food and Agriculture pursuant to 333 CMR 11.00: *Rights of Way Management*, effective July 10, 1987.

(b) Any application of herbicides within the Buffer Zone, other than as provided in 310 CMR 10.03(6)(a), shall be presumed not to alter an Area Subject to Protection Under M.G.L. c. 131, § 40, only if the work is performed in accordance with such plans as are required by the Department of Food and Agriculture pursuant to 333 CMR 11.00: *Rights of Way Management*, effective July 10, 1987. This presumption shall apply only if the person proposing such activity has requested and obtained a determination of the boundaries of the Buffer Zone and Areas Subject to Protection Under M.G.L. c. 131, § 40 in accordance with 310 CMR 10.05(3)(a)1. and 2; and has submitted that determination as part of the Vegetation Management Plan.

(c) Any application of herbicides for management of rights of way within a riverfront area not subject to 310 CMR 10.03 (6)(a) or (b), provided the area is outside any other resource area and qualifies under the provisions of 310 CMR 10.58(6)(a), shall be accorded an exemption of such work under M.G.L. c. 131, § 40, provided that the application of herbicides is performed in accordance with such plans as are required by the Department of Food and Agriculture pursuant to 333 CMR 11.00: *Rights of Way Management*.

(7) Fees.

(a) General Fee Provisions.

1. Notices of Intent. All Notices of Intent filed pursuant to 310 CMR 10.00 shall be accompanied by a filing fee, the amount of which shall be determined by 801 CMR 4.02(310) (Executive Office for Administration and Finance), and a brief statement indicating how the applicant calculated the fee. 50% of any filing fee in excess of \$25.00 shall be made payable, by check or money order, to the Commonwealth of Massachusetts and shall be sent to the DEP Lock Box accompanied by the Notice of Intent Fee Transmittal Form. The remainder of said fee shall be made payable, by check or money order, to the city or town in which the work is proposed.

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2. Requests for Action by the Department. Any person who files a Request for a Superseding Determination of Applicability (310 CMR 10.05(3)(c)), a Request for Superseding Order of Conditions (310 CMR 10.05(7)(a)), a Request for Adjudicatory Hearing (310 CMR 10.05(7)(j)), a Request to Intervene in any Adjudicatory Hearing (310 CMR 1.01(9)(a)), or a Request for a Variance, (310 CMR 10.05(10)), (see also 310 CMR 10.03(7)(e)), shall simultaneously submit a filing fee, in the amount specified by 801 CMR 4.02(310). All such fees shall be paid by check or money order payable to the Commonwealth of Massachusetts and shall be sent to the DEP Lock Box, accompanied by the Request for Departmental Action Fee Transmittal Form. A copy of the Request for Departmental Action Fee Transmittal Form and a copy of the check shall accompany the request for Departmental action.

(b) Specific Provisions for Notice of Intent Fees. In accordance with General Instructions for Completing a Notice of Intent and Abbreviated Notice of Intent, the minimum submittal requirements shall include payment of the filing fee specified in 801 CMR 4.02(310). A conservation commission shall notify, in writing, the appropriate Department Regional Office and the applicant when the correct filing fee has not been paid to the city or town and the filing is therefore incomplete. Said notification shall specify the correct fee amount. The Department shall also notify, in writing, the applicant and the conservation commission when the fee due to the Department has not been paid to the Department and the filing is therefore incomplete. Said notification shall specify the fee due to the Department. The fee will be based on the initial project design as proposed in the Notice of Intent.

1. Disputes over Notice of Intent Filing Fees. Whenever the conservation commission or the Department determines that an inadequate fee has been paid, the time period for the conservation commission or the Department to act shall be stayed until the balance of the fee is paid.

a. Where, in the opinion of the conservation commission or the Department, less than the full filing fee has been included with the Notice of Intent, the Notice shall be deemed complete (assuming all other minimum submittal requirements have been met), and the stay shall be lifted, upon payment of the additional fee specified by the Department or the conservation commission. If the applicant has disputed all or a part of the balance of the fee, after issuance of a Final Order which resolves the fee dispute, in favor of the applicant any disputed funds paid by the applicant in excess of the filing fee as determined in the Final Order shall be paid to the applicant by the Commonwealth and the city or town.

b. In lieu of paying any disputed amount of the filing fee, the applicant may file a Request for Determination of Applicability under 310 CMR 10.05(3)(a), with sufficient information to enable the conservation commission to determine the extent of the area, or the type and extent of the activity, subject to protection under M.G.L. c. 131, § 40.

When a Request For Determination of Applicability is filed by an Applicant to resolve a dispute over the filing fee, all proceedings under the Notice of Intent shall be stayed until all appeal periods for the Determination have elapsed or, if the Determination is appealed until all proceedings before the Department have been completed.

A Final Determination of Applicability as to the area, or the type and extent of the activity, subject to protection under M.G.L. c. 131, § 40 shall be binding on all parties and shall be used in calculating the fee.

(c) Activities Subject to Notice of Intent Fees. The following activity descriptions are intended to include all activities subject to filing of a Notice of Intent under M.G.L. c. 131 § 40. The fees imposed by 310 CMR 10.03 are applicable only to those activities subject to jurisdiction under M.G.L. c. 131, § 40. The fee for work proposed under a single Notice of Intent that involves more than one activity noted below, shall be determined by adding the fees for each of the proposed activities. When the work involves activities within the riverfront area as well as another resource area or the buffer zone, the fee shall be determined by adding an additional 50% of the fee calculated for activities in another resource area(s) or the buffer zone to another resource area for each of the proposed activities within the riverfront area. When the work involves activities within the riverfront area but no other resource area, the fee shall be determined by adding the fees for each of the proposed activities within the riverfront area.

10.03: continued

1. Category 1.

- a. Any work on a single family residential lot including a house addition, deck, garage, garden, pool, shed, or driveway. Activities excluded from Category 1 include driveways reviewable under 310 CMR 10.53(3)(e) (See Category 2f); construction of an unattached single family house; and construction of a dock, pier, or other coastal engineering structure.
- b. Site preparation of each single family house lot, including removal of vegetation, excavation and grading, where actual construction of the house is not proposed under the Notice of Intent.
- c. Control of nuisance vegetation by removal, herbicide treatment or other means, from a resource area, on each single family lot, as allowable under 310 CMR 10.53(4).
- d. Resource improvement allowed under 310 CMR 10.53(4), other than removal of aquatic nuisance vegetation, as allowed under 310 10.53(4).
- e. Construction, repair, replacement or upgrading of a subsurface septic system or any part of such a system.
- f. Activities associated with installation of a monitoring well, other than construction of an access roadway thereto.
- g. New agriculture, including forestry on land in forest use (310 CMR 10.53(3)(r) and (s)), and aquacultural projects.

2. Category 2:

- a. Construction of each single family house (including single family houses in a subdivision), any part of which is in a buffer zone or resource area. Any activities associated with the construction of said house(s), including associated site preparation and construction of retention/detention basins, utilities, septic systems, roadways and driveways other than those roadways or driveways reviewable under 310 CMR 10.53(3)(e)(See Category 2f), shall not be subject to additional fees if all said activities are reviewed under a single Notice of Intent. (For apartment/condominium type buildings see Category 3.)
- b. Parking lot of any size.
- c. The placement of sand for purposes of beach nourishment.
- d. Any projects reviewable under 310 CMR 10.24(7)(a) through (c).
- e. Any activities reviewable under 310 CMR 10.53(3)(d) and 310 CMR 10.53(3)(f) through (l), except for those subject to 310 CMR 10.03(7)(c)4.b. Where more than one activity is proposed within an identical footprint (e.g., construction of a sewer within the footprint of a new roadway), only one fee shall be payable.
- f. Construction of each crossing for a driveway associated with an unattached single family house, reviewable under 310 CMR 10.53(3)(e).
- g. Any point source discharge.
- h. Control of nuisance vegetation, other than on a single family lot, by removal, herbicide treatment or other means, reviewable under 310 CMR 10.53(4).
- i. Raising or lowering of surface water levels for flood control or any other purpose.
- j. Any other activity not described in Categories 1, 3, 4 or 5.
- k. The exploration for (but not development, construction, expansion, maintenance, operation or replacement of) public water supply wells or wellfields derived from groundwater, reviewable under 310 CMR 10.53(3)(o).

3. Category 3:

- a. Site preparation, for any development other than an unattached single family house(s), including the removal of vegetation, excavation and grading, where actual construction is not proposed in the Notice of Intent.
- b. Construction of each building for any commercial, industrial, institutional, or apartment/condominium/townhouse-type development, any part of which is in a buffer zone or resource area. Any activities associated with the construction of said building, including associated site preparation and construction of retention/detention basins, septic systems, parking lots, utilities, point source discharges, package sewage treatment plants, and roadways and driveways other than those roadways or driveways reviewable under 310 CMR 10.53(3)(e), shall not be subject to additional fees if all said activities are reviewed under a single Notice of Intent.

10.03: continued

- c. Construction of each roadway or driveway, not reviewable under 310 CMR 10.53(3)(e), and not associated with construction of an unattached single family house.
- d. Any activity associated with the clean up of hazardous waste, except as otherwise noted in Category 4, including excavation, destruction of vegetation, change in subsurface hydrology, placement of collection wells or other structures for collection and treatment of contaminated soil and/or water.
- e. The development, construction, expansion, maintenance, operation, or replacement of (but not exploration for) public water supply wells or wellfields derived from groundwater, reviewable under 310 CMR 10.53(3)(o).
- 4. Category 4:
 - a. Construction of each crossing for a limited project access roadway or driveway reviewable under 310 CMR 10.53(3)(e) associated with a commercial, industrial, or institutional development or with any residential construction (other than a roadway or driveway associated with construction of an unattached single family house).
 - b. Construction, modification, or repair of a flood control structure such as a dam, reservoir, tidegate, sluiceway, or appurtenant works.
 - c. Creation, operation, maintenance or expansion of a public or private landfill.
 - d. Creation, operation, maintenance or expansion of a public or private sand and/or gravel operation including but not limited to excavation, filling, and stockpiling.
 - e. Construction of new railroad lines or extensions of existing lines, including ballast area, placement of track, signals and switches and other related structures.
 - f. Construction, reconstruction, expansion, or maintenance of any bridge, except to gain access to a single family house lot.
 - g. Any alteration of a resource area(s) to divert water for the clean up of a hazardous waste site, for non-exempt mosquito control projects, or for any other purpose not expressly identified elsewhere in this fee schedule.
 - h. Any activities, including the construction of structures, associated with a dredging operation conducted on land under a waterbody, waterway, or the ocean. If the dredging is directly associated with the construction of a new dock, pier or other structure identified in Category 5, only the Category 5 fee shall apply.
 - i. Construction of, or the discharge from, a package sewage treatment plant.
 - j. Airport vegetation removal projects reviewable under 310 CMR 10.24(7)(c)5. and 10.53(3)(n).
 - k. Landfill closure projects reviewable under 310 CMR 10.24(7)(c)4. and 10.53(3)(p).
 - l. Any activities, including the construction of structures, associated with the assessment, monitoring, containment, mitigation, and remediation of, or other response to, a release or threat of release of oil and/or hazardous material reviewable under 310 CMR 10.24(7)(c)6. or 310 CMR 10.53(3)(q).
- 5. Category 5: Construction, reconstruction, repair or replacement of docks, piers, revetments, dikes, or other engineering structures on coastal or inland resource areas, including the placement of rip rap or other material on coastal or inland resource areas.
- 6. Category 6: Delineation of bordering vegetated wetland.
- (d) Requests for Action by the Department. Any person's request for action by the Department will not be deemed complete and time periods, if any, shall not commence, unless the person making the request has paid the appropriate filing fee specified in 801 CMR 4.02 (310).
- (e) Fees for Requests for Action by Department. The following requests for action by the Department are subject to the fees established by the Executive Office for Administration and Finance at 801 CMR 4.02(310).
 - 1. Request for a Superseding Determination of Applicability.
 - 2. Request for a Superseding Order of Conditions.
 - 3. Request for an Adjudicatory Hearing or for a Variance which is necessary to avoid an unconstitutional taking.
 - 4. Request to Intervene in an Adjudicatory Proceeding.
 - 5. Request for a Variance, except where necessary to avoid an unconstitutional taking.
- (f) Waivers and Exemptions. See 801 CMR 4.02(310) for provisions concerning waivers or exemptions from the requirements of 310 CMR 10.03(7).

10.04: Definitions

Abutter means the same as owner of land abutting the activity.

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

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

Aggrieved means the same as person aggrieved.

Agriculture. For the purposes of 310 CMR 10.04 the following words and phrases have the following meanings:

(a) Land in agricultural use means land within resource areas or the Buffer Zone presently and primarily used in producing or raising one or more of the following agricultural commodities for commercial purposes:

1. animals, including but not limited to livestock, poultry, and bees;
2. fruits, vegetables, berries, nuts, maple sap, and other foods for human consumption;
3. feed, seed, forage, tobacco, flowers, sod, nursery or greenhouse products, and ornamental plants or shrubs; and
4. forest products on land maintained in forest use, including but not limited to biomass, sawlogs, and cordwood, but not including the agricultural commodities described in 310 CMR 10.04(Agriculture)(a)1. through 3..

Additionally, land in agricultural use means land within resource areas or the Buffer Zone presently and primarily used in a manner related to, and customarily and necessarily used in, producing or raising such commodities, including but not limited to: existing access roads and livestock crossings; windbreaks; hedgerows; field edges; bee yards; sand pits; landings for forest products; fence lines; water management projects such as reservoirs, farm ponds, irrigation systems, field ditches, cross ditches, canals/channels, grass waterways, dikes, sub-surface drainage systems, watering facilities, water transport systems, and water storage systems; agricultural composting sites; agricultural storage and work areas; and land under farm structures.

Land in agricultural use may lie inactive for up to five consecutive years unless it is under a United States Department of Agriculture (USDA) contract for a longer term pursuant to the Conservation Reserves Program (the Food Securities Act of 1985, as amended by the Food, Agriculture, Conservation and Trade Act of 1990; and 7 CFR 1410), or it is used for the forestry purposes described in 310 CMR 10.04(Agriculture)(b)14., 15., 16. and 17.). The issuing authority may require appropriate documentation, such as a USDA Farm Plan or aerial photography, to demonstrate agricultural use.

(b) Normal maintenance of land in agricultural use, which in all cases does not include placing substantial amounts of fill in Bordering Land Subject to Flooding or filling or dredging a Salt Marsh, means the following activities, without enlargement as to geographical extent, that are occurring on land in agricultural use, when directly related to production or raising of the agricultural commodities referenced in 310 CMR 10.04(Agriculture)(a), when undertaken in such a manner as to prevent erosion and siltation of adjacent water bodies and wetlands, and when conducted in accordance with federal and state laws:

1. all crop management practices, not to include drainage in a Bordering Vegetated Wetland, customarily employed to enhance existing growing conditions, including but not limited to: tillage, trellising, pruning, mulching, shading, and irrigating; and all customary harvesting practices such as digging, picking, combining, threshing, windrowing, baling, curing, and drying;
2. the use of fertilizers, manures, compost materials, and other soil amendments; pesticides and herbicides; traps; and other such materials;
3. the repair or replacement of existing access roads and livestock crossings;
4. the maintenance of:
 - a. existing forest boundary lines up to five feet wide limited to cutting vegetation within the existing boundary lines;

10.04: continued

- b. windbreaks;
- c. hedgerows; and
- d. fire breaks on land maintained in forest use and owned by the Metropolitan District Commission, the Department of Environmental Management, or the Department of Fisheries, Wildlife, and Environmental Law Enforcement;
- 5. the management of existing field edges, limited to within 100 feet from the land in production, including the following practices:
 - a. mowing;
 - b. burning;
 - c. brush cutting; and
 - d. removing trees.

The management of any field edge that falls within a Bordering Vegetated Wetland is not intended to allow the conversion of Bordering Vegetated Wetland into cropland. Therefore, the field management practices described in 310 CMR 10.04(Agriculture) (b)(5)a. through d. may occur in a Bordering Vegetated Wetland provided that:

- i. the cutting or removal of trees and understory vegetation shall not occur within 25 feet of the bank of a water body that is not managed within the land in production (field ditches, cross ditches, grass waterways, irrigation systems, and farm ponds are examples of managed water bodies) unless the trees or understory vegetation are removed to control alternative hosts but no more than 50% of the canopy may be removed, or except to maintain existing dikes;
- ii. slash, branches, and limbs resulting from the cutting and removal operations shall not be placed within 25 feet of the bank of a water body that is not managed within the land in production; and
- iii. no tilling, filling, excavation, or other change in the existing topography shall occur within the field edge;
- 6. the maintenance and repair of existing fences and the management of temporary fence lines;
- 7. the cleaning, clearing, grading, repairing, dredging, or restoring of existing man-made or natural water management systems such as reservoirs, farm ponds, irrigation systems, field ditches, cross ditches, canals/channels, grass waterways, dikes, sub-surface drainage systems, watering facilities, water transport systems, vents, and water storage systems, all in order to provide drainage, prevent erosion, provide more effective use of water, or provide for efficient use of equipment, and all for the purpose of maintaining favorable conditions for ongoing growing or raising of agricultural commodities;
- 8. the maintenance and repair of ongoing agricultural composting sites, storage areas, and work areas and the storage of fertilizers, pesticides, manures, compost materials, and other soil amendments, provided that such storage occurs only in the Buffer Zone or Bordering Land Subject to Flooding;
- 9. the repair and maintenance of existing farm structures;
- 10. the seeding of eroded or disturbed areas;
- 11. maintaining the flow of existing natural waterways;
- 12. the keeping of livestock and poultry and the management of beehives;
- 13. the cultivation of cranberries, including the following practices:
 - a. the activities described in 310 CMR 10.04(Agriculture)(b)1. through 11.;
 - b. the application of sand to existing bogs and the excavation of sand from sand pits;
 - c. the repair and reconstruction of water control structures including flumes, pumps, dikes, and piping above and below the ground;
 - d. the regrading, including modification of drainage, and replanting of existing cranberry bogs;
 - e. the repair and replacement of dikes;
 - f. water harvesting activities; and
 - g. flooding and flood release;
- 14. the cutting and removal of trees for the purpose of selling the trees or any products derived therefrom, when carried out in accordance with a Forest Cutting Plan approved by the Department of Environmental Management (DEM) under the provisions of M.G.L. c. 132, §§ 40 through 46, and subject to the following:

10.04: continued

- a. the cutting and removal of trees within Bordering Vegetated Wetland shall be limited to no more than 50% of the basal area of the area to be cut and the work shall be conducted when the soil is frozen, dry or otherwise stable to support the equipment used;
 - b. except for the construction or maintenance of access described in 310 CMR 10.04(b)16., there shall be no filling, excavation, or other change in topography or hydrology of resource areas;
 - c. all soils that are exposed during or after any work described in 310 CMR 10.04(Agriculture)(b)14. shall be stabilized to prevent the soils from eroding into Bordering Vegetated Wetlands beyond the work area or into open water bodies, in accordance with the Massachusetts Forestry Best Management Practices Manual;
 - d. the person claiming the exemption shall submit by certified mail or hand delivery at the same time to the conservation commission and the appropriate DEM Regional Office not less than ten days prior to the commencement of the activity, a copy of the Forest Cutting Plan that describes the proposed cutting and removal of trees and any activity within resource areas or the Buffer Zone. The conservation commission shall have the opportunity to comment to DEM on the plan;
 - e. landings for forest products shall not be located in Bordering Vegetated Wetland or Bank; and
 - f. any Forest Cutting Plan that is not affirmatively approved by DEM under M.G.L. c. 132, §§ 40 through 46 but instead is deemed approved due to the expiration of some period of time following the submittal of the plan to DEM for approval shall not be considered "approved" by DEM for the purposes of 310 CMR 10.04.
15. notwithstanding the use of the words "for commercial purposes" in the first sentence of 310 CMR 10.04(Agriculture)(a), the cutting of trees within resource areas and the Buffer Zone by owners for their own use, not to exceed 5,000 board feet or ten cords of wood during any 12 month period without an approved Forest Cutting Plan or the cutting of trees within resources areas of greater than 5,000 board feet or ten cords but less than 10,000 board feet or 20 cords of wood during any 12 month period with an approved Forest Cutting Plan, provided that:
- a. after the cutting, the remaining trees in the resource area (and the Buffer Zone, if the activity is being conducted without an approved Forest Cutting Plan) shall be evenly distributed throughout the area where cutting occurred and the crown cover shall not be less than 50%. Crown cover is determined as the percent of the ground's surface that would be covered by a vertical projection of foliage from trees with a diameter at breast height of five inches or greater, where minor gaps between branches are disregarded and areas of overlapping foliage are counted only once;
 - b. the cutting and removal of trees shall occur only during those periods when the ground is sufficiently frozen, dry, or otherwise stable to support the equipment used;
 - c. the cutting, removal, or other destruction of trees and understory vegetation without a Forest Cutting Plan shall not occur within 25 feet of the Bank, except for the purpose of providing access for the activities described in 310 CMR 10.04(Agriculture)(b)15.;
 - d. the placement of slash, branches, and limbs resulting from the cutting and removal operations shall not occur within 25 feet of Bank;
 - e. no filling, excavation, or other change shall occur in the existing topography or hydrology of a resource area;
 - f. landings for forest products shall not be located in Bordering Vegetated Wetland or Bank; and
 - g. any Forest Cutting Plan that is not affirmatively approved by DEM under M.G.L. c. 132, §§ 40 through 46, but instead is deemed approved due to the expiration of some period of time following the submittal of the plan to DEM for approval shall not be considered "approved" by DEM for the purposes of 310 CMR 10.04.
16. the construction of new temporary access or the maintenance of existing legally constructed access for forestry activities described in 310 CMR 10.04(b)14. or 10.04(b)15. provided that:
- a. every practicable effort shall be made to avoid access, including stream crossings, and the construction of landings through and in resource areas;

10.04: continued

b. where access, including stream crossings, through resource areas cannot be avoided, every practicable effort shall be made to minimize impacts resulting from construction of new access including, but not limited to, maintaining and improving (but not enlarging) existing access. Activities shall be conducted when the soil is frozen, dry, or otherwise stable to support the equipment used;

c. where DEM has determined through its review and approval of the Forest Cutting Plan that access is impracticable without constructing new access or stream crossings:

i. access shall be designed, constructed, and maintained in accordance with the Massachusetts Forestry Best Management Practices Manual;

ii. stream crossings shall be stabilized to prevent erosion using methods described in the Massachusetts Forestry Best Management Practices Manual. When crossings involve fill, culverts or other structures that will obstruct flow, they shall be designed, constructed, and maintained in accordance with the Massachusetts Forestry Best Management Practices Manual to allow the unobstructed passage of existing flows for at least the 25 year storm;

iii. access or stream crossings shall be removed within one year of completion of the work described in the approved Forest Cutting Plan;

iv. following removal of access, the topography and site conditions shall be substantially restored to allow pre-existing vegetation to be reestablished; and

v. activities shall be conducted when the soil is frozen, dry, or otherwise stable to support the equipment used.

17. non-harvest management practices for forest products on land maintained in forest use limited to pruning, pre-commercial thinning or planting of tree seedlings.

(c) Normal improvement of land in agricultural use, which in all cases does not include filling or dredging a Salt Marsh, includes but is not limited to:

1. the following activities when they occur on land in agricultural use or when they occur within the Buffer Zone or Bordering Land Subject to Flooding that is not land in agricultural use, when they are directly related to production or raising of the agricultural commodities referenced in 310 CMR 10.04(Agriculture)(a), and when they are undertaken in such a manner as to prevent erosion and siltation of adjacent water bodies and wetlands and the activity is conducted in accordance with federal and state laws:

a. the installation of permanent fencing, windbreaks, hedgerows, or the cutting of vegetation to create forest boundaries up to five feet wide;

b. the installation of dikes within a cranberry bog;

c. the construction of farm structures, not including habitable dwellings, provided that the footprint of the farm structure does not exceed 4,000 square feet and no filling of Bordering Land Subject to Flooding occurs beyond the footprint of the building;

d. the squaring-off of fields and bogs, provided that the activity does not alter a Bordering Vegetated Wetland, there is no increase in the amount of land in production beyond the minimum increase necessarily resulting from making the boundary of any field or bog more regular, and no fill is placed within Bordering Land Subject to Flooding;

e. the construction of by-pass canals/channels and tail water recovery systems;

f. a change in commodity other than from maple sap production or forest products to any other commodity, provided that there is no filling of Bordering Vegetated Wetland and drainage ditches or the subsurface drainage system are not increased or enlarged;

g. the construction of a water management system such as a reservoir, farm pond, irrigation system, field ditch, cross ditch, canal/channel, grass waterway, dike, sub-surface drainage system, watering facility, water transport system, vent, or water storage system, or of a livestock access; and

h. the construction of composting and storage areas.

For the activities described in 310 CMR 10.04(Agriculture)(c)(1)d. through h. there shall be no net loss of flood storage capacity; and

10.04: continued

2. the reconstruction of existing dikes, the reconstruction and expansion of existing ponds and reservoirs, and the construction of tailwater recovery ponds and by-pass canals/channels occurring partly or entirely within a Bordering Vegetated Wetland, when directly related to production or raising of the agricultural commodities referenced in 310 CMR 10.04(Agriculture)(a), in accordance with the following:

- a. Prior to performing the work, the person claiming the exemption shall submit to the conservation commission for its review at a public meeting that portion of a certified farm Conservation Plan (CP) which relates to the work to be conducted in a Bordering Vegetated Wetland. The CP must be prepared in cooperation with the U.S.D.A. Soil Conservation Service (SCS) and comply with the terms of the January 20, 1993, Memorandum of Understanding (MOU) between the Department and SCS concerning Cps;
- b. The conservation commission may, within 21 days of receiving the CP, provide the person claiming the exemption with written notification containing specific comments detailing the manner in which the CP has not been prepared in compliance with the terms of the MOU;
- c. The person claiming the exemption shall provide SCS with a complete copy of the notification;
- d. All revisions to the CP that relate to the delineation of Bordering Vegetated Wetlands shall be submitted to the conservation commission in accordance with 310 CMR 10.04(Agriculture)(c)(2);
- e. All work shall be done in accordance with the CP; and
- f. The maximum amount of Bordering Vegetated Wetland which may be altered by the above activities is:
 - i. 5,000 square feet for reconstruction of an existing dike;
 - ii. 10,000 square feet for expansion of an existing pond or reservoir;
 - iii. 10,000 square feet for construction of a tailwater recovery pond; and
 - iv. 5,000 square feet for construction of a by-pass canal/channel.

Alter means to change the condition of any Area Subject to Protection Under M.G.L. c. 131, § 40. Examples of alterations include, but are not limited to, the following:

- (a) the changing of pre-existing drainage characteristics, flushing characteristics, salinity distribution, sedimentation patterns, flow patterns and flood retention areas;
- (b) the lowering of the water level or water table;
- (c) the destruction of vegetation;
- (d) the changing of water temperature, biochemical oxygen demand (BOD), and other physical, biological or chemical characteristics of the receiving water.

Provided, that when the provisions of 310 CMR 10.03(6) and 10.05(3) or 333 CMR 11.03(9) have been met, the application of herbicides in the Buffer Zone in accordance with such plans as are required by the Department of Food and Agriculture pursuant to 333 CMR 11.00: *Right of Way Management*, effective July 10, 1987, is not an alteration of any Area Subject to Protection Under M.G.L. c. 131, § 40.

Applicant means any person who files a Notice of Intent, or on whose behalf such a notice is filed.

Aquaculture.

- (a) Land in aquacultural use means land presently and primarily used in the growing of aquatic organisms under controlled conditions, including one or more of the following uses: raising, breeding or producing a specified type of animal or vegetable life including, but not limited to, finfish such as carp, catfish, black bass, flatfishes, herring, salmon, shad, smelt, sturgeon, striped bass, sunfishes, trout, whitefish, eel, tilapia; shellfish such as shrimp, crabs, lobster, crayfish, oysters, clams, periwinkles, scallops, mussels, squid; amphibians such as frogs; reptiles such as turtles; seaweeds such as irish moss and dulse; and edible freshwater plants.

10.04: continued

(b) Normal maintenance or improvement of land in aquacultural use means the following activities, when done in connection with the production of aquatic organisms as defined above: draining, flooding, heating, cooling, removing, filling, grading, compacting, raking, tilling, fertilizing, seeding, harvesting, filtering, rafting, culverting or applying chemicals in conformance with all state and federal laws; provided, however, that such activities are clearly intended to improve and maintain land in aquacultural use and that best available measures are utilized to ensure that there will be no adverse effect on wetlands outside the area in aquacultural use, and further provided that removing, filling, dredging or altering of a salt marsh is not to be considered normal maintenance or improvement of land in aquacultural use.

Area Subject to Protection Under M.G.L. c. 131, § 40 means any area specified in 310 CMR 10.02(1). It is used synonymously with Resource Area, each one of which is defined in greater detail in 310 CMR 10.21 through 10.66.

Bank (coastal) is defined in 310 CMR 10.30(2).

Bank (inland) is defined in 310 CMR 10.54(2).

Beach (barrier) is defined in 310 CMR 10.29(2).

Beach (coastal) is defined in 310 CMR 10.27(2).

Beach (inland): a naturally occurring inland beach means an unvegetated bank as defined in 310 CMR 10.54(2).

Best Available Measures means the most up-to-date technology or the best designs, measures or engineering practices that have been developed and that are commercially available.

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

Bordering means touching. An area listed in 310 CMR 10.02(1)(a) is bordering on a water body listed in 310 CMR 10.02(1)(a) if some portion of the area is touching the water body or if some portion of the area is touching another area listed in 310 CMR 10.02(1)(a) some portion of which is in turn touching the water body.

Bordering Vegetated Wetland is defined in 310 CMR 10.55(2).

Boundary means the boundary of an Area Subject to Protection Under M.G.L. c. 131, § 40. A description of the boundary of each area is found in the appropriate section of 310 CMR 10.00. For coastal areas, *see* 310 CMR 10.21 through 10.37; for inland areas, *see* 310 CMR 10.51 through 10.60.

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

Buffer Zone means that area of land extending 100 feet horizontally outward from the boundary of any area specified in 310 CMR 10.02(1)(a).

Certificate of Compliance means a written determination by the issuing authority that work or a portion thereof has been completed in accordance with an Order. It shall be made on Form 8.

Coastal Wetlands are defined in M.G.L. c. 131, § 40, para. 6.

Commissioner means the Commissioner of the Department of Environmental Protection, pursuant to St. 1989, c. 240, § 101.

10.04: continued

Conditions means those requirements set forth in a written Order issued by a conservation commission or the Department for the purpose of permitting, regulating or prohibiting any activity that removes, fills, dredges or alters an Area Subject to Protection Under M.G.L. c. 131, § 40. [See also 310 CMR 10.05(6).]

Conservation Commission means that body comprised of members lawfully appointed pursuant to M.G.L. c. 40, § 8C. For the purposes of M.G.L. c. 131, § 40 and 310 CMR 10.00, it shall also mean a mayor or board of selectmen, where no conservation commission has been established under M.G.L. c. 40, § 8C.

Creek means the same as a stream, as defined in 310 CMR 10.04

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

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

Densely developed area means a riverfront area that has been designated by the Secretary of the Executive Office of Environmental Affairs at the request of a city or town, limited to an area of 10 acres or more that is being utilized, or includes existing vacant structures or vacant lots formerly utilized as of January 1, 1944 or sooner, for intensive industrial, commercial, institutional, or residential activities or combinations of such activities, including, but not limited to the following: manufacturing, fabricating, wholesaling, warehousing, or other commercial or industrial activities; retail trade and service activities; medical and educational institutions; residential dwelling structures at a density of three or more per two acres; and mixed or combined patterns of the above. Land which is zoned for intensive use but is not utilized for such use as of January 1, 1997 shall not be designated as a densely developed area. Rivers within the municipalities identified in 310 CMR 10.58(2)(a)3.a. also have 25 foot riverfront areas.

Department means the Department of Environmental Protection, and shall include the Commissioner and any other person employed by said Department, pursuant to St. 1989, c. 240, § 101.

Designated Port is defined in 310 CMR 10.26(2).

Determination.

(a) a Determination of Applicability means a written finding by a conservation commission or the Department as to whether a site or the work proposed thereon is subject to the jurisdiction of M.G.L. c. 131, § 40. It shall be made on Form 2.

(b) a Determination of Significance means a written finding by a conservation commission, after a public hearing, or by the Department, that the area on which the proposed work is to be done, or which the proposed work will alter, is significant to one or more of the interests identified in M.G.L. c. 131, § 40. It shall be made as part of the Order, on Form 5.

(c) a Notification of Non-Significance means a written finding by a conservation commission, after a public hearing, or by the Department, that the area on which the proposed work is to be done, or which the proposed work will alter, is not significant to any of the interests of M.G.L. c. 131, § 40. It shall be made on Form 6.

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

Dune means coastal dune, as defined in 310 CMR 10.28(2).

Estuary means:

- (a) any area where fresh and salt water mix and tidal effects are evident; or
- (b) any partially enclosed coastal body of water where the tide meets the current of any stream or river.

10.04: continued

Extension Permit means a written extension of time within which the authorized work shall be completed. It shall be made on Form 7.

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

Final Order means the Order issued by the Commissioner after an adjudicatory hearing or, if no request for hearing has been filed, the Superseding Order or, if no request for a Superseding Order has been filed, the Order of Conditions.

Flat (tidal) is defined in 310 CMR 10.27(2)(b).

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

Formerly or presently owned means owned by the same owner at any time on or after August 1, 1996.

Freshwater Wetlands are defined in M.G.L. c. 131, § 7, para. 7.

General Performance Standards means those requirements established by 310 CMR 10.00 for activities in or affecting each of the Areas Subject to Protection Under M.G.L. c. 131, § 40. They are found in 310 CMR 10.25 through 10.35 and 10.37, and 310 CMR 10.54 through 10.60.

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

Historic Mill Complex means the mill complexes in, but not limited to, Holyoke, Taunton, Fitchburg, Haverhill, Methuen, and Medford in existence prior to 1946 and situated landward of the waterside facade of a retaining wall, building, sluiceway, or other structure existing on August 7, 1996. An historic mill also means any historic mill included on the Massachusetts Register of Historic Places. An historic mill complex includes only the footprint of the area that is or was occupied by interrelated buildings (manufacturing buildings, housing, utilities, parking areas, and driveways) constructed before and existing after 1946, used for any type of manufacturing or mechanical processing and including associated structures to provide water for processing, to generate water power, or for water transportation.

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

Interests Identified in M.G.L. c. 131, § 40 means public or private water supply, ground water supply, flood control, storm damage prevention, prevention of pollution, protection of land containing shellfish, protection of fisheries, and protection of wildlife habitat.

Issuing Authority means a conservation commission, mayor, the selectmen or the Department, whichever is applicable.

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

Land Containing Shellfish is defined in 310 CMR 10.34(2).

Land Subject to Coastal Storm Flowage means land subject to any inundation caused by coastal storms up to and including that caused by the 100-year storm, surge of record or storm of record, whichever is greater.

Land Subject to Flooding is defined in 310 CMR 10.57(2).

Land Subject to Tidal Action means land subject to the periodic rise and fall of a coastal water body, including spring tides.

Land Under Salt Ponds is defined in 310 CMR 10.33(2).

10.04: continued

Land Under Water Bodies and Waterways means the bottom of, or land under, the surface of the ocean or any estuary, creek, river, stream, pond, or lake. Land under the ocean and estuaries is further defined in 310 CMR 10.25(2); land under inland water bodies is further defined in 310 CMR 10.56(2).

Lot means an area of land in one ownership, with definite boundaries.

Majority means more than half of the members of the conservation commission then in office.

Marsh is defined in M.G.L. c. 131, § 40, para. 10.

Meadow (or Wet Meadow) is defined in M.G.L. c. 131, § 40, para. 9.

Mean Annual High-Water Line is defined at 310 CMR 10.58(2).

MEPA means the Massachusetts Environmental Policy Act, M.G.L. c. 30, §§ 6 through 62H, and 301 CMR 11.00: *General Application and Administration Environmental Code, Title 1*.

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

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

Notice of Intent means the written notice filed by any person intending to remove, fill, dredge or alter an Area Subject to Protection under M.G.L. c. 131, § 40. It shall be made on Form 3 or 4.

Ocean means the Atlantic Ocean and all contiguous waters subject to tidal action.

Order means an Order of Conditions, Superseding Order or Final Order, whichever is applicable.

Order of Conditions means the document issued by a conservation commission containing conditions which regulate or prohibit an activity. It shall be made on Form 5.

Owner of Land Abutting the Activity means the owner of land sharing a common boundary or corner with the site of the proposed activity in any direction, including land located directly across a street, way, creek, river, stream, brook or canal.

Party to any proceeding before the Department means the applicant, the conservation commission and the Department, and pursuant to 310 CMR 10.05(7)(a) may include the owner of the site, any abutter, any person aggrieved, any ten residents of the city or town where the land is located and any ten persons pursuant to M.G.L. c. 30A, § 10A.

Person Aggrieved means any person who, because of an act or failure to act by the issuing authority, may suffer an injury in fact which is different either in kind or magnitude from that suffered by the general public and which is within the scope of the interests identified in M.G.L. c. 131, § 40. Such person must specify in writing sufficient facts to allow the Department to determine whether or not the person is in fact aggrieved.

Plans means such data, maps, engineering drawings, calculations, specifications, schedules and other materials, if any, deemed necessary by the issuing authority to describe the site and/or the work, to determine the applicability of M.G.L. c. 131, § 40 or to determine the impact of the proposed work upon the interests identified in M.G.L. c. 131, § 40. [See also General Instructions for Completing Notice of Intent (Form 3) and Abbreviated Notice of Intent (Form 4).]

Pond (coastal) means Salt Pond as defined in 310 CMR 10.33(2).

10.04: continued

Pond (inland) means any open body of fresh water with a surface area observed or recorded within the last ten years of at least 10,000 square feet. Ponds may be either naturally occurring or man-made by impoundment, excavation, or otherwise. Ponds shall contain standing water except for periods of extended drought. Periods of extended drought for purposes of 310 CMR 10.00 shall be those periods, in those specifically identified geographic locations, determined to be at the “Advisory” or more severe drought level by the Massachusetts Drought Management Task Force, as established by the Executive Office of Environmental Affairs and the Massachusetts Emergency Management Agency in 2001, in accordance with the Massachusetts Drought Management Plan (MDMP).

Notwithstanding the above, the following man-made bodies of open water shall not be considered ponds:

- (a) basins or lagoons which are part of wastewater treatment plants;
- (b) swimming pools or other impervious man-made basins; and
- (c) individual gravel pits or quarries excavated from upland areas unless inactive for five or more consecutive years.

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

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

Project Purpose means the general, functional description of an activity proposed within the riverfront area (e.g., construction of a single family house, expansion of a commercial development).

Protection of Fisheries means protection of the capacity of an Area Subject to Protection Under M.G.L. c. 131, § 40:

- (a) to prevent or reduce contamination or damage to fish; and
- (b) to serve as their habitat and nutrient source. Fish includes all species of fresh and salt water finfish and shellfish.

See also the definition of Marine Fisheries contained in 310 CMR 10.23(15).

Protection of Land Containing Shellfish means protection of the capacity of an Area Subject to Protection Under M.G.L. c. 131, § 40:

- (a) to prevent or reduce contamination or damage to shellfish; and
- (b) to serve as their habitat and nutrient source.

See also the definitions of Shellfish and Land Containing Shellfish in 310 CMR 10.34(2).

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

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

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

Request for Determination of Applicability means a written request made by any person to a conservation commission or the Department for a determination as to whether a site or work thereon is subject to M.G.L. c. 131, § 40. It shall be submitted on Form 1.

Resource Area means any of the areas specified in 310 CMR 10.25 through 10.35 and 310 CMR 10.54 through 10.58. It is used synonymously with Area Subject to Protection Under M.G.L. c. 131, § 40, each one of which is enumerated in 310 CMR 10.02(1).

River means any natural flowing body of water that empties to any ocean, lake, pond, or other river and which flows throughout the year. River is defined further at 310 CMR 10.58(2).

Riverfront Area is defined at 310 CMR 10.58(2).

10.04: continued

Rocky Intertidal Shore is defined in 310 CMR 10.31(2).

Salt Marsh is defined in 310 CMR 10.32(2).

Shelter means protection from the elements or predators.

Significant means plays a role. A resource area is significant to an interest identified in M.G.L. c. 131, § 40 when it plays a role in the provision or protection, as appropriate, of that interest. Within the context of the protection of the riverfront area, no significant adverse impact means the level of protection of the performance standards provided under 310 CMR 10.58.

Spring Tides means those tides which occur with the new and full moons, and which are perceptibly higher and lower than other tides.

State-listed species mean the same as rare species, as defined in 310 CMR 10.04.

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

Stream means a body of running water, including brooks and creeks, which moves in a definite channel in the ground due to a hydraulic gradient, and which flows within, into or out of an Area Subject to Protection Under M.G.L. c. 131, § 40. A portion of a stream may flow through a culvert or beneath a bridge. Such a body of running water which does not flow throughout the year (*i.e.*, which is intermittent) is a stream except for that portion upgradient of all bogs, swamps, wet meadows and marshes.

Superseding Determination means a determination of applicability, of significance or of non-significance, as the case may be, issued by the Department. It shall be made on Form 2.

Superseding Order means a document issued by the Department containing conditions which regulate or prohibit an activity. It shall be made on Form 5.

Swamp is defined in M.G.L. c. 131, § 40, para. 8.

Vernal pool habitat means confined basin depressions which, at least in most years, hold water for a minimum of two continuous months during the spring and/or summer, and which are free of adult fish populations, as well as the area within 100 feet of the mean annual boundaries of such depressions, to the extent that such habitat is within an Area Subject to Protection Under M.G.L. c. 131, § 40 as specified in 310 CMR 10.02(1). These areas are essential breeding habitat, and provide other extremely important wildlife habitat functions during non-breeding season as well, for a variety of amphibian species such as wood frog (*Rana sylvatica*) and the spotted salamander (*Ambystoma maculatum*), and are important habitat for other wildlife species.

Vista Pruning means the selective thinning of tree branches or understory shrubs to establish a specific "window" to improve visibility. Vista pruning does not include the cutting of trees which would reduce the leaf canopy to less than 90% of the existing crown cover and does not include the mowing or removal of understory brush.

Water-dependent uses mean those uses and facilities which require direct access to, or location in, marine, tidal or inland waters and which therefore cannot be located away from said waters, including but not limited to: marinas, public recreational uses, navigational and commercial fishing and boating facilities, water-based recreational uses, navigation aids, basins, and channels, industrial uses dependent upon waterborne transportation or requiring large volumes of cooling or process water which cannot reasonably be located or operated at an upland site, crossings over or under water bodies or waterways (but limited to railroad and public roadway bridges, tunnels, culverts, as well as railroad tracks and public roadways connecting thereto which are generally perpendicular to the water body or waterway), and any other uses and facilities as may further hereafter be defined as water-dependent in 310 CMR 9.00.

10.04: continued

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

Wildlife habitat is defined in M.G.L. c. 131, § 40, para. 14.

Work means the same as activity.

10.05: Procedures

(1) Time Periods. All time periods of ten days or less specified in M.G.L. c. 131, § 40 and 310 CMR 10.00 shall be computed using business days only. In the case of a determination or Order, such period shall commence on the first day after the date of issuance and shall end at the close of business on the tenth business day thereafter. All other time periods specified in M.G.L. c. 131, § 40 and 310 CMR 10.00 shall be computed on the basis of calendar days, unless the last day falls on a Saturday, Sunday or legal holiday, in which case the last day shall be the next business day following.

(2) Actions by Conservation Commission. Where M.G.L. c. 131, § 40 states that a particular action (except receipt of a request or notice) is to be taken by the conservation commission, that action is to be taken by more than half the members present at a meeting of at least a quorum. A quorum is defined as a majority of the members then in office.

Where M.G.L. c. 131, § 40 states that an order or notification shall be signed by a majority of the conservation commission, that action is to be taken by a majority of the members then in office, who need not convene as a body in order to sign, provided they met pursuant to the open meeting law, M.G.L. c. 39, §§ 23A through 23C, when voting on the matter.

Where M.G.L. c. 131, § 40 states that the conservation commission is to receive a request or notice, conservation commission means a member of the conservation commission or an individual designated by the conservation commission to receive such request or notice.

(3) Determinations of Applicability.

(a) Requests for Determination of Applicability.

1. Any person who desires a determination as to whether M.G.L. c. 131, § 40 applies to land, or to work that may affect an Area Subject to Protection under M.G.L. c. 131, § 40, may submit to the conservation commission by certified mail or hand delivery a Request for a Determination of Applicability, Form 1. For work within riverfront areas, an applicant may submit to the conservation commission by certified mail or hand delivery a Request for Determination of Applicability to identify the scope of alternatives to be evaluated under 310 CMR 10.58(4)(c)2., including sufficient information to enable the conservation commission to determine the applicable scope.

2. Any person who proposes to perform work within the Buffer Zone shall submit to the conservation commission either a Notice of Intent for such work or a Request for Determination of Applicability. Said request shall include sufficient information, as required on Form 1, to enable the conservation commission to find and view the area and to determine whether the proposed work will alter an Area Subject to Protection Under M.G.L. c. 131, § 40.

Any person who proposes to apply herbicides in the Buffer Zone pursuant to the presumption of 310 CMR 10.03(6)(b) shall be required only to submit a request for determination of the boundaries of the Buffer Zone and the Areas Subject to Protection Under M.G.L. c. 131, § 40. Such Request for Determination shall be submitted prior to the filing of the Vegetation Management Plan, as required by 333 CMR 11.00, on maps of a scale which will enable the issuing authority to find and delineate those Areas Subject to Protection Under M.G.L. c. 131, § 40 identified in 310 CMR 10.02(1)(a) through (c) and the Buffer Zone identified in 310 CMR 10.02(2) within the vicinity of the project area.

3. A request for a Determination of Applicability shall include certification that the Department and the owner of the area subject to the request, if the person making the request is not the owner, have been notified that a determination is being requested under M.G.L. c. 131, § 40.

10.05: continued

(b) Determination of Applicability.

1. Within 21 days after the date of receipt of the Request for a Determination of Applicability, the conservation commission shall issue a Determination of Applicability, Form 2. Notice of the time and place of the public meeting at which the determination will be made shall be given by the conservation commission at the expense of the person making the request not less than five days prior to such meeting, by publication in a newspaper of general circulation in the city or town in which the land is located, and by mailing a notice to the person making the request, the owner, the board of health and the planning board of said city or town. Notice shall also be given in accordance with the open meeting law, M.G.L. c. 39, § 23B. Said determination shall be signed by a majority of the conservation commission, and copies thereof shall be sent by the conservation commission to the Department, to the person making the request, and to the owner. Delivery of the copy to the person making the request shall be by hand delivery or certified mail, return receipt requested. Said determination shall be valid for three years from the date of issuance, except that a determination of the boundaries of the Areas Subject to Protection Under M.G.L. c. 131, § 40 and the Buffer Zone which are to apply to such plans as are required by the Department of Food and Agriculture pursuant to 333 CMR 11.00: *Rights of Way management*, effective July 10, 1987, shall be valid throughout the effective duration of the Vegetation Management Plan.

2. The conservation commission shall find that M.G.L. c. 131, § 40 applies to the land, or a portion thereof, if it is an Area Subject to Protection Under M.G.L. c. 131, § 40 as defined in 310 CMR 10.02(1). The conservation commission shall find that M.G.L. c. 131, § 40 applies to the work, or portion thereof, if it is an Activity Subject to Regulation Under M.G.L. c. 131, § 40 as defined in 310 CMR 10.02(2). The conservation commission shall identify the scope of alternatives to be evaluated, if requested, for work within riverfront areas under 310 CMR 10.58(4)(c)2..

3. A Notice of Intent which is filed as a result of a positive determination, whether such determination is made by the Department or a conservation commission, shall be filed with the conservation commission, and all of the procedures set forth in 310 CMR 10.05(4) shall apply.

(c) Appeal to the Department. Following a positive or negative Determination of Applicability, the identification of the scope of alternatives for work within the riverfront area, or the failure of a conservation commission to make a determination within 21 days, any person specified in 310 CMR 10.05(7) may, within ten days, request the Department to issue a Superseding Determination of Applicability pursuant to the procedures set forth in 310 CMR 10.05(7). The Department shall issue its determination within 35 days from receipt of such request.

(d) Work Pending Appeal of Determination.

1. Upon a positive Determination of Applicability by a conservation commission, work may not proceed until the Department or the Commissioner issues a negative determination, or until a Notice of Intent has been filed, a final order has been issued and recorded, and all administrative appeal periods have elapsed, except that a Notice of Intent shall not be required for the application of herbicides in accordance with 310 CMR 10.03(6).

2. Upon a positive Determination of Applicability by the Department, work may not proceed until the Commissioner issues a negative determination or until a Notice of Intent has been filed, a final order has been issued and recorded, and all administrative appeal periods have elapsed.

3. Upon a positive Determination of Applicability by the Commissioner, work may not proceed until a judicial determination is made that the proposed work is not subject to M.G.L. c. 131, § 40 or until a Notice of Intent has been filed and a final order has been issued and recorded, and all administrative appeal periods have elapsed.

4. Upon a negative Determination of Applicability by a conservation commission or upon the failure of a conservation commission to act within the 21 day time period, and where the Department has been requested to issue a Superseding Determination of Applicability but has failed to do so within 35 days, work may proceed at the owner's risk upon notice to the Department and to the conservation commission.

5. Upon a negative Determination of Applicability by the Department, work may proceed at the owner's risk even if a request for an adjudicatory hearing has been made.

10.05: continued

6. Upon a negative Determination of Applicability by the Commissioner after an adjudicatory hearing, work may proceed at the owner's risk even if a petition for judicial review has been filed.

7. Upon a positive Determination of Applicability by a conservation commission, the Department, or the Commissioner which identifies the scope of alternatives to be evaluated under 310 CMR 10.58(4)(c)2. for work within the riverfront area, work may not proceed until a Notice of Intent has been filed and a final Order has been issued and recorded and all administrative appeal periods have elapsed.

(4) Notices of Intent.

(a) Any person who proposes to do work that will remove, fill, dredge or alter any Area Subject to Protection Under M.G.L. c. 131 § 40 shall file a Notice of Intent on Form 3 and other application materials in accordance with the submittal requirements set forth in the *General Instructions for Completing Notice of Intent (Form 3) and Abbreviated Notice of Intent (Form 4)*. Two copies of the completed Notice of Intent with supporting plans and documents shall be sent by certified mail or hand delivery to the conservation commission, and two copies of the same shall be sent concurrently in like manner to the Department.

(b) For certain purposes, other forms of Notices may be used.

1. For certain projects, applicants may at their option use the Abbreviated Notice of Intent. This latter form may only be used when all three of the following circumstances exist:

a. the proposed work is within the Buffer Zone, as defined in 310 CMR 10.04, or within Land Subject to Flooding, as defined in 310 CMR 10.57(2) or within the Riverfront Area, as defined in 310 CMR 10.58.

b. the proposed work will disturb less than 1000 square feet of surface area within the Buffer Zone and/or Land Subject to Flooding or less than 1000 square feet of riverfront area, provided the work conforms to 310 CMR 10.58(4)(c)2.a..

c. the proposed work will not require U.S. Army Corps of Engineer Section 10 or Section 404 permits, or a license from the Division of Waterways pursuant to M.G.L. c. 91.

2. To establish the extent of bordering vegetated wetland and other resource areas on land subject to protection under M.G.L. c. 131, § 40, applicants may use the Abbreviated Notice of Resource Area Delineation for the confirmation of a delineated boundary of bordering vegetated wetlands and other resource areas on the site, prior to filing a Notice of Intent for proposed work. Alternatively, the boundary of bordering vegetated wetland (or other resource areas) may be determined through the filing of a Notice of Intent.

(c) Upon receipt of the application materials referred to in 310 CMR 10.05(4)(a), the Department shall issue a file number. The designation of a file number shall not imply that the plans and supporting documents have been judged adequate for the issuance of an Order, but only that copies of the minimum submittal requirements contained in the General Instructions have been filed.

(d) In the event that only a portion of a proposed project or activity lies within an Area Subject to Protection Under M.G.L. c. 131, § 40 or within the Buffer Zone, and the remainder of the project or activity lies outside those areas, only that portion within those areas must be described in the detail called for by the General Instructions and Form 3 and 4; provided, however, that in such circumstances the Notice of Intent shall also contain a description and calculation of peak flow and estimated water quality characteristics of discharge from a point source (both closed and open channel) when the point of discharge falls within an Area Subject to Protection Under M.G.L. c. 131, § 40 or within the Buffer Zone.

Notwithstanding the foregoing, when the issuing authority has determined that an activity outside the Areas Subject to Protection Under M.G.L. c. 131, § 40 and outside the Buffer Zone has in fact altered an Area Subject to Protection Under M.G.L. c. 131, § 40, it may require such plans, supporting calculations and other documentation as are necessary to describe the entire activity.

10.05: continued

(e) The requirement under M.G.L. c. 131, § 40 to obtain or apply for all obtainable permits, variances and approvals required by local by-law with respect to the proposed activity shall mean only those which are feasible to obtain at the time the Notice of Intent is filed. Permits, variances, and approvals required by local by-law may include, among others, zoning variances, permits from boards of appeals, permits required under floodplain or wetland zoning by-laws and gravel removal permits. They do not include, among others, building permits under the State Building Code, M.G.L. c. 23B, § 16, or subdivision control approvals under the State Subdivision Control Law, M.G.L. c. 41, §§ 81K through 81GG, which are issued by local authorities. When an applicant for a comprehensive permit (under M.G.L. c. 40B, §§ 20 through 23) from a board of appeals has received a determination from the board granting or denying the permit and, in the case of a denial, has appealed to the Housing Appeals Committee (established under M.G.L. c. 23B, § 5A), said applicant shall be deemed to have applied for all permits obtainable at the time of filing.

(f) If the issuing authority rejects a Notice of Intent because of a failure to obtain or apply for all permits, variances and approvals required by local by-law, it shall specify in writing the permit, variance or approval that has not been applied for. A ruling by the municipal agency within whose jurisdiction the issuance of the permit, variance or approval lies, or by the town counsel or city solicitor, concerning the applicability or obtainability of such permit, variance or approval shall be accepted by the issuing authority. In the absence of such a ruling, other evidence may be accepted.

(g) A Notice of Intent shall expire where the applicant has failed to diligently pursue the issuance of a Final Order in proceedings under 310 CMR 10.00. A Notice of Intent shall be presumed to have expired two years after the date of filing unless the applicant submits information showing that (a) good cause exists for the delay of proceedings under 310 CMR 10.00; and (b) the applicant has continued to pursue the project diligently in other forums in the intervening period; provided, however, that unfavorable financial circumstances shall not constitute good cause for delay. No Notice of Intent shall be deemed expired under 310 CMR 10.05 when an adjudicatory hearing is pending and when the applicant has provided all information necessary to continue with the prosecution of the case. Notwithstanding the provisions contained in 310 CMR 10.10, 310 CMR 10.05(4)(g) shall apply to any Notice of Intent whenever filed.

(h) The issuing authority may require that supporting plans and calculations be prepared and stamped by a registered professional engineer (PE) when, in its judgment, the complexity of the proposed work warrants this professional certification. The issuing authority may also require the preparation of supporting materials by other professionals including, but not limited to, registered landscape architect, registered land surveyor, environmental scientist, geologist or hydrologist when in its judgment the complexity of the proposed work warrants the relevant specialized expertise.

(5) Public Hearings by Conservation Commissions.

(a) A public hearing shall be held by the conservation commission within 21 days of receipt of the minimum submittal requirements set forth in the *General Instructions for Completing Notice of Intent (Form 3)* and *Abbreviated Notice of Intent (Form 4)*, and shall be advertised in accordance with M.G.L. c. 131, § 40 and the requirements of the open meeting law, M.G.L. c. 39, § 23B.

(b) Public hearings may be continued as follows:

1. without the consent of the applicant to a date, announced at the hearing, within 21 days, of receipt of the Notice of Intent;
2. with the consent of the applicant, to an agreed-upon date, which shall be announced at the hearing; or
3. with the consent of the applicant for a period not to exceed 21 days after the submission of a specified piece of information or the occurrence of a specified action. The date, time and place of said continued hearing shall be publicized in accordance with M.G.L. c. 131, § 40, and notice shall be sent to any person at the hearing who so requests in writing.

(6) Orders of Conditions Regulating Work and Orders of Resource Area Delineation.

(a) Within 21 days of the close of the public hearing, the conservation commission shall either:

10.05: continued

1. make a determination that the area on which the work is proposed to be done, or which the proposed work will remove, fill, dredge or alter, is not significant to any of the interests identified in M.G.L. c. 131, § 40, and shall so notify the applicant and the Department on Form 6;
2. make a determination that the area on which the work is proposed to be done, or which the proposed work will remove, fill, dredge or alter, is significant to one or more of the interests identified in M.G.L. c. 131, § 40, and shall issue an Order of Conditions for the protection of said interest(s), on Form 5; or
3. make a determination that bordering vegetated wetland and other resource areas subject to jurisdiction have been identified and delineated according to the definitions in 310 CMR 10.00 and shall issue an Order of Resource Area Delineation to confirm or modify the delineations submitted. The Order of Resource Area Delineation shall be effective for three years.

The standards and presumptions to be used by the issuing authority in determining whether an area is significant to the interests identified in M.G.L. c. 131, § 40 are found in 310 CMR 10.21 through 10.37 (for coastal wetlands) and 310 CMR 10.51 through 10.60 (for inland wetlands).

(b) The Order of Conditions shall impose such conditions as are necessary to meet the performance standards set forth in 310 CMR 10.21 through 10.60 for the protection of those areas found to be significant to one or more of the interests identified in M.G.L. c. 131, § 40.

The Order shall prohibit any work or any portion thereof that cannot be conditioned to meet said standards.

The Order shall impose conditions only upon work or the portion thereof that is to be undertaken within an Area Subject to Protection Under M.G.L. c. 131, § 40 or within the Buffer Zone. The Order shall impose conditions setting limits on the quantity and quality of discharge from a point source (both closed and open channel), when said limits are necessary to protect the interests identified in M.G.L. c. 131, § 40; provided, however, that the point of discharge falls within an Area Subject to Protection Under M.G.L. c. 131, § 40 or within the Buffer Zone, and further provided that said conditions are consistent with the limitations set forth in 310 CMR 10.03(4). The Order shall impose conditions to control erosion and sedimentation within resource areas and the Buffer Zone.

Notwithstanding the foregoing, when the issuing authority has determined that an activity outside the Areas Subject to Protection Under M.G.L. c. 131, § 40 and outside the Buffer Zone has in fact altered an Area Subject to Protection Under M.G.L. c. 131, § 40, it shall impose such conditions on any portion of the activity as are necessary to contribute to the protection of the interests identified in M.G.L. c. 131, § 40.

(c) If the conservation commission finds that the information submitted by the applicant is not sufficient to describe the site, the work or the effect of the work on the interests identified in M.G.L. c. 131, § 40, it may issue an Order prohibiting the work. The Order shall specify the information which is lacking and why it is necessary.

(d) Except as provided in M.G.L. c. 131, § 40 for maintenance dredging, an Order or Notification of Non-Significance shall be valid for three years from the date of its issuance; provided, however, that the issuing authority may issue an Order for up to five years where special circumstances warrant and where those special circumstances are set forth in the Order.

(e) The Order or Notification of Non-Significance shall be signed by a majority of the conservation commission and shall be mailed by certified mail (return receipt requested) or hand delivered to the applicant or his agent or attorney, and a copy mailed or hand delivered at the same time to the Department. If the Order imposes conditions necessary to meet any performance standard contained in 310 CMR 10.37 or 10.59, a copy shall be mailed or hand delivered at the same time to the Massachusetts Natural Heritage and Endangered Species Program.

(f) A copy of the plans describing the work and the Order shall be kept on file by the conservation commission and by the Department, and shall be available to the public at reasonable hours.

10.05: continued

(g) Prior to the commencement of any work permitted or required by the Final Order or Notification of Non-Significance, the Order or Notification shall be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the final order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of registered land, the final order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is to be done. Certification of recording shall be sent to the issuing authority on the form at the end of Form 5. If work is undertaken without the applicant first recording the Order, the issuing authority may issue an Enforcement Order (Form 9) or may itself record the Order of Conditions.

(h) Notwithstanding the provisions contained in 310 CMR 10.10(1) and (3), any Order of Conditions not containing an expiration date, issued for work proposed in a Notice of Intent filed under M.G.L. c. 131, § 40 prior to November 18, 1974, shall expire on April 17, 1986.

(i) An Order of Conditions does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of property rights.

(j) Failure to comply with conditions stated in the Order and with all related statutes and other regulatory measures shall be deemed cause to revoke or modify the Order of Conditions.

(7) Requests for Actions by the Department (Appeals).

(a) The following persons may request the Department to act:

1. the applicant;
2. the owner, if not the applicant;
3. any person aggrieved by an Order;
4. any owner of land abutting the land on which the work is to be done;
5. any ten residents of the city or town where the land is located; and
6. the Department.

(b) Any person(s) permitted to request the Department to act under 310 CMR 10.05(7)(a) may request the Department to issue a Superseding Determination of Applicability or to issue a Superseding Order, whichever is appropriate, whenever a conservation commission has:

1. issued a Determination of Applicability (Form 2);
 2. issued a Notification that an area is not significant to any interest identified in M.G.L. c. 131, § 40 (Form 6);
 3. issued an Order of Conditions allowing, conditioning or prohibiting work (Form 5);
- or
4. failed to hold a public hearing or issue an Order, Notification or Determination within the time period required by M.G.L. c. 131, § 40.

Where the Department is requested to issue a Superseding Determination or Order of Conditions, the conservation commission shall be a party to all agency proceedings and hearings before the Department.

(c) A request for a Superseding Order or Determination shall be made in writing and shall be sent by certified mail or hand delivered within ten days of issuance of the Order, Determination or Notification which is being appealed. When the basis of such request is the conservation commission's failure to act, the request may be made at any time up to 70 days after the expiration of the period within which the conservation commission was to have acted. Said request shall state clearly and concisely the objections to the Order, Determination or Notification which is being appealed and, in the case of a request for a Superseding Order, how the Order of Conditions or Notification of Non-Significance issued by the conservation commission is inconsistent with 310 CMR 10.00 and does not contribute to the protection of the interests identified in M.G.L. c. 131, § 40.

(d) All requests for the Department to act shall be sent to the appropriate Regional Office of the Department. A copy of the request shall at the same time be sent by certified mail or hand delivered to the conservation commission and the applicant, if he is not the appellant.

(e) Within 35 days from receipt of such a request, the Department shall issue a Superseding Determination of Applicability (Form 2) or a Notification that an area is not significant to any interest identified in M.G.L. c. 131, § 40 (Form 6).

10.05: continued

- (f) Within 70 days from receipt of such a request, the Department shall issue a Superseding Order unless either of the following apply, or in the event that both apply, whichever is later:
 1. compliance with M.G.L. c. 30, §§ 6 through 62H and 301 CMR 11.00 is required, in which case the Department shall issue a Superseding Order within 40 days of the issuance of a statement by the Secretary of the Executive Office of Environmental Affairs that the applicant has complied with M.G.L. c. 30, §§ 6 through 62H and 301 CMR 11.00;
 2. the Department has requested additional plans, information or documentation pursuant to 310 CMR 10.05(7)(g), in which case the Department shall issue a Superseding Order within 40 days of receipt of such plans, information, or documentation, or of the failure of the applicant to comply with such request.
- (g) The Department shall notify the applicant within 30 days of receipt of a request for the Department to act if additional information or documentation is necessary to make its determination; provided, however, that further information may be requested should the information supplied in response to the original notification so require.
- (h) When the request for a Superseding Order concerns an Order prohibiting work and issued pursuant to 310 CMR 10.05(6)(c), the Department shall limit its review to the information submitted to the conservation commission. If the Department determines that insufficient information was submitted, it shall affirm the denial and instruct the applicant to refile with the conservation commission and include the appropriate information. If the Department determines that sufficient information was submitted, it shall so inform the applicant and the conservation commission, and shall proceed to issue a Superseding Order as provided in 310 CMR 10.05.
- (i) After receipt of a request for a Superseding Determination or Order, the Department shall conduct an informal meeting, which shall include an inspection of the site, to which all parties shall be invited in order to present any information necessary or useful to a proper and complete review of the proposed activity and its effects upon the interests identified in M.G.L. c. 131, § 40. Any party presenting information as a result of such a meeting shall provide copies to the other parties. If the Department determines that an inspection of the site is not necessary or useful to a proper and complete review, it shall set forth its reasons in writing to all parties. Based upon its review of the Notice of Intent, the Order, the informal meeting and site inspection, and any other additional plans, information, or documentation submitted under 310 CMR 10.05(7)(f) or (g), the Department may issue a Superseding Order which affirms the Order issued by the conservation commission.
- (j) After issuance by the Department of a Superseding Order or a Superseding Determination, any person specified in 310 CMR 10.05(7)(a), whether or not previously a participant in the proceedings, or any ten persons pursuant to M.G.L. c. 30A, § 10A, may request an adjudicatory hearing. The request for a hearing must be sent to the Department by certified mail or hand delivered within ten days after the date of issuance of the Superseding Order or Superseding Determination, and a copy thereof must at the same time be sent by certified mail or hand delivered to the conservation commission, the applicant and any other parties. Said request shall state clearly and concisely the facts of the proceeding, the reasons the Superseding Order or Superseding Determination is alleged to be inconsistent with 310 CMR 10.00 and does not contribute to the protection of the interests identified in M.G.L. c. 131, § 40, and the relief sought through the adjudicatory hearing including specifically the changes desired in the Superseding Order; the Department Wetlands File Number, name of the applicant and address of the project; the complete name, address, telephone and telefax (if any) numbers of the party filing the request, and, if represented by counsel, the name, address, telephone and telefax (if any) numbers of the attorney; the names, addresses, telephone and telefax (if any) numbers of all other parties, if known; and a statement that a copy of the request has been sent to the applicant, the conservation commission and each other party or representative of such party, if known. Failure to submit all necessary information may result in a dismissal by the Department of the request for Adjudicatory Hearing. The request shall be addressed to the Docket Clerk, Office of General Counsel, at the Department's offices in Boston.
- (k) No work shall be undertaken until all administrative appeal periods from an Order or Notification of Non-Significance have elapsed or, if such an appeal has been taken, until all proceedings before the Department have been completed.

10.05: continued

(8) Extensions of Orders of Conditions.

- (a) The issuing authority may extend an Order for one or more periods of up to three years each, which shall be made on Form 7. The request for an extension shall be made to the issuing authority at least 30 days prior to expiration of the Order.
- (b) The issuing authority may deny the request for an extension and require the filing of a new Notice of Intent for the remaining work in the following circumstances:
 - 1. where no work has begun on the project, except where such failure is due to an unavoidable delay, such as appeals, in the obtaining of other necessary permits;
 - 2. where new information, not available at the time the Order was issued, has become available and indicates that the Order is not adequate to protect the interests identified in M.G.L. c. 131, § 40; or
 - 3. where incomplete work is causing damage to the interests identified in M.G.L. c. 131, § 40; or
 - 4. where work has been done in violation of the Order or 310 CMR 10.00.
- (c) If issued by the conservation commission, the Extension Permit shall be signed by a majority of the commission. A copy of the Extension Permit shall be sent to the conservation commission or the Department, whichever is appropriate, by the issuing authority.
- (d) The Extension Permit shall be recorded in the Land Court or the Registry of Deeds, whichever is appropriate. Certification of recording shall be sent to the issuing authority on the form at the end of Form 7. If work is undertaken without the applicant so recording the Extension Permit, the issuing authority may issue an Enforcement Order (Form 9) or may itself record the Extension Permit.

(9) Certificates of Compliance.

- (a) Upon completion of the work described in a Final Order of Conditions, the applicant shall request in writing the issuance of a Certificate of Compliance stating that the work has been satisfactorily completed. Upon written request by the applicant, a Certificate of Compliance shall be issued by the issuing authority within 21 days of receipt thereof, and shall certify on Form 8 that the activity or portions thereof described in the Notice of Intent and plans has been completed in compliance with the Order. If issued by the Conservation Commission, the Certificate of Compliance shall be signed by a majority of the commission. A copy of the Certificate of Compliance shall be sent to the conservation commission or the Department, whichever is appropriate, by the issuing authority.
- (b) Prior to the issuance of a Certificate of Compliance, a site inspection shall be made by the issuing authority, in the presence of the applicant or the applicant's agent. If the Department is the issuing authority, it shall notify the conservation commission of the request and the date of the site inspection.
- (c) If the issuing authority determines, after review and inspection, that the work has not been done in compliance with the Order, it may refuse to issue a Certificate of Compliance. Such refusal shall be issued within 21 days of receipt of a request for a Certificate of Compliance, shall be in writing and shall specify the reasons for denial.
- (d) If a project has been completed in accordance with plans stamped by a registered professional engineer, architect, landscape architect or land surveyor, a written statement by such a professional person certifying substantial compliance with the plans and setting forth what deviation, if any, exists from the plans approved in the Order shall accompany the request for a Certificate of Compliance.
- (e) If the final order contains conditions which continue past the completion of the work, such as maintenance or monitoring, the Certificate of Compliance shall specify which, if any, of such conditions shall continue. The Certificate shall also specify to what portions of the work it applies, if it does not apply to all the work regulated by the Order.
- (f) The Certificate of Compliance shall be recorded in the Land Court or Registry of Deeds, whichever is appropriate. Certification of recording shall be sent to the issuing authority on the form at the end of Form 8. Upon failure of the applicant to so record, the issuing authority may do so.

(10) Variance.

- (a) The Commissioner may waive the application of any regulation(s) in 310 CMR 10.21 through 10.60 when he finds, after opportunity for an adjudicatory hearing, that:

10.05: continued

1. there are no reasonable conditions or alternatives that would allow the project to proceed in compliance with 310 CMR 10.21 through 10.60;
 2. that mitigating measures are proposed that will allow the project to be conditioned so as to contribute to the protection of the interests identified in M.G.L. c. 131, § 40; and
 3. that the variance is necessary to accommodate an overriding community, regional, state or national public interest; or that it is necessary to avoid an Order that so restricts the use of property as to constitute an unconstitutional taking without compensation.
- (b) Procedure. A request for a variance shall be made in writing and shall include, at a minimum, the following information:

1. a description of alternatives explored that would allow the project to proceed in compliance with 310 CMR 10.21 through 10.60 and an explanation of why each is unreasonable;
2. a description of the mitigating measures to be used to contribute to the protection of the interests identified in M.G.L. c. 131, § 40; and
3. evidence that an overriding public interest is associated with the project which justifies waiver of 310 CMR 10.21 through 10.60, or evidence that the Superseding Order so restricts the use of the land that it constitutes an unconstitutional taking without compensation.

The request for a variance shall be sent to the Department by certified mail or hand delivered and a copy thereof shall at the same time be sent by certified mail or hand delivered to the conservation commission and any other parties.

After reviewing the information submitted with the request for a variance and any other information submitted by any party within 21 days of the request, the Commissioner shall issue a decision as to whether to grant the request.

Within ten days of the date of issuance of the Commissioner's decision on the variance, any person specified in 310 CMR 10.05(7)(j) may, according to the procedures specified in that section, request an adjudicatory hearing on the decision. At the adjudicatory hearing, the applicant has the burden of demonstrating that the project meets the criteria necessary for a variance. Other parties to the adjudicatory hearing may introduce evidence either in favor of or opposing the request for a variance.

For projects in which all of the proposed work will be undertaken on land within the boundaries of one city or town, the request for a variance shall not be filed until the applicant first files a Notice of Intent with the Conservation Commission. The Commission shall review the project in accordance with the procedures set forth in 310 CMR 10.01 through 10.10 and issue an Order of Conditions consistent with 310 CMR 10.21 through 10.60. Within ten days of the issuance of the Order of Conditions, the applicant may request the Department to issue a Superseding Order. The Department staff shall review the project in accordance with the procedures set forth in 310 CMR 10.01 through 10.10 and shall issue a Superseding Order consistent with the provisions of 310 CMR 10.21 through 10.60. Within ten days of the issuance of the Superseding Order, the applicant may request an adjudicatory hearing on that order and/or a variance under 310 CMR 10.05(10) according to the procedure previously described.

For projects in which the proposed work will be undertaken on land within the boundaries of more than one city or town, the applicant may file a request for a variance directly with the Commissioner, with a copy to each affected conservation commission. If, after public notice, the Commissioner finds that a project meets the variance criteria, he shall specify which regulation(s) has been waived and what general requirements or conditions must be met to satisfy the above-stated variance criteria. The applicant shall then file a Notice of Intent with the appropriate conservation commissions in accordance with the procedures contained in 310 CMR 10.01 through 10.10. The conservation commissions shall issue Orders of Conditions consistent with all provisions of 310 CMR 10.21 through 10.60 except those waived by the Commissioner and containing any additional conditions or requirements imposed by the Commissioner in the variance. The usual procedures contained in 310 CMR 10.01 through 10.10 for requesting Superseding Orders and adjudicatory hearings remain applicable.

10.05: continued

Commentary

310 CMR 10.05(10), which provides that the Commissioner may waive the application of one or more of the regulations on the basis of overriding public benefit is intended to be employed only in rare and unusual cases. The provision authorizing a variance request directly to the Commissioner for projects on land within more than one city or town is intended to apply to projects that involve functionally related work in several contiguous towns (e.g., transportation and energy transmission facilities) and to provide for a single uniform determination concerning alternative locations and the other variance criteria.

10.06: Emergencies

(1) Any person requesting permission to do an emergency project shall specify why the project is necessary for the protection of the health or safety of the citizens of the Commonwealth and what agency of the Commonwealth or subdivision thereof is to perform the project or has ordered the project to be performed. If the project is certified to be an emergency by the conservation commission or the Commissioner, the certification shall include a description of the work which is to be allowed and shall not include work beyond that necessary to abate the emergency. A site inspection shall be made prior to certification.

(2) An emergency certification shall be issued only for the protection of public health or safety.

(3) The time limitation for performance of emergency work shall not exceed 30 days, or 60 days for Immediate Response Actions approved by the Bureau of Waste Site Cleanup (BWSC) of the Department of Environmental Protection in accordance with the provisions of 310 CMR 40.0410, unless written approval of the Commissioner is obtained.

(4) A copy of an emergency certification shall be sent to the Department when it is issued by a conservation commission, and to the conservation commission when it is issued by the Department.

(5) The Department may, on its own motion or at the request of any person, review: an emergency certification issued by a conservation commission and any work permitted thereunder; a denial by a conservation commission of a request for emergency certification; or the failure by a conservation commission to act within 24 hours of a request for emergency certification. Such review shall not operate to stay the work permitted by the emergency certification unless the Department specifically so orders. The Department's review shall be conducted within seven days of: issuance by a conservation commission of the emergency certification; denial by a conservation commission of the emergency certification; or failure by a conservation commission to act within 24 hours of a request for emergency certification. If certification was improperly granted, or the work allowed thereunder is excessive or not required to protect the health and safety of citizens of the Commonwealth, the Department may revoke the emergency certification, condition the work permitted thereunder, or take such other action as it deems appropriate.

(6) Agricultural Emergencies

(a) Notwithstanding the provisions of 310 CMR 10.06(1) through (4), any person may undertake work for the emergency agricultural activities described in 310 CMR 10.06(6)(g) when necessary to:

1. eliminate an imminent threat to land in agricultural use;
2. restore land in agricultural use that has been damaged due to a storm or other sudden, unforeseen event; or
3. provide an emergency agricultural water source when the existing agricultural water source suddenly and unforeseeably has been rendered unusable or unavailable.

10.06: continued

(b) Written notice of any work undertaken as an emergency activity under 310 CMR 10.06(6) must be received by the conservation commission and mailed to the Department within three days after the work has commenced or within three days after the end of the emergency event, whichever is sooner. Such notice shall state the name of the person performing the work, the name of the property owner (if different), the property and the location on the property where the work is to be performed, the exact nature of the emergency and of the work which is to be performed, and when the work was begun and when it is expected to be completed. The commission may, at its discretion, conduct a site visit to view the work being performed under such notice and to confirm that the information in the notice is correct.

(c) When an emergency is caused by a storm, any work undertaken as an emergency activity under 310 CMR 10.06(6) must commence within 30 days following the storm event which caused the agricultural emergency.

(d) Any work undertaken as an emergency activity under 310 CMR 10.06(6) shall be completed within 30 days from the commencement of such work unless written approval for a later completion date is given by the Commissioner.

(e) No work under 310 CMR 10.06(6) shall be allowed within estimated habitat which is indicated on the most recent Estimated Habitat Maps of State-Listed Rare Wetlands Wildlife published by the Natural Heritage and Endangered Species Program of the Massachusetts Department of Fisheries, Wildlife, and Environmental Law Enforcement.

(f) Work under 310 CMR 10.06(6) shall not fill or dredge a Salt Marsh.

(g) Only the following emergency activities are allowed under 310 CMR 10.06(6)(a):

1. The installation of stream bank stabilization measures, provided that:
 - a. such activity is carried out in accordance with Soil Conservation Service best management practices;
 - b. no more than 100 linear feet of bank are altered per storm event, and no more than 200 linear feet of new rip rap or gabions are placed on the bank of a stream under this provision cumulatively; and
 - c. after the 200 foot threshold has been reached the placement of additional rip rap or gabions following future storm events shall require the filing of a Notice of Intent.
2. The removal of storm debris, including trees, brush, branches, and cobbles, that were deposited in a stream channel during the storm event, provided that:
 - a. after the material is removed it is not placed on a bank or in a Bordering Vegetated Wetland;
 - b. Soil Conservation Service best management practices are followed; and
 - c. removal of material from a stream is limited to 100 linear feet per storm event.
3. The development of an emergency agricultural water source where the existing agricultural water source suddenly has been rendered unusable because of contamination, sudden diversion, or other unforeseen circumstances. Where an emergency agricultural water supply is required:
 - a. the work shall be conducted so that impacts to Bordering Vegetated Wetland are minimized and all impacts, including excavation, access, and any other alterations to Bordering Vegetated Wetland, shall not exceed 2,000 square feet;
 - b. the size of the water supply shall be limited to that necessary to provide the amount of water required to abate the emergency, but not to exceed 2,000 square feet;
 - c. a Notice of Intent shall be filed if the agricultural water supply is to be used for more than 60 days, in which case the agricultural water supply shall comply with existing performance standards under 310 CMR 10.53(3)(a), (b), and (g); and
 - d. all work shall comply with the Water Management Act, M.G.L. c. 21G.

10.06: continued

(7) Notwithstanding any other requirement of 310 CMR 10.06, Immediate Response Actions receiving oral approval from the Bureau of Waste Site Cleanup (BWSC) of the Department of Environmental Protection pursuant to 310 CMR 40.0420(2), or initiated up to 24 hours prior to notification to and oral approval by BWSC pursuant to 310 CMR 40.0420(7) and (8), may commence before requesting the conservation commission to issue an emergency certification under 310 CMR 10.06, so long as such request is made within 24 hours after BWSC has orally approved commencement of the Immediate Response Action. Once a request for emergency certification has been made pursuant to 310 CMR 10.06(7), work that commenced before such filing may continue pending a decision on the request by the conservation commission. Such work may also continue pending a decision on a request for Departmental review unless the request has not been filed with the Department within one business day of: issuance by the conservation commission of the emergency certification; denial by a conservation commission of the emergency certification; or failure by a conservation commission to act within 24 hours of a request for emergency certification.

10.07: Compliance with the M.G.L. c. 30, §§ 61 through 62H

(1) The Massachusetts Environmental Policy Act, M.G.L. c. 30, §§ 61 through 62H, may require an applicant to file an Environmental Notification Form (ENF) and possibly an Environmental Impact Report (EIR) for the proposed work, prior to the Department's issuance of a Superseding Order. *See* 301 CMR 11.00: *MEPA Regulations*.

(2) If said filing is required, the Department shall so notify the applicant upon receipt of the request for the Department to act. If within 70 days of the request for the Department to act the applicant has not filed an ENF, the Department may issue a Superseding Order prohibiting the project; provided, however, that such an order shall not issue if the Executive Office of Environmental Affairs determines that the filing of an ENF is not required.

(3) In determining total surface area for purposes of the M.G.L. c. 30, §§ 6 through 62H wetlands threshold set forth in 301 CMR 11.25(2) and 11.26(7)(a), only those portions of the Areas Subject to Protection Under M.G.L. c. 131, § 40 specified in 310 CMR 10.02(1), not including the Buffer Zone, which will be removed, filled, dredged or altered shall be considered.

10.08: Enforcement Orders

(1) When the conservation commission, the Department or the Division of Law Enforcement of the Department of Fisheries, Wildlife and Environmental Law Enforcement (DLE) determines that an activity is in violation of M.G.L. c. 131, § 40, 310 CMR 10.00 or a Final Order, the conservation commission, Department or the DLE may issue an Enforcement Order on Form 9. Violations include, but are not limited to:

- (a) failure to comply with a Final Order, such as failure to observe a particular condition or time period specified in the Order;
- (b) failure to complete work described in a Final Order, when such failure causes damage to the interests identified in M.G.L. c. 131, § 40; or
- (c) failure to obtain a valid Final Order or Extension Permit prior to conducting an Activity Subject to Regulation Under M.G.L. c. 131, § 40 as defined in 310 CMR 10.02(2).

(2) A Final Order may be enforced by either the conservation commission or the Department regardless of which is the issuing authority. The members, officers, employees and agents of the conservation commission and the Department may enter upon privately owned land for the purpose of performing their duties under M.G.L. c. 131, § 40 and 310 CMR 10.00.

(3) An Enforcement Order issued by a conservation commission shall be signed by a majority of the commission. In a situation requiring immediate action, an Enforcement Order may be signed by a single member or agent of the commission, if said Order is ratified by a majority of the members at the next scheduled meeting of the commission.

10.09: Severability

If any provision of any part of 310 CMR 10.00 or the application thereof, is held to be invalid, such invalidity shall not affect any other provision of 310 CMR 10.00.

10.10: Effective Date

(1) 310 CMR 10.01 through 10.10 and 310 CMR 10.51 through 10.60 shall take effect on April 1, 1983 and shall apply to all Notices of Intent filed on or after that date and any subsequent procedures related to such filings made on or after that date. 310 CMR 10.01 through 10.10 and 310 CMR 10.51 through 10.60 shall not apply to any Notice of Intent filed prior to the effective date of 310 CMR 10.00, or to any extensions of any Order of Conditions the Notice of Intent for which was filed prior to said effective date, except as otherwise provided in 310 CMR 10.05(4)(g) and 10.05(6)(h).

(2) The effective date of 310 CMR 10.21 through 10.37 is August 10, 1978. 310 CMR 10.21 through 10.37 shall not apply to any Notice of Intent filed prior to August 10, 1978, or to any extensions to an Order of Conditions when the Notice of Intent upon which such Order was based was filed prior to August 10, 1978.

(3) All proceedings and actions commenced under M.G.L. c. 131, § 40 prior to the effective date of 310 CMR 10.00 shall remain in full force and effect under the prior applicable regulations, except as otherwise provided in 310 CMR 10.05(4)(g) and 10.05(6)(h).

(4) The amendments to 310 CMR 10.00 concerning application of herbicides to rights of way contained in 310 CMR 10.03(6); 10.04 (definition of "alter"); 10.05(3)(a)2.; 10.05(3)(b)1.; and 10.05(3)(d)1. shall be effective on July 10, 1987.

(5) The amendments to 310 CMR 10.00 published in the Massachusetts Register on October 16, 1987, concerning primarily the protection of wildlife habitat, shall take effect on November 1, 1987, and shall apply to all Notices of Intent filed on or after that date and any subsequent procedures related to such filing made on or after that date. The amendments to 310 CMR 10.00, concerning primarily the protection of wildlife habitat, shall not apply to any Notice of Intent filed prior to November 1, 1987, or to any extensions of any Order of Conditions the Notice of Intent for which was filed prior to November 1, 1987, except as otherwise provided in 310 CMR 10.05(4)(g) and 310 CMR 10.05(6)(h). All proceedings and actions commenced under M.G.L. c. 131, § 40 prior to November 1, 1987, and shall remain in full force and effect under the prior applicable regulations, except as otherwise provided in 310 CMR 10.05(4)(g) and 10.05(6)(h).

(6) The amendment to 310 CMR 10.55 concerning work in Bordering Vegetated Wetlands that are within an Area of Critical Environmental Concern contained in 310 CMR 10.55(4)(e) shall be effective on April 23, 1993, and shall not apply to any Notice of Intent filed prior to the effective date.

(7) The amendments to 310 CMR 10.00 concerning normal maintenance and improvement of land in agricultural use contained in 310 CMR 10.04 ("Agriculture"), 310 CMR 10.06(6), and 310 CMR 10.53(5) shall be effective on May 21, 1993, and shall not apply to any Notice of Intent filed prior to the effective date.

(8) The provisions of 310 CMR 10.03(7)(c)2.k., 10.03(7)(c)3.e., 10.03(7)(c)4.j. through l., 10.06(7), 10.24(7)(c)4. through 6., 10.53(3)(m) through (q), and the revisions to 310 CMR 10.03(7)(c)2.e., 10.03(7)(c)4.b., 10.06(3) & (5), and 10.53(3)(i) promulgated on December 3, 1993, shall take effect on January 1, 1994. They shall not apply to any Notice of Intent filed before January 1, 1994, nor to any extensions to an Order of Conditions when the Notice of Intent upon which such Order was based was filed prior to that date.

(9) The effective date of 310 CMR 10.55(1) and (2) is June 30, 1995.

10.10: continued

(10) The revisions to 310 CMR 10.02, 10.03, 10.04, 10.05, 10.21, 10.53, 10.58, and 10.60 to incorporate St. 1996, c. 258 amendments to M.G.L. c. 131, § 40, and the deletion of 310 CMR 10.99, shall be effective on October 6, 1997 and shall apply to Requests for Determination of Applicability and Notices of Intent filed after that date. Applicants who have received an Order of Conditions before August 7, 1996 or filed a Notice of Intent before August 7, 1996 and received a Final Order of Conditions before August 7, 1997, or later pending resolution of an adjudicatory hearing, shall not be subject to the requirements of 310 CMR 10.58 for the work permitted by the Order. A Determination of Applicability issued before August 7, 1996 is valid only for the resource areas specified in the Determination and not for the riverfront area.

(11) The amendments to 310 CMR 10.00 concerning drought (found at 310 CMR 10.04: Pond; 310 CMR 10.58(2)(a)1.f.) and perennial and intermittent streams (found at 310 CMR 10.58(2)(a)) shall take effect on December 20, 2002 and shall not apply to any Request for Determination of Applicability, Abbreviated Notice of Resource Area Delineation, Abbreviated Notice of Intent, or Notice of Intent filed prior to the effective date.

10.21: Introduction

310 CMR 10.21 through 10.37 apply to all work subject to M.G.L. c. 131, § 40, M.G.L. c. 131, § 40, which will alter, dredge, fill, or remove any coastal beach, coastal dune, tidal flat, coastal wetland, land subject to coastal storm flowage, coastal bank, land subject to tidal action, or land under an estuary, under a salt pond, under the ocean or under certain streams, ponds, rivers, lakes or creeks within the coastal zone that are anadromous/catadromous fish runs. This Part is in addition to and does not change the provisions set forth in 310 CMR 10.01 through 10.10. 310 CMR 10.21 through 10.37 are intended to ensure that development along the coastline is located, designed, built and maintained in a manner that protects the public interests in the coastal resources listed in M.G.L. c. 131, § 40. The proponent of the work must submit sufficient information to enable the issuing authority to determine whether the proposed work will comply with 310 CMR 10.21 through 10.37. Any proposed work may be subject to the requirements of sections concerning coastal beaches, coastal dunes and land containing shellfish. Thus, in order to determine which provisions apply to a proposed project, 310 CMR 10.00 must be read in its entirety. 310 CMR 10.21 through 10.37 are divided into 16 sections, 44 of which deal with specific coastal resources. Each coastal resource section begins with a preamble. In addition, the requirements for protection of the riverfront area in 310 CMR 10.58 apply within the coastal resource areas. The riverfront area may overlap other coastal resource areas and the performance standards for each resource area must be met. 310 CMR 10.24(7) applies to riverfront areas within coastal resource areas. The Preamble identifies the interests of M.G.L. c. 131, § 40 to which that resource is or is likely to be significant and describes the characteristics or factors of the resource which are critical to the protection of the interest to which the resource is significant. 310 CMR 10.21 through 10.37 are in the form of performance standards and shall be interpreted to protect those characteristics and resources to the maximum extent permissible under M.G.L. c. 131, § 40.

The performance standards are intended to identify the level of protection the issuing authority must impose in order to contribute to the protection of the interests of M.G.L. c. 131, § 40. It is the responsibility of the issuing authority to order specific measures and requirements for each proposed project which will ensure that the project is designed and carried out consistent with the required level of protection. Such authority must then issue an Order of Conditions which is understandable and enforceable.

10.22: Purpose

310 CMR 10.27 through 10.37 are promulgated pursuant to M.G.L. c. 131, § 40 and are intended to implement it. They are further intended to establish criteria and standards for the uniform and coordinated administration of the provisions of M.G.L. c. 131, § 40; to ensure coordination between the Department and other EOEA agencies; and to ensure consideration by the Department of relevant policies, laws or programs of other EOEA agencies. 310 CMR 10.21 through 10.37 is, in addition, intended to be consistent with and form a part of the Commonwealth's Coastal Zone Management Program as it has been promulgated and defined by 301 CMR 21.00. 310 CMR 10.21 through 10.37, however, are adopted independently under M.G.L. c. 131, § 40 and would remain in full force and effect in the absence of 301 CMR 21.00.

10.22: continued

The interpretation and application of 310 CMR 10.21 through 10.37 shall be consistent with the policies of 301 CMR 21.00 to the maximum extent permissible under M.G.L. c. 131, § 40. 301 CMR 20.99 establishes the CZM policies as part of 301 CMR 20.00, and the Department recognizes these policies as state environmental policy, which it will carry out in accordance with M.G.L. c. 21A, § 2. Specifically, 301 CMR 20.99, *Policies 1, 2, 3, 4, 5, 6, 9 and 10* are applicable to the administration of M.G.L. c. 21A, § 2, but the provisions of the more specific regulations contained in the following sections shall govern, unless the Secretary, pursuant to the conflict resolution procedures of M.G.L. c. 21A, 301 CMR 21.00 of the CZM Regulations, has resolved any conflict and has determined that the CZM policies should or should not apply.

10.23: Additional Definitions for 310 CMR 10.21 through 10.35

The definitions contained in 310 CMR 10.23 apply to and are valid for 310 CMR 10.21 through 10.37. The following definitions are for terms used throughout 310 CMR 10.21 through 10.37. Other terms that are used only in specific sections of 310 CMR 10.21 through 10.37 are defined in those sections.

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

Adverse effect means a greater than negligible change in the resource area or one of its characteristics or factors that diminishes the value of the resource area to one or more of the specific interests of M.G.L. c. 131, § 40, as determined by the issuing authority. "Negligible" means small enough to be disregarded.

Applicant means any person giving notice of intention to remove, fill, dredge or alter under M.G.L. c. 131, § 40.

Area of Critical Environmental Concern (ACEC) means an area which has been so designated by the Secretary in accordance with 301 CMR 12.00 of the CZM Regulations. The term "Area for Preservation or Restoration" (APR) shall be synonymous with ACEC, as provided in the CZM Regulations.

Building means any residential, commercial, industrial, recreational or other similar structure. For the purposes of 310 CMR 10.00, building may be interpreted to include a large, substantial structure such as a utility tower.

Coastal engineering structure means, but is not limited to, any breakwater, bulkhead, groin, jetty, revetment, seawall, weir, riprap or any other structure that is designed to alter wave, tidal or sediment transport processes in order to protect inland or upland structures from the effects of such processes.

Coastal Zone means that area defined in 301 CMR 21.05.

DMF means the Division of Marine Fisheries.

Grain Size means a measure of the size of a material or rock particle that makes up sediment.

Improvement Dredging means any dredging under a license in an area which has not previously been dredged or which extends the original dredged width, depth, length or otherwise alters the original boundaries of a previously dredged area.

Interests of the Act means the following eight interests specified in M.G.L. c. 131, § 40: public or private water supply, ground water supply, flood control, storm damage prevention, prevention of pollution, protection of land containing shellfish and protection of fisheries and wildlife habitat.

Issuing authority means either a conservation commission or the Department, as appropriate.

10.24: continued

Littoral processes means the movement of sediment, including gravel, sand or cobbles, along the coast caused by waves or currents.

Maintenance Dredging means dredging under a license in any previously dredged area which does not extend the originally-dredged depth, width, or length but does not mean improvement dredging or backfilling.

Marine Fisheries means any animal life inhabiting the ocean or its adjacent tidal waters or the land thereunder that is utilized by man in a recreational and/or commercial manner or that is part of the food chain for such animal life.

Mean High Water Line means the line where the arithmetic mean of the high water heights observed over a specific 19-year metonic cycle (the National Tidal Datum Epoch) meets the shore and shall be determined using hydrographic survey data of the National Ocean Survey of the U.S. Department of Commerce.

Mean Low Water Line means the line where the arithmetic mean of the low water heights observed over a specific 19-year metonic cycle (the National Tidal Datum Epoch) meets the shore and shall be determined using hydrographic survey data of the National Ocean Survey of the U.S. Department of Commerce.

Minimize means to achieve the least amount of adverse effect that can be attained using best available measures or best practical measures, whichever is referred to in the pertinent section. "Best available measures" means the most up-to-date technology or the best designs, measures or engineering practices that have been developed and that are commercially available. "Best Practical Measures" means technologies, designs, measures or engineering practices that are in general use to protect similar interests.

NPDES (National Pollutant Discharge Elimination System) Permit means the permit issued jointly by the federal and state governments, in accordance with 33 U.S.C. 1342 and M.G.L. c. 21, § 43, regulating liquid discharges from a point source.

Productivity means the rate of biomass production over a period of time.

Resource Area means any coastal bank; coastal wetland; coastal beach; coastal dune; tidal flat; or any land under the ocean or under an estuary or under a salt pond; land subject to tidal action or coastal 100 year storm flowage; or land under certain streams, ponds, rivers, lakes, or creeks within the coastal zone that are anadromous/catadromous fish runs.

Secretary means the Secretary of Environmental Affairs.

Significant. A resource area shall be found to be significant to an interest of M.G.L. c. 131, § 40 when such resource area plays a role in the provision or protection, as appropriate, of public or private water supply, ground water supply, flood control, storm damage prevention, prevention of pollution, land containing shellfish, fisheries, and/or wildlife habitat.

Turbidity means the amount of particulate matter suspended in water.

Water circulation means the pattern of water movement in coastal waters.

10.24: General Provisions

(1) If the issuing authority determines that a resource area is significant to an interest of M.G.L. c. 131, § 40 for which no presumption is stated in the Preamble to the applicable section, the issuing authority shall impose such conditions as are necessary to contribute to the protection of such interest.

10.24: continued

(2) When the issuing authority determines that a project in one resource area would adversely affect another resource area, the issuing authority shall impose such conditions as will protect the interest to which each resource are significant to the same degree as required in 310 CMR 10.00 concerning each resource area.

(3) A determination which finds that a resource area is not significant to an interest to which it is presumed in 310 CMR 10.21 through 10.37 to be significant, or is significant to an interest to which it is presumed to be not significant, shall be made on Form 7. No such determination shall be effective unless a copy of this form and the accompanying written explanation for the determination required by 310 CMR 10.00 is sent on the day of issuance to the appropriate regional office of the Department.

(4) (a) 310 CMR 10.21 through 10.37 do not change the requirement of any other Massachusetts statute or by-law. A proposed project must comply with all applicable requirements of other federal, state and local statutes and by-laws, in addition to meeting the requirements of 310 CMR 10.00. Examples of such laws which may be applicable are the Coastal Restrictions Act (M.G.L. c. 130, § 105), the Ocean Sanctuaries Act (M.G.L. c. 132A, §§ 13 through 16 and 18), the Mineral Resources Act (M.G.L. c. 21, §§ 54 through 58), the Massachusetts Clean Water Act (M.G.L. c. 21, §§ 26 through 53), the Waterways laws (M.G.L. c. 91), the Massachusetts Environmental Policy Act (M.G.L. c. 30, §§ 61 through 62H), the act establishing the Martha's Vineyard Commission (St. 1974, c. 637) and the Scenic Rivers Act (M.G.L. c. 21, § 2. 17B).

(b) When the site of a proposed project is subject to a Restriction Order which has been duly recorded under the provisions of M.G.L. c. 130, § 105, such a project shall conform to 310 CMR 10.21 through 10.37.

(c) If an NPDES permit for any new point-source discharge has or will be obtained prior to the commencement of the discharge, the effluent limitations established in such permit shall be deemed to satisfy the water quality standards established in any section of 310 CMR 10.21 through 10.37 relative to the effects of the new point-source discharge on water quality. Such effluent limitations shall be incorporated or shall be deemed to be incorporated into the Order of Conditions.

(5) (a) When any area subject to 310 CMR 10.21 through 10.37 has been designated an Area of Critical Environmental Concern by the Secretary of Environmental Affairs pursuant to 301 CMR 21.00, and when the Secretary has made a finding of the significance of the area to one or more interests of M.G.L. c. 131, § 40, the issuing authority shall presume that such area is significant to those interests.

(b) When any portion of a designated Area of Critical Environmental Concern is determined by the issuing authority to be significant to any of the interests of M.G.L. c. 131, § 40, any proposed project in or impacting that portion of the Area of Critical Environmental Concern shall have no adverse effect upon those interests, except as provided under 310 CMR 10.25(4) for maintenance dredging.

(6) Where any section of 310 CMR 10.00 provides that a proposed project "may be permitted" in certain circumstances, no such project shall be undertaken until all of the usual procedures required by M.G.L. c. 131, § 40 and 310 CMR 10.21 through 10.37 have been followed and a Final Order has been issued for the work. The issuing authority shall impose such conditions on such projects as may be necessary to contribute to the protection of the interests of M.G.L. c. 131, § 40.

(7) 310 CMR 10.24 is not intended to prohibit the issuing authority from imposing such additional conditions as are necessary to contribute to the interests of M.G.L. c. 131, § 40 where the indicated minimizing measures are not sufficient.

(a) Notwithstanding any provisions of 310 CMR 10.25 through 10.35, whenever an area in which a project is proposed is found to be significant to one or more of the interests of M.G.L. c. 131, § 40, the construction, reconstruction, operation and maintenance of the following structures associated with and essential to an electric generating facility may be permitted as provided herein (although no such project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37):

10.24: continued

1. conduits for cooling water intake or discharge, which may be emplaced by trenching with a minimum depth of four feet of cover below original grade, except where they traverse salt ponds, salt marshes and barrier beaches, in which cases they may be emplaced only by tunneling;
 2. headwalls and other essential structures appurtenant to 310 CMR 10.24(7)(a)1. above, except that these structures may not be constructed in salt marshes, salt ponds or barrier beaches;
 3. pipelines or other conduits for the transmission of utilities essential to the facility (water, fuel, sewage, and power), which may be emplaced by trenching with a minimum depth of four feet of cover below original grade, or which may be carried above grade on pilings or similar supports, but only if the applicant demonstrates that there will be no adverse effect on the resource area by the construction, operation, and maintenance of such pipelines or other conduits. If such pipelines or conduits are emplaced through a resource area which adverse effects are required to be minimized by 310 CMR 10.25 through 10.35, then that standard shall be applied, except that in no case shall fuel or sewage lines be operated or be designed to be operated so that they will have an adverse effect on the resource area.
 4. structures necessary for navigation, berthing and protection of such vessels and vessel movements as may be necessary to the operation of the facility, but only on coastal banks, coastal beaches, rocky intertidal shores or land under the ocean;
 5. structures for maritime-dependent accessory activities essential to the facility, but only on coastal banks, coastal beaches, rocky intertidal shores or land under the ocean;
 6. coastal engineering structures necessary to the protection of such other structures as may be permitted under 310 CMR 10.24, but only on coastal banks, coastal beaches, rocky intertidal shores, or land under the ocean;
 7. all fuel lines shall be double cased and watertight so as to prevent inflow and leakage;
 8. the conduits or structures shall be designed to minimize, using the best available measures, adverse effects on the relevant interests of M.G.L. c. 131, § 40 due to changes in wave action or sediment transport or adjacent coastal banks, coastal beaches, coastal dunes, salt marshes or barrier beaches;
 9. in designated port areas the conduits or structures shall be designed to minimize, using best practical measures, adverse effects on the relevant interests of M.G.L. c. 131, § 40;
 10. the provisions of 310 CMR 10.24(7)(b) shall also apply when applicable.
- (b) Notwithstanding any provisions of 310 CMR 10.25 through 10.35, whenever an area in which a project is proposed is found to be significant to one or more of the interests of M.G.L. c. 131, § 40, the construction, reconstruction, operation and maintenance of underground and overhead public utilities, limited to electrical distribution or transmission lines, or communication, sewer, water and natural gas lines, may be permitted, (although no such project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37) provided:
1. for local distribution or connecting lines not reviewed by the Energy Facilities Siting Council, the issuing authority determines that alternative routes with fewer adverse effects are not physically or legally feasible;
 2. adverse effects during construction are minimized using the best available measures, which may include such equipment as Bailey-bridges and helicopters;
 3. the surface vegetation and contours of the area are substantially restored;
 4. When a trench is made in a salt marsh, all spoil is removed from the salt marsh upon excavation. Clean sand or other appropriate material shall be used to restore the level of the trench to that of the surrounding undisturbed salt marsh. The surface vegetation shall be restored substantially to its original condition by immediately transplanting appropriate marsh plant nursery stock once construction is completed. Baffles of concrete, clay or other non-porous material shall be placed in the trench, if necessary, to prevent groundwater excursion. During the first growing season, periodic maintenance of the marsh restoration area shall be required and shall include at least the replacement of non-surviving transplants and the removal of all deposits of debris and organic litter. During construction, equipment such as Bailey-bridges and helicopters shall be used to minimize, using best available measures, the adverse effects of construction on the salt marsh. All vehicles shall be used only on swamp mats or in such a way as to prevent tire marks, trenches, or ruts;

10.24: continued

5. no utility shall traverse a salt marsh unless the applicant has shown that any thermal influence on the salt marsh of such line subsequent to the project being completed will not alter the natural freezing and thawing patterns of the top 24 inches of the salt marsh surface. Thermal sand, concrete or other suitable material may be used to backfill the trench to a point no less than 24 inches below grade. Above this level, clean sand shall be used to restore the level of the trench to that of the surrounding undisturbed salt marsh;
 6. no permanent access roads shall be permitted except in designated port areas; and
 7. all sewer lines shall be constructed so as to be watertight so as to prevent inflow and leakage.
- (c) Notwithstanding the provisions of 310 CMR 10.25 through 10.35, the issuing authority may issue an Order of Conditions and impose such conditions as will contribute to the interests identified in M.G.L. c. 131, § 40 permitting the following limited project (although no such project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37):

10.24: continued

1. Maintenance and improvement of existing public roadways, but limited to widening less than a single lane, adding shoulders, correcting substandard intersections, and improving drainage systems.
2. The maintenance, repair and improvement (but not substantial enlargement) of structures, including buildings, piers, towers, headwalls, bridges and culverts which existed on November 1, 1987.
3. The routine maintenance and repair of road drainage structures including culverts and catch basins, drainage easements, ditches, watercourses and artificial water conveyances to insure flow capacities which existed on November 1, 1987.
4. The closure of landfills when undertaken to comply with the requirements of 310 CMR 19.000; provided, however, that:
 - a. a project design alternative analysis shall be prepared in accordance with 310 CMR 19.150; and
 - b. such projects shall be designed, constructed, implemented, operated, and maintained to avoid or, where avoidance is not practicable, to minimize impacts to resource areas, and to meet the following standards to the maximum extent practicable:
 - i. hydrological changes to resource areas shall be minimized;
 - ii. best management practices shall be used to minimize adverse impacts during construction, including prevention of erosion and siltation of adjacent water bodies and wetlands in accordance with standard U.S.D.A. Soil Conservation Service methods;
 - iii. mitigating measures shall be implemented that contribute to the protection of the interests identified in M.G.L. c. 131, § 40;
 - iv. no access road, assessment or monitoring device, or other structure or activity shall restrict flows so as to cause an increase in flood stage or velocity;
 - v. temporary structures and work areas in resource areas, such as access roads and assessment and monitoring devices, shall be removed within 30 days of the Department's written determination that the closure of the facility has been completed in accordance with the closure permit. Temporary alterations to resource areas shall be substantially restored to preexisting hydrology and topography. At least 75% of the surface of any area of disturbed vegetation shall be reestablished with indigenous wetland plant species within two growing seasons and prior to said vegetative reestablishment any exposed soil in the area of disturbed vegetation shall be temporarily stabilized to prevent erosion in accordance with standard U.S.D.A. Soil Conservation Service methods. Temporary structures, work areas, and alterations to resource areas are those that no longer are necessary to fulfill the requirements of 310 CMR 19.000;
 - vi. except for direct impacts to resource areas caused by the final cap and cover on the landfill, no changes in the existing topography or the existing soil and surface water levels shall be permitted, except for those resulting from temporary access roads;
 - vii. work in resource areas shall occur only when the ground is sufficiently frozen, dry, or otherwise stable to support the equipment used; and
 - viii. such projects shall not include the construction of new landfills or the expansion or modification of existing landfills.
5. Airport vegetation removal projects; provided, however, that:
 - a. such projects must be undertaken in order to comply with Federal Aviation Administration (FAA) Regulation Part 77 (14 CFR Part 77), FAA Advisory Circular 150/5300-13 (Navigational Aids and Approach Light Systems), and FAA Order 6480.4 (Air Traffic Control Tower Siting Criteria), all as amended, or to comply with the airport approach regulations set forth in M.G.L. c. 90, §§ 40A through 40I;

- b. such projects must be undertaken at airports that are managed by the Massachusetts Port Authority (Massport) or that are subject to certification by the Massachusetts Aeronautics Commission (MAC);
- c. the requirement outlined in 310 CMR 10.24(7)(c)5.a. must be certified in writing by the FAA or by the MAC;
- d. such projects shall not include the construction of new airport facilities or the expansion or relocation of existing airport uses;
- e. notices of Intent filed for such projects shall:
 - i. delineate the vegetation requiring removal;
 - ii. delineate the affected resource areas;
 - iii. identify the proposed method for removal of vegetation and analyze alternatives. At a minimum, the alternatives analysis shall include: an alternative (based on a Federal Aviation Administration waiver or airport operation changes) that does not alter resource areas, which will provide baseline data for evaluating other alternatives; an assessment of impacts to resource areas resulting from mechanical methods of vegetation removal, including the use of both large and small equipment; and an assessment of impacts to resource areas resulting from chemical methods of vegetation removal;
 - iv. quantify the likely impacts to wildlife habitat and water quality;
 - v. evaluate possible mitigation measures, including but not limited to an assessment of erosion and sedimentation controls, wetland restoration, wetland replication, on-site and off-site wetland enhancement, herbicide application guidelines, spill containment plans, development restrictions and monitoring; and
 - vi. propose a five-year airport vegetation management plan. The vegetation management plan shall, at minimum, contain a purpose and goals statement, identify all airport protective zones, identify proposed vegetation management areas within the protective zones, and identify and prioritize future vegetation removal projects. Updated vegetation management plans shall be provided for each Notice of Intent filed after the expiration of the most recent five-year vegetation management plan period;
- f. where such projects require the filing of a Notice of Intent in more than one municipality, the Notice of Intent filed in each municipality shall describe the total impacts to resource areas proposed for the entire project;
- g. in addition to existing notice requirements contained in 310 CMR 10.00, for projects pursuant to 310 CMR 10.24(7)(c)5. copies of each Notice of Intent shall be filed simultaneously with the Massachusetts Department of Food and Agriculture, the Massachusetts Historical Commission, the Massachusetts Department of Environmental Management (Areas of Critical Environmental Concern Program), and the Division of Water Supply in the Department of Environmental Protection; and
- h. such projects shall be designed, constructed, implemented, operated, and maintained to avoid or, where avoidance is not practicable, to minimize impacts to resource areas, and to meet the following standards to the maximum extent practicable:
 - i. hydrological changes to resource areas shall be minimized;
 - ii. best management practices shall be used to minimize adverse impacts during construction, including prevention of erosion and siltation of adjacent water bodies and wetlands in accordance with standard U.S.D.A. Soil Conservation Service methods;
 - iii. mitigating measures shall be implemented that contribute to the protection of the interests identified in M.G.L. c. 131, § 40;
 - iv. no access road or other structure or activity shall restrict flows so as to cause an increase in flood stage or velocity;

10.24: continued

- v. no change in the existing surface topography or the existing soil and surface water levels shall occur except for temporary access roads;
 - vi. temporary structures and work areas in resource areas, such as access roads, shall be removed within 30 days of completion of the work. Temporary alterations to resource areas shall be substantially restored to preexisting hydrology and topography. At least 75% of the surface of any area of disturbed vegetation shall be reestablished with indigenous wetland plant species within two growing seasons and prior to said vegetative reestablishment any exposed soil in the area of disturbed vegetation shall be temporarily stabilized to prevent erosion in accordance with standard U.S.D.A. Soil Conservation Service methods;
 - vii. work in resource areas shall occur only during those periods when the ground is sufficiently frozen, dry, or otherwise stable to support the equipment being used; and
 - viii. slash, branches, and limbs resulting from cutting and removal operations shall not be placed within 25 feet of the bank of any water body.
6. Assessment, monitoring, containment, mitigation, and remediation of, or other response to, a release or threat of release of oil and/or hazardous material in accordance with the provisions of 310 CMR 40.0000 and the following general conditions (although no such measure may be permitted which is designed in accordance with the provisions of 310 CMR 40.1020 solely to reduce contamination to a level lower than that which is needed to achieve "No Significant Risk" as defined in 310 CMR 40.0006(10)):
- a. There are no practicable alternatives to the response action being proposed that are consistent with the provisions of 310 CMR 40.0000 and that would be less damaging to resource areas. The alternatives analysis shall include the following:
 - i. an alternative that does not alter resource areas, which will provide baseline data for evaluating other alternatives; and
 - ii. an assessment of alternatives to both temporary and permanent impacts to resource areas.
- A "Comprehensive Remedial Action Alternative" that is selected in accordance with the provisions of 310 CMR 40.0851 through 40.0869 shall be deemed to have met the requirements of 310 CMR 10.24(7)(c)6.a.; and
- b. Such projects shall be designed, constructed, implemented, operated, and maintained to avoid or, where avoidance is not practicable, to minimize impacts to resource areas, and to meet the following standards to the maximum extent practicable:
 - i. hydrological changes to resource areas shall be minimized;
 - ii. best management practices shall be used to minimize adverse impacts during construction, including prevention of erosion and siltation of resource areas in accordance with standard U.S.D.A. Soil Conservation Service methods;
 - iii. mitigating measures shall be implemented that contribute to the protection of the interests identified in the Act;
 - iv. no access road, assessment or monitoring device, or other structure or activity shall restrict flows so as to cause an increase in flood stage or velocity;
 - v. temporary structures and work areas in resource areas, such as access roads and assessment and monitoring devices, shall be removed within 30 days of completion of the work. Temporary alterations to resource areas shall be substantially restored to preexisting hydrology and topography. At least 75% of the surface of any area of disturbed vegetation shall be reestablished with indigenous wetland plant species within two growing seasons and prior to said vegetative reestablishment any exposed soil in the area of disturbed vegetation shall be temporarily stabilized to prevent erosion in accordance with standard U.S.D.A. Soil Conservation Service methods. Temporary structures, work areas, and alterations to resource areas are those that no longer are necessary to fulfill the requirements of 310 CMR 40.0000; and

10.24: continued

- vi. work in resource areas shall occur only when the ground is sufficiently frozen, dry, or otherwise stable to support the equipment being used.

10.25: Land Under the Ocean

(1) Preamble. Land under the ocean is likely to be significant to the protection of marine fisheries and, where there are shellfish, to protection of land containing shellfish.* Nearshore areas of land under the ocean are likely to be significant to storm damage prevention, flood control, and protection of wildlife habitat.

Land under the ocean provides feeding areas, spawning and nursery grounds and shelter for many coastal organisms related to marine fisheries. Nearshore areas of land under the ocean help reduce storm damage and flooding by diminishing and buffering the high energy effects of storms. Submerged bars dissipate storm wave energy. Such areas provide a source of sediment for seasonal rebuilding of coastal beaches and dunes. Nearshore areas of land under the ocean also provide important food for birds. For example, waterfowl feed heavily on vegetation (such as eel grass, widgeon grass, and macrophytic algae) and invertebrates (such as polychaetes and mollusks) found in estuaries and other shallow submerged land under the ocean.

When a proposed project involves the dredging, removing, filling or altering of a nearshore area of land under the ocean, the issuing authority shall presume that the area is significant to the interests specified above.

When a proposed project involves the dredging, removing, filling or altering of land under the ocean beyond the nearshore area, the issuing authority shall presume that such land is significant to the protection of marine fisheries and, where there are shellfish, to the protection of land containing shellfish and that it is not significant to storm damage prevention, flood control or protection of wildlife habitat.

These presumptions may be overcome only upon a clear showing that the area or land does not play a role in the protection of marine fisheries or wildlife habitat, land containing shellfish, storm damage prevention or flood control, as appropriate, and if the issuing authority makes a written determination to such effect.

When land under the ocean underlies an anadromous/catadromous fish run, 310 CMR 10.35(1) through 10.35(4) shall apply. When land under the ocean is in a designated port area, 310 CMR 10.26(1) through 10.26(4) shall apply. When land under the ocean is land containing shellfish, 310 CMR 10.34(1) through 10.34(7) shall apply.

When nearshore areas of land under the ocean are significant to storm damage prevention or flood control, the bottom topography of such land is critical to the protection of those interests.

When nearshore areas or other land under the ocean is significant to the protection of marine fisheries or wildlife habitat, the following factors are critical to the protection of such interests:

- (a) water circulation,
- (b) distribution of sediment grain size,
- (c) water quality,
- (d) finfish habitat, and
- (e) important food for wildlife.

(2) Definitions.

Land Under the Ocean means land extending from the mean low water line seaward to the boundary of the municipality's jurisdiction and includes land under estuaries.

*For regulations concerning land containing shellfish, see 310 CMR 10.34.

10.25: continued

Nearshore Areas of land under the ocean means that land extending from the mean low water line to the seaward limit of a municipality's jurisdiction, but in no case beyond the point where the land is 80 feet below the level of the ocean at mean low water. However, the nearshore area shall extend seaward only to that point where the land is 30 feet below the level of the ocean at mean low water for municipalities bordering Buzzard's Bay and Vineyard Sound (west of a line between West Chop, Martha's Vineyard and Nobska Point, Falmouth), 40 feet below the level of the ocean at mean low water for Provincetown's land in Cape Cod Bay, and 50 feet below the level of the ocean at mean low water for Truro's and Wellfleet's land in Cape Cod Bay.

WHEN LAND UNDER THE OCEAN OR NEARSHORE AREAS OF LAND UNDER THE OCEAN ARE FOUND TO BE SIGNIFICANT TO THE PROTECTION OF MARINE FISHERIES, PROTECTION OF WILDLIFE HABITAT, STORM DAMAGE PREVENTION OR FLOOD CONTROL, 310 CMR 10.25(3) through (7) SHALL APPLY:

(3) Improvement dredging for navigational purposes affecting land under the ocean shall be designed and carried out using the best available measures so as to minimize adverse effects on such interests caused by changes in:

- (a) bottom topography which will result in increased flooding or erosion caused by an increase in the height or velocity of waves impacting the shore;
- (b) sediment transport processes which will increase flood or erosion hazards by affecting the natural replenishment of beaches;
- (c) water circulation which will result in an adverse change in flushing rate, temperature, or turbidity levels; or
- (d) marine productivity which will result from the suspension or transport of pollutants, the smothering of bottom organisms, the accumulation of pollutants by organisms, or the destruction of marine fisheries habitat or wildlife habitat.

(4) Maintenance dredging for navigational purposes affecting land under the ocean shall be designed and carried out using the best available measures so as to minimize adverse effects on such interests caused by changes in marine productivity which will result from the suspension or transport of pollutants, increases in turbidity, the smothering of bottom organisms, the accumulation of pollutants by organisms, or the destruction of marine fisheries habitat or wildlife habitat.

(5) Projects not included in 310 CMR 10.25(3) or 10.25(4) which affect nearshore areas of land under the ocean shall not cause adverse effects by altering the bottom topography so as to increase storm damage or erosion of coastal beaches, coastal banks, coastal dunes, or salt marshes.

(6) Projects not included in 310 CMR 10.25(3) which affect land under the ocean shall if water-dependent be designed and constructed, using best available measures, so as to minimize adverse effects, and if non-water-dependent, have no adverse effects, on marine fisheries habitat or wildlife habitat caused by:

- (a) alterations in water circulation;
- (b) destruction of eelgrass (*Zostera marina*) or widgeon grass (*Ruppia maritima*) beds;
- (c) alterations in the distribution of sediment grain size;
- (d) changes in water quality, including, but not limited to, other than natural fluctuations in the level of dissolved oxygen, temperature or turbidity, or the addition of pollutants; or
- (e) alterations of shallow submerged lands with high densities of polychaetes, mollusks or macrophytic algae.

(7) Notwithstanding the provisions of 310 CMR 10.25(3) through (6), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

10.26: Designated Port Areas

(1) Preamble. Land under the ocean in designated port areas is likely to be significant to marine fisheries, storm damage prevention and flood control. In designated port areas, salt marshes, coastal dunes, land under salt ponds, coastal beaches, tidal flats, barrier beaches, rocky intertidal shores and land containing shellfish are not likely to be significant to marine fisheries, storm damage prevention or flood control.

Many species of marine fisheries, including anadromous fish, may inhabit port areas. Anadromous fish may need to be able to pass through port areas to inland spawning areas or to the sea. Other species frequently feed in designated port areas due to high nutrient concentrations in the waters and the tidelands.

Designated port areas, which are portions of developed harbors, are usually located in estuaries. Relatively high concentrations of contaminants, from vessel discharges and point and non-point source discharges, are likely to occur in port areas. Water circulation patterns tend to distribute pollution throughout the estuary, and to other areas which are likely to be significant to other interests of M.G.L. c. 131, § 40. Land forms in designated port areas have been greatly altered from their natural shape, and coastal engineering structures often have replaced natural protection for upland areas from storm damage and flooding.

Land under the ocean often provides support for such structures. Some proposed activities may alter wave and current patterns so as to affect the stability of such structures or the depths or configurations of navigation channels.

Where a proposed project involves dredging, filling, removing, or altering land under the ocean in designated port areas, the issuing authority shall presume that the area is significant to marine fisheries, storm damage prevention and flood control. These presumptions may be overcome only upon a clear showing that land under the ocean in designated port areas does not play a role in the protection of marine fisheries, storm damage prevention or flood control, or that a salt marsh, coastal dune, land under a salt pond, coastal beach, tidal flat, barrier beach, rocky intertidal shore or land containing shellfish, in designated port areas, does play a role in marine fisheries, storm damage prevention or flood control, and if the issuing authority makes a written determination to such effect.

When a proposed project in a designated port area is on land under the ocean which is determined to be significant to marine fisheries, the following factors are critical to the protection of such interests:

- (a) water circulation, and
- (b) water quality.

When a proposed project in a designated port area is on land under the ocean which is determined to be significant to storm damage prevention or flood control, the ability of such land to provide support for adjacent coastal or man-made structures is critical to the protection of such interests.

(2) Definition. Designated Port Areas means those areas designated in 310 CMR 9.24(2) and 9.24(3) of the Department adopted pursuant to the Waterways law, M.G.L. c. 91.

WHEN LAND UNDER THE OCEAN IN DESIGNATED PORT AREAS IS FOUND TO BE SIGNIFICANT TO THE PROTECTION OF MARINE FISHERIES, STORM DAMAGE PREVENTION OR FLOOD CONTROL, 310 CMR 10.26(3) and (4) SHALL APPLY:

(3) Projects shall be designed and constructed, using best practical measures, so as to minimize adverse effects on marine fisheries caused by changes in:

- (a) water circulation;
- (b) water quality, including, but not limited to, other than natural fluctuations in the level of dissolved oxygen, temperature or turbidity, or the addition of pollutants.

(4) Projects shall be designed and constructed, using the best practical measures, so as to minimize, adverse effects on storm damage prevention or flood control caused by changes in such land's ability to provide support for adjacent coastal banks or adjacent coastal engineering structures.

10.27: Coastal Beaches

(1) Preamble. Coastal beaches, which are defined to include tidal flats, are significant to storm damage prevention, flood control and the protection of wildlife habitat. In addition, tidal flats are likely to be significant to the protection of marine fisheries and where there are shellfish, to land containing shellfish.*

Coastal beaches dissipate wave energy by their gentle slope, their permeability and their granular nature, which permit changes in beach form in response to changes in wave conditions.

Coastal beaches serve as a sediment source for dunes and subtidal areas. Steep storm waves cause beach sediment to move offshore, resulting in a gentler beach slope and greater energy dissipation. Less steep waves cause an onshore return of beach sediment, where it will be available to provide protection against future storm waves.

A coastal beach at any point serves as a sediment source for coastal areas downdrift from that point. The oblique approach of waves moves beach sediment alongshore in the general direction of wave action. Thus, the coastal beach is a body of sediment which is moving along the shore.

Coastal beaches serve the purposes of storm damage prevention and flood control by dissipating wave energy, by reducing the height of storm waves, and by providing sediment to supply other coastal features, including coastal dunes, land under the ocean and other coastal beaches. Interruptions of these natural processes by man-made structures reduce the ability of the coastal beach to perform these functions.

A number of birds also nest in the coastal berm, between the toe of a dune and the high tide line. In addition, isolated coastal beaches on small islands are important as haul out areas for harbor seals.

Tidal flats are likely to be significant to the protection of marine fisheries and wildlife habitat because they provide habitats for marine organisms such as polychaete worms and mollusks, which in turn are food sources for fisheries and migratory and wintering birds. Coastal beaches are extremely important in recycling of nutrients derived from storm drift and tidal action. Vegetative debris along the drift line is vital for resident and migratory shorebirds, which feed largely on invertebrates which eat the vegetation. Below the drift line in the lower intertidal zone are infauna (invertebrates such as mollusks and crustacea) which are also eaten by shore birds.

Tidal flats are also sites where organic and inorganic materials may become entrapped and then returned to the photosynthetic zone of the water column to support algae and other primary producers of the marine food web.

When a proposed project involves the dredging, filling, removing, or altering of a coastal beach, the issuing authority shall presume that the coastal beach is significant to the interests specified above. This presumption may be overcome only upon a clear showing that a coastal beach does not play a role in storm damage prevention, flood control, or protection of wildlife habitat, or that tidal flats do not play a role in the protection of marine fisheries or land containing shellfish, and if the issuing authority makes a written determination to such effect.

When coastal beaches are determined to be significant to storm damage prevention or flood control, the following characteristics are critical to the protection of those interests:

- (a) volume (quantity of sediments) and form, and
- (b) the ability to respond to wave action.

When coastal beaches are significant to the protection of marine fisheries or wildlife habitat, the following characteristics are critical to the protection of those interests:

- (a) distribution of sediment grain size,
- (b) water circulation
- (c) water quality, and
- (d) relief and elevation.

* For regulations concerning land containing shellfish see 310 CMR 10.34.

10.27: continued

When tidal flats are in a designated port area, 310 CMR 10.26(1) through 10.26(4) shall apply. When tidal flats are significant to land containing shellfish, 310 CMR 10.34(1) through 10.34(8) shall apply.

(2) Definitions.

Coastal Beach means unconsolidated sediment subject to wave, tidal and coastal storm action which forms the gently sloping shore of a body of salt water and includes tidal flats. Coastal beaches extend from the mean low water line landward to the dune line, coastal bankline or the seaward edge of existing man-made structures, when these structures replace one of the above lines, whichever is closest to the ocean.

Tidal Flat means any nearly level part of a coastal beach which usually extends from the mean low water line landward to the more steeply sloping face of the coastal beach or which may be separated from the beach by land under the ocean.

WHEN A COASTAL BEACH IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION, FLOOD CONTROL, OR PROTECTION OF WILDLIFE HABITAT, 310 CMR 10.27(3) through (7) SHALL APPLY:

(3) Any project on a coastal beach, except any project permitted under 310 CMR 10.30(3)(a), shall not have an adverse effect by increasing erosion, decreasing the volume or changing the form of any such coastal beach or an adjacent or downdrift coastal beach.

(4) Any groin, jetty, solid pier, or other such solid fill structure which will interfere with littoral drift, in addition to complying with 310 CMR 10.27(3), shall be constructed as follows:

- (a) It shall be the minimum length and height demonstrated to be necessary to maintain beach form and volume. In evaluating necessity, coastal engineering, physical oceanographic and/or coastal geologic information shall be considered.
- (b) Immediately after construction any groin shall be filled to entrapment capacity in height and length with sediment of grain size compatible with that of the adjacent beach.
- (c) Jetties trapping littoral drift material shall contain a sand by-pass system to transfer sediments to the downdrift side of the inlet or shall be periodically dredged to provide beach nourishment to ensure that downdrift or adjacent beaches are not starved of sediments.

(5) Notwithstanding 310 CMR 10.27(3), beach nourishment with clean sediment of a grain size compatible with that on the existing beach may be permitted.

WHEN A TIDAL FLAT IS DETERMINED TO BE SIGNIFICANT TO MARINE FISHERIES OR THE PROTECTION OF WILDLIFE HABITAT, 310 CMR 10.27(6) SHALL APPLY:

(6) In addition to complying with the requirements of 310 CMR 10.27 (3) and 10.27(4), a project on a tidal flat shall if water-dependent be designed and constructed, using best available measures, so as to minimize adverse effects, and if non-water-dependent, have no adverse effects, on marine fisheries and wildlife habitat caused by:

- (a) alterations in water circulation,
- (b) alterations in the distribution of sediment grain size, and
- (c) changes in water quality, including, but not limited to, other than natural fluctuations in the levels of dissolved oxygen, temperature or turbidity, or the addition of pollutants.

(7) Notwithstanding the provisions of 310 CMR 10.27(3) through 10.27(6), no project may be permitted which will have any adverse effect on specified habitat sites or rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

10.28: Coastal Dunes

(1) Preamble. All coastal dunes are likely to be significant to storm damage prevention and flood control, and all coastal dunes on barrier beaches and the coastal dune closest to the coastal beach in any area are per se significant to storm damage prevention and flood control. Coastal dunes are also often significant to the protection of wildlife habitat.

Coastal dunes aid in storm damage prevention and flood control by supplying sand to coastal beaches. Coastal dunes protect inland coastal areas from storm damage and flooding by storm waves and storm elevated sea levels because such dunes are higher than the coastal beaches which they border. In order to protect this function, coastal dune volume must be maintained while allowing the coastal dune shape to conform to natural wind and water flow patterns.

Vegetation cover contributes to the growth and stability of coastal dunes by providing conditions favorable to sand deposition.

On retreating shorelines, the ability of the coastal dunes bordering the coastal beach to move landward at the rate of shoreline retreat allows these dunes to maintain their form and volume, which in turn promotes their function of protecting against storm damage or flooding.

A number of birds, most commonly terns and gulls, nest at the base or sides of dunes. In some dune systems other birds also nest in the interdunal area, the species being determined by the plant community structure, topography, and hydrologic regime of the area. In a few dune systems, wet meadows or vernal pool habitats occur, which serve as important feeding areas for a wide variety of bird species.

When a proposed project involves the dredging, filling, removal or alteration of a coastal dune, the issuing authority shall presume that the area is significant to the interests of storm damage prevention, flood control and the protection of wildlife habitat. This presumption may be overcome only upon a clear showing that a coastal dune does not play a role in storm damage prevention, flood control or the protection of wildlife habitat, and if the issuing authority makes a written determination to that effect.

When a coastal dune is significant to storm damage prevention, flood control or the protection of wildlife habitat, the following characteristics are critical to the protection of those interest(s):

- (a) the ability of the dune to erode in response to coastal beach conditions;
- (b) dune volume;
- (c) dune form, which must be allowed to be changed by wind and natural water flow;
- (d) vegetative cover;
- (e) the ability of the dune to move landward or laterally; or
- (f) the ability of the dune to continue serving as bird nesting habitat.

(2) Definition. Coastal Dune means any natural hill, mound or ridge of sediment landward of a coastal beach deposited by wind action or storm overwash. Coastal dune also means sediment deposited by artificial means and serving the purpose of storm damage prevention or flood control.

WHEN A COASTAL DUNE IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION, FLOOD CONTROL OR THE PROTECTION OF WILDLIFE HABITAT, 310 10.28(3) through (6) SHALL APPLY:

(3) Any alteration of, or structure on, a coastal dune or within 100 feet of a coastal dune shall not have an adverse effect on the coastal dune by:

- (a) affecting the ability of waves to remove sand from the dune;
- (b) disturbing the vegetative cover so as to destabilize the dune;
- (c) causing any modification of the dune form that would increase the potential for storm or flood damage;
- (d) interfering with the landward or lateral movement of the dune;
- (e) causing removal of sand from the dune artificially; or
- (f) interfering with mapped or otherwise identified bird nesting habitat.

10.28: continued

(4) Notwithstanding the provisions of 310 CMR 10.28(3), when a building already exists upon a coastal dune, a project accessory to the existing building may be permitted, provided that such work, using the best commercially available measures, minimizes the adverse effect on the coastal dune caused by the impacts listed in 310 CMR 10.28 (3)(b) through 10.28(3)(e). Such an accessory project may include, but is not limited to, a small shed or a small parking area for residences. It shall not include coastal engineering structures.

(5): The following projects may be permitted, provided that they adhere to the provisions of 310 CMR 10.28(3):

- (a) pedestrian walkways, designed to minimize the disturbance to the vegetative cover and traditional bird nesting habitat;
- (b) fencing and other devices designed to increase dune development; and
- (c) plantings compatible with the natural vegetative cover.

(6) Notwithstanding the provisions of 310 CMR 10.28(3) through (5), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

10.29: Barrier Beaches

(1) Preamble. Barrier beaches are significant to storm damage prevention and flood control and are likely to be significant to the protection of marine fisheries and wildlife habitat and, where there are shellfish, the protection of land containing shellfish.*

Barrier beaches protect landward areas because they provide a buffer to storm waves and to sea levels elevated by storms. Barrier beaches protect from wave action such highly productive wetlands as salt marshes, estuaries, lagoons, salt ponds and fresh water marshes and ponds, which are in turn important to marine fisheries and protection of wildlife habitat. Barrier beaches and the dunes thereon are also important to the protection of wildlife habitat in the ways described in 310 CMR 10.27(1) (coastal beaches) and 10.28(1) (coastal dunes).

Barrier beaches are maintained by the alongshore movement of beach sediment caused by wave action. The coastal dunes and tidal flats on a barrier beach consist of sediment supplied by wind action, storm wave overwash and tidal inlet deposition. Barrier beaches in Massachusetts undergo a landward migration caused by the landward movement of sediment by wind, storm wave overwash and tidal current processes. The continuation of these processes maintains the volume of the landform which is necessary to carry out the storm and flood buffer function.

When a proposed project involves removal, filling, dredging or altering of a barrier beach, the issuing authority shall presume that the barrier beach, including all of its coastal dunes, is significant to the interest(s) specified above. This presumption may be overcome only upon a clear showing that a barrier beach, including all of its coastal dunes, does not play a role in storm damage prevention, flood control, or the protection of marine fisheries, wildlife habitat, or land containing shellfish, and if the issuing authority makes a written determination to such effect.

When a barrier beach is significant to storm damage prevention and flood control, the characteristics of coastal beaches, tidal flats and coastal dunes listed in 310 CMR 10.27(1) and 10.28(1) and their ability to respond to wave action, including storm overwash sediment transport, are critical to the protection of the interests specified in 310 CMR 10.29.

(2) Definition. Barrier Beach means a narrow low-lying strip of land generally consisting of coastal beaches and coastal dunes extending roughly parallel to the trend of the coast. It is separated from the mainland by a narrow body of fresh, brackish or saline water or a marsh system. A barrier beach may be joined to the mainland at one or both ends.

* For regulations concerning land containing shellfish see 310 CMR 10.34.

10.29: continued

(3) When a Barrier Beach is Determined to be Significant to Storm Damage Prevention, Flood Control, Marine Fisheries or Protection of Wildlife Habitat. 310 CMR 10.27(3) through 10.27(6) (coastal beaches) and 10.28(3) through 10.28(5) (coastal dunes) shall apply to the coastal beaches and to all coastal dunes which make up a barrier beach.

(4) Notwithstanding the provisions of 310 CMR 10.29(3), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

10.30: Coastal Banks

(1) Preamble. Coastal banks are likely to be significant to storm damage prevention and flood control. Coastal banks that supply sediment to coastal beaches, coastal dunes and barrier beaches are per se significant to storm damage prevention and flood control. Coastal banks that, because of their height, provide a buffer to upland areas from storm waters are significant to storm damage prevention and flood control.

Coastal banks composed of unconsolidated sediment and exposed to vigorous wave action serve as a major continuous source of sediment for beaches, dunes, and barrier beaches (as well as other land forms caused by coastal processes). The supply of sediment is removed from banks by wave action, and this removal takes place in response to beach and sea conditions. It is a naturally occurring process necessary to the continued existence of coastal beaches, coastal dunes and barrier beaches which, in turn, dissipate storm wave energy, thus protecting structures of coastal wetlands landward of them from storm damage and flooding.

Coastal banks, because of their height and stability, may act as a buffer or natural wall, which protects upland areas from storm damage and flooding. While erosion caused by wave action is an integral part of shoreline processes and furnishes important sediment to downdrift landforms, erosion of a coastal bank by wind and rain runoff, which plays only a minor role in beach nourishment, should not be increased unnecessarily. Therefore, disturbances to a coastal bank which reduce its natural resistance to wind and rain erosion cause cuts and gullies in the bank, increase the risk of its collapse, increase the danger to structures at the top of the bank and decrease its value as a buffer.

Bank vegetation tends to stabilize the bank and reduce the rate of erosion due to wind and rain runoff. Pedestrian and vehicular traffic damages the protective vegetation and frequently leads to gully erosion or deep "blowouts" on unconsolidated banks. Therefore, any project permitted by 310 CMR 10.30 should incorporate, when appropriate, elevated walkways.

A particular coastal bank may serve both as a sediment source and as a buffer, or it may serve only one role.

When a proposed project involves dredging, removing, filling, or altering a coastal bank, the issuing authority shall presume that the area is significant to storm damage prevention and flood control. This presumption may be overcome only upon a clear showing that a coastal bank does not play a role in storm damage prevention or flood control, and if the issuing authority makes a written determination to that effect.

When issuing authority determines that a coastal bank is significant to storm damage prevention or flood control because it supplies sediment to coastal beaches, coastal dunes or barrier beaches, the ability of the coastal bank to erode in response to wave action is critical to the protection of that interest(s).

When the issuing authority determines that a coastal bank is significant to storm damage prevention or flood control because it is a vertical buffer to storm waters, the stability of the bank, *i.e.*, the natural resistance of the bank to erosion caused by wind and rain runoff, is critical to the protection of that interest(s).

(2) Definition. Coastal Bank means the seaward face or side of any elevated landform, other than a coastal dune, which lies at the landward edge of a coastal beach, land subject to tidal action, or other wetland.

10.30: continued

WHEN A COASTAL BANK IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION OR FLOOD CONTROL BECAUSE IT SUPPLIES SEDIMENT TO COASTAL BEACHES, COASTAL DUNES OR BARRIER BEACHES, 310 CMR 10.30(3) through (5) SHALL APPLY:

(3) No new bulkhead, revetment, seawall, groin or other coastal engineering structure shall be permitted on such a coastal bank except that such a coastal engineering structure shall be permitted when required to prevent storm damage to buildings constructed prior to the effective date of 310 CMR 10.21 through 10.37 or constructed pursuant to a Notice of Intent filed prior to the effective date of 310 CMR 10.21 through 10.37 (August 10, 1978), including reconstructions of such buildings subsequent to the effective date of 310 CMR 10.21 through 10.37, provided that the following requirements are met:

- (a) a coastal engineering structure or a modification thereto shall be designed and constructed so as to minimize, using best available measures, adverse effects on adjacent or nearby coastal beaches due to changes in wave action, and
- (b) the applicant demonstrates that no method of protecting the building other than the proposed coastal engineering structure is feasible.
- (c) protective planting designed to reduce erosion may be permitted.

(4) Any project on a coastal bank or within 100 feet landward of the top of a coastal bank, other than a structure permitted by 310 CMR 10.30(3), shall not have an adverse effect due to wave action on the movement of sediment from the coastal bank to coastal beaches or land subject to tidal action.

(5) The Order of Conditions and the Certificate of Compliance for any new building within 100 feet landward of the top of a coastal bank permitted by the issuing authority under M.G.L. c. 131, § 40 shall contain the specific condition: 310 CMR 10.30(3), promulgated under M.G.L. c. 131, § 40, requires that no coastal engineering structure, such as a bulkhead, revetment, or seawall shall be permitted on an eroding bank at any time in the future to protect the project allowed by this Order of Conditions.

WHEN A COASTAL BANK IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION OR FLOOD CONTROL BECAUSE IT IS A VERTICAL BUFFER TO STORM WATERS, 310 CMR 10.30(6) through (8) SHALL APPLY:

(6) Any project on such a coastal bank or within 100 feet landward of the top of such coastal bank shall have no adverse effects on the stability of the coastal bank.

(7) Bulkheads, revetments, seawalls, groins or other coastal engineering structures may be permitted on such a coastal bank except when such bank is significant to storm damage prevention or flood control because it supplies sediment to coastal beaches, coastal dunes, and barrier beaches.

(8) Notwithstanding the provisions of 310 CMR 10.30(3) through (7), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

10.31: Rocky Intertidal Shores

(1) Preamble. Rocky intertidal shores are likely to be significant to storm damage prevention, flood control, protection of marine fisheries and wildlife habitat and where there are shellfish, protection of land containing shellfish.*

Rocky shore environments are habitats for macroalgae and marine invertebrates and provide protection to and food for, larger marine organisms such as crabs, lobsters, and such fish species as winter flounder, as well as a number of birds. Most marine plants and animals found in rocky shore environments are uniquely adapted to survive there and cannot survive elsewhere. Harbor seals also use rocky intertidal shores, such as rock outcroppings or isolated shores of small islands, as haul out areas.

10.31: continued

When a proposed project involves the filling, removing or altering of a rocky intertidal shore, the issuing authority shall presume that such shore is significant to the interests specified above.

This presumption may be overcome only upon a clear showing that a rocky intertidal shore does not play a role in storm damage prevention, flood control, protection of marine fisheries or wildlife habitat, and where there are shellfish, protection of land containing shellfish and if the issuing authority makes a written determination to such effect.*

When a rocky intertidal shore is determined to be significant to storm damage prevention, flood control, or protection of wildlife habitat the form and volume of exposed intertidal bedrock and boulders are critical to the protection of those interests.

When a rocky intertidal shore is significant to the protection of marine fisheries or wildlife habitat, water circulation and water quality are critical to the protection of those interests.

(2) Definition. Rocky Intertidal Shores means naturally occurring rocky areas, such as bedrock or boulder-strewn areas between the mean high water line and the mean low water line.

(3) When a Rocky Intertidal Shore is Determined to be Significant to Storm Damage Prevention, Flood Control, or Protection of Wildlife Habitat, any proposed project shall be designed and constructed, using the best practical measures, so as to minimize adverse effects on the form and volume of exposed intertidal bedrock and boulders.

(4) When a Rocky Intertidal Shore is Determined to be Significant to the Protection of Marine Fisheries or Wildlife Habitat, any proposed project shall if water-dependent be designed and constructed, using best available measures, so as to minimize adverse effects, and if non-water-dependent, have no adverse effects, on water circulation and water quality. Water quality impacts include, but are not limited to, other than natural fluctuations in the levels of dissolved oxygen, temperature or turbidity, or the addition of pollutants.

(5) Notwithstanding the provisions of 310 CMR 10.31(3) and (4), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

10.32: Salt Marshes

(1) Preamble. Salt marshes are significant to protection of marine fisheries, wildlife habitat, and where there are shellfish, to protection of land containing shellfish, and prevention of pollution and are likely to be significant to storm damage prevention and ground water supply.

A salt marsh produces large amounts of organic matter. A significant portion of this material is exported as detritus and dissolved organics to estuarine and coastal waters, where it provides the basis for a large food web that supports many marine organisms, including finfish and shellfish as well as many bird species. Salt marshes also provide a spawning and nursery habitat for several important estuarine forage finfish as well as important food, shelter, breeding areas, and migratory and overwintering areas for many wildlife species.

Salt marsh plants and substrate remove pollutants from surrounding waters. The network of salt marsh vegetation roots and rhizomes binds sediments together.

The sediments absorb chlorinated hydrocarbons and heavy metals such as lead, copper, and iron. The marsh also retains nitrogen and phosphorous compounds, which in large amounts can lead to algal blooms in coastal waters.

The underlying peat also serves as a barrier between fresh ground water landward of the salt marsh and the ocean, thus helping to maintain the level of such ground water.

Salt marsh cord grass and underlying peat are resistant to erosion and dissipate wave energy, thereby providing a buffer that reduces wave damage.

* For regulations concerning land containing shellfish, see 310 CMR 10.34.

10.32: continued

When a proposed project involves the dredging, filling, removing or altering of a salt marsh, the issuing authority shall presume that such area is significant to the interests specified above. This presumption may be overcome only upon a clear showing that a salt marsh does not play a role in the protection of marine fisheries or wildlife habitat, prevention of pollution, ground water supply, or storm damage prevention, and if the issuing authority makes a written determination to such effect.

When a salt marsh is significant to one or more of the interests specified above, the following characteristics are critical to the protection of such interest(s):

- (a) the growth, composition and distribution of salt marsh vegetation, (protection of marine fisheries and wildlife habitat, prevention of pollution, storm damage prevention);
- (b) the flow and level of tidal and fresh water (protection of marine fisheries and wildlife habitat, prevention of pollution); and
- (c) the presence and depth of peat (ground water supply, prevention of pollution, storm damage prevention).

(2) Definitions.

Salt Marsh means a coastal wetland that extends landward up to the highest high tide line, that is, the highest spring tide of the year, and is characterized by plants that are well adapted to or prefer living in, saline soils. Dominant plants within salt marshes are salt meadow cord grass (*Spartina patens*) and/or salt marsh cord grass (*Spartina alterniflora*). A salt marsh may contain tidal creeks, ditches and pools.

Spring Tide means the tide of the greatest amplitude during the approximately 14-day tidal cycle. It occurs at or near the time when the gravitational forces of the sun and the moon are in phase (new and full moons).

WHEN A SALT MARSH IS DETERMINED TO BE SIGNIFICANT TO THE PROTECTION OF MARINE FISHERIES, THE PREVENTION OF POLLUTION, STORM DAMAGE PREVENTION OR GROUND WATER SUPPLY, 310 CMR 10.32(3) through (6) SHALL APPLY:

(3) A proposed project in a salt marsh, on lands within 100 feet of a salt marsh, or in a body of water adjacent to a salt marsh shall not destroy any portion of the salt marsh and shall not have an adverse effect on the productivity of the salt marsh. Alterations in growth, distribution and composition of salt marsh vegetation shall be considered in evaluating adverse effects on productivity. This section shall not be construed to prohibit the harvesting of salt hay.

(4) Notwithstanding the provisions of 310 CMR 10.32(3), a small project within a salt marsh, such as an elevated walkway or other structure which has no adverse effects other than blocking sunlight from the underlying vegetation for a portion of each day, may be permitted if such a project complies with all other applicable requirements of 310 CMR 10.21 through 10.37.

(5) Notwithstanding the provisions of 310 CMR 10.32(3), a project which will restore or rehabilitate a salt marsh, or create a salt marsh, may be permitted.

(6) Notwithstanding the provisions of 310 CMR 10.32(3) through (5), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

10.33: Land Under Salt Ponds

(1) Preamble. Land under salt ponds is significant to the protection of marine fisheries and wildlife habitat and, where there are shellfish, to the protection of land containing shellfish.*

* For regulations concerning land containing shellfish, see 310 CMR 10.34.

10.33: continued

Land under salt ponds provides an excellent habitat for marine fisheries. The high productivity of plants in salt ponds provides food for shellfish, crustaceans and larval and juvenile fish. Salt ponds also provide spawning areas for shellfish and are nursery areas for crabs and fish. In addition to the many birds which feed on fish found in salt ponds, waterfowl also eat invertebrates such as mollusks and crustaceans, which in turn depend on bottom sediment and vegetation. Some bird species also eat rupia and eel grass which may be rooted in land under salt ponds.

When a proposed project involves the dredging, filling, removing or altering of land under a salt pond, the issuing authority shall presume that such land is significant to the protection of marine fisheries and wildlife habitat and, where there are shellfish, to the protection of land containing shellfish. This presumption may be overcome only upon a clear showing that land under a salt pond does not play a role in the protection of marine fisheries or wildlife habitat or land containing shellfish, and if the issuing authority makes a written determination to such effect.

When land under a salt pond is significant to the protection of marine fisheries or wildlife habitat, the following factors are critical to the protection of that interest:

- (a) water circulation,
- (b) distribution of sediment grain size,
- (c) freshwater inflow,
- (d) productivity of plants, and
- (e) water quality.

(2) Definition. Salt Pond means a shallow enclosed or semi-enclosed body of saline water that may be partially or totally restricted by barrier beach formation. Salt ponds may receive freshwater from small streams emptying into their upper reaches and/or springs in the salt pond itself.

WHEN LAND UNDER A SALT POND IS DETERMINED TO BE SIGNIFICANT TO THE PROTECTION OF MARINE FISHERIES OR WILDLIFE HABITAT, 310 CMR 10.33(3) through (5) SHALL APPLY:

(3) Any project on land under a salt pond, on lands within 100 feet of the mean high water line of a salt pond, or on land under a body of water adjacent to a salt pond shall not have an adverse effect on the marine fisheries or wildlife habitat of such a salt pond caused by:

- (a) alterations of water circulation;
- (b) alterations in the distribution of sediment grain size and the relief or elevation of the bottom topography;
- (c) modifications in the flow of fresh and/or salt water;
- (d) alterations in the productivity of plants, or
- (e) alterations in water quality, including, but not limited to, other than normal fluctuations in the level of dissolved oxygen, nutrients, temperature or turbidity, or the addition of pollutants.

(4) Notwithstanding the provisions of 310 CMR 10.33(3), activities specifically required and intended to maintain the depth and the opening of the salt pond to the ocean in order to maintain or enhance the marine fisheries or for the specific purpose of fisheries management, may be permitted.

(5) Notwithstanding the provisions of 310 CMR 10.33(3) and (4), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

10.34: Land Containing Shellfish

(1) Preamble. Land containing shellfish is found within certain of the resource areas under the jurisdiction of M.G.L. c. 131, § 40. "Land containing shellfish" is also specifically one of the interests of M.G.L. c. 131, § 40. The purpose of 310 CMR 10.34 is to identify those resource areas likely to contain shellfish, to provide criteria for determining the significance of land containing shellfish, and to establish regulations for projects which will affect such land.

10.34: continued

Land containing shellfish is, under 310 CMR 10.34(3), significant to the protection of marine fisheries as well as to the protection of the interest of land containing shellfish.

Shellfish are a valuable renewable resource. The maintenance of productive shellfish beds not only assures the continuance of shellfish themselves, but also plays a direct role in supporting fish stocks by providing a major food source. The young shellfish in the planktonic larval stage that are produced in large quantities during spring and summer are an important source of food for the young stages of marine fishes and many crustaceans.

When a resource area is found to be significant to the protection of land containing shellfish under 310 CMR 10.34(3), and is, therefore, also significant to marine fisheries the following factors are critical to the protection of those interests:

- (a) shellfish,
- (b) water quality,
- (c) water circulation, and
- (d) the natural relief, evaluation or distribution of sediment grain size of such land.

(2) Definitions.

Land containing shellfish means land under the ocean, tidal flats, rocky intertidal shores, salt marshes and land under salt ponds when any such land contains shellfish.

Shellfish means the following species: Bay scallop (*Argopecten irradians*); Blue mussel (*Mytilus edulis*); Ocean quahog (*Arctica islandica*); Oyster (*Crassostrea virginica*); Quahog (*Mercenaria merceneria*); Razor clam (*Ensis directus*); Sea clam (*Spisula solidissima*); Sea scallop (*Placopecten magellanicus*); Soft shell clam (*Mya arenaria*).

Shellfish constable means the official in a city or town, whether designated a constable, warden, natural resources officer, or by some other name, in charge of enforcing the laws regulating the harvest of shellfish.

(3) Significance. Land containing shellfish shall be found significant to the protection of land containing shellfish and to the protection of marine fisheries when it has been identified and mapped as follows:

- (a) by the conservation commission or the Department in consultation with DMF and based upon maps and designations of DMF, or
- (b) by the conservation commission or the Department, based upon maps and written documentation of the shellfish constable or the Department. In making such identification and maps the following factors shall be taken into account and documented: the density of shellfish, the size of the area and the historical and current importance of the area to recreational or commercial shellfishing.

WHEN A RESOURCE AREA, INCLUDING LAND UNDER THE OCEAN, TIDAL FLATS, ROCKY INTERTIDAL SHORES, SALT MARSHES, OR LAND UNDER SALT PONDS IS DETERMINED TO BE SIGNIFICANT TO THE PROTECTION OF LAND CONTAINING SHELLFISH AND THEREFORE TO THE PROTECTION OF MARINE FISHERIES, 310 CMR 10.34(4) through (8) SHALL APPLY:

(4) Except as provided in 310 CMR 10.34(5), any project on land containing shellfish shall not adversely affect such land or marine fisheries by a change in the productivity of such land caused by:

- (a) alterations of water circulation,
- (b) alterations in relief elevation,
- (c) the compacting of sediment by vehicular traffic,
- (d) alterations in the distribution of sediment grain size,
- (e) alterations in natural drainage from adjacent land, or
- (f) changes in water quality, including, but not limited to, other than natural fluctuations in the levels of salinity, dissolved oxygen, nutrients, temperature or turbidity, or the addition of pollutants.

10.34: continued

(5) Notwithstanding the provisions of 310 CMR 10.34(4), projects which temporarily have an adverse effect on shellfish productivity but which do not permanently destroy the habitat may be permitted if the land containing shellfish can and will be returned substantially to its former productivity in less than one year from the commencement of work, unless an extension of the Order of Conditions is granted, in which case such restoration shall be completed within one year of such extension.

(6) In the case of land containing shellfish defined as significant in 310 CMR 10.34(3)(b) (*i.e.*, those areas identified on the basis of maps and designations of the Shellfish Constable), except in Areas of Critical Environmental Concern, the issuing authority may, after consultation with the Shellfish Constable, permit the shellfish to be moved from such area under the guidelines of, and to a suitable location approved by, DMF, in order to permit a proposed project on such land. Any such project shall not be commenced until after the moving and replanting of the shellfish have been commenced.

(7) Notwithstanding 310 CMR 10.34(4) through 10.34(6), projects approved by DMF that are specifically intended to increase the productivity of land containing shellfish may be permitted. Aquaculture projects approved by the appropriate local and state authority may also be permitted.

(8) Notwithstanding the provisions of 310 CMR 10.34(4) through (7), no project may be permitted which will have any adverse effect on specified habitat of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

10.35: Banks of or Land Under the Ocean, Ponds, Streams, Rivers, Lakes, or Creeks that Underlie an Anadromous/Catadromous Fish Run ("Fish Run")

(1) Preamble. The banks of and land under the ocean, ponds, streams, rivers, lakes or creeks that underlie an anadromous/catadromous fish run are significant to protection of marine fisheries.

Anadromous and catadromous fish ("the fish") are renewable protein resources that provide recreational, aesthetic and commercial benefits. In addition, throughout their life cycle such fish are important components of freshwater, estuarine, and marine environments and are food sources for other organisms.

The spawning migrations of such fish also provide a direct link between marine and freshwater ecosystems. This link plays a role in maintaining the productivity of fisheries.

When a proposed project involves the dredging, filling, removing or altering of a bank of a fish run, or land under the ocean, or under a pond, stream, river, lake or creek which is a fish run, the issuing authority shall presume that such bank or land is significant to the protection of marine fisheries. This presumption may be overcome only upon a clear showing that such bank or land does not play a role in the protection of marine fisheries, and if the issuing authority makes a written determination to that effect.

When such a bank of a fish run, or land under the ocean or under a pond, stream, river, lake or creek which is a fish run is significant to the protection of marine fisheries, the following factors are critical to the protection of such interest:

- (a) the fish,
- (b) accessibility of spawning areas,
- (c) the volume or rate of the flow of water within spawning areas and migratory routes, and
- (d) spawning and nursery grounds.

(2) Definitions.

Anadromous Fish means fish that enter fresh water from the ocean to spawn, such as alewives, shad and salmon.

10.35: continued

Catadromous Fish means fish that enter salt water from fresh water to spawn, such as eels.

Anadromous/Catadromous Fish Run means that area within estuaries, ponds, streams, creeks, rivers, lakes or coastal waters, which is a spawning or feeding ground or passageway for anadromous or catadromous fish and which is identified by DMF or has been mapped on the Coastal Atlas of the Coastal Zone Management Program. Such fish runs shall include those areas which have historically served as fish runs and are either being restored or are planned to be restored at the time the Notice of Intent is filed. For the purposes of 310 CMR 10.21 through 10.37, such fish runs shall extend inland no further than the inland boundary of the coastal zone.

WHEN SUCH LAND OR BANK IS DETERMINED TO BE SIGNIFICANT TO THE PROTECTION OF MARINE FISHERIES, 310 CMR 10.35(3) through (5) SHALL APPLY:

(3) Any project on such land or bank shall not have an adverse effect on the anadromous or catadromous fish run by:

- (a) impeding or obstructing the migration of the fish, unless DMF has determined that such impeding or obstructing is acceptable, pursuant to its authority under M.G.L. c. 130, § 19;
- (b) changing the volume or rate of flow of water within the fish run; or
- (c) impairing the capacity of spawning or nursery habitats necessary to sustain the various life stages of the fish.

(4) Unless otherwise allowed by DMF pursuant to M.G.L. c. 130, § 19, dredging, disposal of dredged material or filling in a fish run shall be prohibited between March 15th and June 15th in any year.

(5) Notwithstanding the provisions of 310 CMR 10.35(3), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

(10.36: Reserved. Variance provision is at 310 CMR 10.05(10))

10.37: Estimated Habitats of Rare Wildlife (for coastal wetlands)

If a project is within estimated habitat which is indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetlands Wildlife (if any) published by the Natural Heritage and Endangered Species Program (hereinafter referred to as the Program), a fully completed copy of the Notice of Intent (including all plans, reports, and other materials required under 310 CMR 10.05(4)(a)&(b)) for such project shall be sent to the Program via the U.S. Postal Service by express or priority mail (or otherwise sent in a manner that guarantees delivery within two days). Such copy shall be sent no later than the date of the filing of the Notice of Intent with the issuing authority. Proof of timely mailing or other delivery to the Program of the copy of such Notice of Intent shall be included in the Notice of Intent which is submitted to the issuing authority and sent to the Department's regional office.

Estimated Habitat Maps shall be based on the estimated geographical extent of the habitats of all state-listed vertebrate and invertebrate animal species for which a reported occurrence within the last 25 years has been accepted by the Program and incorporated into its official data base.

Within 30 days of the filing of such a Notice of Intent with the issuing authority, the Program shall determine whether any state-listed species identified on the aforementioned map are likely to continue to be located on or near the site of the original occurrence and, if so, whether the area to be altered by the proposed project is in fact part of such species' habitat. Such determination shall be presumed by the issuing authority to be correct. Any proposed project which would alter a resource area that is not located on the most recent Estimated Habitat Map (if any) provided to the conservation commission, shall be presumed not to be within a rare species' habitat. Both of these presumptions are rebuttable and may be overcome upon a clear showing to the contrary. If the issuing authority fails to receive a response from the Program within 30 days of the filing of such a Notice of Intent, a copy of which was received by the Program in a timely manner, it shall issue its Order of Conditions based on available information; however, the fact that a proposed project would alter a resource area that is located on an Estimated Habitat Map shall not be considered sufficient evidence in itself that such project is in fact within the habitat of a rare species.

10.37: continued

If the Program determines that a resource area which would be altered by a proposed project is in fact within the habitat of a state-listed species, it shall provide in writing to the applicant and to the Conservation Commission and the Department, the identification of the species whose habitat would be altered by the proposed project, and all other relevant information which the Program has regarding the species' location and habitat requirements, insofar as such information may assist the applicant and the issuing authority to determine whether the project is or can be designed so as to meet the performance standard set in 310 CMR 10.37.

Notwithstanding 310 CMR 10.24(7) and 10.25 and 310 CMR 10.27 through 10.35, if a proposed project is found by the issuing authority to alter a resource area which is part of the habitat of a state-listed species, such project shall not be permitted to have any short or long term adverse effects on the habitat of the local population of that species. A determination of whether or not a proposed project will have such an adverse effect shall be made by the issuing authority.

However, a written opinion of the Program on whether or not a proposed project will have such an adverse effect shall be presumed by the issuing authority to be correct. This presumption is rebuttable and may be overcome upon a clear showing to the contrary.

The conservation commission shall not issue an Order of Conditions under 310 CMR 10.05(6) regarding any such project for at least 30 days after the filing of the Notice of Intent, unless the Program before such time period has elapsed has either determined that the resource area(s) which would be altered by the project is not in fact within the habitat of a state-listed species or, if it has determined that such resource area(s) is in fact within rare species habitat, rendered a written opinion as to whether the project will have an adverse effect on that habitat.

Notwithstanding any other provision of 310 CMR 10.37, should an Environmental Impact Report be required for a proposed project under the M.G.L. c. 60, §§ 6 through 62H, as determined by 301 CMR 11.00 the performance standard established under 310 CMR 10.37 shall only apply to proposed projects which would alter the habitat of a rare species for which an occurrence has been entered into the official data base of the Massachusetts Natural Heritage and Endangered Species Program prior to the time that the Secretary of the Executive Office of Environmental Affairs has determined, in accordance with the provisions of 301 CMR 11.09(4), that a final Environmental Impact Report for that project adequately and properly complies with the M.G.L. c. 30, §§ 6 through 62H (unless, subsequent to that determination, the Secretary requires supplemental information concerning state-listed species, in accordance with the provisions of 301 CMR 11.17).

10.51: Introduction

310 CMR 10.51 through 10.60 applies to all work which will remove, fill, dredge or alter any bank, bordering vegetated wetland, land under water bodies and waterways, land subject to flooding or riverfront area. 310 CMR 10.51 through 10.60 pertains to inland (as opposed to coastal) wetlands, and is promulgated in addition to 310 CMR 10.01 through 10.10 and 310 CMR 10.21 through 10.37. A project may be subject to regulation under both 310 CMR 10.01 through 10.10 and 310 CMR 10.21 through 10.37, in which case compliance with all applicable regulations is required.

310 CMR 10.51 through 10.60 is grouped into five resource areas. Each section begins with a Preamble which specifies the interests identified in M.G.L. c. 131, § 40 to which that resource area is or is likely to be significant. The next subsection defines the resource area and describes the characteristics of that area which are critical to the protection of the interests so identified. The next subsection sets forth the presumptions concerning the significance of the resource area.

The last subsection contains the general performance standards to be applied to any work that will remove, fill, dredge or alter the resource area.

10.52: Purpose

310 CMR 10.51 through 10.60 is intended to establish criteria and standards for the uniform and coordinated administration of the provisions of M.G.L. c. 131, § 40. It is intended to ensure that development in and near inland wetlands is sited, designed, constructed and maintained in a manner that protects the public interests identified in M.G.L. c. 131, § 40 and served by these resource areas.

10.52: continued

310 CMR 10.51 through 10.60 is intended to ensure coordination between the divisions of the Department and between the Department and other EOEA agencies; and to ensure consideration by the Department of relevant policies, laws or programs of other EOEA agencies.

310 CMR 10.51 through 10.60 is, in addition, intended to be consistent with and form a part of the Commonwealth's Coastal Zone Management Program as it has been promulgated and defined by 301 CMR 21.00 issued pursuant to M.G.L. c. 21A and entitled "Establishment of the Coastal Zone Management Program by the Executive Office of Environmental Affairs". 310 CMR 10.51 through 10.60, however, is adopted independently under M.G.L. c. 131, § 40 and would remain in full force and effect in the absence of 301 CMR 21.00.

310 CMR 10.51 through 10.60 is intended to notify both persons proposing work in Areas Subject to Protection Under M.G.L. c. 131, § 40 and those regulating that work as to the performance standards that should be applied. These standards are intended to identify the level of protection that the issuing authority must impose in order to contribute to the protection of the interests identified in M.G.L. c. 131, § 40. It is the responsibility of the person proposing work to design and complete his project in conformance with these performance standards. It is the responsibility of the issuing authority to impose such conditions on a proposed project as to ensure that the project is designed and completed in a manner consistent with these standards.

10.53: General Provisions

(1) If the issuing authority determines that a resource area is significant to an interest identified in M.G.L. c. 131, § 40 for which no presumption is stated in the Preamble to the applicable section, the issuing authority shall impose such conditions as are necessary to contribute to the protection of such interests.

(2) When the site of a proposed project is subject to a Restriction Order which has been duly recorded under the provisions of M.G.L. c. 131, § 40A, such a project shall conform to both the provisions contained in that Order and 310 CMR 10.51 through 10.60.

(3) Notwithstanding the provisions of 310 CMR 10.54 through 10.58 and 10.60, the issuing authority may issue an Order of Conditions and impose such conditions as will contribute to the interests identified in M.G.L. c. 131, § 40 permitting the following limited projects (although no such project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.59). In the exercise of this discretion, the issuing authority shall consider the magnitude of the alteration and the significance of the project site to the interests identified in M.G.L. c. 131, § 40, the availability of reasonable alternatives to the proposed activity, the extent to which adverse impacts are minimized, and the extent to which mitigation measures, including replication or restoration, are provided to contribute to the protection of the interests identified in M.G.L. c. 131, § 40.

(a) Work on land to be used primarily and directly in the raising of animals, including but not limited to dairy cattle, beef cattle, poultry, sheep, swine, horses, ponies, mules, goats, bees and fur-bearing animals or on land to be used in a related manner which is incidental thereto and represents a customary and necessary use in raising such animals; and work on land to be used primarily and directly in the raising of fruits, vegetables, berries, nuts and other foods for human consumption, feed for animals, tobacco, flowers, sod, trees, nursery or greenhouse products, and ornamental plants and shrubs; or on land to be used in a related manner which is incidental thereto and represents a customary and necessary use in raising such products, provided they are carried out in accordance with the following general conditions and any additional conditions deemed necessary by the issuing authority:

1. there shall occur no change in the existing topography or the existing soil and surface water levels of the area;
2. all fertilizers, pesticides, herbicides and other such materials shall be used in accordance with all applicable state and federal laws and regulations governing their use; and

10.53: continued

3. all activities shall be undertaken in such a manner as to prevent erosion and siltation of adjacent water bodies and wetlands as specified by the U.S.D.A. Soil Conservation Service, "Guidelines for Soil and Water Conservation". A plan prepared by the U.S.D.A. Soil Conservation Service through a county conservation district for the improvement of land for agriculture shall be deemed adequate to prevent erosion and siltation.
- (b) Work on land to be used primarily and directly in the raising of cranberries or on land to be used in a related manner which is incidental thereto and represents a customary and necessary use in raising such products, provided it is carried out in accordance with the following general conditions and any additional conditions deemed necessary by the issuing authority:
1. all fertilizers, pesticides, herbicides and other such materials shall be used in accordance with all applicable state and federal laws and regulations governing their use; and
 2. all activities shall be undertaken in such a manner as to prevent erosion and siltation of adjacent water bodies and wetlands as specified by the U.S.D.A. Soil Conservation Service, "Guidelines for Soil and Water Conservation".
- (c) Work on land to be used primarily and directly in the raising of forest products under a planned program to improve the quantity and quality of a continuous crop or on land to be used in a related manner which is incidental thereto and represents a customary and necessary use in raising such products, provided it is carried out in accordance with the following general conditions and any additional conditions deemed necessary by the issuing authority:
1. there shall occur no change in the existing topography or the existing soil and surface water levels of the area except for temporary access roads;
 2. the removal of trees shall occur only during those periods when the ground is sufficiently frozen, dry or otherwise stable to support the equipment used; and
 3. all activities shall be undertaken in such a manner as to prevent erosion and siltation of adjacent water bodies and wetlands as specified by the U.S.D.A. Soil Conservation Service, "Guidelines for Soil and Water Conservation."
 4. the placement of slash, branches and limbs resulting from the cutting and removal operations shall not occur within 25 feet of the bank of a water body.
- (d) The construction, reconstruction, operation and maintenance of underground and overhead public utilities, such as electrical distribution or transmission lines, or communication, sewer, water and natural gas lines, may be permitted, in accordance with the following general conditions and any additional conditions deemed necessary by the issuing authority:
1. the issuing authority may require a reasonable alternative route with fewer adverse effects for a local distribution or connecting line not reviewed by the Energy Facilities Siting Council;
 2. best available measures shall be used to minimize adverse effects during construction;
 3. the surface vegetation and contours of the area shall be substantially restored; and
 4. all sewer lines shall be constructed to minimize inflow and leakage.
- (e) The construction and maintenance of a new roadway or driveway of minimum legal and practical width acceptable to the planning board, where reasonable alternative means of access from a public way to an upland area of the same owner is unavailable. Such roadway or driveway shall be constructed in a manner which does not restrict the flow of water. Reasonable alternative means of access may include any previously or currently available alternatives such as realignment or reconfiguration of the project to conform to 310 CMR 10.54 to 310 CMR 10.58 or to otherwise minimize adverse impacts on resource areas. The issuing authority may require the applicant to utilize access over an adjacent parcel of land currently or formerly owned by the applicant, or in which the applicant has, or can obtain, an ownership interest. The applicant shall design the roadway or driveway according to the minimum length and width acceptable to the Planning Board, and shall present reasonable alternative means of access to the Board. The applicant shall provide replication of bordering vegetated wetlands and compensatory flood storage to the extent practicable. In the Certificate of Compliance, the issuing authority may continue a condition imposed in the Order of Conditions to prohibit further activities under 310 CMR 10.53(3)(e).

10.53: continued

- (f) Maintenance and improvement of existing public roadways, but limited to widening less than a single lane, adding shoulders, correcting substandard intersections, and improving inadequate drainage systems.
- (g) The excavation of wildlife impoundments, farm ponds and ponds for fire protection. The above uses are allowed provided that no fill or other material is placed upon the wetland except as may be necessary to construct said impoundments or ponds, to provide access thereto, and to provide bank stabilization.
- (h) The maintenance of beaches and boat launching ramps which existed on the effective date of 310 CMR 10.51 through 10.60 (April 1, 1983).
- (i) The maintenance, repair and improvement (but not substantial enlargement) of structures, including dams and reservoirs and appurtenant works to such dams and reservoirs, buildings, piers, towers, headwalls, bridges, and culverts which existed on the effective date of 310 CMR 10.51 through 10.60 (April 1, 1983). When water levels are drawn down for the maintenance, repair, or improvement of dams or reservoirs or appurtenant works to such dams or reservoirs under 310 CMR 10.53(3)(i), water levels that existed immediately prior to such projects being undertaken shall be restored upon completion of the work, and a new Notice of Intent need not be filed for such restoration.
- (j) The construction and maintenance of catwalks, footbridges, wharves, docks, piers, boathouses, boat shelters, duck blinds, skeet and trap shooting decks and observation decks; provided, however, that such structures are constructed on pilings or posts so as to permit the reasonably unobstructed flowage of water and adequate light to maintain vegetation.
- (k) The routine maintenance and repair of road drainage structures including culverts and catch basins, drainage easements, ditches, watercourses and artificial water conveyances to insure flow capacities which existed on the effective date of 310 CMR 10.51 through 10.60 (April 1, 1983).
- (l) The construction, reconstruction, operation or maintenance of water dependent uses; provided, however that:
 - 1. any portion of such work which alters a bordering vegetated wetland shall remain subject to the provisions of 310 CMR 10.55,
 - 2. such work in any other resource area(s) found to be significant to flood control or prevention of storm damage shall meet the performance standards for that interest(s), and
 - 3. adverse impacts from such work in any other resource area(s) shall be minimized regarding the other statutory interests for which that resource area(s) is found to be significant.
- (m) Lake drawdown projects (except those related to the breaching of a dam or a reservoir or an appurtenant work to such dam or reservoir) undertaken in response to written Orders or Recommendation Letters issued by the Department of Environmental Management Office of Dam Safety (DEM). The issuing authority shall, in the Order of Conditions, limit the duration of the drawdown based on information contained in the written finding or superseding finding by DEM pursuant to M.G.L. c. 253, §§ 44 through 50, concerning the time required to repair the dam and the economic practicability of repairing the dam. In no event shall the drawdown continue longer than three years without a new or extended Order of Conditions being obtained. Water levels that existed immediately prior to such drawdowns shall be restored no later than the expiration date of the Order of Conditions or any new or extended Order of Conditions, and a new Notice of Intent need not be filed for such restoration.
- (n) Airport vegetation removal projects; provided, however, that:
 - 1. such projects must be undertaken in order to comply with Federal Aviation Administration (FAA) Regulation Part 77 (14 CFR Part 77), FAA Advisory Circular 150/5300-13 (Navigational Aids and Approach Light Systems), and FAA Order 6480.4 (Air Traffic Control Tower Siting Criteria), all as amended, or to comply with the airport approach regulations set forth in M.G.L. c. 90, §§ 40A through 40I, inclusive;

10.53: continued

2. such projects must be undertaken at airports that are managed by the Massachusetts Port Authority (Massport) or that are subject to certification by the Massachusetts Aeronautics Commission (MAC);
3. the requirement outlined in 310 CMR 10.53(3)(n)1. must be certified in writing by the FAA or by the MAC;
4. such projects shall not include the construction of new airport facilities or the expansion or relocation of existing airport uses;
5. Notices of Intent filed for such projects shall:
 - a. delineate the vegetation requiring removal;
 - b. delineate the affected resource areas;
 - c. identify the proposed method for removal of vegetation and analyze alternatives. At a minimum, the alternatives analysis shall include:
 - i. an alternative (based on a Federal Aviation Administration waiver or airport operation changes) that does not alter resource areas, which will provide baseline data for evaluating other alternatives;
 - ii. an assessment of impacts to resource areas resulting from mechanical methods of vegetation removal, including the use of both large and small equipment; and
 - iii. an assessment of impacts to resource areas resulting from chemical methods of vegetation removal;
 - d. quantify the likely impacts to wildlife habitat and water quality;
 - e. evaluate possible mitigation measures, including but not limited to an assessment of erosion and sedimentation controls, wetland restoration, wetland replication, on-site and off-site wetland enhancement, herbicide application guidelines, spill containment plans, development restrictions, monitoring, and compensatory flood storage; and
 - f. propose a five-year airport vegetation management plan. The vegetation management plan shall, at minimum, contain a purpose and goals statement, identify all airport protective zones, identify proposed vegetation management areas within the protective zones, and identify and prioritize future vegetation removal projects. Updated vegetation management plans shall be provided for each Notice of Intent filed after the expiration of the most recent five-year vegetation management plan period;
6. where such projects require the filing of a Notice of Intent in more than one municipality, the Notice of Intent filed in each municipality shall describe the total impacts to resource areas proposed for the entire project;
7. in addition to existing notice requirements contained in 310 CMR 10.00, for projects pursuant to 310 CMR 10.53(3)(n) copies of each Notice of Intent shall be filed simultaneously with the Massachusetts Department of Food and Agriculture, the Massachusetts Historical Commission, the Massachusetts Department of Environmental Management (Areas of Critical Environmental Concern Program), and the Division of Water Supply in the Department of Environmental Protection; and
8. such projects shall be designed, constructed, implemented, operated, and maintained to avoid or, where avoidance is not practicable, to minimize impacts to resource areas, and to meet the following standards to the maximum extent practicable:
 - a. hydrological changes to resource areas shall be minimized;
 - b. best management practices shall be used to minimize adverse impacts during construction, including prevention of erosion and siltation of adjacent water bodies and wetlands in accordance with standard U.S.D.A. Soil Conservation Service methods;
 - c. mitigating measures shall be implemented that contribute to the protection of the interests identified in M.G.L. c. 131, § 40;
 - d. compensatory storage shall be provided in accordance with the standards of 310 CMR 10.57(4)(a)1. for all flood storage volume that will be lost;
 - e. no access road or other structure or activity shall restrict flows so as to cause an increase in flood stage or velocity;
 - f. no change in the existing surface topography or the existing soil and surface water levels shall occur except for temporary access roads;

10.53: continued

- g. temporary structures and work areas in resource areas, such as access roads, shall be removed within 30 days of completion of the work. Temporary alterations to resource areas shall be substantially restored to preexisting hydrology and topography. At least 75% of the surface of any area of disturbed vegetation shall be reestablished with indigenous wetland plant species within two growing seasons and prior to said vegetative reestablishment any exposed soil in the area of disturbed vegetation shall be temporarily stabilized to prevent erosion in accordance with standard U.S.D.A. Soil Conservation Service methods;
 - h. work in resource areas shall occur only during those periods when the ground is sufficiently frozen, dry, or otherwise stable to support the equipment being used; and
 - i. slash, branches, and limbs resulting from cutting and removal operations shall not be placed within 25 feet of the bank of any water body.
- (o) The exploration, development, construction, expansion, maintenance, operation, and replacement of public water supply wells or wellfields (including necessary associated roads, ways, structures, and underground and overhead utility lines) derived from groundwater, provided, however, that:
 - 1. approval for the water supply has been granted under the Public Water Supply Source Approval Process pursuant to 310 CMR 22.21 and/or the Water Management Act, M.G.L. c. 21G. This general condition shall not apply to exploration; and
 - 2. such projects shall be designed, constructed, implemented, operated, and maintained to avoid or, where avoidance is not practicable, to minimize impacts to resource areas, and to meet the following standards to the maximum extent practicable:
 - a. hydrological changes to resource areas shall be minimized;
 - b. best management practices shall be used to minimize adverse impacts during construction, including prevention of erosion and siltation of adjacent water bodies and wetlands in accordance with standard U.S.D.A. Soil Conservation Service methods;
 - c. mitigating measures shall be implemented that contribute to the protection of the interests identified in M.G.L. c. 131, § 40;
 - d. compensatory storage shall be provided in accordance with the standards of 310 CMR 10.57(4)(a)1. for all flood storage volume that will be lost;
 - e. no access road or other structure or activity shall restrict flows so as to cause an increase in flood stage or velocity;
 - f. temporary structures and work areas in resource areas, including access roads, shall be removed within 30 days of completion of the work. Temporary alterations to resource areas shall be substantially restored to preexisting hydrology and topography. At least 75% of the surface of any area of disturbed vegetation shall be reestablished with indigenous wetland plant species within two growing seasons and prior to said vegetative reestablishment any exposed soil in the area of disturbed vegetation shall be temporarily stabilized to prevent erosion in accordance with standard U.S.D.A. Soil Conservation Service methods; and
 - g. work in resource areas shall occur only when the ground is sufficiently frozen, dry, or otherwise stable to support the equipment being used.
- (p) The closure of landfills when undertaken to comply with the requirements of 310 CMR 19.000; provided, however, that:
 - 1. a project design alternative analysis shall be prepared in accordance with 310 CMR 19.150; and
 - 2. such projects shall be designed, constructed, implemented, operated, and maintained to avoid or, where avoidance is not practicable, to minimize impacts to resource areas, and to meet the following standards to the maximum extent practicable:
 - a. hydrological changes to resource areas shall be minimized;
 - b. best management practices shall be used to minimize adverse impacts during construction, including prevention of erosion and siltation of adjacent water bodies and wetlands in accordance with standard U.S.D.A. Soil Conservation Service methods;
 - c. mitigating measures shall be implemented that contribute to the protection of the interests identified in M.G.L. c. 131, § 40;
 - d. compensatory storage shall be provided in accordance with the standards of 310 CMR 10.57(4)(a)1. for all flood storage volume that will be lost;

10.53: continued

- e. no access road, assessment or monitoring device, or other structure or activity shall restrict flows so as to cause an increase in flood stage or velocity;
 - f. temporary structures and work areas in resource areas, such as access roads and assessment and monitoring devices, shall be removed within 30 days of the Department's written determination that the closure of the facility has been completed in accordance with the closure permit. Temporary alterations to resource areas shall be substantially restored to preexisting hydrology and topography. At least 75% of the surface of any area of disturbed vegetation shall be reestablished with indigenous wetland plant species within two growing seasons and prior to said vegetative reestablishment any exposed soil in the area of disturbed vegetation shall be temporarily stabilized to prevent erosion in accordance with standard U.S.D.A. Soil Conservation Service methods. Temporary structures, work areas, and alterations to resource areas are those that no longer are necessary to fulfill the requirements of 310 CMR 19.000;
 - g. except for direct impacts to resource areas caused by the final cap and cover on the landfill, no changes in the existing topography or the existing soil and surface water levels shall be permitted, except for those resulting from temporary access roads;
 - h. work in resource areas shall occur only when the ground is sufficiently frozen, dry, or otherwise stable to support the equipment used; and
 - i. such projects shall not include the construction of new landfills or the expansion or modification of existing landfills.
- (q) Assessment, monitoring, containment, mitigation, and remediation of, or other response to, a release or threat of release of oil and/or hazardous material in accordance with the provisions of 310 CMR 40.0000 and the following general conditions (although no such measure may be permitted which is designed in accordance with the provisions of 310 CMR 40.1020 solely to reduce contamination to a level lower than that which is needed to achieve "No Significant Risk" as defined in 310 CMR 40.0006(10)):
- 1. there are no practicable alternatives to the response action being proposed that are consistent with the provisions of 310 CMR 40.0000 and that would be less damaging to resource areas. The alternatives analysis shall include, at a minimum, the following:
 - a. an alternative that does not alter resource areas, which will provide baseline data for evaluating other alternatives; and
 - b. an assessment of alternatives to both temporary and permanent impacts to resource areas.
- A "Comprehensive Remedial Action Alternative" that is selected in accordance with the provisions of 310 CMR 40.0851 through 40.0869 shall be deemed to have met the requirements of 310 CMR 10.53(3)(q)1.; and
- 2. such projects shall be designed, constructed, implemented, operated, and maintained to avoid or, where avoidance is not practicable, to minimize impacts to resource areas, and shall meet the following standards to the maximum extent practicable:
 - a. hydrological changes to resource areas shall be minimized;
 - b. best management practices shall be used to minimize adverse impacts during construction, including prevention of erosion and siltation of adjacent water bodies and wetlands in accordance with standard U.S.D.A. Soil Conservation Service methods;
 - c. mitigating measures shall be implemented that contribute to the protection of the interests identified in M.G.L. c. 131, § 40;
 - d. compensatory storage shall be provided in accordance with the standards of 310 CMR 10.57(4)(a)1. for all flood storage volume that will be lost;
 - e. no access road, assessment or monitoring device, or other structure or activity shall restrict flows so as to cause an increase in flood stage or velocity;
 - f. temporary structures and work areas in resource areas, such as access roads and assessment and monitoring devices, shall be removed within 30 days of completion of the work. Temporary alterations to resource areas shall be substantially restored to preexisting hydrology and topography. At least 75% of the surface of any area of disturbed vegetation shall be reestablished with indigenous wetland plant species within two growing seasons and prior to said vegetative reestablishment any exposed soil in the area of disturbed vegetation shall be temporarily stabilized to prevent erosion in accordance with standard U.S.D.A. Soil Conservation Service methods.

10.53: continued

Temporary structures, work areas, and alterations to resource areas are those that no longer are necessary to fulfill the requirements of 310 CMR 40.0000; and
 g. work in resource areas shall occur only when the ground is sufficiently frozen, dry, or otherwise stable to support the equipment being used.

(r) The construction of a new access for forestry, including leaving in place an access constructed in accordance with 310 CMR 10.04(Agriculture)(b)14.d., or the enlargement of an existing access for forestry, provided that:

1. the access is constructed:
 - a. in accordance with a Forest Cutting Plan approved by the Department of Environmental Management (DEM) under the provisions of M.G.L. c. 132, §§ 40 through 46; or
 - b. on land subject to a permanent, recorded conservation restriction that has been created in accordance with M.G.L. c. 184, §§ 31 through 33, inclusive, and maintains the land in perpetual forest use;
2. the access is of the minimum practicable width that is required for the cutting and removal of trees;
3. practicable alternative access across upland is not available;
4. the number of access ways located within resource areas is minimized;
5. activities shall be conducted when the soil is frozen, dry, or otherwise stable to support the equipment used;
6. the access does not increase flood stage or velocity;
7. the design and installation of the access complies with the Massachusetts Forestry Best Management Practices Manual. When the access involves fill, culverts or other structures that will obstruct flow, it shall be designed, constructed, and maintained in accordance with the Massachusetts Forestry Best Management Practices Manual. When crossings involve fill, culverts or other structures that will obstruct flow, they shall be designed, constructed, and maintained in accordance with the Massachusetts Forestry Best Management Practices Manual to allow the unobstructed passage of existing flows for at least the 25 year storm; and

(s) the cutting of trees by owners for their own use of more than 10,000 board feet or 20 cords but less than 25,000 board feet or 50 cords during any 12 month period, provided that:

1. after the cutting, the remaining trees in the resource area shall be evenly distributed throughout the area where cutting occurred and the crown cover shall not be less than 50%. Crown cover is determined as the percent of the ground's surface that would be covered by a vertical projection of foliage from trees with a diameter at breast height of five inches or greater, where minor gaps between branches are disregarded and areas of overlapping foliage are counted only once;
2. the cutting and removal of trees shall occur only during those periods when the ground is sufficiently frozen, dry, or otherwise stable to support the equipment used;
3. the cutting, removal, or other destruction of trees and understory vegetation shall be minimized within 25 feet of the bank of a water body, except for the purpose of providing access for the activities described in 310 CMR 10.04(Agriculture)(b)15.;
4. the placement of slash, branches, and limbs resulting from cutting and removal operations shall not occur within 25 feet of the bank of a water body;
5. no filling, excavation, or other change shall occur in the existing topography or hydrology of a resource area; and
6. landings for forest products shall not be located in Bordering Vegetated Wetland or Bank.

(4) Notwithstanding the provisions of 310 CMR 10.54 through 10.58, the issuing authority may issue an Order of Conditions for projects which will improve the natural capacity of a resource area(s) to protect the interests identified in M.G.L. c. 131, § 40 (although no such project may be permitted which will have any adverse effect on specified wildlife habitat sites of rare vertebrate or invertebrate species as identified by procedures established under 310 CMR 10.59). Such projects include, but are not limited to, the removal of aquatic nuisance vegetation to retard pond and lake eutrophication and the thinning or planting of vegetation to improve habitat value.

(5) Notwithstanding the provisions of 310 CMR 10.53(1), 10.54 through 10.58, and 10.60, the issuing authority shall issue an Order of Conditions permitting for the support of existing agricultural production the reconstruction of existing dikes, the construction of new ponds or reservoirs, the expansion of existing ponds or reservoirs, and the construction of tailwater recovery systems and by-pass canals/channels, provided that the following criteria are met:

10.53: continued

- (a) The Notice of Intent shall include all relevant portions of the farm Conservation Plan (CP) covering the work which has been prepared for the property and the applicant in cooperation with the United States Soil Conservation Service (SCS) pursuant to the January 20, 1993, Memorandum of Understanding (MOU) between the Department and SCS concerning CPs. At a minimum, the Notice of Intent shall include a description of the project, the number of square feet of each type of resource area that will be altered, and the alternatives that were considered in order to avoid alterations of wetland resource areas.
 - (b) There shall be a rebuttable presumption, which may be overcome upon a clear showing to the contrary, that:
 - 1. work described in the CP avoids impacts to wetland resource areas or minimizes impacts where they are unavoidable; and
 - 2. construction specifications and mitigation measures contained in the CP minimize impacts where impacts are unavoidable and adequately protect the interests of M.G.L. c. 131, § 40.
 - (c) If any presumption set forth in 310 CMR 10.53(5)(b) is overcome upon a clear showing to the contrary, the issuing authority shall impose such conditions on the work as are necessary to restore the presumption.
 - (d) The project will not have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.59.
 - (e) The maximum amount of Bordering Vegetated Wetland which may be altered by the above activities is:
 - 1. 20,000 square feet for the construction or expansion of a pond or reservoir;
 - 2. 20,000 square feet for the construction of a tailwater recovery system;
 - 3. 20,000 square feet for the construction of a by-pass canal/channel; and
 - 4. 10,000 square feet for the reconstruction of an existing dike.
 - (f) There shall not be any filling or dredging of a Salt Marsh.
- (6) Notwithstanding the provisions of 310 CMR 10.58, the issuing authority may issue an Order of Conditions for the construction, rehabilitation, and maintenance of footpaths, bikepaths, and other pedestrian or nonmotorized vehicle access to or along riverfront areas but outside other resource areas, provided that adverse impacts from the work are minimized and that the design specifications are commensurate with the projected use and are compatible with the character of the riverfront area. Generally, the width of the access shall not exceed ten feet of pavement, except within an area that is already altered (e.g., railroad beds within rights of way). Access shall not be located in vernal pools or fenced in a manner which would impede the movement of wildlife.

10.54: Bank (Naturally Occurring Banks and Beaches)

(1) Preamble. Banks are likely to be significant to public or private water supply, to ground water supply, to flood control, to storm damage prevention, to the prevention of pollution and to the protection of fisheries and wildlife habitat. Where Banks are composed of concrete, asphalt or other artificial impervious material, said Banks are likely to be significant to flood control and storm damage prevention.

Banks are areas where ground water discharges to the surface and where, under some circumstances, surface water recharges the ground water.

Where Banks are partially or totally vegetated, the vegetation serves to maintain the Banks' stability, which in turn protects water quality by reducing erosion and siltation.

Banks may also provide shade that moderates water temperatures, as well as providing breeding habitat, escape cover and food, all of which are significant to the protection of fisheries.

Banks which drop off quickly or overhang the water's edge often contain numerous undercuts which are favorite hiding spots for important game species such as largemouth bass (*Micropterus salmoides*).

The topography, plant community composition and structure, and soil structure of banks together provide important food, shelter, migratory and overwintering areas, and breeding areas for wildlife. Topography plays a role in determining the suitability of banks to serve as burrowing or feeding habitat. Soil structure also plays a role in determining the suitability for burrowing, hibernation and other cover. Bank topography and soil structure impact the bank's vegetative structure, as well. Bushes and other undergrowth, trees, vegetation extending from the bank into the water, and vegetation growing along the water's edge are also important to a wide variety of wildlife. A number of tubers and berry bushes also grow in banks and serve as important food for wildlife. Finally, banks may provide important shelter for wildlife which needs to move between wetland areas.

10.54: continued

Banks act to confine floodwaters during the most frequent storms, preventing the spread of water to adjacent land. Because Banks confine water during such storms to an established channel they maintain water temperatures and depths necessary for the protection of fisheries. The maintenance of cool water temperatures during warm weather is critical to the survival of important game species such as brook trout (*Salvelinus fontinalis*), rainbow trout (*Oncorhynchus Mykiss*) and brown trout (*Salmo trutta*). An alteration of a Bank that permits water to frequently and consistently spread over a large and more shallow area increases the amount of property which is routinely flooded, as well as elevating water temperature and reducing fish habitat within the main channel, particularly during warm weather.

(2) Definition, Critical Characteristics and Boundary.

(a) A Bank is the portion of the land surface which normally abuts and confines a water body. It occurs between a water body and a vegetated bordering wetland and adjacent flood plain, or, in the absence of these, it occurs between a water body and an upland.

A Bank may be partially or totally vegetated, or it may be comprised of exposed soil, gravel or stone.

(b) The physical characteristics of a Bank, as well as its location, as described in the foregoing 310 CMR 10.54(2)(a), are critical to the protection of the interests specified in 310 CMR 10.54(1).

(c) The upper boundary of a Bank is the first observable break in the slope or the mean annual flood level, whichever is lower. The lower boundary of a Bank is the mean annual low flow level.

(3) Presumption. Where a proposed activity involves the removing, filling, dredging or altering of a Bank, the issuing authority shall presume that such area is significant to the interests specified in 310 CMR 10.54(1). This presumption is rebuttable and may be overcome upon a clear showing that the Bank does not play a role in the protection of said interests. In the event that the presumption is deemed to have been overcome, the issuing authority shall make a written determination to this effect, setting forth its grounds (Form 6).

(4) General Performance Standard.

(a) Where the presumption set forth in 310 CMR 10.54(3) is not overcome, any proposed work on a Bank shall not impair the following:

1. the physical stability of the Bank;
2. the water carrying capacity of the existing channel within the Bank;
3. ground water and surface water quality;
4. the capacity of the Bank to provide breeding habitat, escape cover and food for fisheries;
5. the capacity of the Bank to provide important wildlife habitat functions. A project or projects on a single lot, for which Notice(s) of Intent is filed on or after November 1, 1987, that (cumulatively) alter(s) up to 10% or 50 feet (whichever is less) of the length of the bank found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond the above threshold may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures contained in 310 CMR 10.60.

(b) Notwithstanding the provisions of 310 CMR 10.54(4)(a), structures may be permitted in or on a Bank when required to prevent flood damage to facilities, buildings and roads constructed prior to the effective date of 310 CMR 10.51 through 10.60 or constructed pursuant to a Notice of Intent filed prior to the effective date of 310 CMR 10.51 through 10.60 (April 1, 1983), including the renovation or reconstruction (but not substantial enlargement) of such facilities, buildings and roads, provided that the following requirements are met:

1. The proposed protective structure, renovation or reconstruction is designed and constructed using best practical measures so as to minimize adverse effects on the characteristics and functions of the resource area;

10.54: continued

2. The applicant demonstrates that there is no reasonable method of protecting, renovating or rebuilding the facility in question other than the one proposed.
- (c) Notwithstanding the provisions of 310 CMR 10.54(4)(a) or (b), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.59.

10.55: Bordering Vegetated Wetlands (Wet Meadows, Marshes, Swamps and Bogs)

(1) Preamble. Bordering Vegetated Wetlands are likely to be significant to public or private water supply, to ground water supply, to flood control, to storm damage prevention, to prevention of pollution, to the protection of fisheries and to wildlife habitat.

The plants and soils of Bordering Vegetated Wetlands remove or detain sediments, nutrients (such as nitrogen and phosphorous) and toxic substances (such as heavy metal compounds) that occur in run-off and flood waters.

Some nutrients and toxic substances are detained for years in plant root systems or in the soils. Others are held by plants during the growing season and released as the plants decay in the fall and winter. This latter phenomenon delays the impacts of nutrients and toxins until the cold weather period, when such impacts are less likely to reduce water quality.

Bordering Vegetated Wetlands are areas where ground water discharges to the surface and where, under some circumstances, surface water discharges to the ground water.

The profusion of vegetation in Bordering Vegetated Wetlands acts to slow down and reduce the passage of flood waters during periods of peak flows by providing temporary flood water storage and by facilitating water removal through evaporation and transpiration. This process reduces downstream flood crests and resulting damage to private and public property. During dry periods the water retained in Bordering Vegetated Wetlands is essential to the maintenance of base flow levels in rivers and streams, which in turn is important to the protection of water quality and water supplies.

The Act defines freshwater wetlands by hydrology and vegetation. Hydrology is the driving force which creates wetlands, but it is a transient, temporal parameter. The presence of water at or near the ground surface during a significant portion of the year supports, and in fact promotes, the growth of wetland indicator plants. Prolonged or frequent saturation or inundation also produces hydric soils, and creates anaerobic conditions that favor the growth of wetland indicator plants. Hydric soils are direct indicators of long-term hydrologic conditions and are present throughout the year.

Wetland vegetation supports a wide variety of insects, reptiles, amphibians, small mammals and birds which are a source of food for important game fish. Bluegills (*Lepomis macrochirus*), pumpkinseeds (*Lepomis gibbosus*), yellow perch (*Perca flavescens*), rock bass (*Ambloplites rupestris*) and all trout species feed upon nonaquatic insects. Large-mouth bass (*Micropterus salmoides*), chain pickerel (*Esox niger*) and northern pike (*Esox lucius*) feed upon small mammals, snakes, nonaquatic insects, birds and amphibians.

Wetland vegetation provides shade which moderates water temperatures important to fish life. Wetlands flooded by adjacent water bodies and waterways provide food, breeding habitat and cover for fish. Fish populations in the larval stage are particularly dependent upon food provided by over-bank flooding which occurs during peak flow periods (extreme storms) because most river and stream channels do not provide sufficient quantities of the microscopic plant and animal life required for food.

Bordering vegetated wetlands are probably the Commonwealth's most important inland habitat for wildlife. The hydrologic regime, plant community composition and structure, soil composition and structure, topography, and water chemistry of bordering vegetated wetlands provide important food, shelter, migratory and overwintering areas, and breeding areas for many birds, mammals, amphibians and reptiles. A wide variety of vegetated wetland plants, the nature of which are determined in large part by the depth and duration of water, as well as soil and water composition, are utilized by varied species as important areas for mating, nesting, brood rearing, shelter and food (directly and indirectly). The diversity and interspersed nature of the vegetative structure is also important in determining the nature of its wildlife habitat. Different habitat characteristics are used by different wildlife species during summer, winter and migratory seasons.

10.55: continued

Although the vegetational community can often be analyzed to establish an accurate wetland boundary, sole reliance on the presence of wetland indicator plants can be misleading because some species thrive in both uplands and wetlands. Gently sloping areas often produce large transitional zones where the vegetational boundary is difficult to delineate. Hydrology can supplement vegetative criteria to enhance the technical accuracy, consistency, and credibility of wetland boundary delineations, and are especially useful for analyzing disturbed sites.

(2) Definition, Critical Characteristics and Boundary.

(a) Bordering Vegetated Wetlands are freshwater wetlands which border on creeks, rivers, streams, ponds and lakes. The types of freshwater wetlands are wet meadows, marshes, swamps and bogs. Bordering Vegetated Wetlands are areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants. The ground and surface water regime and the vegetational community which occur in each type of freshwater wetland are specified in M.G.L. c. 131, § 40.

(b) The physical characteristics of Bordering Vegetated Wetlands, as described in 310 CMR 10.55(2)(a), are critical to the protection of the interests specified in 310 CMR 10.55(1).

(c) The boundary of Bordering Vegetated Wetlands is the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist. Wetland indicator plants shall include but not necessarily be limited to those plant species identified in the Act. Wetland indicator plants are also those classified in the indicator categories of Facultative, Facultative+, Facultative Wetland-, Facultative Wetland, Facultative Wetland+, or Obligate Wetland in the National List of Plant Species That Occur in Wetlands: Massachusetts (Fish & Wildlife Service, U.S. Department of the Interior, 1988) or plants exhibiting physiological or morphological adaptations to life in saturated or inundated conditions.

1. Areas containing a predominance of wetland indicator plants are presumed to indicate the presence of saturated or inundated conditions. Therefore, the boundary as determined by 50% or more wetland indicator plants shall be presumed accurate when:

- a. all dominant species have an indicator status of obligate, facultative wetland+, facultative wetland, or facultative wetland- and the slope is distinct or abrupt between the upland plant community and the wetland plant community;
- b. the area where the work will occur is clearly limited to the buffer zone; or
- c. the issuing authority determines that sole reliance on wetland indicator plants will yield an accurate delineation.

2. When the boundary is not presumed accurate as described in 310 CMR 10.55(2)(c)1.a. through c. or to overcome the presumption, credible evidence shall be submitted by a competent source demonstrating that the boundary of Bordering Vegetated Wetlands is the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist. The issuing authority must evaluate vegetation and indicators of saturated or inundated conditions if submitted by a credible source, or may require credible evidence of saturated or inundated conditions when determining the boundary. Indicators of saturated or inundated conditions sufficient to support wetland indicator plants shall include one or more of the following:

- a. groundwater, including the capillary fringe, within a major portion of the root zone;
- b. observation of prolonged or frequent flowing or standing surface water;
- c. characteristics of hydric soils.

3. Where an area has been disturbed (*e.g.* by cutting, filling, or cultivation), the boundary is the line within which there are indicators of saturated or inundated conditions sufficient to support a predominance of wetland indicator plants, a predominance of wetland indicator plants, or credible evidence from a competent source that the area supported or would support under undisturbed conditions a predominance of wetland indicator plants prior to the disturbance.

10.55: continued

(3) Presumption. Where a proposed activity involves the removing, filling, dredging or altering of a Bordering Vegetated Wetland, the issuing authority shall presume that such area is significant to the interests specified in 310 CMR 10.55(1). This presumption is rebuttable and may be overcome upon a clear showing that the Bordering Vegetated Wetland does not play a role in the protection of said interests. In the event that the presumption is deemed to have been overcome, the issuing authority shall make a written determination to this effect, setting forth its grounds (Form 6).

(4) General Performance Standards.

(a) Where the presumption set forth in 310 CMR 10.55(3) is not overcome, any proposed work in a Bordering Vegetated Wetland shall not destroy or otherwise impair any portion of said area.

(b) Notwithstanding the provisions of 310 CMR 10.55(4)(a), the issuing authority may issue an Order of Conditions permitting work which results in the loss of up to 5000 square feet of Bordering Vegetated Wetland when said area is replaced in accordance with the following general conditions and any additional, specific conditions the issuing authority deems necessary to ensure that the replacement area will function in a manner similar to the area that will be lost:

1. the surface of the replacement area to be created ("the replacement area") shall be equal to that of the area that will be lost ("the lost area");
2. the ground water and surface elevation of the replacement area shall be approximately equal to that of the lost area;
3. The overall horizontal configuration and location of the replacement area with respect to the bank shall be similar to that of the lost area;
4. the replacement area shall have an unrestricted hydraulic connection to the same water body or waterway associated with the lost area;
5. the replacement area shall be located within the same general area of the water body or reach of the waterway as the lost area;
6. at least 75% of the surface of the replacement area shall be reestablished with indigenous wetland plant species within two growing seasons, and prior to said vegetative reestablishment any exposed soil in the replacement area shall be temporarily stabilized to prevent erosion in accordance with standard U.S. Soil Conservation Service methods; and
7. the replacement area shall be provided in a manner which is consistent with all other General Performance Standards for each resource area in Part III of 310 CMR 10.00.

(c) Notwithstanding the provisions of 310 CMR 10.55(4)(a), the issuing authority may issue an Order of Conditions permitting work which results in the loss of a portion of Bordering Vegetated Wetland when;

1. said portion has a surface area less than 500 square feet;
2. said portion extends in a distinct linear configuration ("finger-like") into adjacent uplands; and
3. in the judgment of the issuing authority it is not reasonable to scale down, redesign or otherwise change the proposed work so that it could be completed without loss of said wetland.

(d) Notwithstanding the provisions of 310 CMR 10.55(4)(a),(b) and (c), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.59.

(e) Any proposed work shall not destroy or otherwise impair any portion of a Bordering Vegetated Wetland that is within an Area of Critical Environmental Concern designated by the Secretary of Environmental Affairs under M.G.L. c. 21A, § 2(7) and 301 CMR 12.00. This 310 CMR 10.55(4)(e):

1. supersedes the provisions of 310 CMR 10.55(4)(b) and (c);
2. shall not apply if the presumption set forth at 310 CMR 10.55(3) is overcome;
3. shall not apply to work proposed under 310 CMR 10.53(3)(l); and
4. shall not apply to maintenance of stormwater detention, retention, or sedimentation ponds, or to maintenance of stormwater energy dissipating structures, that have been constructed in accordance with a valid order of conditions.

10.56: Land Under Water Bodies and Waterways (Under any Creek, River, Stream, Pond or Lake)

(1) Preamble. Land Under Water Bodies and Waterways is likely to be significant to public and private water supply, to ground water supply, to flood control, to storm damage prevention, to prevention of pollution and to protection of fisheries and wildlife habitat. Where such land is composed of concrete, asphalt or other artificial impervious material, said land is likely to be significant to flood control and storm damage prevention.

Where Land Under Water Bodies and Waterways is composed of pervious material, such land represents a point of exchange between surface and ground water.

The physical nature of Land Under Water Bodies and Waterways is highly variable, ranging from deep organic and fine sedimentary deposits to rocks and bedrock. The organic soils and sediments play an important role in the process of detaining and removing dissolved and particulate nutrients (such as nitrogen and phosphorous) from the surface water above. They also serve as traps for toxic substances (such as heavy metal compounds).

Land Under Water Bodies and Waterways, in conjunction with banks, serves to confine floodwater within a definite channel during the most frequent storms. Filling within this channel blocks flows which in turn causes backwater and overbank flooding during such storms. An alteration of Land Under Water Bodies and Waterways that causes water to frequently spread out over a larger area at a lower depth increases the amount of property which is routinely flooded. Additionally, it results in an elevation of water temperature and a decrease in habitat in the main channel, both of which are detrimental to fisheries, particularly during periods of warm weather and low flows.

Land under rivers, streams and creeks that is composed of gravel allows the circulation of cold, well oxygenated water necessary for the survival of important game fish species such as brook trout (*Salvelinus fontinalis*), rainbow trout (*Oncorhynchus mykiss*), brown trout (*Salmo trutta*) and atlantic salmon (*Salmon salar*). River, stream and creek bottoms with a diverse structure composed of gravel, large and small boulders and rock outcrops provides escape cover and resting areas for the above mentioned game fish species (*salmonids*). Such bottom type also provides areas for the production of aquatic insects essential to fisheries.

Land under ponds and lakes is vital to a large assortment of warm water fish during spawning periods. Species such as large mouth bass (*Micropterus salmoides*), smallmouth bass (*Micropterus dolomieu*), blue gills (*Lepomis macrochirus*), pumpkinseeds (*Lepomis gibbosus*), black crappie (*Pomoxis nigromaculatus*) and rock bass (*Ambloplites rupestris*) build nests on the lake and bottom substrates within which they shed fertilize their eggs.

The plant community composition and structure, hydrologic regime, topography, soil composition and water quality of land under water bodies and waterways provide important food, shelter, migratory and overwintering areas, and breeding areas for wildlife. Certain submerged, rooted vegetation is eaten by water fowl and some mammals. Some amphibians (as well as some invertebrate species eaten by vertebrate wildlife) attach their eggs to such vegetation. Some aquatic vegetation protruding out of the water is also used for nesting, and many species use dead vegetation resting on land under water but protruding above the surface for feeding and basking. Soil composition is also important for hibernation and for animals which begin to burrow their tunnels under water. Hydrologic regime, topography, and water quality not only affect vegetation, but also determine which species feed in an area.

(2) Definition, Critical Characteristics and Boundaries.

(a) Land Under Water Bodies and Waterways is the land beneath any creek, river, stream, pond or lake. Said land may be composed of organic muck or peat, fine sediments, rocks or bedrock.

(b) The physical characteristics and location of Land Under Water Bodies and Waterways specified in 310 CMR 10.56(2)(a) are critical to the protection of the interests specified in 310 CMR 10.56(1).

(c) The boundary of Land Under Water Bodies and Waterways is the mean annual low water level.

(3) Presumption. Where a project involves removing, filling, dredging or altering of Land Under Water Bodies and Waterways, the issuing authority shall presume that such area is significant to the interests specified in 310 CMR 10.56(1). This presumption is rebuttable and may be overcome upon a clear showing that said land does not play a role in the protection of said interests. In the event that the presumption is deemed to have been overcome, the issuing authority shall make a written determination to this effect, setting forth the grounds (Form 6).

10.56: continued

(4) General Performance Standards.

(a) Where the presumption set forth in 310 CMR 10.56(3) is not overcome, any proposed work within Land Under Water Bodies and Waterways shall not impair the following:

1. The water carrying capacity within the defined channel, which is provided by said land in conjunction with the banks;
2. Ground and surface water quality;
3. The capacity of said land to provide breeding habitat, escape cover and food for fisheries; and
4. The capacity of said land to provide important wildlife habitat functions. A project or projects on a single lot, for which Notice(s) of intent is filed on or after November 1, 1987, that (cumulatively) alter(s) up to 10% or 5,000 square feet (whichever is less) of land in this resource area found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions.

Additional alterations beyond the above threshold may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures established under 310 CMR 10.60.

(b) Notwithstanding the provisions of 310 CMR 10.56(4)(a), the issuing authority may issue an Order in accordance with M.G.L. c. 131, § 40 to maintain or improve boat channels within Land Under Water Bodies and Waterways when said work is designed and carried out using the best practical measures so as to minimize adverse effects such as the suspension or transport of pollutants, increases in turbidity, the smothering of bottom organisms, the accumulation of pollutants by organisms or the destruction of fisheries habitat or nutrient source areas.

(c) Notwithstanding the provisions of 310 CMR 10.56(4)(a) or (b), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.59.

10.57: Land Subject to Flooding (Bordering and Isolated Areas)(1) Preamble.(a) Bordering Land Subject to Flooding:

1. Bordering Land Subject to Flooding is an area which floods from a rise in a bordering waterway or water body. Such areas are likely to be significant to flood control and storm damage prevention.
2. Bordering Land Subject to Flooding provides a temporary storage area for flood water which has overtopped the bank of the main channel of a creek, river or stream or the basin of a pond or lake. During periods of peak run-off, flood waters are both retained (*i.e.*, slowly released through evaporation and percolation) and detained (slowly released through surface discharge) by Bordering Land Subject to Flooding. Over time, incremental filling of these areas causes increases in the extent and level of flooding by eliminating flood storage volume or by restricting flows, thereby causing increases in damage to public and private properties.
3. Certain portions of Bordering Land Subject to Flooding are also likely to be significant to the protection of wildlife habitat. These include: (a) all areas on the ten year floodplain or within 100 feet of the bank or bordering vegetated wetland (whichever is further from the water body or waterway, so long as such area is contained within the 100 year floodplain), and (b) all vernal pool habitat on the 100 year floodplain, except for those portions of (a) and (b) which have been so extensively altered by human activity that their important wildlife habitat functions have been effectively eliminated (such "altered" areas include paved and gravelled areas, golf courses, cemeteries, playgrounds, landfills, fairgrounds, quarries, gravel pits, buildings, lawns, gardens, roadways (including median strips, areas enclosed within highway interchanges, shoulders, and embankments), railroad tracks (including ballast and embankments), and similar areas lawfully existing on November 1, 1987 and maintained as such since that time).

10.57: continued

The hydrologic regime, plant community composition and structure, topography, soil composition and proximity to water bodies and bordering vegetated wetlands of these portions of bordering land subject to flooding provide important food, shelter, migratory and overwintering areas, and breeding areas for wildlife. Nutrients from flood waters, as well as the inundation of floodplain soil, create important wildlife habitat characteristics, such as richness and diversity of soil and vegetation. A great many species require or prefer habitat which is as close as possible to water and/or has moist conditions, characteristics generally present on lower floodplains. Similarly, lower floodplains, because of their proximity to water and vegetated wetlands, can provide important shelter for wildlife which needs to migrate between such areas, or between such areas and uplands. The "edge" where floodplain habitat borders vegetated wetlands or water bodies is frequently very high in wildlife richness and diversity. Similar "edges" may be found elsewhere the lower floodplain, where differences in topography and frequency of flooding have created varied soil and plant community composition and structure.

Finally, vernal pool habitat is found at various locations throughout the 100 year floodplain, the pool itself generally formed by meander scars, or sloughs left after the main water channel has changed course. These pools are essential breeding sites for certain amphibians which require isolated areas that are generally flooded for at least two continuous months in the spring and/or summer and are free from fish predators. Most of these amphibians remain near the breeding pool during the remainder of their lifecycle.

Many reptiles, birds and mammals also feed here.

(b) Isolated Land Subject to Flooding:

1. Isolated Land Subject to Flooding is an isolated depression or a closed basin which serves as a ponding area for run-off or high ground water which has risen above the ground surface. Such areas are likely to be locally significant to flood control and storm damage prevention. In addition, where such areas are underlain by pervious material they are likely to be significant to public or private water supply and to ground water supply. Where such areas are underlain by pervious material covered by a mat of organic peat and muck, they are also likely to be significant to the prevention of pollution. Finally, where such areas are vernal pool habitat, they are significant to the protection of wildlife habitat.

2. Isolated Land Subject to Flooding provides a temporary storage area where run-off and high ground water pond and slowly evaporate or percolate into the substrate. Filling causes lateral displacement of the ponded water onto contiguous properties, which may in turn result in damage to said properties.

3. Isolated Land Subject to Flooding, where it is underlain by pervious material, provides a point of exchange between ground and surface waters. Contaminants introduced into said area, such as septic system discharges and road salts, find easy access into the ground water and neighboring wells. Where these conditions occur and a mat of organic peat or muck covers the substrate of the area, said mat serves to detain and remove contaminants which might otherwise enter the ground water and neighboring wells.

4. Isolated Land Subject to Flooding, where it is vernal pool habitat, is an essential breeding site for certain amphibians which require isolated areas that are generally flooded for at least two continuous months in the spring and/or summer and are free from fish predators. Most of these amphibians remain near the breeding pool during the remainder of their lifecycle. Many reptiles, birds and mammals also feed here.

(2) Definitions, Critical Characteristics and Boundaries.

(a) Bordering Land Subject to Flooding:

1. Bordering Land Subject to Flooding is an area with low, flat topography adjacent to and inundated by flood waters rising from creeks, rivers, streams, ponds or lakes. It extends from the banks of these waterways and water bodies; where a bordering vegetated wetland occurs, it extends from said wetland.

2. The topography and location of Bordering Land Subject to Flooding specified in the foregoing 310 CMR 10.57(2)(a)1. are critical to the protection of the interests specified in 310 CMR 10.57(1)(a). Where Bordering Land Subject to Flooding is significant to the protection of wildlife habitat, the physical characteristics as described in the foregoing 310 CMR 10.57(1)(a)(3) are critical to the protection of that interest.

10.57: continued

3. The boundary of Bordering Land Subject to Flooding is the estimated maximum lateral extent of flood water which will theoretically result from the statistical 100-year frequency storm. Said boundary shall be that determined by reference to the most recently available flood profile data prepared for the community within which the work is proposed under the National Flood Insurance Program (NFIP, currently administered by the Federal Emergency Management Agency, successor to the U.S. Department of Housing and Urban Development). Said boundary, so determined, shall be presumed accurate. This presumption may be overcome only by credible evidence from a registered professional engineer or other professional competent in such matters.

Where NFIP Profile data is unavailable, the boundary of Bordering Land Subject to Flooding shall be the maximum lateral extent of flood water which has been observed or recorded. In the event of a conflict, the issuing authority may require the applicant to determine the boundary of Bordering Land Subject to Flooding by engineering calculations which shall be:

- a. based upon a design storm of seven inches of precipitation in 24 hours (*i.e.*, a Type III Rainfall, as defined by the U.S. Soil Conservation Service);
 - b. based upon the standard methodologies set forth in U.S. Soil Conservation Service Technical Release No. 55, *Urban Hydrology for Small Watersheds* and Section 4 of the U.S. Soil Conservation Service, *National Engineering Hydrology Handbook*; and
 - c. prepared by a registered professional engineer or other professional competent in such matters.
4. The boundary of the ten year floodplain is the estimated maximum lateral extent of the flood water which will theoretically result from the statistical ten-year frequency storm. Said boundary shall be determined as specified under 310 CMR 10.57(2)(a)3., except that where NFIP Profile data is unavailable, the boundary shall be the maximum lateral extent of flood water which has been observed or recorded during a 10 year frequency storm and, in the event of conflict, engineering calculations under 310 CMR 10.57(2)(a)3.a. shall be based on a design storm of 48/10 (4.8) inches of precipitation in 24 hours.
5. The only portions of this resource area which shall be presumed to be vernal pool habitat are those that have been certified as such by the Massachusetts Division of Fisheries and Wildlife, where said Division has forwarded maps and other information needed to identify the location of such habitat to the Conservation Commission and DEP prior to the filing of each Notice of Intent or Abbreviated Notice of Intent regarding that portion. Such presumption is rebuttable, and may be overcome upon a clear showing to the contrary. However, notwithstanding any other provision of 310 CMR 10.57, should an Environmental Impact Report be required for a proposed project as determined by 301 CMR 11.00 the performance standard established under this Section regarding vernal pool habitat shall only apply to proposed projects which would alter such habitats as have been identified prior to the time that the Secretary of the Executive Office of Environmental Affairs has determined, in accordance with the provisions of 301 CMR 11.09(4), that a final Environmental Impact Report for that project adequately and properly complies with the M.G.L. c. 30, § 6 through 62H (unless, subsequent to that determination, the Secretary requires supplemental information concerning vernal pool habitat, in accordance with the provisions of 301 CMR 11.17).
6. The boundary of vernal pool habitat is that certified by the Massachusetts Division of Fisheries and Wildlife. In the event of a conflict of opinion, or the lack of a clear boundary delineation certified by the Division of Fisheries and Wildlife, the applicant may submit an opinion certified by a registered professional engineer, supported by engineering calculations, as to the probable extent of said habitat. Said calculations shall be prepared in accordance with the general requirements set forth in 310 CMR 10.57(2)(a)3.a. through c., except that the maximum extent of said water shall be based upon the total volume (rather than peak rate) of run-off from the drainage area contributing to the vernal pool and shall be further based upon a design storm of 26/10 (2.6) inches (rather than seven inches) of precipitation in 24 hours. Vernal pool habitat shall include the area within 100 feet of the boundary of the vernal pool itself, insofar as such area is contained within the boundaries of this resource area.

10.57: continued

(b) Isolated Land Subject to Flooding:

1. Isolated Land Subject to Flooding is an isolated depression or closed basin without an inlet or an outlet. It is an area which at least once a year confines standing water to a volume of at least ¼ acre-feet and to an average depth of at least six inches.

Isolated Land Subject to Flooding may be underlain by pervious material, which in turn may be covered by a mat of organic peat or muck.

2. The characteristics specified in the foregoing 310 CMR 10.57(2)(b)1. are critical to the protection of the interests specified in 310 CMR 10.57(1)(b).

3. The boundary of Isolated Land Subject to Flooding is the perimeter of the largest observed or recorded volume of water confined in said area.

In the event of a conflict of opinion regarding the extent of water confined in an Isolated Land Subject to Flooding, the applicant may submit an opinion certified by a registered professional engineer, supported by engineering calculations, as to the probable extent of said water. Said calculations shall be prepared in accordance with the general requirements set forth in 310 CMR 10.57(2)(a)3.a. through c., except that the maximum extent of said water shall be based upon the total volume (rather than peak rate) of run-off from the drainage area contributing to the Isolated Land Subject to Flooding and shall be further based upon the assumption that there is no infiltration of said run-off into the soil within the Isolated Land Subject to Flooding.

4. The only portions of this resource area which shall be presumed to be vernal pool habitat are those determined under procedures established in 310 CMR 10.57(2)(a)5.

5. The boundary of vernal pool habitat is that determined under procedures established in 310 CMR 10.57(2)(a)6.

(3) Presumption. Where a project involves removing, filling, dredging or altering of Land Subject to Flooding (both Bordering and Isolated Areas) the issuing authority shall presume that such an area is significant to, and only to, the respective interests specified in 310 CMR 10.57(1)(a) and (b). This presumption may be overcome only upon a clear showing that said land does not play a role in the protection of said interests. In the event that the presumption is deemed to have been overcome, the issuing authority shall make a written determination to this effect, setting forth its grounds (Form 6).

(4) General Performance Standards.

(a) Bordering Land Subject to Flooding:

1. Compensatory storage shall be provided for all flood storage volume that will be lost as the result of a proposed project within Bordering Land Subject to Flooding, when in the judgment of the issuing authority said loss will cause an increase or will contribute incrementally to an increase in the horizontal extent and level of flood waters during peak flows.

Compensatory storage shall mean a volume not previously used for flood storage and shall be incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body. Further, with respect to waterways, such compensatory volume shall be provided within the same reach of the river, stream or creek.

2. Work within Bordering Land Subject to Flooding, including that work required to provide the above-specified compensatory storage, shall not restrict flows so as to cause an increase in flood stage or velocity.

3. Work in those portions of bordering land subject to flooding found to be significant to the protection of wildlife habitat shall not impair its capacity to provide important wildlife habitat functions. Except for work which would adversely affect vernal pool habitat, a project or projects on a single lot, for which Notice(s) of Intent is filed on or after November 1, 1987, that (cumulatively) alter(s) up to 10% or 5,000 square feet (whichever is less) of land in this resource area found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond the above threshold, or altering vernal pool habitat, may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures contained in 310 CMR 10.60.

10.57: continued

(b) Isolated Land Subject to Flooding: A proposed project in Isolated Land Subject to Flooding shall not result in the following:

1. Flood damage due to filling which causes lateral displacement of water that would otherwise be confined within said area.
2. An adverse effect on public and private water supply or ground water supply, where said area is underlain by pervious material.
3. An adverse effect on the capacity of said area to prevent pollution of the ground water, where the area is underlain by pervious material which in turn is covered by a mat of organic peat and muck.
4. An impairment of its capacity to provide wildlife habitat where said area is vernal pool habitat, as determined by procedures contained in 310 CMR 10.60.

(c) Protection of Rare Wildlife Species: Notwithstanding the provisions of 310 CMR 10.57(4)(a) or (b), no project may be permitted which will have any adverse effect on specified wildlife habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.59.

10.58 Riverfront Area

(1) Preamble. Riverfront areas are likely to be significant to protect the private or public water supply; to protect groundwater; to provide flood control; to prevent storm damage; to prevent pollution; to protect land containing shellfish; to protect wildlife habitat; and to protect the fisheries. Land adjacent to rivers and streams can protect the natural integrity of these water bodies. The presence of natural vegetation within riverfront areas is critical to sustaining rivers as ecosystems and providing these public values. The riverfront area can prevent degradation of water quality by filtering sediments, toxic substances (such as heavy metals), and nutrients (such as phosphorus and nitrogen) from stormwater, nonpoint pollution sources, and the river itself. Sediments are trapped by vegetation before reaching the river. Nutrients and toxic substances may be detained in plant root systems or broken down by soil bacteria. Riverfront areas can trap and remove disease-causing bacteria that otherwise would reach rivers and coastal estuaries where they can contaminate shellfish beds and prohibit safe human consumption. Natural vegetation within the riverfront area also maintains water quality for fish and wildlife.

Where rivers serve as water supplies or provide induced recharge to wells, the riverfront area can be important to the maintenance of drinking water quality and quantity. Land along rivers in its natural state with a high infiltration capacity increases the yield of a water supply well. When riverfront areas lack the capacity to filter pollutants, contaminants can reach human populations served by wells near rivers or by direct river intakes. The capacity of riverfront areas to filter pollutants is equally critical to surface water supplies, reducing or eliminating the need for additional treatment. In the watershed, mature vegetation within riverfront areas provides shade to moderate water temperatures and slow algal growth, which can produce odors and taste problems in drinking water.

Within riverfront areas, surface water interaction with groundwater significantly influences the stream ecosystem. The dynamic relationship between surface and groundwater within the "hyporheic zone" sustains communities of aquatic organisms which regulate the flux of nutrients, biomass and the productivity of organisms including fish within the stream itself. The hyporheic zone extends to greater distances horizontally from the channel in large, higher order streams with alluvial floodplains, but the interaction within this zone is important in smaller streams as well.

By providing recharge and retaining natural flood storage, as well as by slowing surface water runoff, riverfront areas can mitigate flooding and damage from storms. The root systems of riverfront vegetation keep soil porous, increasing infiltration capacity. Vegetation also removes excess water through evaporation and transpiration. This removal of water from the soil allows for more infiltration when flooding occurs. Increases in storage of floodwaters can decrease peak discharges and reduce storm damage. Vegetated riverfronts also dissipate the energy of storm flows, reducing damage to public and private property.

Riverfront areas are critical to maintaining thriving fisheries. Maintaining vegetation along rivers promotes fish cover, increases food and oxygen availability, decreases sedimentation, and provides spawning habitat. Maintenance of water temperatures and depths is critical to many important fish species. Where groundwater recharges surface water flows, loss of recharge as a result of impervious surfaces within the riverfront area may aggravate low flow conditions and increase water temperatures. In some cases, summer stream flows are maintained almost exclusively from groundwater recharge. Small streams are most readily impacted by removal of trees and other vegetation along the shore.

10.58: continued

Riverfront areas are important wildlife habitat, providing food, shelter, breeding, migratory, and overwintering areas. Even some predominantly upland species use and may be seasonally dependent on riverfront areas. Riverfront areas promote biological diversity by providing habitats for an unusually wide variety of upland and wetland species, including bald eagles, osprey, and kingfishers. Large dead trees provide nesting sites for bird species that typically use the same nest from year to year. Sandy areas along rivers may serve as nesting sites for turtles and water snakes. Riverfront areas provide food for species such as wood turtles which feed and nest in uplands but use rivers as resting and overwintering areas. Riverfront areas provide corridors for the migration of wildlife for feeding or breeding. Loss of this connective function, from activities that create barriers to wildlife movement within riverfront areas, results in habitat fragmentation and causes declines in wildlife populations. Wildlife must also be able to move across riverfront areas, between uplands and the river.

Vernal pools are frequently found within depressions in riverfront areas. These pools are essential breeding sites for certain amphibians which require isolated, seasonally wet areas without predator fish. Most of these amphibians require areas of undisturbed woodlands as habitat during the non-breeding seasons. Some species require continuous woody vegetation between woodland habitat and the breeding pools. Depending on the species, during non-breeding seasons these amphibians may remain near the pools or travel one-fourth mile or more from the pools. Reptiles, especially turtles, often require areas along rivers to lay their eggs. Since amphibians and reptiles are less mobile than mammals and birds, maintaining integrity of their habitat is critical.

In those portions so extensively altered by human activity that their important wildlife habitat functions have been effectively eliminated, riverfront areas are not significant to the protection of important wildlife habitat and vernal pool habitat.

(2) Definitions, Critical Characteristics and Boundaries.

(a) A Riverfront Area is the area of land between a river's mean annual high water line and a parallel line measured horizontally. The riverfront area may include or overlap other resource areas or their buffer zones. The riverfront area does not have a buffer zone.

1. A river is any natural flowing body of water that empties to any ocean, lake, pond, or other river and which flows throughout the year. Rivers include streams (see 310 CMR 10.04: Stream) that are perennial because surface water flows within them throughout the year. Intermittent streams are not rivers as defined herein because surface water does not flow within them throughout the year. When surface water is not flowing within an intermittent stream, it may remain in isolated pools or it may be absent. When surface water is present in contiguous and connected pool/riffle systems, it shall be determined to be flowing. Rivers begin at the point an intermittent stream becomes perennial or at the point a perennial stream flows from a spring, pond, or lake. Downstream of the first point of perennial flow, a stream normally remains a river except where interrupted by a lake or pond. Upstream of the first point of perennial flow, a stream is normally intermittent.

a. A river or stream shown as perennial on the current United States Geological Survey (USGS) or more recent map provided by the Department is perennial.

b. A river or stream shown as intermittent or not shown on the current USGS map or more recent map provided by the Department, that has a watershed size greater than or equal to one square mile, is perennial.

c. A stream shown as intermittent or not shown on the current USGS map or more recent map provided by the Department, that has a watershed size less than one square mile, is intermittent unless:

i. The stream has a watershed size of at least one-half (0.50) square mile and has a predicted flow rate greater than or equal to 0.01 cubic feet per second at the 99% flow duration using the USGS Stream Stats method. The issuing authority shall find such streams to be perennial; or

10.58: continued

- ii. When the USGS StreamStats method cannot be used because the stream does not have a mapped and digitized centerline (including but not limited to streams located in the following basins: North Coastal Basin, Taunton Basin, Buzzards Bay Basin, Cape Cod and Islands Basin, and that portion of the South Coastal Basin that is south of the Jones River sub-basin), and the stream has a watershed size of at least one-half (0.50) square mile, and the surficial geology of the contributing drainage area to the stream at the project site contains 75% or more stratified drift, the issuing authority shall find such streams to be perennial. Stratified drift shall mean sand and gravel deposits that have been layered and sorted by glacial meltwater streams. Areal percentages of stratified drift may be determined using USGS surficial geologic maps, USGS Hydrological Atlases, Massachusetts Geographical Information System (MassGIS) surficial geology data layer, or other published or electronic surficial geological information from a credible source.
- d. Notwithstanding 310 CMR 10.58(2)(a)1.a. through c., the issuing authority shall find that any stream is intermittent based upon a documented field observation that the stream is not flowing. A documented field observation shall be made by a competent source and shall be based upon an observation made at least once per day, over four days in any consecutive 12 month period, during a non-drought period on a stream not significantly affected by drawdown from withdrawals of water supply wells, direct withdrawals, impoundments, or other man-made flow reductions or diversions. Field observations made after December 20, 2002 shall be documented by field notes and by dated photographs or video. Field observations made prior to December 20, 2002 shall be documented by credible evidence. All field observations shall be submitted to the issuing authority with a statement signed under the penalties of perjury attesting to the authenticity and veracity of the field notes, photographs or video and other credible evidence. Department staff, conservation commissioners, and conservation commission staff are competent sources; issuing authorities may consider evidence from other sources that are determined to be competent.
- e. Rivers include the entire length and width to the mean annual high-water line of the major rivers (Assabet, Blackstone, Charles, Chicopee, Concord, Connecticut, Deerfield, Farmington, French, Hoosic, Housatonic, Ipswich, Merrimack, Millers, Nashua, Neponset, Parker (Essex County), Quinebaug, Shawsheen, Sudbury, Taunton, Ten Mile, and Westfield).
- f. Rivers include perennial streams that cease to flow during periods of extended drought. Periods of extended drought for purposes of 310 CMR 10.00 shall be those periods, in those specifically identified geographic locations, determined to be at the "Advisory" or more severe drought level by the Massachusetts Drought Management Task Force, as established by the Executive Office of Environmental Affairs and the Massachusetts Emergency Management Agency in 2001, in accordance with the Massachusetts Drought Management Plan (MDMP). Rivers and streams that are perennial under natural conditions but are significantly affected by drawdown from withdrawals of water supply wells, direct withdrawals, impoundments, or other man-made flow reductions or diversions shall be considered perennial.
- g. Manmade canals (*e.g.*, the Cape Cod Canal and canals diverted from rivers in Lowell and Holyoke) and mosquito ditches associated with coastal rivers do not have riverfront areas.
- h. Where rivers flow through lakes or ponds, the riverfront area stops at the inlet and begins again at the outlet. A water body identified as a lake, pond, or reservoir on the current U.S.G.S. map or more recent map provided by the Department, is a lake or pond, unless the issuing authority determines that the water body has primarily riverine characteristics. When a water body is not identified as a lake, pond, or reservoir on the current U.S.G.S. map or more recent map provided by the Department, the water body is a river if it has primarily riverine characteristics. Riverine characteristics may include, but are not limited to, unidirectional flow that can be visually observed or measured in the field. In coastal areas, the unidirectional flow may be tidally influenced. In addition, rivers are characterized by horizontal zonation as opposed to the vertical stratification that is typically associated with lakes, ponds, and embayments. Great Ponds (*i.e.*, any pond which contained more than ten acres in its natural state, as calculated based on the surface area of lands lying below the natural high water mark; a list is available from the Department) are never rivers.

10.58: continued

2. Mean Annual High-Water Line of a river is the line that is apparent from visible markings or changes in the character of soils or vegetation due to the prolonged presence of water and that distinguishes between predominantly aquatic and predominantly terrestrial land. Field indicators of bankfull conditions shall be used to determine the mean annual high-water line. Bankfull field indicators include but are not limited to: changes in slope, changes in vegetation, stain lines, top of pointbars, changes in bank materials, or bank undercuts.

a. In most rivers, the first observable break in slope is coincident with bankfull conditions and the mean annual high-water line.

b. In some river reaches, the mean annual high-water line is represented by bankfull field indicators that occur above the first observable break in slope, or if no observable break in slope exists, by other bankfull field indicators. These river reaches are characterized by at least two of the following features: low gradient, meanders, oxbows, histosols, a low-flow channel, or poorly-defined or nonexistent banks.

c. In tidal rivers, the mean annual high-water line is coincident with the mean high water line determined under 310 CMR 10.23.

3. The Riverfront Area is the area of land between a river's mean annual high-water line measured horizontally outward from the river and a parallel line located 200 feet away, except that the parallel line is located:

a. 25 feet away in Boston, Brockton, Cambridge, Chelsea, Everett, Fall River, Lawrence, Lowell, Malden, New Bedford, Somerville, Springfield, Winthrop, and Worcester;

b. 25 feet away in densely developed areas, as designated by the Secretary of the Executive Office of Environmental Affairs; and

c. 100 feet away for new agricultural and aquacultural activities.

Measured horizontally means that the riverfront area extends at a right angle to the mean annual high-water line rather than along the surface of the land.

Where a river runs through a culvert more than 200 feet in length, the riverfront area stops at a perpendicular line at the upstream end of the culvert and resumes at the downstream end. When a river contains islands, the riverfront area extends landward into the island from and parallel to the mean annual high-water line.

(b) The physical characteristics of a Riverfront Area as described in 310 CMR 10.58(2)(a) are critical to the protection of the interests specified in 310 CMR 10.58(1).

(c) The boundary of the Riverfront Area is a line parallel to the mean annual high-water line, located at the outside edge of the riverfront area. At the point where a stream becomes perennial, the riverfront area begins at a line drawn as a semicircle with a 200 foot (25 foot in densely developed areas; 100 foot for new agriculture) radius around the point and connects to the parallel line perpendicular to the mean annual high-water line which forms the outer boundary. When a river flows into coastal waters or an embayment, the river ends where it no longer has primarily riverine characteristics. Where the river's mouth cannot be readily identified, the river ends where a line drawn perpendicular to the shoreline no longer intersects the opposite bank.

(3) Presumption. Where a proposed activity involves work within the riverfront area, the issuing authority shall presume that the area is significant to protect the private or public water supply; to protect the groundwater; to provide flood control; to prevent storm damage; to prevent pollution; to protect land containing shellfish; to protect wildlife habitat; and to protect fisheries.

The presumption is rebuttable and may be overcome by a clear showing that the riverfront area does not play a role in the protection of one or more of these interests. In the event that the presumption is deemed to have been overcome as to the protection of all the interests, the issuing authority shall make a written determination to this effect, setting forth its grounds on Form 6. Where the applicant provides information that the riverfront area at the site of the activity does not play a role in the protection of an interest, the issuing authority may determine that the presumption for that interest has been rebutted and the presumption of significance is partially overcome.

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(4) General Performance Standard. Where the presumption set forth in 310 CMR 10.58(3) is not overcome, the applicant shall prove by a preponderance of the evidence that there are no practicable and substantially equivalent economic alternatives to the proposed project with less adverse effects on the interests identified in M.G.L. c.131 § 40 and that the work, including proposed mitigation, will have no significant adverse impact on the riverfront area to protect the interests identified in M.G.L. c. 131 § 40. In the event that the presumption is partially overcome, the issuing authority shall make a written determination setting forth its grounds in the Order of Conditions and the partial rebuttal shall be taken into account in the application of 310 CMR 10.58 (4)(d)1.a. and c.; the issuing authority shall impose conditions in the Order that contribute to the protection of interests for which the riverfront area is significant.

(a) Protection of Other Resource Areas. The work shall meet the performance standards for all other resource areas within the riverfront area, as identified in 310 CMR 10.30 (coastal bank), 10.32 (salt marsh), 10.55 (Bordering Vegetated Wetland), and 10.57 (Land Subject to Flooding). When work in the riverfront area is also within the buffer zone to another resource area, the performance standards for the riverfront area shall contribute to the protection of the interests of M.G.L. c. 131, § 40 in lieu of any additional requirements that might otherwise be imposed on work in the buffer zone within the riverfront area.

(b) Protection of Rare Species. No project may be permitted within the riverfront area which will have any adverse effect on specified habitat sites of rare wetland or upland, vertebrate or invertebrate species, as identified by the procedures established under 310 CMR 10.59 or 10.37, or which will have any adverse effect on vernal pool habitat certified prior to the filing of the Notice of Intent.

(c) Practicable and Substantially Equivalent Economic Alternatives. There must be no practicable and substantially equivalent economic alternative to the proposed project with less adverse effects on the interests identified in M.G.L. c. 131 § 40.

1. Definition of Practicable. An alternative is practicable and substantially equivalent economically if it is available and capable of being done after taking into consideration costs, existing technology, proposed use, and logistics, in light of overall project purposes. Available and capable of being done means the alternative is obtainable and feasible. Project purposes shall be defined generally (*e.g.*, single family home, residential subdivision, expansion of a commercial development). The alternatives analysis may reduce the scale of the activity or the number of lots available for development, consistent with the project purpose and proposed use. The alternatives analysis shall not include interior design specifications (*i.e.*, neither the proposed use or project purpose in the Notice of Intent nor the Order of Conditions should specify the number of rooms, bedrooms, etc. within a building). Transactions shall not be arranged to circumvent the intent of alternatives analysis review. The four factors to be considered are:

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- a. Costs, and whether such costs are reasonable or prohibitive to the owner. The owner means the individual or entity which owns the area where the activity will occur or which will implement the project purpose. Cost includes expenditures for a project within the riverfront area, such as land acquisition, site preparation, design, construction, landscaping, and transaction expenses. Cost does not include anticipated profits after the project purpose is achieved or expenditures to achieve the project purpose prior to receiving an Order with the exception of land acquisition costs incurred prior to August 7, 1996. In taking costs into account, the issuing authority shall be guided by these principles:
 - i. The cost of an alternative must be reasonable for the project purpose, and cannot be prohibitive.
 - ii. Higher or lower costs taken alone will not determine whether an alternative is practicable. An alternative for proposed work in the riverfront area must be a practicable and substantially equivalent economic alternative (*i.e.*, will achieve the proposed use and project purpose from an economic perspective).
 - iii. In considering the costs to the owner, the evaluation should focus on the financial capability reasonably expected from the type of owner (*e.g.*, individual homeowner, residential developer, small business owner, large commercial or industrial developer) rather than the personal or corporate financial status of that particular owner. Applicants should not submit, nor should issuing authorities request, financial information of a confidential nature, such as income tax records or bank statements.
 - iv. Issuing authorities may require documentation of costs, but may also base their determinations on descriptions of alternatives, knowledge of alternative sites, information provided by qualified professionals, comparisons to costs normally associated with similar projects, or other evidence. Any documentation of costs should be limited to that required for a determination of whether the costs are reasonable or prohibitive.
 - b. Existing technology, which includes best available measures (*i.e.*, the most up-to-date technology or the best designs, measures, or engineering practices that have been developed and are commercially available);
 - c. The proposed use. This term is related to the concept of project purpose. In the context of typical single family homes, the project purpose (construction of a single family house) and proposed use (family home) are virtually identical. In the context of projects where the purpose implies a business component, such as residential subdivision, commercial, and industrial projects, the proposed use typically requires economic viability. Practicable and substantially equivalent economic alternatives include alternatives which are economically viable for the proposed use from the perspective of site location, project configuration within a site, and the scope of the project. In the context of publically financed projects, the proposed use includes consideration of legitimate governmental purposes (*e.g.*, protection of health and safety, providing economic development opportunities, or similar public purposes.); and
 - d. Logistics. Logistics refers to the presence or absence of physical or legal constraints. Physical characteristics of a site may influence its development. Legal barriers include circumstances where a project cannot meet other applicable requirements to obtain the necessary permits at an alternative site. An alternative site is not practicable if special legislation or changes to municipal zoning would be required to achieve the proposed use or project purpose. An alternative is not practicable if the applicant is unable to obtain the consent of the owner of an alternative site for access for the purpose of obtaining the information required by the Notice of Intent or of allowing the issuing authority to conduct a site visit.
2. Scope of Alternatives. The scope of alternatives under consideration shall be commensurate with the type and size of the project. The issuing authority shall presume that alternatives beyond the scope described below are not practicable and therefore need not be considered. The issuing authority or another party may overcome the presumption by demonstrating the practicability of a wider range of alternatives, based on cost, and whether the cost is reasonable or prohibitive to the owner; existing technology; proposed use; and logistics in light of the overall project purpose.

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a. The area under consideration for practicable alternatives is limited to the lot for activities associated with the construction or expansion of a single family house on a lot recorded on or before August 1, 1996.

b. The area under consideration for practicable alternatives is limited to the lot, the subdivided lots and any adjacent lots formerly or presently owned by the same owner for:

- i. activities associated with the construction or expansion of a single family house on a lot recorded after August 1, 1996;
- ii. any expansion of an existing structure, including enlargement of the footprint of any structure or the addition of associated structures for single family homes (e.g., a garage) on lots recorded after August 1, 1996;
- iii. any activity other than the construction or expansion of a single family house where the applicant owned the lot before August 7, 1996, including the creation of a real estate subdivision but excluding public projects, and the applicant will implement the project purpose;
- iv. new agriculture or aquaculture projects;
- v. any activity by a public entity when funds for the purchase of the site for the project purpose have been appropriated through action of the appropriate municipal board or state agency prior to the August 7, 1996; or
- vi. any lot shown on a definitive subdivision plan approved under M.G.L. c. 41, §§ 81K to 81GG, provided there is a recorded deed restriction limiting the total alteration to 5000 square feet or 10%, whichever is greater, of the riverfront area allocated to the lots within the entire subdivision.

c. Except as allowed under 310 CMR 10.58(4)(c)2.b., the area under consideration for practicable alternatives extends to the original parcel and the subdivided parcels, any adjacent parcels, and any other land which can reasonably be obtained within the municipality for:

- i. activities associated with residential subdivision or housing complexes, institutional, industrial, or commercial projects; or
- ii. activities conducted by municipal government.

For adjacent lots, reasonably be obtained means to purchase at market prices if otherwise practicable, as documented by offers (and any responses). For other land, reasonably be obtained means adequate in size to accommodate the project purpose and listed for sale within appropriately zoned areas, at the time of filing a Request for Determination or Notice of Intent, within the municipality.

d. Alternatives extend to any sites which can reasonably be obtained within the appropriate region of the state for:

- i. residential, institutional, commercial, or industrial activities required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under M.G.L. c. 30, §§ 61 through 62H, or an alternatives analysis conducted by the Corps of Engineers for a Section 404 permit under the federal Clean Water Act, 33 U.S.C. 1251 *et seq.*, and used for 401 Water Quality Certification under 314 CMR 9.00; or
- ii. activities conducted by district, county, state or federal government entities.

The area to be considered is the service area within the governmental unit boundary or jurisdictional authority, or the municipality if there is no defined service area, consistent with the project purpose.

3. Evaluation of Alternatives. The applicant shall demonstrate that there are no practicable and substantially equivalent economic alternatives as defined in 310 CMR 10.58(4)(c)1., within the scope of alternatives as set forth in 310 CMR 10.58(4)(c)2., with less adverse effects on the interests identified in M.G.L. c. 131 § 40. The applicant shall submit information to describe sites and the work both for the proposed location and alternative site locations and configurations sufficient for a determination by the issuing authority under 310 CMR 10.58(4)(d). The level of detail of information shall be commensurate with the scope of the project and the practicability of alternatives. Where an applicant identifies an alternative which can be summarily demonstrated to be not practicable, an evaluation is not required.

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The purpose of evaluating project alternatives is to locate activities so that impacts to the riverfront area are avoided to the extent practicable. Projects within the scope of alternatives must be evaluated to determine whether any are practicable. As much of a project as feasible shall be sited outside the riverfront area. If siting of a project entirely outside the riverfront area is not practicable, the alternatives shall be evaluated to locate the project as far as possible from the river.

The issuing authority shall not require alternatives which result in greater or substantially equivalent adverse impacts. If an alternative would result in no identifiable difference in impact, the issuing authority shall eliminate the alternative. If there would be no less adverse effects on the interests identified in M.G.L. c. 131, § 40, the proposed project rather than a practicable alternative shall be allowed, but the criteria in 310 CMR 10.58(4)(d) for determining no significant adverse impact must still be met. If there is a practicable and substantially equivalent economic alternative with less adverse effects, the proposed work shall be denied and the applicant may either withdraw the Notice of Intent or receive an Order of Conditions for the alternative, provided the applicant submitted sufficient information on the alternative in the Notice of Intent.

(d) No Significant Adverse Impact. The work, including proposed mitigation measures, must have no significant adverse impact on the riverfront area to protect the interests identified in M.G.L. c. 131, § 40.

1. Within 200 foot riverfront areas, the issuing authority may allow the alteration of up to 5000 square feet or 10% of the riverfront area within the lot, whichever is greater, on a lot recorded on or before October 6, 1997 or lots recorded after October 6, 1997 subject to the restrictions of 310 CMR 10.58(4)(c)2.b.vi., or up to 10% of the riverfront area within a lot recorded after October 6, 1997, provided that:

a. At a minimum, a 100 foot wide area of undisturbed vegetation is provided. This area shall extend from mean annual high-water along the river unless another location would better protect the interests identified in M.G.L. c. 131 § 40. If there is not a 100 foot wide area of undisturbed vegetation within the riverfront area, existing vegetative cover shall be preserved or extended to the maximum extent feasible to approximate a 100 foot wide corridor of natural vegetation. Replication and compensatory storage required to meet other resource area performance standards are allowed within this area; structural stormwater management measures may be allowed only when there is no practicable alternative. Temporary impacts where necessary for installation of linear site-related utilities are allowed, provided the area is restored to its natural conditions. Proposed work which does not meet the requirement of 310 CMR 10.58(4)(d)1.a. may be allowed only if an applicant demonstrates by a preponderance of evidence from a competent source that an area of undisturbed vegetation with an overall average width of 100 feet will provide equivalent protection of the riverfront area, or that a partial rebuttal of the presumptions of significance is sufficient to justify a lesser area of undisturbed vegetation;

b. Stormwater is managed according to standards established by the Department.

c. Proposed work does not impair the capacity of the riverfront area to provide important wildlife habitat functions. Work shall not result in an impairment of the capacity to provide vernal pool habitat identified by evidence from a competent source, but not yet certified. For work within an undeveloped riverfront area which exceeds 5,000 square feet, the issuing authority may require a wildlife habitat evaluation study under 310 CMR 10.60.

d. Proposed work shall not impair groundwater or surface water quality by incorporating erosion and sedimentation controls and other measures to attenuate nonpoint source pollution.

The calculation of square footage of alteration shall exclude areas of replication or compensatory flood storage required to meet performance standards for other resource areas, or any area of restoration within the riverfront area. The calculation also shall exclude areas used for structural stormwater management measures, provided there is no practicable alternative to siting these structures within the riverfront area and provided a wildlife corridor is maintained (e.g. detention basins shall not be fenced).

2. Within 25 foot riverfront areas, any proposed work shall cause no significant adverse impact by:

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- a. Limiting alteration to the maximum extent feasible, and at a minimum, preserving or establishing a corridor of undisturbed vegetation of a maximum feasible width. Replication and compensatory storage required to meet other resource area performance standards are allowed within this area; structural stormwater management measures shall be allowed only when there is no practicable alternative;
 - b. Providing stormwater management according to standards established by the Department;
 - c. Preserving the capacity of the riverfront area to provide important wildlife habitat functions. Work shall not result in an impairment of the capacity to provide vernal pool habitat when identified by evidence from a competent source but not yet certified; and
 - d. Proposed work shall not impair groundwater or surface water quality by incorporating erosion and sedimentation controls and other measures to attenuate nonpoint source pollution.
3. Notwithstanding the provisions of 310 CMR 10.58(4)(d)1. or 2., the issuing authority shall allow the construction of a single family house, a septic system if no sewer is available, and a driveway, on a lot recorded before August 7, 1996 where the size or shape of the lot within the riverfront area prevents the construction from meeting the requirements of 310 CMR 10.58(4)(d)1. or 2., provided that:
- a. The lot can be developed for such purposes under the applicable provisions of other municipal and state law; and
 - b. The performance standards of 310 CMR 10.58(4)(d) are met to the maximum extent feasible. In difficult siting situations, the maximum extent of yards around houses should be limited to the area necessary for construction. Except where the lot contains vernal pool habitat or specified habitat sites of rare species, a wildlife habitat evaluation study shall not be required.
4. Notwithstanding the provisions of 310 CMR 10.58(4)(d)1. or 2., the issuing authority may allow the construction of a commercial structure of minimum feasible dimension, on a lot recorded before August 7, 1996 where the size or shape of the lot within the riverfront area prevents the construction from meeting the requirements of 310 CMR 10.58(4)(d)1. or 2., only if:
- a. The lot can be developed for such purposes and cannot be developed for any other purposes under the applicable provisions of other municipal and state law;
 - b. The work is not eligible for 310 CMR 10.58(5); and
 - c. The performance standards of 310 CMR 10.58(4)(d)1. or 2. are met to the maximum extent feasible.

(5) Redevelopment Within Previously Developed Riverfront Areas; Restoration and Mitigation.

Notwithstanding the provisions of 310 CMR 10.58(4)(c) and (d), the issuing authority may allow work to redevelop a previously developed riverfront area, provided the proposed work improves existing conditions. Redevelopment means replacement, rehabilitation or expansion of existing structures, improvement of existing roads, or reuse of degraded or previously developed areas. A previously developed riverfront area contains areas degraded prior to August 7, 1996 by impervious surfaces from existing structures or pavement, absence of topsoil, junkyards, or abandoned dumping grounds. Work to redevelop previously developed riverfront areas shall conform to the following criteria:

- (a) At a minimum, proposed work shall result in an improvement over existing conditions of the capacity of the riverfront area to protect the interests identified in M.G.L. c. 131 § 40. When a lot is previously developed but no portion of the riverfront area is degraded, the requirements of 310 CMR 10.58(4) shall be met.
- (b) Stormwater management is provided according to standards established by the Department.
- (c) Within 200 foot riverfront areas, proposed work shall not be located closer to the river than existing conditions or 100 feet, whichever is less, or not closer than existing conditions within 25 foot riverfront areas, except in accordance with 310 CMR 10.58(5)(f) or (g).
- (d) Proposed work, including expansion of existing structures, shall be located outside the riverfront area or toward the riverfront area boundary and away from the river, except in accordance with 310 CMR 10.58(5)(f) or (g).
- (e) The area of proposed work shall not exceed the amount of degraded area, provided that the proposed work may alter up to 10% if the degraded area is less than 10% of the riverfront area, except in accordance with 310 CMR 10.58(5)(f) or (g).

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(f) When an applicant proposes restoration on-site of degraded riverfront area, alteration may be allowed notwithstanding the criteria of 310 CMR 10.58(5)(c), (d), and (e) at a ratio in square feet of at least 1:1 of restored area to area of alteration not conforming to the criteria. Areas immediately along the river shall be selected for restoration. Alteration not conforming to the criteria shall begin at the riverfront area boundary. Restoration shall include:

1. removal of all debris, but retaining any trees or other mature vegetation;
2. grading to a topography which reduces runoff and increases infiltration;
3. coverage by topsoil at a depth consistent with natural conditions at the site; and
4. seeding and planting with an erosion control seed mixture, followed by plantings of herbaceous and woody species appropriate to the site;

(g) When an applicant proposes mitigation either on-site or in the riverfront area within the same general area of the river basin, alteration may be allowed notwithstanding the criteria of 310 CMR 10.58(5)(c), (d), or (e) at a ratio in square feet of at least 2:1 of mitigation area to area of alteration not conforming to the criteria or an equivalent level of environmental protection where square footage is not a relevant measure. Alteration not conforming to the criteria shall begin at the riverfront area boundary. Mitigation may include off-site restoration of riverfront areas, conservation restrictions under M.G.L. c. 184, §§ 31 to 33 to preserve undisturbed riverfront areas that could be otherwise altered under 310 CMR 10.00, the purchase of development rights within the riverfront area, the restoration of bordering vegetated wetland, projects to remedy an existing adverse impact on the interests identified in M.G.L. c. 131, § 40 for which the applicant is not legally responsible, or similar activities undertaken voluntarily by the applicant which will support a determination by the issuing authority of no significant adverse impact. Preference shall be given to potential mitigation projects, if any, identified in a River Basin Plan approved by the Secretary of the Executive Office of Environmental Affairs.

(h) The issuing authority shall include a continuing condition in the Certificate of Compliance for projects under 310 CMR 10.58(5)(f) or (g) prohibiting further alteration within the restoration or mitigation area, except as may be required to maintain the area in its restored or mitigated condition. Prior to requesting the issuance of the Certificate of Compliance, the applicant shall demonstrate the restoration or mitigation has been successfully completed for at least two growing seasons.

(6) Notwithstanding the provisions of 310 CMR 10.58(1) through (5), certain activities or areas are grandfathered or exempted from requirements for the riverfront area:

(a) Any excavation, structure, road, clearing, driveway, landscaping, utility line, rail line, airport owned by a political subdivision, marine cargo terminal owned by a political subdivision, bridge over two miles long, septic system, or parking lot within the riverfront area in existence on August 7, 1996. Maintenance of such structures or areas is allowed (including any activity which maintains a structure, roads (limited to repairs, resurfacing, repaving, but not enlargement), clearing, landscaping, etc. in its existing condition) without the filing of a Notice of Intent for work within the riverfront area, but not when such work is within other resource areas or their buffer zones except as provided in 310 CMR 10.58(6)(b). Changes in existing conditions which will remove, fill, dredge or alter the riverfront area are subject to 310 CMR 10.58, except that the replacement within the same footprint of structures destroyed by fire or other casualty is not subject to 310 CMR 10.58.

(b) Certain minor activities, provided the activity is not within any other resource area:

1. Unpaved pedestrian walkways for private use;
2. Fencing, provided it will not constitute a barrier to wildlife movement; stonewalls; stacks of cordwood;
3. Vista pruning, provided the activity is located more than 50 feet from the mean annual high water line within a riverfront area or from bordering vegetated wetland, whichever is farther. (Pruning of landscaped areas is not subject to jurisdiction under 310 CMR 10.00.);
4. Plantings of native species of trees, shrubs, or groundcover, but excluding turf lawns;

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5. The conversion of lawn to uses accessory to existing single family houses in existence on August 7, 1996, such as decks, sheds, patios, and pools, provided the activity is located more than 50 feet from the mean annual high-water line within the riverfront area or from bordering vegetated wetland, whichever is farther, and erosion and sedimentation controls are implemented during construction. The conversion of such uses accessory to existing single family houses to lawn is also allowed. (Mowing of lawns is not subject to jurisdiction under 310 CMR 10.00);
6. The conversion of impervious to vegetated surfaces, provided erosion and sedimentation controls are implemented during construction; and
7. Activities that are temporary in nature, have negligible impacts, and are necessary for planning and design purposes (*e.g.*, installation of monitoring wells, exploratory borings, sediment sampling and surveying).

Activities not meeting the requirements of 310 CMR 10.58(6)(b) may be allowed through a Determination of Applicability or a Notice of Intent. If resource area boundaries are uncertain, a Request for Determination of Applicability or Notice of Intent should be filed.

- (c) On-site sewage disposal systems in existence on August 7, 1996 and the repair or upgrade of existing systems in compliance with 310 CMR 15.000. New construction of a system under 310 CMR 15.000 must comply with 310 CMR 10.58, subject to the presumption for the siting of systems in 310 CMR 10.03.
- (d) The expansion of structures, airports, and marine cargo terminals, provided they are owned by a political subdivision and the expansion activity was physically begun on or before November 1, 1996.
- (e) Projects for which a draft environmental impact report was prepared and submitted pursuant to M.G.L. c. 30, § 62B, on or before November 1, 1996, or as extended by the Department for just cause but no later than December 31, 1996.
- (f) Projects for which a building permit conforming to local requirements was filed on or before October 1, 1996 and granted on or before April 1, 1997, or as extended by the conservation commission for just cause by no more than 60 days.
- (g) The road and infrastructure shown on a definitive subdivision plan approved or endorsed under M.G.L. c. 41, § 81U, on or before August 1, 1996. Activities on the subdivided lots are subject to 310 CMR 10.58 unless they received a building permit under 310 CMR 10.58(6)(f).
- (h) Construction, expansion, repair, restoration, alteration, replacement, operation and maintenance of public or private local or regional wastewater treatment plants and their related structures, conveyance systems, and facilities, including utility lines.
- (i) Structures and activities subject to a M.G.L. c. 91 waterways license or permit, or authorized prior to 1973 by a special act, are exempt, provided the structure or activity is subject to jurisdiction and obtains a license, permit, or authorization under 310 CMR 9.00.
- (j) Activities within riverfront areas subject to a protective order under M.G.L. c. 21, § 17B, the Scenic Rivers Act.
- (k) Activities on land occupied by historic mill complexes.

10.59: Estimated Habitats of Rare Wildlife (for inland wetlands)

If a project is within estimated habitat which is indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetlands Wildlife (if any) published by the Natural Heritage and Endangered Species Program (hereinafter referred to as the Program), a fully completed copy of the Notice of Intent (including all plans, reports, and other materials required under 310 CMR 10.05(4)(a) & (b)) for such project shall be sent to the Program via the U.S. Postal Service by express or priority mail (or otherwise sent in a manner that guarantees delivery within two days). Such copy shall be sent no later than the date of the filing of the Notice of Intent with the issuing authority. Proof of timely mailing or other delivery to the Program of the copy of such Notice of Intent shall be included in the Notice of Intent which is submitted to the issuing authority and sent to the Department's regional office.

Estimated Habitat Maps shall be based on the estimated geographical extent of the habitats of all state-listed vertebrate and invertebrate animal species for which a reported occurrence within the last 25 years has been accepted by the Program and incorporated into its official data base.

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Within 30 days of the filing of such a Notice of Intent with the issuing authority the Program shall determine whether any state-listed species identified on the aforementioned map are likely to continue to be located on or near the site of the original occurrence and, if so, whether the area to be altered by the proposed project is in fact part of such species' habitat. Such determination shall be presumed by the issuing authority to be correct. Any proposed project which would alter a resource area that is not located on the most recent Estimated Habitat Map (if any) provided to the conservation commission, shall be presumed not to be within a rare species' habitat. Both of these presumptions are rebuttable and may be overcome upon a clear showing to the contrary. If the issuing authority fails to receive a response from the Program within 30 days of the filing of such a Notice of Intent, a copy of which was received by the Program in a timely manner, it shall issue its Order of Conditions based on available information; however, the fact that a proposed project would alter a resource area that is located on an Estimated Habitat Map shall not be considered sufficient evidence in itself that such project is in fact within the habitat of a rare species.

If the Program determines that a resource area which would be altered by a proposed project is in fact within the habitat of a state-listed species, it shall provide in writing to the applicant and to the Conservation Commission and the Department, the identification of the species whose habitat would be altered by the proposed project, and all other relevant information which the Program has regarding the species' location and habitat requirements, insofar as such information may assist the applicant and the issuing authority to determine whether the project is or can be designed so as to meet the performance standard set in 310 CMR 10.59.

Notwithstanding 310 CMR 10.53 through 10.58 and 310 CMR 10.60, if a proposed project is found by the issuing authority to alter a resource area which is part of the habitat of a state-listed species, such project shall not be permitted to have any short or long term adverse effects on the habitat of the local population of that species. A determination of whether or not a proposed project will have such an adverse effect shall be made by the issuing authority. However, a written opinion of the Program on whether or not a proposed project will have such an adverse effect shall be presumed by the issuing authority to be correct. This presumption is rebuttable and may be overcome upon a clear showing to the contrary.

The conservation commission shall not issue an Order of Conditions under 310 CMR 10.05(6) regarding any such project for at least 30 days after the filing of the Notice of Intent unless the Program before such time period has elapsed has either determined that the resource area(s) which would be altered by the project is not in fact within the habitat of a state-listed species or, if it has determined that such resource area(s) is in fact within rare species habitat, rendered a written opinion as to whether the project will have an adverse effect on that habitat.

Notwithstanding any other provision of 310 CMR 10.58, should an Environmental Impact Report be required for a proposed project under the M.G.L. c. 30, §§ 6 through 62H, as determined by 301 CMR 11.00 the performance standard established under 310 CMR 10.58 shall only apply to proposed projects which would alter the habitat of a rare species for which an occurrence has been entered into the official data base of the Massachusetts Natural Heritage and Endangered Species Program prior to the time that the Secretary of the Executive Office of Environmental Affairs has determined, in accordance with the provisions of 301 CMR 11.09(4), that a final Environmental Impact Report for that project adequately and properly complies with the M.G.L. c. 30, §§ 6 through 62H (unless, subsequent to that determination, the Secretary requires supplemental information concerning state-listed species, in accordance with the provisions of 301 CMR 11.17).

10.60: Wildlife Habitat Evaluations(1) Measuring Adverse Effects on Wildlife Habitat

(a) To the extent that a proposed project on inland Banks, Land Under Water, Riverfront Area, or Land Subject to Flooding will alter vernal pool habitat or will alter other wildlife habitat beyond the thresholds permitted under 310 CMR 10.54(4)(a)5., 10.56(4)(a)4., 10.57(4)(a)3. and 10.58(4)(d)1., such alterations may be permitted only if they will have no adverse effects on wildlife habitat. Adverse effects on wildlife habitat mean the alteration of any habitat characteristic listed in 310 CMR 10.60(2), insofar as such alteration will, following two growing seasons of project completion and thereafter (or, if a project would eliminate trees, upon the maturity of replanted saplings) substantially reduce its capacity to provide the important wildlife habitat functions listed in 310 CMR 10.60(2). Such performance standard, however, shall not apply to the habitat of rare species, which are covered by the performance standards established under 310 CMR 10.59.

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(b) An evaluation by the applicant of whether a proposed project will have an adverse effect on wildlife habitat beyond permissible thresholds shall be performed by an individual with at least a masters degree in wildlife biology or ecological science from an accredited college or university, or other competent professional with at least two years experience in wildlife habitat evaluation.

(c) Any wildlife habitat management practices conducted by the Division of Fisheries and Wildlife, and any wildlife management practices of any individual or organization if reviewed and approved in writing by said Division, shall be presumed to have no adverse effect on wildlife habitat. Such presumption is rebuttable, and may be overcome by a clear showing to the contrary.

(2) Wildlife Habitat Characteristics of Inland Resource Areas:

(a) Banks. The topography, soil structure, and plant community composition and structure of banks can provide the following important wildlife habitat functions:

1. Food, shelter and migratory and breeding areas for wildlife
2. Overwintering areas for mammals and reptiles.

(b) Land Under Water Bodies or Waterways. The plant community and soil composition and structure, hydrologic regime, topography and water quality of land under water bodies or waterways can provide the following important wildlife habitat functions:

1. Food, shelter and breeding areas for wildlife;
2. Overwintering areas for mammals, reptiles and amphibians.

(c) Vernal Pool Habitat. The topography, soil structure, plant community composition and structure, and hydrologic regime of vernal pool habitat can provide the following important wildlife habitat functions:

1. Food, shelter, migratory and breeding areas, and overwintering areas for amphibians;
2. Food for other wildlife.

(d) Lower Floodplains. The hydrologic regime, plant community and soil composition and structure, topography, and proximity to water bodies and waterways of lower floodplains can provide the following important wildlife habitat functions:

1. Food, shelter, migratory and overwintering areas for wildlife;
2. Breeding areas for birds, mammals and reptiles.

(e) Riverfront Area. The topography, soil structure, plant community composition and structure, and hydrologic regime can provide the following important wildlife habitat functions:

1. Food, shelter, overwintering and breeding areas for wildlife, including turtle nesting areas, nesting sites for birds which typically reuse specific nesting sites, cavity trees, and isolated depressions that function as vernal pools.
2. Migratory areas along the riparian corridor including the movement of wildlife unimpeded by barriers within the riverfront area.

(3) Restoration and Replication of Altered Habitat. Alterations of wildlife habitat characteristics beyond permissible thresholds may be restored onsite or replicated offsite in accordance with the following general conditions, and any additional conditions the issuing authority deems necessary to insure that the standard in 310 CMR 10.60(1)(a) is satisfied:

- (a) the surface of the replacement area to be created ("the replacement area") shall be equal to that of the area that will be lost ("the lost area");
- (b) the elevation of groundwater relative to the surface of the replacement area shall be approximately equal to that of the lost area;
- (c) the replacement area shall be located within the same general area as the lost area. In the case of banks and land under water, the replacement area shall be located on the same water body or waterway if the latter has not been rechanneled or otherwise relocated. In the case of bordering land subject to flooding, the replacement area shall be located approximately the same distance from the water body or waterway as the lost area. In the case of vernal pool habitat, the replacement area shall be located in close proximity to the lost area;
- (d) interspersed and diversity of vegetation, water and other wildlife habitat characteristics of the replacement area, as well as its location relative to neighboring wildlife habitats, shall be similar to that of the lost areas, insofar as necessary to maintain the wildlife habitat functions of the lost area;

10.60: continued

- (e) the project shall not alter ten or more acres of Land Subject to Flooding or Land Under Water found to be significant to the protection of wildlife habitat, or 2,000 feet or more of Bank found to be significant to the protection of wildlife habitat (in the case of a bank of a stream or river, this shall be measured on each side of said stream or river).
- (f) if the replacement area is located in an area subject to M.G.L. c. 131, § 40, there shall be no adverse effect on the existing important wildlife habitat functions of said area as measured by the standards of 310 CMR 10.60;
- (g) the "thresholds" established in 310 CMR 10.54(4)(a)5., 10.56(4)(a)4., 10.57(4)(a)3. and 10.58(4)(d)1.c. (below which alterations of resource areas are not deemed to impair capacity to provide important wildlife habitat functions) shall not apply to any replacement area; and
- (h) the replacement area shall be provided in a manner which is consistent with all other General Performance Standards for each resource area in 310 CMR 10.51 through 10.60.

REGULATORY AUTHORITY

310 CMR 10.00: M.G.L. c. 131, § 40.

(PAGES 407 THROUGH 440 ARE RESERVED FOR FUTURE USE.)

Appendix

* The following are appendices to, but not a part of 310 CMR 10.00

PREFACE TO WETLANDS REGULATIONS RELATIVE TO MEAN ANNUAL HIGH WATER, 2000 REGULATORY REVISIONS

Introduction

The Department of Environmental Protection promulgated regulations on October 6, 1997 to implement the Rivers Protection Act amendments to the Wetlands Protection Act. Since then, the Department has gained considerable field experience and now recognizes that one aspect of these regulations, determining the “Mean Annual High-Water (MAHW) Line,” can be difficult and confusing in the field. Locating the MAHW line is important because it establishes the lower boundary of the Riverfront Resource Area.

The Rulemaking Process

The Department established a technical advisory committee drawn from the environmental and development communities, plus federal, state, and municipal staff members, to develop improvements to the existing MAHW regulation. The technical advisory committee met throughout the fall of 1999 and spring of 2000 to review scientific literature, analyze potential methods for locating MAHW, draft a proposed regulation that was consistent with the legislative definition, and field-test the proposed definition. The technical advisory committee unanimously agreed upon the approach embodied in the new MAHW regulation, and the Department thanks each member of the committee for contributing so many hours in such a professional and dedicated manner.

The Department held five public hearings throughout the Commonwealth on the draft regulation, and received public comment through February 22, 2000. The new regulation is effective as of May 12, 2000.

Summary and Rationale of the Mean Annual High-Water Regulations

The Legislature defined MAHW in the Rivers Protection Act as, “...the line that is apparent from visible markings or changes in the character of soils or vegetation due to the prolonged presence of water and that distinguishes between predominantly aquatic and predominantly terrestrial land.”

The technical advisory committee and the Department first agreed that the legislative definition focuses on field indicators as the primary tool for locating the MAHW line. It requires us to find, “...a line that is apparent from visible markings or changes in the character of soils or vegetation...” (emphasis added). Upon review of the scientific literature, the technical advisory committee unanimously concluded that the concept of “bankfull discharge,” as evidenced by “bankfull field indicators,” most closely matched the legislative definition. In addition, our collective experience has shown that boundaries based upon readily-observable field indicators are easier to implement for conservation commissions and other parties than a methodology that relies on complicated statistical computations.

“Bankfull discharge” corresponds to the elevation, or stage of the river, that actively creates, modifies, and maintains the river’s channel. In the context of these regulations, the river’s channel can be described broadly as the cross-sectional area that carries the river’s annual high water flows, which typically occur in early spring. During bankfull discharge, the water is moving sediment, forming or removing bars, forming or changing bends and meanders, and generally doing work that results in morphologic change to the river system. These morphologic changes to the river system can be observed in the field. Bankfull field indicators include changes in vegetation (usually changes in vegetational community), stain lines, top of point bars (depositional features), changes in slope, changes in bank material, and bank undercuts. The Department is releasing guidance materials concurrently with the new regulation to assist conservation commissions and other parties in identifying these features in the field.

Appendix: continued

The new regulation makes it clear that in most rivers, the first observable break in slope will continue to indicate the MAHW line. However, in some river reaches, characterized by features such as a low gradient, meanders, oxbows, histosols, a lowflow channel, or poorly-defined or nonexistent banks, the MAHW line will be evidenced by some combination of the bankfull field indicators listed above. It is important to understand that no one bankfull field indicator should be taken alone; multiple corroborating features should be sought. Bankfull field indicators may be quite subtle in a meandering river with a broad floodplain, or in a wetland stream, so multiple observations along both sides of the river, combined with field indicators located up and down the river reach, may be necessary.

For tidal rivers, the Legislature has defined MAHW to be the mean high tide line. The MAHW regulations reference the existing description of the mean high tide line found in the coastal section of the Wetlands Protection Act Regulations at 310 CMR 10.23.

Appendix: continued

PREFACE: 1997 REGULATORY REVISIONS FOR THE RIVERS
PROTECTION ACT AMENDMENTS TO THE WETLANDS PROTECTION ACT

I. Introduction

The Rivers Protection Act (St. 1996, c. 258), signed into law August 7, 1996 and effective immediately, added a new resource area and accompanying performance standards to the Wetlands Protection Act. The resource area is called the "riverfront area" and extends 200 feet (25 feet in municipalities with large populations and in densely developed areas) on each side of perennial rivers and streams throughout the Commonwealth. Although Massachusetts has almost 9000 miles of rivers, the riverfront area is less than one percent of the state's total acreage. The purpose of the Rivers Protection Act is to preserve the natural integrity of rivers and adjacent land for the important values these areas provide to all citizens of the Commonwealth.

Unlike earlier versions of the "Rivers Bill," the Rivers Protection Act as enacted does not prohibit activities near rivers. Applicants proposing work in the riverfront area must obtain a permit, called an Order of Conditions, from the local conservation commission or from the Department of Environmental Protection on appeal. Applicants must demonstrate that projects meet two performance standards prescribed in the statute: that there are no significant adverse impacts on the riverfront area to protect public and private water supplies, wildlife habitat, fisheries, shellfish, groundwater, and to prevent flooding, storm damage and pollution and there are no practicable and substantially equivalent economic alternatives to the proposed work with less adverse effects on these public interests.

II. Regulatory Development Process

The Department established a Riverfront Advisory Committee to participate in the development of its regulations. As required by the Rivers Protection Act, the eight member committee included four representatives of environmental organizations, a developer, and a representative for real estate, agriculture and aquaculture interests. Three committee members owned land within the riverfront area. The committee met biweekly from January through April, 1997.

The Riverfront Advisory Committee provided valuable perspectives on the issues raised by the statute and on the Department's interim policy issued in November 1996 to provide guidance to commissions and applicants between enactment of the statute and promulgation of regulations. The Department also had the benefit of comments from other knowledgeable individuals from the development, environmental, and legal communities. The Department held seven public hearings in May 1997 and received over 1,200 pages of comments from citizens, environmental organizations and development interests.

The regulations were promulgated on July 25, 1997, with an effective date of October 6, 1997. Because they provide a greater level of detail than the Department's interim policy, the regulations may be helpful in decision making for cases arising between August 7, 1996 and October 6, 1997. As of October 6, 1997, the revised 310 CMR 10.00 must be used to implement the Rivers Protection Act.

III. Summary and Rationale of the Regulations

The regulations reflect the Department's responsibility to honor the legislative mandate to protect riverfront areas for their important public values. The two performance standards and the definition of "river," which together provide this protection, are set forth in the statute. Wherever possible, the Department emphasized ease of implementation to avoid unnecessary delays for applicants and to reduce the administrative burden on conservation commissions. The Department received comments expressing many conflicting views of the legislative intent behind the Rivers Protection Act. The regulations are designed to implement the statute by providing clear procedures and substantive criteria to guide applicants, conservation commissions, and Department staff from project design through the decisionmaking process. The new provisions governing riverfront areas are located at 310 CMR 10.58; the variance provisions formerly at 310 CMR 10.58 and 10.36 have been moved to 310 CMR 10.05 (10).

Preface: continued

Definition of River. The Department's regulations reflect the broad definition of "river" presented in the statute. Although many people think of rivers as relatively large bodies of water as opposed to smaller streams, the statutory language clearly encompasses all perennially flowing waters. The physical distinction between intermittent and perennial streams is critical because it determines whether or not an area is subject to jurisdiction. The Department decided to use United States Geological Survey (U.S.G.S.) or other more recent maps provided by the Department as presumptively showing perennial streams for three reasons. First, maps offer a relatively accurate and convenient tool for applicants, commissions, and interested citizens. Second, maps provide evidence that is gathered and cross-checked over time, as opposed to one-time observations that can easily be influenced by recent weather conditions. Third, the use of maps will save most applicants time and money that would otherwise be spent conducting case-by-case field investigations.

The regulations, however, allow applicants or others to present evidence that the mapped information is inaccurate. Commissions should still perform site visits and verify the location and status of rivers and streams at project locations. In response to concerns about the burden on commissions to rebut the presumption, the regulations specify that conservation commissioners, commission staff, and Department staff are competent sources of such evidence.

Definition of Mean Annual High Water. Mean annual high-water line is defined in the statute as the line apparent from visible markings and changes in soils and vegetation from the prolonged presence of water and which distinguishes between predominantly aquatic and terrestrial land. Although the boundary of bordering vegetated wetland is also determined by changes in soils and vegetation, the mean annual high-water line is determined by characteristic features indicative of fluvial processes.

The Department determined that in the vast majority of cases, the mean annual high-water line specified as the boundary of the riverfront area is coterminous with the upper boundary of the bank. The top of bank is currently used to determine wetlands boundaries, and is relatively easy to identify without expensive engineering calculations and without engendering disputes. Using an existing wetlands boundary will benefit commissions and applicants because they are already experienced in its identification and will avoid the potential for confusion in using another distinct boundary. Some commenters expressed concern about using the upper boundary of banks to determine jurisdiction for low gradient rivers with wide areas of submergent or emergent vegetation. The regulations clarify that the bank will be located on the landward edge of such vegetation, and that U.S.G.S. stream gauge data may be used to identify the annual flood level as an alternative to the first observable break in slope.

Practicable Alternatives. The Rivers Protection Act requires applicants to demonstrate that there is no practicable and substantially equivalent economic alternative to the proposed project with less adverse impact on the protected interests. A "practicable and substantially equivalent economic alternative" is defined in the statute as an available and feasible alternative which will accomplish the project's purpose, taking into account costs, logistics, the proposed use, and technology. The Rivers Protection Act also specifies the scope of alternatives to be evaluated. For activities associated with a single family house on a lot recorded prior to August 7, 1996, the alternatives considered must be limited to the lot. For any other activity, including the creation of a real estate subdivision, the area under consideration must extend to the subdivided lots, any parcel out of which the lots were created, any adjacent parcels, and any other land which can reasonably be obtained.

The evaluation of alternatives to determine whether they are practicable is called an "alternatives analysis." The text of the Rivers Protection Act requiring evaluation of alternatives is quite similar to the practicable alternatives analysis used for many years by the U.S. Army Corps of Engineers for permits involving work in wetlands and waterbodies under Section 404 of the federal Clean Water Act. The Department reviewed federal regulations and case law to interpret this performance standard, allowing for the differences between the text of the Rivers Protection Act and the federal guidelines. Although the word "avoid" is not used in either the federal or state text, the effect of the practicable alternatives analysis and the purpose of evaluating alternatives is to determine whether impacts to resource areas can be avoided.

The Department's regulations address two concerns about the practicable alternatives performance standard. First, the definition of "practicable" in the Rivers Protection Act explicitly requires issuing authorities to consider the costs of alternatives. The regulations provide guidance on how costs should be taken into account in the decisionmaking process. While issuing authorities may require the submission of financial data to assess costs, the consideration of costs of alternatives should be limited to a determination of whether costs are reasonable or prohibitive within the context of the project purpose.

Preface: continued

Second, the regulations limit the scope of the alternatives analysis so that applicants will not be required to evaluate an unduly broad range of project locations. The number of cases which will require off-site alternatives analysis will be limited to larger projects and certain public projects. Alternatives for many projects, including expansions, extend only to adjacent lots. In response to concerns about conservation commission evaluation of alternatives in other municipalities, the final regulations generally limit the scope of alternatives to within municipal boundaries except when a broader analysis is otherwise being conducted for an Environmental Impact Report or 404/401 permit.

No Significant Adverse Impact. The Rivers Protection Act requires an applicant to demonstrate that any work, including proposed mitigation measures, will have no significant adverse impact on the riverfront area to protect public and private water supplies, groundwater, wildlife habitat, fisheries, shellfish, and to prevent flooding, storm damage and pollution. In its regulations, the Department has chosen to identify criteria to implement this standard, avoiding the unpredictability and inconsistency of case-by-case review of projects without any guidelines.

The criteria include a limitation on alteration, a 100 foot vegetated corridor, stormwater management, and provisions to protect wildlife habitat. The Department also established separate criteria specifically for 25 foot riverfront areas. These criteria were selected to promote the benefits of protecting the riverfront area, while ensuring flexibility for many projects. While the criteria will restrict activities within riverfront areas, there is no "prohibition" on development within the riverfront area. Issuing authorities must allow the use of lots recorded before August 7, 1996 for single family house projects. Full compliance with the criteria may also be relaxed to accommodate a variety of circumstances, including limited projects, redevelopment projects, and septic systems or stormwater management facilities when alternative locations are not available.

The criterion of a 100 foot corridor of undisturbed vegetation is based on the scientific literature which recognizes the importance of naturally vegetated riparian areas for the reduction of nonpoint source pollution and protection of wildlife habitat. Limitations on alterations within the entirety of the riverfront area are justified by the need to protect all eight interests of the Act. The limitation of 5000 square feet or 10%, whichever is greater, applies to lots existing on the effective date of the regulations and to entire subdivisions. The limitation of 10% for new lots removes the incentive to create small lots in order to maximize the potential for alteration of riverfront areas.

Many commenters requested enhanced protection of wildlife habitat. Work may not impair the capacity of the riverfront to provide wildlife and vernal pool habitat. A wildlife habitat evaluation may be required for larger projects, and the regulations identify features of important riverfront wildlife habitat. Certified vernal pools are protected at the same standard as rare species habitat, but vernal pools which are not yet certified are also protected.

Restoration and Other Mitigation. Redevelopment of previously developed riverfront areas brings opportunities for restoration and other forms of mitigation. Rather than simply to stem the tide of further deterioration of water quality, the regulations provide an opportunity to improve our rivers by allowing issuing authorities to require on-site restoration of riverfront areas in exchange for approving additional development farther away from the river. Mitigation, such as preservation of riverfront land or improving an existing adverse impact on-site or within the watershed, also may be approved in exchange for additional development. The regulations include ratios limiting the amount of additional development that an issuing authority can permit to ensure that there will be no significant adverse impact from these projects. Based on comments received on the proposed regulations, the final regulations allow a broader range of redevelopment projects to qualify for the restoration and mitigation option, and also clarify the standards required of these projects. Restoration and other mitigation opportunities offer applicants greater flexibility without compromising environmental protection.

Limited Projects. Limited projects are categories of activities within the existing wetlands regulations which can proceed at the discretion of the issuing authority without fully meeting the resource area performance standards. Many limited projects are activities which are important to public health, safety, and the environment, such as landfill closures. The Department has interpreted the Rivers Protection Act as allowing issuing authorities the discretion to permit limited projects within the riverfront area.

Preface: continued

The Department addressed limited projects in several ways. To reduce discrepancies in the use of limited projects, the text has been revised to guide the exercise of discretion for projects in any resource area. The basic concepts of avoiding, minimizing, and mitigating impacts will provide better protection of all resource areas. The new regulations also codify a long-standing policy interpreting the limited project provision for road or driveway access to uplands. These revisions will promote efficiency in the administrative process and more predictable decisionmaking, benefiting applicants as well as government. Finally, the regulations allow footpaths and bikepaths as limited projects if they are designed to be compatible with projected uses and the character of the particular riverfront area. Public access and other water-based recreational facilities within the riverfront area may be allowed under the existing limited project for construction and maintenance of water-dependent uses.

Alterations for Minor Activities without Review. The existing wetlands regulations require applicants to file a Notice of Intent for any alteration of a resource area and to obtain an Order of Conditions for any work unless the issuing authority determines that the area of the proposed work is not significant to any interest identified in the statute. While the riverfront area is a resource area under the statute, truly minor alterations will not jeopardize these interests. The Department has determined that for these activities there will be no significant adverse impact on the riverfront area and that there are no alternatives with less adverse effect on the interests identified in the statute. The exclusion of minor activities from review under the requirements for the riverfront area, and also an exclusion from review for work in the buffer zone to other resource areas, will minimize the administrative burden on issuing authorities by reducing the number of projects subject to full application requirements and will relieve some potential applicants of permitting responsibilities. While some conservation commissions urged the Department to require review of these activities or to adopt a notification procedure, the Department concluded that the administrative burden of additional procedural requirements is not justified. However, the categories of minor alterations have been carefully circumscribed to avoid the potential for impacts to resource areas.

Building on Subdivision Lots. Based on the language of the statute, the Department extended the grandfathered status for definitive plans to the road and infrastructure, the subject of the Planning Board review, but not to future activities on the lots. The Department has ensured that these lots can be developed for single family houses, provided other legal requirements are met; the issue for review is the placement of structures within the lot. The regulations also ensure that single family houses can be built on lots recorded before the passage of the statute, and limit the scope of alternatives that must be considered for new single family lots. For subdivisions receiving approvals after August 7, 1996, the regulations require a more limited scope of alternatives analysis if the land was owned by the developer when the statute was passed.

Procedures for Applicants. The regulations allow applicants to follow the same procedures currently used under the wetlands regulations. Requests for Determinations of Applicability may be made for the riverfront area, a Notice of Intent must be filed for most proposed activities, and an Order of Conditions will describe the requirements for work. A Request for Determination also may be filed to obtain in advance an identification of the scope of alternatives to evaluate for proposed work in the riverfront area. The existing provisions in the regulations for appeals, emergencies, enforcement, and variances apply to the riverfront area. Continuation of these familiar procedures will benefit both applicants and conservation commissions.

The Department is also revising its application forms to improve their usefulness, and removing the forms from the regulations to allow for periodic revisions. The Department will continue to provide forms required for use by applicants. In addition, a new and optional procedure for applicants to obtain a confirmation of a bordering vegetated wetlands delineation has been created, with a fee to support the review responsibilities incurred by issuing authorities.

Fees. The Rivers Protection Act required the Department to establish fees for work within the riverfront area. Although applicants are reluctant to incur application expenses associated with their projects, the availability of fees enhances the capacity of conservation commissions to support professional staff, hire consultants, or engage other assistance which can benefit applicants by reducing the potential for delays in the permitting process. The Department set fees commensurate with the increased workload for projects within the riverfront area, while recognizing some efficiency when work is already proposed for another resource area. To assist commissions with the review of difficult projects, applicants also may finance the services of a mutually agreed upon consultant.

Preface: continued

Appeals. The Department recently eliminated a backlog of wetlands adjudicatory hearing appeals by adopting streamlined rules for administrative hearings, encouraging mediation, and emphasizing pre-trial settlement discussions. In response to concern that a new appeals backlog might arise from the caseload under the Rivers Protection Act, the Department has incorporated several innovations to reduce the number of appeals without jeopardizing due process or environmental protection. Examples include the new guidance on the exercise of discretion for limited projects, the exemption of some minor activities from review, and establishing that the Department can issue a Superseding Order that simply affirms a local Order of Conditions. By taking steps to make the administration of the Act less susceptible to appeals and by using its resources more efficiently, the Department can save applicants from long delays and save taxpayers money. The Department is committed to allocating as many of its resources as possible to training applicants, consultants, and commissions to promote fair and efficient implementation of the new regulations.

NON-TEXT PAGE

PREFACE TO WETLANDS REGULATIONS RELATIVE
TO PROTECTION OF WILDLIFE HABITAT

1987 REGULATORY REVISIONS

I. INTRODUCTION

Under a recent amendment (St. 1986, c. 262) to the Wetlands Protection Act, M.G.L. c. 131, § 40, wildlife habitat is added to the interests protected by M.G.L. c. 131, § 40. Wildlife habitat is defined in M.G.L. c. 131, § 40 to mean:

"those areas subject to (M.G.L. c. 131, § 40) which due to their plant community composition and structure, hydrologic regime or other characteristics, provide important food, shelter, migratory or overwintering areas, or breeding areas for wildlife."

Pursuant to the rulemaking authority set forth in M.G.L. c. 131, § 40, the Department of Environmental Protection is promulgating additional regulations, after public comment, to protect this additional interest.

II. THE RULEMAKING PROCESS

During the entire period that its proposed regulations were in preparation, the Department had the benefit of advice and consultation from knowledgeable groups and individuals, most particularly representatives from the development and environmental communities, as well as wildlife and wetland scientists. Where consensus was attained and deemed consistent with the Department's responsibilities under M.G.L. c. 131, § 40, the proposed regulations reflected it; in other instances, the Department weighed conflicting points of view and chose a course of action that in its judgement best served both the public interests identified in M.G.L. c. 131, § 40 and private property rights. The proposed regulations were then subject to public comment at four Public Hearings held around the state, as well as through extensive written submittals. These comments were carefully weighed by the Department and, in many cases, incorporated into a revised version of the regulations. As required by M.G.L. c. 131, § 40, these regulations were submitted to the Clerk of the Massachusetts House of Representatives for forwarding to the Joint Committee on Natural Resources, 60 days prior to their filing with the Secretary of State for final promulgation. The effective date of these regulations is November 1, 1987.

To briefly summarize the lengthy process by which the regulations were prepared; in the 1986 amendment to M.G.L. c. 131, § 40, the Legislature mandated the establishment of a technical advisory committee ("TAC") consisting of a university wildlife biologist; staff members from the Department of Fisheries, Wildlife & Environmental Law Enforcement, Department of Public Works, and Office of Coastal Zone Management; a member of the Massachusetts Homebuilders Association; a member of the Massachusetts Association of Conservation Commissions; a member of the Massachusetts Audubon Society; a member of the National Association of Industrial Office Parks, Boston Chapter; and a general contractor, to advise and assist the Department in drafting proposed regulations. Numerous meetings of the TAC were held to discuss key policy issues. In addition, a six person Scientific Advisory Subcommittee was formed to identify the wildlife habitat characteristics and functions of each wetland resource area, upon which scientific information the proposed regulations were based. Many other scientists, consultants and individuals were contacted informally by the Department during this time period for their advice and opinions.

The Department proposed regulatory revisions on May 5, 1987, and held three Informational Meetings around the state to explain the draft regulations on May 12, 14 and 19; four Public Hearings to receive public comment orally on May 26 and 28 and June 2 and 4; and accepted written comments from the public on the proposed regulations until June 12, 1987. The regulations reflect the benefit of these comments.

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III. THE GENERAL APPROACH

The regulations are based on a number of important principles. The Department has attempted to keep the regulations from being overly burdensome, complex or expensive for conservation commissions and applicants, especially for small projects with minor effects on wildlife habitat. No new fees are proposed in these regulations. The Department has also tried wherever possible to maintain the existing regulatory structure, except where protection of wildlife habitat requires procedures which are not needed to protect other interests alone. Most importantly, the regulations are based on the definition of wildlife habitat contained in M.G.L. c. 131, § 40 (see "I. INTRODUCTION" to this Preface).

Prior to enactment of the wildlife amendment to M.G.L. c. 131, § 40 by the Legislature, the Department and most of the other interest groups which were party to the legislative debate agreed to the "intent" of a "preamble", "explaining the effect of this amendment upon the Wetlands Protection Act." Although not legally binding, the Department believes that this "preamble" represents an accurate interpretation of the statutory language (especially the statutory definition of "wildlife habitat") as well as the legislative intent. Consequently, the Department has drafted these regulations to be fully consistent with this "preamble", which is quoted as follows in its entirety:

It is important to make clear what it means to have added the wildlife habitat interest as an eighth interest in M.G.L. c. 131, § 40. It does not mean that the geographic jurisdiction of the conservation commission or the DEP is increased. The resource areas that are protectable under this statute stay the same, only the reasons for their protection are different by adding this wildlife habitat value. In other words, this amendment does not make M.G.L. c. 131, § 40 a wildlife habitat protection statute. It is still a wetlands protection statute. The presence of wildlife habitat on upland (with no resource areas) does not give the conservation commission or the DEP power to control the work therein not altering resource areas.

The addition of the wildlife habitat interest likewise does not change the work or activities that are regulatable under the statute. There still must be dredging, filling, removing or altering of a resource area to trigger jurisdiction of the conservation commission or DEP. In other words, the amendment does not increase the scope of activities regulatable, but rather adds another reason for the conservation commission or the DEP to ask for information about the work and set conditions.

The addition of the wildlife habitat interest also does not change the role or authority of the conservation commission or the DEP in regard to work in the buffer zone. The applicant still has his option to file either a Request for Determination (RFD) or full application (NOI) and the issuing authority still has the task of deciding if the proposed work will alter resource areas. Commissions still may issue negative determinations if satisfied that precautions in the project have been taken so that there will be no alteration of resource areas. In other words, work in a wildlife habitat found in the buffer zone (not altering resource areas) does not trigger jurisdiction to require a full Notice of Intent.

The addition of the wildlife habitat interest does not mean that the mere presence of wildlife in a resource area is enough to establish habitat value. An amendment to the bill during passage makes clear that something else is necessary, namely the presence of a 'plant community composition and structure, hydrologic regime, or other characteristic' providing significant features for wildlife. In other words, the amendment does not mean that there is a wildlife habitat value to the resource area just because some creatures have been seen there. Instead it is the presence of plant community, hydrologic or other characteristics that is determinative. The statute protects habitat value not wildlife *per se*.

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Furthermore, the presence of these characteristics establishing wildlife habitat does not mean that it is automatic that every resource area is significant to wildlife habitat. The amendment to the bill during passage makes it clear that the features present must be enough to 'provide important food, shelter, migratory or overwintering areas, or breeding areas for wildlife.' In other words, the definition of wildlife habitat sets a threshold for a resource area to be significant for wildlife habitat. It must be significant for the particular reasons stated in the definition: food, shelter, migratory or overwintering areas, or breeding areas.

Each point in this "preamble" is reflected in these regulations. The geographical jurisdiction of the regulations is in no way increased beyond the resource areas as previously defined, despite the urging of many individuals and organizations that the Department extend the regulations to cover all "vernal pool" amphibian breeding areas, even those outside current resource areas. The regulations do not change any rules regarding uplands or buffer zones, nor do they "increase the scope of activities regulatable".

Most importantly, the regulations follows a strict interpretation of the statutory definition of "wildlife habitat", consistent with the agreement expressed in the preamble. Unlike the other interests protected under the M.G.L. c. 131, § 40, the term "wildlife habitat" is defined in the legislation. Wildlife habitat means those resource areas which, due to certain physical characteristics, provide "important" wildlife habitat functions (*i.e.*, "important food, shelter, migratory or overwintering areas, or breeding areas for wildlife"). Thus while resource areas are presumed to be significant to the protection of other interests whenever they play a role in protecting the interest, a particular site must play a role in providing important wildlife habitat functions, and must do so because of the presence of specific physical habitat characteristics, in order to warrant a presumption of significance under the new wildlife regulations.

The regulations specify what these physical habitat characteristics are and what are (and are not) to be considered "important" wildlife habitat functions in each resource area. This information is reflected throughout the regulations: in the "Preamble", "Presumptions of Significance" and "Performance Standard" contained in the regulations for each resource area, as well as in the special provisions for "rare" wildlife species (310 CMR 10.37 and 10.59) and, for inland resource areas, in 310 CMR 10.60 "Wildlife Habitat Evaluations". The Department furthermore intends to amplify upon the complex wildlife habitat characteristics and functions of resource areas through additional policy guidances. It is only for specified habitat characteristics and the "important" wildlife habitat functions they serve, that presumptions of significance and performance standards are to be applied. These provisions reflect the following understanding of the statutory definition of wildlife habitat:

A. By limiting the definition of wildlife habitat to include only those areas which "due to (certain physical) characteristics" provide "important" wildlife habitat functions, the Department believes the Legislature meant to protect only those wildlife habitats which, though they may sometimes be present elsewhere, are particularly prevalent and/or valuable in wetland resource areas. The scientific literature indicates that virtually everything, except concrete, provides habitat for at least some wildlife species, yet the Department does not believe it was the intention of the Legislature to protect lawns, cemeteries, golf courses, landfills, or wildlife habitats which typify "upland" areas, just because they happen to be located in wetland resource areas. Based on detailed scientific assessments of the wildlife habitats found in each resource area, certain resource areas (or portions of resources areas) which are generally lacking in special wetland wildlife habitat characteristics and functions, are not presumed in the regulations to be significant to the protection of wildlife habitat. For those resource areas which are presumed significant, only specified wildlife habitat characteristics and functions are protected.

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B. By requiring the protection only of "important" wildlife habitat functions (rather than wildlife, per se), the Department believes the Legislature did not intend for the Department to try to save every food source, breeding site, etc. for each individual animal. Instead, the Department believes the Legislature meant to protect wetland habitat which is important to wildlife from a regional or statewide perspective. Therefore, the regulations allow alteration of small amounts of wildlife habitat in most resource areas. For those portions of inland resource areas found to be significant to the protection of wildlife habitat (except bordering vegetated wetlands), the regulations reflect the Department's conclusion that small, one time alterations of up to 10% of the remaining wetland wildlife habitat on a given lot will not harm "important" wildlife habitat functions, and that temporary disruptions of other wildlife habitat is permissible so long as its important wildlife habitat functions are substantially restored or replicated. Certain "water dependent" projects (which the Department believes will be relatively uncommon in inland areas as compared to coastal areas) may also be allowed to proceed at the discretion of the issuing authority under a reduced performance standard without major impacts on "important" wildlife habitat functions of wetland resource areas in the Commonwealth. Because most "important" wildlife habitat in coastal areas is more limited than that in inland areas, the Department has only set a reduced performance standard in some coastal resource areas for "water-dependent projects", those uses and facilities which require direct access to, or location in coastal waters and which therefore cannot be located away from such waters. By requiring such projects to minimize adverse effects on wildlife habitat, while allowing most other projects (no matter how small) to have no adverse effect, "important" wildlife habitat functions of coastal resource areas will be adequately protected. However, because wetland wildlife habitat of rare, officially "state-listed" species is always "important" in both coastal and inland areas, the regulations permit no adverse effects whatsoever on this habitat.

Another alternative for protecting "important" wildlife habitat functions would have been to protect only those specific sites which are of a "high" value for wildlife. The Department considered, but ultimately rejected this alternative. Unfortunately, what is excellent habitat for one species is frequently inadequate for another. For this and other reasons, scientists are currently incapable of setting objective standards for rating the relative value to all wildlife (mammals, reptiles, birds, and amphibians) of sites within most wetland resource areas. Furthermore, without a comprehensive survey of all wetland wildlife habitat in the state (which would be prohibitively time-consuming and expensive), it would be impossible to design a cut-off point for determining when a site is or is not of sufficiently high value to be considered "important". Instead, the regulations generally require no adverse effects on all the "important" wildlife habitat functions existing at each project site (except for certain small alterations or specified project types in some resource areas). Those sites providing few valuable wildlife habitat functions will simply have less to protect than sites that are rich in important wildlife habitat functions.

C. By not defining the term "wildlife", the Department feels the Legislature intended that no preference be given to any particular wildlife species over any other. Consequently, the regulations protect equally all mammals, birds, reptiles, and amphibians for which a resource area provides important wildlife habitat functions. Fisheries (except for specified "rare" species) are not directly protected by most of the regulatory revisions, because current regulations already contain provisions protecting fisheries. Since the habitat needs of most invertebrates overlap those of vertebrate wildlife and fisheries, the Department felt it was not necessary to set separate standards to protect invertebrates, unless they are officially designated rare species in need of special protections. Furthermore, the goal of protecting all wildlife species equally led the Department to promulgate regulations which, within certain limits, require the maintenance of existing wildlife habitat characteristics and functions, rather than allowing development projects to substitute habitat characteristics which, while perhaps helping some species, could harm others.

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IV. SUMMARY OF WILDLIFE REGULATIONS

A. Presumptions of Significance. A presumption is created that the following coastal resource areas are significant to the protection of wildlife habitat: Land Under Water; Coastal Beaches; Coastal Dunes; Barrier Beaches; Rocky Intertidal Shores; Salt Marshes; and Land Under Salt Ponds. Presumptions of significance are also made for all inland resource areas, though only for portions of Land Subject to Flooding. For Bordering Land Subject to Flooding, only those areas are presumed significant which have not been extensively altered by human activity; furthermore, except for vernal pool habitat (which is critical to certain amphibians), the presumption is limited to areas on the 10-year floodplain or within 100 feet of the bank or bordering vegetated wetland (whichever is further from the water body). Within isolated Land Subject to flooding, only vernal pool habitat is presumed significant to the protection of wildlife habitat. Vernal pools are presumed to exist, however, only when certified and mapped by the Massachusetts Division of Fisheries and Wildlife.

Like the presumptions of significance found in current regulations regarding other interests protected by M.G.L. c. 131, § 40, presumptions regarding wildlife habitat are generalizations based on a generic study of each resource area. (As noted above, however, unlike presumptions of significance regarding other statutory interests, presumptions regarding wildlife are predicated on a statutory definition which requires the presence of certain physical characteristics providing important wildlife habitat functions.) The prima facie force of the presumption can be overcome by the introduction of sufficient evidence to the contrary; that is, by a showing that the resource area in question functions atypically.

B. Performance Standards. For coastal resource areas, little or no change in performance standards are made for Dunes, Salt Marshes or Land Under Salt Ponds. This is because existing standards for fisheries and other interests protected by M.G.L. c. 131, § 40 are generally adequate to protect wildlife habitat as well. Only minor changes are made in performance standards for water-dependent projects on Land Under the Ocean, Coastal Beaches, Barrier Beaches, and Rocky Intertidal shores. New, stricter performance standards, however, are set for non-water-dependent projects in these resource areas. Such projects may have no adverse effects on specified wildlife habitat characteristics.

In addition, conservation commissions or the Department may allow maintenance, repair, and/or improvement (but not substantial enlargement) of certain projects such as existing roadways, structures and road drainage facilities in coastal resource areas, subject to whatever conditions are deemed appropriate.

For all resource areas (coastal and inland), no project may have any adverse effect on the local population of a rare, "state-listed" vertebrate or invertebrate animal species, where the project is located within the habitat of such species. These habitats are only presumed to exist where mapped by the Massachusetts Natural Heritage and Endangered Species Program. These areas make up only a small percentage of the land subject to these regulations.

For inland resource areas, no changes in performance standards are made for bordering vegetated wetlands (with the exception of special provisions for rare, state-listed species, described above), because existing performance standards allow no large scale alteration of such wetlands, and even small alterations (under 5,000 sq. ft.) must be replicated. For other inland resource areas, project size "thresholds" of 10% of the wildlife habitat on each lot (with a maximum threshold on each lot of 50 feet of Bank and 5,000 sq. ft. of Land Under Water and Land Subject to Flooding) are established, below which projects are allowed without being considered to impair their capacity to provide important wildlife habitat functions. Such thresholds do not apply to critical "vernal pool (amphibian) habitat" on Land Subject to Flooding. Moreover, once this threshold of the wildlife habitat on a lot has been altered

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after November 1, 1987, all future projects on that lot (no matter how small) must meet the same performance standard as applies to larger (above-threshold) projects: no adverse effects on wildlife habitat. This performance standard (which applies to inland Banks, Land under Water, and those portions of Land Subject to Flooding found to be significant to the protection of wildlife habitat) forbids alterations of specified habitat characteristics found at the site, insofar as such alterations will after two (2) growing seasons substantially reduce the pre-project habitat value. Applicants must present evidence from a wildlife biologist or similar professional that this standard will be met. Replication of altered habitat off-site is permitted, but under a number of strict conditions.

Just as the regulations impose less stringent performance standards regarding protection of wildlife habitat on "water-dependent" projects in coastal resource areas, the new inland regulations establish a "limited project" status for water-dependent uses. As with other limited projects in inland resource areas, the normal performance standards are suspended and the issuing authority may issue an Order of Conditions along with "such conditions as will contribute to the interests identified in M.G.L. c. 131, § 40" for water-dependent uses. However, unlike other limited projects these uses remain subject to the existing performance standards for bordering vegetated wetlands, flood control and storm damage prevention, and they must minimize adverse impacts on other statutory interests for which each affected resource area is found to be significant. This new limited project status was deemed necessary by the Department in light of the significantly stronger performance standards being imposed on most larger projects by the new wildlife habitat regulations.

V. ISSUES OF MAJOR CONCERN

Public comment on the Department's proposed lower wetlands/wildlife regulations was extensive. While most commentators generally supported the proposed regulations, there were also many suggested changes. The following represents a summary of the most common issues of major concern, and the Department's response thereto as reflected in the final regulations:

A. Presumptions of Significance. There was some strenuous opposition to the establishment of presumptions of significance regarding protection of wildlife habitat, based largely on the language of the last paragraph of the "preamble" agreed to by numerous interest groups (as well as the Department) prior to the legislative enactment of the wetlands/wildlife amendment in 1986. Although this paragraph of the preamble does not explicitly state that the signatories agreed that the Department would not extend its practice of the use of presumptions of significance to the new wildlife habitat interest, these commentators argued that such a result was implied by the statement, "Furthermore, the presence of these characteristics establishing wildlife habitat does not mean that it is automatic that every resource area is significant to wildlife habitat."

The Department believes that a reading of the entire paragraph of the preamble makes it clear that this language does not suggest that resource areas should not be presumed significant to the protection of wildlife habitat, but only that presumptions must be based strictly on the presence of certain physical habitat characteristics providing specified "important" wildlife habitat functions in each resource area:

Furthermore, the presence of these characteristics establishing wildlife habitat does not mean that it is automatic that every resource area is significant to wildlife habitat. The amendment to the bill during passage makes it clear that the features present must be enough to 'provide important food, shelter, migratory or overwintering areas, or breeding areas for wildlife.' *In other words, the definition of wildlife habitat sets a threshold for a resource area to be significant for the particular reasons stated in the definition: food, shelter, migratory or overwintering areas, or breeding areas.* (emphasis added)

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As noted in detail above, this is exactly what the Department has done in creating the presumptions contained in these regulations and certain thresholds below which wildlife habitat functions are irrebuttably deemed not to be important (with the exception of rare species habitat).

As with presumptions of significance regrading all other statutory interests, the presumption for wildlife habitat is based on scientifically supported generalities regarding each resource area, and may be overcome by clear evidence that a specific project site acts atypically.

B. Expansion of Jurisdiction. Certain parties suggested that the proposed regulations expanded the jurisdiction of the regulations by adding what can be strict new performance standards to certain resource areas which had previously been subject to less strict standards. The Department disagrees. Adding a new interest to be protected under M.G.L. c. 131, § 40 clearly requires new performance standards in some resource areas, but in no case has the Department changed the definition or boundaries of any resource area as previously defined, nor has it changed any rules pertaining to the buffer zone or uplands. Furthermore, although there were a very large number of comments asking the Department to protect small, upland vernal pools, the Department has consistently rejected this suggestion on the basis that such an action would expand the geographic jurisdiction of conservation commissions and the Department, in contradiction to the intention of most parties supporting the wetlands/wildlife amendment and the Legislature itself.

C. Vernal Pools. On the issue of vernal pools, the Department received two groups of comments. As noted directly above, many individuals and organizations pressed the Department to protect all vernal pools, including those outside currently defined wetland resource areas, but this was rejected as an unauthorized expansion of jurisdiction. Many parties, including the Department's own regional staff, noted that because they are often very small in size and usually temporary in nature, the proposed regulatory language on identifying vernal pools would lead to innumerable, frequently insoluble disputes over the presence of such habitats on Land Subject to Flooding. After extensive research on vernal pool identification techniques, the Department concluded that it would be unfair to applicants to retain proposed requirements that could force them to conduct difficult, timely, expensive and often inconclusive searches for possible vernal pools. Instead, the final regulations create a presumption that vernal pools are present only when mapped, where such maps have been certified by the Division of Fisheries and Wildlife. That Division has agreed to establish such a certification program, which will require evidence of the breeding of amphibian species that need vernal pools. Finally, scientific evidence was presented to the Department that areas immediately surrounding vernal pools generally serve all the important nonbreeding habitat functions of amphibians which require vernal pools for breeding. Consequently, the regulations contain performance standards protecting the area within 100 feet of the boundaries of vernal pools.

D. Floodplains. Perhaps the most controversial provisions in the proposed regulations were those protecting floodplains (Bordering Land Subject to Flooding). On the one hand, there were many comments urging the Department to protect all wildlife habitats (including fields) throughout the 100 year floodplain, except for those portions altered by human activity. On the other hand, others suggested that the Department has no basis for proposing to presume that woodlands (or other defined areas) on the entire 100-year floodplain were significant to the protection of "important" wildlife habitat functions. The Department recognized some merit in each of these contentions, and incorporated aspects of both in the final regulations.

As noted above, presumptions of significance are based on scientifically grounded generalizations on how resource areas typically function; however, regarding protection of wildlife habitat, they are also limited to those wetland habitats which, due to certain physical characteristics, provide "important" functions for wildlife (*i.e.*, those "special" qualities which, though they may be present in uplands, are particularly prevalent or valuable in wetland resource

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areas). The Preamble describing important wildlife habitat functions of floodplains in 310 CMR 10.57(1)(a)(3) indicates that these functions stem from five major factors: frequent flooding, close proximity to water bodies, moistness of soils, the vegetative corridor which aids movement of wildlife to and from as well as along water bodies, and the "edge" effect which causes wildlife to thrive in the area where two different habitat types meet (*e.g.*, where water bodies or bordering vegetated wetlands meet other habitat). Such habitat clearly is not limited to woodlands, but rather extends to fields and other areas which have not been so altered by human activities as to effectively eliminate their special wetland habitat value. The final regulations reflect this principle. It is also true that the five key factors which provide "important" wetland wildlife habitat functions are generally much more prevalent on the lower floodplain (that closest to the water body) than the upper floodplain. Indeed, as one moves away from the water body and bordering vegetated wetland into the infrequently flooded areas of the 100-year floodplain, the habitat becomes increasingly indistinguishable in its vegetative and hydrologic characteristics from upland areas.

Therefore, in the final regulations the Department determined that a presumption of significance for wildlife habitat was warranted only for the lower floodplain (except for vernal pools, which are clearly essential for certain amphibians wherever they appear on the floodplain). The lower floodplain is defined as areas on the 10 year floodplain or within 100 feet of the bank or bordering vegetated wetland, whichever is further from the water body or waterway. "Important" floodplain habitat on the upper floodplain may also be protected on a case by case basis where evidence of its existence has been demonstrated, though this area is not presumed to be significant to the protection of wildlife habitat.

E. Thresholds. The Department proposed the creation of project size thresholds for three resource areas (inland Banks, Land Under Water, and Land Subject to Flooding) below which alterations are not deemed to have an adverse effect on the protection of important wildlife habitat functions. Though there were objections to this concept, the Department found, as explained in detail above, that use of thresholds is the most scientifically valid and least complex method of protecting "important" wildlife habitat in these resource areas, while allowing small, unimportant alterations (*i.e.*, unimportant from a regional or statewide prospective). Many commentators expressed concern that although the proposed threshold alterations may appear small individually, repeated undertakings of threshold projects on the same property could cause large cumulative impacts on wildlife habitat. In response to these comments, the Department has added a provision insuring that such small alterations will not be allowed, cumulatively, to have a major impact on important wildlife habitat functions. The thresholds may only be applied once per lot after the effective date of the wildlife regulations. This rule regarding cumulative impacts applies only to the protection of wildlife habitat on inland Banks, Land Under Water and Land Subject to Flooding. The Department takes no position at this time as to whether this is the appropriate method of addressing cumulative impact issues regarding limited projects or performance standards in effect prior to the promulgation of the new regulations protecting wildlife habitat. There were also numerous comments that the proposed thresholds were too small to allow for certain projects which must necessarily be located on or near water -- for example bridges, marinas, wastewater treatment plants, etc. Rather than raising the thresholds for all projects, however, the final regulations take cognizance of these water-dependent uses by creating a new "limited" project category for such uses (except those in bordering vegetated wetlands) with their own performance standards. To balance the net effect on important wildlife habitat functions, we have tightened the thresholds for non-water-dependent uses on inland resource areas (except bordering vegetated wetlands) to no more than 10% of those portions of an owner's lot found to be significant to the protection of wildlife habitat (the maximum limits of 50 linear feet of Bank and 5,000 sq. ft. of Land Under Water or Land Subject to Flooding, contained in the proposed regulations, were retained in the final regulations).

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F. Rare Species. Most commentators strongly supported protection for rare species, but a number of technical changes were suggested and incorporated into the final regulations. Applicants with proposed projects on "Estimated Habitat Maps" may, if they wish, contact the Natural Heritage and Endangered Species program 90 days before filing their Notice of Intent and receive a response within 45 days, so as to facilitate project designs which will meet rare species performance standards. In all cases, the Heritage Program will have at least 30 days to respond to notification that a proposed project is on the Estimated Habitat map, and no Order of Conditions may be issued before that time.

G. Wildlife Habitat Evaluations. A number of commentators found Section 10.60 (which sets standards for determining whether "above threshold" projects on inland Banks, Land Under Water, or Bordering Land Subject to Flooding will adversely effect wildlife habitat) to be confusing. The final regulations, we believe, are clearer. The basic standard for determining adverse effects is whether the project would substantially reduce specified important wildlife habitat functions. Standards for restoration and replication of wildlife habitat were also clarified.

Although there were some comments in opposition to allowing off-site replication, we believe that the performance standards for replication are sufficiently stringent to protect wildlife habitat, especially since off-site replication above 5,000 sq. ft. of bordering vegetated wetlands (the most valuable wildlife habitat) remains prohibited under the stringent performance standards contained in the present regulations. Furthermore, an Order of Conditions may require that replicated habitat in fact meets the standard of no substantial reduction in habitat value for an indefinite period in the future, so that further efforts can be required if initial replication is unsuccessful.

PREFACE TO WETLANDS REGULATIONS RELATIVE
TO RIGHTS OF WAY MANAGEMENT

1987 REGULATORY REVISION

In 1983, the Massachusetts Pesticide Control Act, M.G.L. c. 132B, was amended to require notification of conservation commissions prior to application of herbicides on rights of way. Many commissions became aware for the first time that application of herbicides on rights of way may result in alteration of wetlands and, with the exception of exempt utilities, may require action under the M.G.L. c. 131, § 40. On July 18, 1986, the Department issued a final decision after adjudicatory hearing in DEP Hearing Docket Nos. 83-28 and 83-35 (Clinton and Leverett) finding that the application of specific herbicides by the railroads to track and ballast within 100 feet of wetland areas would alter those wetlands and was therefore subject to jurisdiction under M.G.L. c. 131, § 40, requiring the filing of Notices of Intent with the local conservation commissions.

The Department of Food and Agriculture (DFA) initiated a Generic Environmental Impact Report (GEIR) evaluating alternatives for rights of way management. A technical advisory task force of environmentalists, agencies and rights of way managers assisted in the GEIR preparation and, based on results of the study, recommended to the Secretary of Environmental Affairs a framework for a coherent state-wide rights of way regulatory program. DFA published draft regulations to implement this program in 1986 and received extensive public commentary. Final regulations, 333 CMR 11.00, became effective on July 10, 1987.

The DFA regulations require persons proposing to apply herbicides to rights of way to first receive approval of a five year Vegetation Management Plan (VMP) and Yearly Operating Plan (YOP). These regulations identify certain "sensitive areas", including wetlands and public and private surface and groundwater supplies, where the application of herbicides is, in most instances, prohibited, and areas adjacent to the sensitive areas where use of herbicides is curtailed.

DEP worked closely with DFA to include provisions which give maximum protection for water supplies and provide protection for wetlands at least equal to that provided under the M.G.L. c. 131, § 40 and 310 CMR 10.00. To eliminate duplicate review under M.G.L. c. 131, § 40, DEP has adopted changes to the wetlands regulations which allow herbicide applications on rights of way in accordance with the DFA regulations without filing a Notice of Intent under the M.G.L. c. 131, § 40. However, non-exempt applicants will still be required to file a Request for Determination of Applicability to the appropriate conservation commission to establish boundaries of wetlands on or near the right of way. Specifically, these regulations presume that work performed in accordance with a VMP and YOP, as may be required under DFA regulations, will not alter an area subject to protection under M.G.L. c. 131, § 40.

During the public comment period on its proposed regulations, the Department identified several issues of major concern. After consideration of all comments, the Department has determined that, except for minor points of clarification and the addition of an automatic expiration date, no further changes in the regulations are warranted at this time. A discussion of these issues follows.

A. Presumption vs. Limited Project. Several commentators suggested that conservation commissions should retain the authority to review each herbicide application on rights of way through the usual Notice of Intent process. These regulations create a presumption that herbicide application carried out in accordance with an approved VMP and YOP under the DFA regulations will not alter wetlands and that the filing of a Notice of Intent is therefore not required. This procedure was established pursuant to the recommendation of the GEIR task force which states:

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The regulations which provide for approval of Vegetation Management Plans by the Department of Food and Agriculture should be conditioned on review and approval by the Department of Environmental Protection (DEP) of those portions of the Plans that deal with wetlands. The DEP should be required to certify to the DFA that these portions of the Plans will result in compliance with the substantive and procedural provisions which protect the interests of the M.G.L. c. 131, § 40. If the regulations are so drawn, activities under a Plan approved by DEP would not constitute an alteration of wetlands as defined under 310 CMR 10.00.

Since the DFA regulations provide that DEP is a member of the VMP advisory panel which reviews and makes recommendations on the approval of VMPs, the GEIR task force recommendations have been fully implemented. Therefore, the Department has determined that it would be duplicative to require the filing of individual Notices of Intent in each municipality for each application of herbicides to rights of way.

B. Adequacy of Setback from Wetlands. The DFA rights of way regulations prohibit application of herbicides on or within ten feet of wetlands and strictly limit herbicide application from ten feet to 100 feet of wetlands. Many commentators questioned the adequacy of these setback requirements and suggested that a 50 or 100 foot no spray zone would be more appropriate. Several commentators suggested that the proposed setback requirements were inconsistent with the Department's adjudicatory hearing decision in the Clinton and Leverett cases.

The no spray zone surrounding wetlands is necessary for three reasons: to compensate for mapping errors, to compensate for applicator errors and to assure that herbicides will not migrate into wetlands after application on the adjacent uplands. During the public comment period, the Department received no evidence demonstrating that the ten-foot setback established in the DFA regulations will not be adequate. The DFA regulations establish a procedure for selecting a limited number of herbicides that may be applied in the limited spray zone (from 10 to 100 feet from wetlands) which is adjacent to the no spray zone. Herbicides that will be selected for use in these limited spray zones under the DFA regulations are those which available data demonstrate will not migrate further than ten feet.

The applicators have argued that they can maintain a level of accuracy in mapping of wetlands and in application of herbicides to assure that herbicides will not be inadvertently applied within ten feet of wetland areas. The Department is not convinced that these claims are unreasonable; however, in order to confirm their accuracy, the Department has included in the final regulations an automatic expiration date two years from the effective date, which is coterminous with the expiration date of the DFA regulations. During the two-year effective period of these regulations, the Department expects applicators to conduct studies monitoring herbicide application operations and to submit a report concerning impacts of herbicide application on wetlands under these new regulations detailing the accuracy of wetlands mapping, the accuracy of herbicide application, and the extent of herbicide migration. The results of this study will provide a basis for recommendations by the Department for amendments to the DFA regulations and a decision on reauthorization of these amendments to the Department's wetland regulations.

Finally, the Department does not find the setbacks requirements established in the DFA regulations to be inconsistent with its decision in the Clinton and Leverett cases. In that decision, the Department assumed a worst-case analysis in terms of an herbicide known to be highly mobile which was applied to the track and ballast areas adjacent to wetlands. The Department found, based on the particular facts of these cases and the particular herbicide proposed for application that there would be a migration of that herbicide into the wetlands from application within the 100-foot buffer zone that would be sufficiently concentrated to cause alterations of the wetlands plants. However, the DFA rights of way management regulations set up a procedure for identification of herbicides which are relatively immobile and which are preapproved for application on the buffer zone in order to avoid alteration of wetlands plants. Furthermore, guidelines for application of the selected herbicides will also be established. Finally, no herbicides may be applied within ten feet of

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wetland areas. In light of the strict controls placed on application of herbicides within the 100-foot buffer zone under the DFA regulations, the Department finds that adoptions of the proposed regulatory scheme is fully consistent with its previous adjudicatory hearing decision in the Clinton and Leverett cases.

C. Impacts of Herbicides Application on Wildlife Habitat. The Department is currently developing regulations under M.G.L. c. 131, § 40 to protect wildlife habitat. The effective date of these regulations is November 1, 1987. One commentator expressed concern regarding the impact of herbicide application on wildlife habitat in wetlands, and particularly on the habitat of rare, "state-listed" wildlife species. As discussed above, the Department has determined that the DFA regulations provide for protection of wetlands from alterations due to herbicide application. However, the OFA regulations do not include floodplains in their definition of wetlands, although those regulations do prohibit herbicide application within 10 feet of any standing or flowing surface water. Beyond that, there is no specific protection of wildlife habitat, including rare species, in floodplain areas.

The Department is concerned that the DFA regulations do not specifically address protection of wildlife habitat in floodplains, in particular those rare, "state-listed" wildlife species. Therefore, as a member of the VMP advisory panel, the Department will review VMPs for potential effect on wildlife habitat and specifically will recommend disapproval of any VMP that will have an adverse effect in areas mapped by the Natural Heritage and Endangered Species Program as habitat of any rare, "state-listed" wildlife species. Furthermore, the Department expects applicators to incorporate into the previously discussed two-year monitoring study a section detailing the effects of herbicide application on wildlife habitat in floodplains and on the habitat of rare, "state-listed" wildlife species. The Department will use the results of this study as the basis for recommending any amendments to the DFA regulations and a decision on reauthorization of these amendments to the Department's wetlands regulations.

PREFACE TO THE WETLANDS REGULATIONS

1983 REGULATORY REVISIONS

I. INTRODUCTION

Under the provisions of the Wetlands Protection Act, M.G.L. c. 131, § 40 ("M.G.L. c. 131, § 40"), no person may remove, fill, dredge or alter certain resource areas without first filing a Notice of Intent and obtaining an Order of Conditions. The Act requires that any order so issued must contain conditions sufficient to preserve and promote the following public interests: the protection of public or private water supply and groundwater supply, the enhancement of flood control and storm damage prevention, the prevention of pollution and the protection of fisheries and land containing shellfish.

Pursuant to the rulemaking authority set forth in M.G.L. c. 131, § 40, the Department of Environmental Protection first adopted wetlands regulations in 1974, amending them in 1977 and again in 1978. After extensive review, the Department is now issuing a comprehensive revision of its Wetlands Regulations, 310 CMR 10.00. Not only has Part I, Regulations for all Wetlands, been completely rewritten, but a new Part III has been added: Additional Regulations for Inland Wetlands, 310 CMR 10.51 et seq. Other than minor changes in format, however, no revisions have been made to Part II, Additional Regulations for Coastal Wetlands, 310 CMR 10.21 et seq. In the Department's judgment, the Part II regulations have worked well, so much so that their salient elements - *e.g.*, the use of presumptions of significance and performance standards - have been incorporated in Part III.

II. THE RULEMAKING PROCESS

During the entire period that its regulations were in preparation, the Department had the benefit of advice and consultation from knowledgeable groups and individuals, most particularly representatives from the development and environmental communities, civil engineers and wetlands scientists. Where consensus was attained and deemed consistent with the Department's responsibilities under M.G.L. c. 131, § 40, the regulations reflect it; in other instances, the Department weighed conflicting points of view and chose a course of action that in its judgment best served both the interests identified in M.G.L. c. 131, § 40 and private property rights.

To briefly summarize the lengthy process by which these regulations were prepared; during a large part of 1979 a special task force comprised of representatives of the environmental groups, the developers, general contractors, utilities, the Greater Boston Chamber of Commerce, land use consultants, the Executive Office of Communities and Development, the Attorney General's Office and the Department met on a regular basis and ultimately produced a working set of draft regulations, much of which is incorporated in the regulations now being promulgated. Certain issues remained unresolved, however, and in the Fall of 1980 a smaller group was formed to assist the Department in preparing its public hearing draft. This group -- which consisted of a wetlands scientist from the University of Massachusetts, a civil engineer with extensive wetlands experience, an environmental attorney, the general counsel for the Home Builder's Association of Massachusetts, a senior

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staff member from the Department's Division of Wetlands Protection and the Division's Director -- met on a number of occasions to discuss the remaining issues and to provide the Department with the points of view of the various constituencies represented.¹

On May 25, 1981, the Department issued its proposed regulations for public comment. Public information meetings were held throughout the state during the first two weeks of June, and were closely followed by public hearings.² In addition to testimony taken during the hearings, the Department received and reviewed 142 letters containing approximately 900 separate comments on various aspects of the proposed regulations.

To assist the Department in weighing these comments, in resolving the remaining scientific and engineering issues and in preparing its final draft, a Wetlands Technical Review Group was established, consisting of representatives from the Division of Wetlands Protection, the Division of Fish and Wildlife, the Division of Water Pollution Control, the Department's Metro-Boston/Northeast Region, the Office of Coastal Zone Management, the University of Massachusetts and a number of engineering consulting firms. Another advisory group was created to assist the Department in making final revisions to the many forms required for administration of M.G.L. c. 131, § 40, forms that are now set forth at 310 CMR 10.99. Finally, in an effort to more accurately assess the impact of the new regulations on development in Massachusetts, the Division of Wetlands Protection and the MEPA unit of the Executive Office of Environmental Affairs jointly reviewed all Environmental Notification Forms filed between October 1, 1980 and September 21, 1981, establishing the precise extent to which the projects involved would experience greater or lesser regulatory control under the new regulations.

III. THE GENERAL APPROACH

Above all, the regulations are intended to put an end to the confusing, inconsistent and sometimes unnecessary regulatory practices that have attended administration of M.G.L. c. 131, § 40 in the past, especially with respect to the issue of jurisdiction. At one extreme, it has been argued by those espousing a very restrictive interpretation of M.G.L. c. 131, § 40 that jurisdiction is limited to only those activities that are undertaken within the boundaries of the areas specified in M.G.L. c. 131, § 40. This is erroneous, in the Department's view, for a close reading of M.G.L. c. 131, § 40 indicates that regulation extends not only to such activities but to all work, regardless of where it is located, that has the demonstrable effect of removing, filling, dredging or altering an area subject to protection under M.G.L. c. 131, § 40.

¹ In addition, throughout the entire rulemaking process successive drafts of the regulations were distributed to a broad range of agencies, groups and individuals for their comment. Input was sought and received from the Executive Office of Communities and Development, the Department of Environmental Management, the Department of Public Works, the Department of Agriculture, the Massachusetts Coastal Zone Management Office, the MEPA unit of the Executive Office of Environmental Affairs, the Joint Committee on Natural Resources and Agriculture, the Governor's Development Office, the Greater Boston Chamber of Commerce, the Home Builders Association of Massachusetts, Associated General Contractors of Massachusetts, Construction Industries of Massachusetts, New England Power Company, Boston Edison Company, New England Legal Foundation, Massachusetts Association of Professional Foresters, Massachusetts Association of Conservation Commissions, Massachusetts Forests and Parks Association/Environmental Lobby of Massachusetts, Massachusetts Audubon Society, the Conservation Law Foundation of New England and a number of private engineering and land use consulting firms. The Department is grateful for the time and effort expended by these groups, and to a significant extent the proposed regulations reflect their insights, expertise and sound counsel.

² Public information meetings were held in Lakeville (June 2, 1981), Holyoke (June 3, 1981), Worcester (June 8, 1981) and Lexington (June 17, 1981). Public hearings were held in Lakeville (June 17, 1981), Holyoke (June 18, 1981), Worcester (June 22, 1981) and Boston (June 23, 1981).

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At the other extreme, it has been the Department's experience that considerable upland acreage has been unnecessarily regulated by local conservation commissions on the basis of highly questionable assumptions with respect to the anticipated impact of a proposed project on a protected area located some distance away. Some projects have been subject to regulation in their entirety, even though only a portion of the proposed work is adjacent to a wetland or adjacent to land subject to flooding. Similarly, entire projects have on occasion been subject to unnecessary and costly delay because a portion of the site is adjacent to a wetland, even though no actual work is proposed within 100 feet of that area. Finally, in some instances projects have been regulated even though no part of the site is in or even adjacent to an area subject to protection under M.G.L. c. 131, § 40.

In short, under current regulatory practices a substantial amount of the upland acreage still available for development in the Commonwealth is subject to preconstruction review of doubtful legal and practical validity.³ It is the Department's view that in the vast majority of cases it is unnecessary to regulate projects outside land subject to flooding and beyond 100 feet from freshwater wetlands bordering water bodies, provided that the wetlands themselves are left intact in order to attenuate project impacts.

It is also the Department's view that while engineering solutions can protect the statutory interests at stake in most projects located in or near banks, floodplains and land under waterways and water bodies, this is not the case with bordering freshwater wetlands. The complex natural functioning of these wetlands cannot be replicated, and no amount of engineering will enable such areas to be filled or substantially altered without seriously impairing the statutory interests they serve.⁴ The regulations now promulgated reflect both this conclusion and the Department's concern with overregulation of uplands; while placing strict limits on those areas to be subject to preconstruction review, the regulations substantially increase the protection to be provided them.

Thus for the development community the most troublesome aspect of the regulations has been that in a majority of cases major alterations of freshwater wetlands bordering on water bodies would be greatly restricted or prohibited. According to the U.S. Soil Conservation Service estimates, however, these areas represent only 4.36 percent of the total land and water area of the state, or approximately 352,975 acres. A large portion of this area is already unbuildable because it is in public or quasi-public ownership for open space purposes,⁵ because natural limitations such as the depth of organic soils make building impractical⁶ or

³ The Department estimates that as much as 10,000 acres of upland may be unnecessarily regulated each year.

⁴ In issuing its proposed regulations for public comment, the Department specifically requested interested parties to comment on this position and on a suggested alternative that would leave the issuing authority with discretion to set conditions for work in bordering vegetated wetlands. Nothing was submitted in response or emerged in the course of further review of the question to alter the Department's original conclusion that there is no technical basis for conditioning work in bordering vegetated wetlands. See Section V.C., however, for a discussion of certain limited alterations of these wetlands that the Department has concluded can be carried out without impairment of their function.

⁵ The United States Soil Conservation Service estimates that approximately 60,000 acres of the freshwater wetlands in Massachusetts are in public or quasi-public ownership.

⁶ According to soil studies done by the U.S. Soil Conservation Service, three percent of the total land and water area of Massachusetts is freshwater wetlands underlain by highly compressible organic materials (peat, muck, and shallow and deep marsh). Thus approximately 242,882 acres or 68.81 percent of the Commonwealth's bordering freshwater wetlands is already greatly limited if not unavailable for development.

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because existing local and federal laws already restrict building in these areas.⁷ On the other hand, as previously indicated the development community gains a significant decrease in regulation of adjacent uplands, along with a substantial increase in the clarity, certainty and consistency of decision-making.

For the environmental community, the most troublesome aspect of the regulations has been the fact that there would be a significant loss of control over work proposed in adjacent uplands.

What the environmental community and the general public gain, on the other hand, is that under the revised regulations freshwater wetlands which border water bodies remain substantially intact. Jurisdiction continues to be asserted over work proposed within 100 feet of bordering wetlands when it appears that such work will alter the wetland. Beyond that distance, however, and beyond the boundary of land subject to flooding, preconstruction review is not required because the Department has determined it to be unlikely that the work will cause impacts that cannot be sufficiently attenuated by the wetland system itself.

IV. SUMMARY OF THE REGULATIONS

The promulgated regulations, in many of their particulars, represent a departure from existing standards and procedures. In other respects, these regulations codify for the first time administrative practices that over the years have evolved in the course of the regulatory work performed by the Department's wetlands staff and local conservation commissions. As noted above, these regulations are intended above all to promote clarity, certainty and consistency in decision-making, both on the local level and on appeal to the Department. Accordingly, the regulations address with great specificity the three major issues that in the Department's experience are at the heart of much of the past regulatory confusion: the question of jurisdiction, the question of a resource area's significance and the question of the extent to which work is to be conditioned (*i.e.*, the performance standards to be applied).

A. Jurisdiction

In the past, a major item of concern for developers, home builders and private property owners has been the fact that the wetlands regulations did not provide clear and workable guidance as to just what areas were subject to regulation. As a result, jurisdiction has been asserted inconsistently by local conservation commissions, and on occasion in excess of their statutory mandate; indeed, the Governor's Commission to Simplify Rules and Regulations has identified this issue as a major target for regulatory reform.⁸

⁷ Examples include local zoning and non-zoning wetlands by-laws, local flood plain zoning, the U.S. Army Corps of Engineers "404" permit program and the Federal Emergency Management Agency's ("FEMA") flood insurance program. FEMA estimates that over 40,000 acres in Massachusetts are in the floodway, much of which is wetland. No development is permitted in the floodway that will increase flood levels during the 100-year flood, a requirement that in most cases amounts to a prohibition on building.

⁸ See Report of the Governor's Commission to Simplify Rules and Regulations Recommendation No. 11: "Quantitative thresholds for delimiting significant wetlands subject to the law must be incorporated into the regulations." The Commission goes on to recommend (1) that regulated wetlands should contain at least 50 percent or more of indigenous wetlands plants, a limitation that the Department concurs in and has incorporated in its regulations at 310 CMR 10.55(2)(c), and (2) that minimum or lower level thresholds be established for the water bodies specified in M.G.L. c. 131, § 40, thresholds that now can be found in the revised regulations in both the definitions section, 310 CMR 10.04, and in Part III.

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Accordingly, the new promulgated regulations clarify jurisdiction by providing explicit definitions and boundaries for each of the resource areas identified in M.G.L. c. 131, § 40; as M.G.L. c. 131, § 40 requires, work within these areas cannot go forward without the filing of a Notice of Intent and the issuance of an Order of Conditions. In addition, because it is the Department's judgment that work undertaken within 100 feet of bordering vegetated wetlands has a very high likelihood of adversely affecting those ecologically sensitive areas, the regulations require that anyone contemplating such work must file a Request for a Determination of Applicability with the conservation commission in order to insure that prior to commencement of the work an informed and public decision will be made as to possible impacts.⁹ Finally, the regulations make clear that work outside the resource areas and outside the 100-foot buffer zone surrounding bordering vegetated wetlands can proceed without preconstruction review; jurisdiction over such work can be asserted only upon a showing that it has actually altered a resource area.

B. Significance

Clearly defining the resource areas and their boundaries, of course, is but the first step; regulation of work within such areas can be justified only if the area contributes in some significant way to the interests identified in M.G.L. c. 131, § 40. In order to guide conservation commissions in making this determination, the Department has studied each of the resource areas generically, and has developed presumptions of significance for each.¹⁰ These presumptions can be overcome by a showing that the resource area in question functions atypically; their role in the regulatory process is only to provide a formal statement of value and to serve as a device by which decision-making, especially on the local level, can be influenced so as to insure that each resource area is accorded its proper ecological value, no more or no less. The use and derivation of these presumptions of significance are discussed further in Section V of this Preface.

C. Performance Standards

Finally, general performance standards have been developed for each of the resource areas, standards that are to be utilized by the conservation commissions and Department staff in drafting orders of conditions once an area has been determined significant to one or more of the interests set forth in M.G.L. c. 131, § 40. In general, the standards are intended (1) to maintain the channel carrying capacity of banks and land under waterways and water bodies, (2) to preserve the flood storage capacity of floodplains and (3) to prevent major alterations of core bordering vegetated wetlands (*i.e.*, the portion of those wetlands bordering waterways and water bodies within which wetlands vegetation clearly predominates).

⁹ The buffer zone concept has been used by conservation commissions and the Department's wetlands staff for years; its inclusion in the regulations is therefore no more than a codification of past practices. As the regulations make clear, however, jurisdiction does not automatically extend outward 100 feet from the edge of a bordering vegetated wetland; although some conservation commissions have taken this position in the past, there is nothing in M.G.L. c. 131, § 40 to support it. Ultimately, the buffer zone filing requirement is only a device by which local conservation commissions can be informed of work which in the Department's experience is sufficiently close to vegetated wetlands to pose significant potential for adverse impact. A notice of intent may be required for such work, but only after a determination has been made that the work will alter the neighboring wetland. For a further discussion of this issue, see Section V.A. of this Preface.

¹⁰ Land subject to flooding, for example, has been found to be significant to flood control and storm damage prevention. See 310 CMR 10.57(1)(a) and 10.57(1)(b). Bordering vegetated wetlands, on the other hand, have been found significant to all of the interest identified in M.G.L. c. 131, § 40. See 310 CMR 10.55(1).

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V. ISSUES OF MAJOR CONCERN

In soliciting public comment on its proposed regulations, the Department identified a number of issues that were of particular concern and that had generated the most debate during its deliberations and preparation of earlier drafts. After consideration of all comments and extended consultation with the Technical Review Group, final regulations have now been prepared and promulgated. For some of these major issues, significant changes have been made; for others, the Department found no reason to alter its original position. A discussion of each of these issues follows.

A. Regulation of Work Within the 100-Foot Buffer Zone

It has been the Department's experience that any project undertaken in close proximity to a wetlands resource area has a high likelihood of resulting in some alteration of that area, either immediately, as a consequence of daily operation of the completed project. The problem becomes particularly acute where bordering vegetated wetlands are involved; inadvertent damage to these sensitive areas can easily occur and in many instances is irreparable. Accordingly, the adopted regulations require that any person intending to perform work within 100 feet of a bordering vegetated wetland must submit a Request for a Determination of Applicability to the local conservation commission.¹¹ In this way the commission has an opportunity to review the proposed project and to determine whether any alteration of the neighboring wetland will occur. If such a determination is made, then the project will require the filing of a Notice of Intent, just as if it were proposed for inside the wetland itself.

Of course, anyone contemplating a project within 100 feet of a bordering vegetated wetland can forego this preliminary determination by simply filing a Notice of Intent, an option that may be appropriate in those cases where it is obvious that the proposed work will indeed have an impact on the wetland. Equally, where the applicant proposes to take appropriate engineering measures to prevent impact on a neighboring wetland (and fully documents such measures in the Request for Determination of Applicability) there is no legitimate basis for requiring a Notice of Intent.

The proposed regulations called for the filing of a Notice of Intent whenever a conservation commission determined that work within a buffer zone would be "likely to alter" a neighboring wetland. Considerable opposition was encountered to this standard, primarily from those who feared that such language would encourage conservation commissions to assert jurisdiction over work in the buffer zone even in cases where the likelihood of impact was so remote as to be negligible. The Department stands by its experience that work performed in close proximity to wetlands often has an impact on them, but in order to insure that jurisdiction is asserted only in those cases where the likelihood of impact has been clearly and unquestionably established, the language of 310 CMR 10.02(2)(b) has been tightened from "likely to alter" to "will alter." In making this change, the Department seeks only to emphasize that jurisdiction is not to be automatically asserted over work in the buffer zone; it is still the intent of the regulations that whenever it is demonstrated that work in a buffer zone will have an impact on a neighboring wetland a Notice of Intent will be required and an appropriate Order of Conditions obtained.

¹¹ Under M.G.L. c. 131, § 40, any person may request the conservation commission to determine whether its provisions are "applicable to any land or work thereon." The procedures for obtaining such a determination are set forth in 310 CMR 10.05(3).

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Some commentators have also questioned the Department's authority to establish a buffer zone, citing the recent Appeals Court case of *Town of Rutland v. Fife*, Mass. App. Adv. Sh. (1981) 308.¹² Such objections, however, misconstrue the intended nature and function of the buffer zone; as noted above, its purpose is not to expand jurisdiction automatically beyond the boundaries of bordering vegetated wetlands, but to provide a mechanism by which local conservation commissions can be notified of projects located outside these boundaries but sufficiently close thereto to pose a potential environmental threat. Only in the event that the conservation commission concludes that the proposed project will alter the wetland is a Notice of Intent required.

Indeed, the concept of a buffer zone is hardly novel; although its precise origins are obscure, it has been informally applied for years by conservation commissions and the Department's wetlands staff. If anything, the regulations will put an end to the misconception, apparently still held by some commissions, that jurisdiction under M.G.L. c. 131, § 40 extends 100 feet beyond wetlands boundaries, irrespective of whether work in that zone will have any impact on the wetland.

In order to lessen the burden on persons planning projects within the buffer zone, the information required of them has been kept to a minimum. See Form 1, Request for a Determination of Applicability, 310 CMR 10.99. At the applicant's option, of course, supplementary information can be submitted to describe the manner in which proposed preventive measures will operate to insulate the wetland from damage and to demonstrate why no alteration of the wetland is likely.

B. Regulation of Work at Distances Greater Than 100 Feet From Bordering Vegetated Wetlands

A number of commentators questioned the Department's decision to limit the buffer zone to 100 feet and to require no preconstruction review for projects beyond that zone. They point to instances in which construction activity taking place well beyond the boundaries of a wetland has had an adverse impact on it, and emphasize the irreparable damage that such work can cause.

Whatever protective zone is established will by its very nature be somewhat arbitrary, however, and in the Department's judgment and experience the likelihood of impact becomes so attenuated at distances greater than 100 feet that preconstruction review can no

¹² The Department questions whether the original opinion in *Rutland v. Fife* was in any way relevant to the validity of the 100-foot buffer zone contained in its regulations. In any event, the issue is now moot; on motion of the Attorney General's Office, the Appeals Court modified its opinion by adding the following footnote:

We do not decide the question whether work must be done in a wetland in order to constitute alteration of that wetland. Footnote, corrected page 309.

Under M.G.L. c. 131, § 40, the filing of a Notice of Intent is required whenever proposed work will "remove, fill, dredge or alter" a resource area. There is nothing in the text of M.G.L. c. 131, § 40 to indicate that such work can be regulated only when it takes place within the borders of a resource area, nor in the Department's judgment would such a limitation be appropriate; as noted above, the effects of construction well beyond the border of a wetland will often cause significant and irreparable damage to that area.

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longer be justified.¹³ Accordingly, projects undertaken beyond the buffer zone are subject to regulation only when alteration of the wetland actually occurs, 310 CMR 10.02(2)(c). Furthermore, it is the Department's expectation that the regulatory scheme it has adopted will provide a clear incentive for developers to stay far removed from wetlands, since projects undertaken beyond the buffer zone will thereby avoid preconstruction review.

C. Performance Standards: Bordering Vegetated Wetlands

As noted above, performance standards similar to those developed by the Department for coastal wetlands have been incorporated in Part III of the regulations for each of the inland resource areas identified in M.G.L. c. 131, § 40. When an Order of Conditions is drafted by either a local conservation commission or the Department these standards will provide the general guidelines by which the proposed work is to be conditioned. In the case of bordering vegetated wetlands, as defined in 310 CMR 10.55, the Department has concluded that once such an area is determined to be significant to one or more of the interests specified in M.G.L. c. 131, § 40 any alteration or destruction of that area will impair if not eliminate its capacity to contribute to the protection of those interests. Accordingly, the performance standards for bordering vegetated wetlands allow work in those areas only under very narrowly defined circumstances.

Several commentators have questioned whether the Department has the authority, through its regulations, to limit construction activities in this manner; to the extent that prohibition is allowed at all, they argue, it is only pursuant to the Wetlands Restriction Act, M.G.L. c. 131, § 40A.¹⁴ There are a number of responses to this argument, and because the performance standards for bordering vegetated wetlands are at the very heart of the Department's regulations, they will be discussed in some detail.

First, it should be noted that to the extent that the regulations can be characterized as prohibiting construction, it is only with respect to the most ecologically sensitive of the many resource areas identified in M.G.L. c. 131, § 40. In all other areas, the regulations now make clear, work can go forward under performance standards that are explicit in the protective measures that must be taken but are by no means prohibitive in their impact on development. It is only in bordering vegetated wetlands, the Department has concluded, that the interests of M.G.L. c. 131, § 40 cannot be protected other than by leaving the existing wetland plant community intact. While retention and detention basins and compensatory storage measures can replicate the flood control value of bordering vegetated wetlands, there are no engineering solutions currently

¹³ At one point in its deliberations, the Department considered the possibility of employing a matrix approach to work done outside of but in close proximity to a wetlands boundary, utilizing certain factors to arrive at a buffer distance that would vary with local topography and project size. This approach was ultimately discarded as far too complex and cumbersome for applicants to deal with and conservation commissions to administer.

¹⁴ As with the buffer zone, the stringent performance standards for bordering vegetated wetlands can hardly be characterized as revolutionary. Under the present regulations pertaining to salt marshes, the coastal equivalent of bordering vegetated wetlands, no project may be allowed that will destroy any portion of a salt marsh, 310 CMR 10.32(3). Similarly, under the present 310 CMR 10.2(27) an Order of Conditions "shall regulate or prohibit the (proposed) activity". See also letter of April 26, 1976, from the Chief of the Attorney General's Environmental Protection Division to all Conservation Commissions, written in the aftermath of *MacGibbon v. Board of Appeals of Duxbury*, 369 Mass. 512 (1976) and concluding that in our view, therefore, municipalities may continue to protect wetlands by the enactment of conservation bylaws under the Zoning Act and by the imposition of conditions or the prohibition of alteration of wetlands under M.G.L. c. 131, § 40.

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available that can replace the capacity of such wetlands to renovate water quality or to provide food, cover and habitat for fisheries.¹⁵

In addition, the Department has defined the boundaries of bordering vegetated wetlands areas in a conservative manner, so that only the most essential inner reaches of these systems are subject to the strict performance standards; under 310 CMR 10.55(2)(c) "the boundary of bordering vegetated community consists of the wetlands plant species identified in M.G.L. c. 131, § 40." Compared to the expansive and often ad hoc boundary decisions occasioned by the previous regulations, the new regulations amount to a significant increase in the land area available for development.

Finally, after review of the comments and consultation with the Technical Review Group, the Department has identified two further means by which slight intrusions at the periphery of subject wetlands can be allowed without impairment of the functions they serve. Both such exceptions to the general prohibition on work in bordering vegetated wetlands have been carefully circumscribed, and are available only at the discretion of the issuing authority. The first, addressed at 310 CMR 10.55(4)(b), allows the loss of up to 5000 square feet of subject wetlands when the wetland habitat is replaced in accordance with the strict standards set forth in 310 CMR 10.55(4)(b)(1)-(7). The second provision permits the filling of linear wetland formations of less than 500 square feet, where such formations extend from the main body of subject wetlands into adjacent uplands. These formations characteristically occur along the edges of wetland systems in the glaciated northeast, and pursuant to 310 CMR 10.55(4)(c) they may be filled in those cases where the issuing authority decides that a project cannot otherwise go forward. In the Department's judgment, any such exception must be carefully conditioned by the issuing authority but is nevertheless appropriate because the narrow linear configuration of these formations means that (1) they represent a very small percentage of the surface area of subject wetlands within the state, (2) they can be distinguished clearly from the main body of subject wetlands, thus providing a definite limit to the amount of filling allowed and (3) they tend to divide otherwise buildable lots into parcels too small for practical use.

For the foregoing reasons, the Department concludes that its performance standards for bordering vegetated wetlands will not only preserve and protect the critical functions provided by this type of resource, but will not unduly impair development in the Commonwealth, a conclusion buttressed by the comprehensive review of past Environmental Notification Forms undertaken jointly by the Division of Wetlands Protection and the MEPA Unit of the Executive Office of Environmental Affairs.¹⁶

¹⁵ Because of the extensive comments the Department received on its proposed performance standards for bordering vegetated wetlands, the issue was subjected to intense scrutiny by the Technical Review Group during the post-public hearing phase of this rulemaking. After extended deliberation, the Technical Review Group unanimously agreed that current research supports the position taken by the Department that the functions served by bordering vegetated wetlands cannot be replicated in their totality by engineering means.

¹⁶ See letter of February 2, 1982 from Samuel Mygatt, Executive Director of the MEPA Unit to Anthony Cortese, Commissioner of the Department. In concluding his report, Mr. Mygatt makes the following observations:

First, the proposed regulations are extremely clear and easy to apply, and in almost all instances, their effect on a proposed project is readily predictable. This is in marked contrast to the present regulations. Secondly, the treatment of the "Buffer Zone" will be strong inducement to project proponents to carefully design their projects to minimize impacts on nearby wetland areas. Third, the proposed regulations will constrain suprisingly little present development in Massachusetts.

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Of course, minimal impact on the ability to develop private property is no defense to the claim that the Department is acting *ultra vires*; if prohibition of certain activities is not necessary to effectuate the purposes of M.G.L. c. 131, § 40 or is not authorized thereunder, then it is irrelevant that the strict performance standards of 310 CMR 10.55 apply to a comparatively small portion of the total land area subject to regulation under M.G.L. c. 131, § 40. For the reasons detailed above, however, the Department has concluded that destruction of bordering vegetated wetlands must be curtailed if the interests identified in M.G.L. c. 131, § 40 are to be protected; it therefore only remains to be determined whether the language of M.G.L. c. 131, § 40 allows such protective measures.

Under M.G.L. c. 131, § 40, once a resource area is determined to be significant to one or more of the specified interests, the conservation commission (or the Department on appeal) is directed to issue an order imposing "such conditions as will contribute to the protection of the interests described herein, and all work shall be done in accordance therewith." There is certainly nothing in this language to indicate that in the appropriate case the interests may not be protected by prohibition, and as a general proposition of law it has been repeatedly recognized that the power to regulate implies the power to prohibit.¹⁷

The Department finds further and explicit support for its position in *Commissioner of Natural Resources v. S. Volpe and Co.*, 349 Mass. 104 (1965), which arose under M.G.L. c. 130, § 27A, a predecessor to the present Wetlands Protection Act. Under M.G.L. c. 130, § 27A, any person proposing to undertake work in a coastal wetland was required to file a notice of intent with the Director of Marine Fisheries; if the director determined that the wetland contained shellfish or was necessary to protect marine fisheries, he was authorized to "impose such conditions on said proposed work as he may determine necessary to protect such shellfish or marine fisheries, and work shall be done subject thereto," language that is virtually identical to that of the present Wetlands Protection Act. Pursuant to this authority, the director prohibited the filling of a large marsh in Wareham, an order that the Supreme Judicial Court concluded was lawful and consistent with the language of M.G.L. c. 130, § 27A. *Id.* at 111. Finally, in *Lovequist v. Conservation Commission of the Town of Dennis*, Mass. Adv. Sh. (1979) 2210, a local floodplain by-law empowered the town's conservation commission to deny permission for any project that would harm "the environmental quality of either or both the subject lands and contiguous lands." The by-law was attacked as being inconsistent with the Wetlands Protection Act, a challenge that was dismissed by the Supreme Judicial Court on a number of grounds, including the fact that "pursuant to (the Department's wetlands regulations) conservation commissions for almost five years have had a prerogative to prohibit construction which might injure wetlands areas." *Id.* at 2219.

Nor is there anything in the Wetlands Restriction Act, M.G.L. c. 131, § 40A, that would preclude exercising the power of prohibition under the Wetlands Protection Act. Under the Wetlands Restriction Act the Department of Environmental Management ("DEM") is authorized to adopt orders "regulating, restricting or prohibiting (the) dredging, filling, removing or otherwise altering or pollution (of) inland wetlands." The legislature thus provided DEM with the same broad range of regulatory options that are possible under the Wetlands Protection Act - regulation, restriction or prohibition - and if DEM has chosen to adopt a policy of prohibition this choice should certainly not operate to preclude the Department from acting similarly in the appropriate situation; if anything, DEM's program confirms the Department's judgment and experience with respect to the level of protection necessary to preserve the ecological functions of bordering vegetated wetlands. The Department notes that the DEM restriction program is a coordinated regional approach to entire watershed

¹⁷ In *John Donnelly and Sons, Inc. v. Outdoor Advertising Board*, 369 Mass. 206, 214 (1975), for example, the Supreme Judicial Court upheld a local ordinance prohibiting all off-premise advertising, an ordinance that was passed pursuant to an Article of Amendment to the Massachusetts Constitution that authorized the regulation and restriction of such advertising but was silent as to outright prohibition.

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systems, and views its own program as the local complement thereof. In addition, due to limitations on resources and finances, the DEM program has thus far been able to address the wetlands resources of only a small number of communities; pending completion of the DEM effort, it is all the more important to insure that the most critical of the Commonwealth's wetlands resources not be further destroyed.

D. Presumptions of Significance

As noted above, Part III of the newly promulgated regulations contains rebuttable presumptions of significance for each of the inland resource areas identified in M.G.L. c. 131, § 40. They are based on the Department's extensive experience in administering its wetlands protection program and on the recommendations of recognized science and engineering experts from both the consulting and academic communities. While it is the Department's judgment that the resource areas are so likely to be significant to the interests indicated in the revised regulations that the presumptions are justified, the prima facie force of each can be overcome by the introduction of sufficient evidence to the contrary.

E. Definition of "Stream"

During the public comment period the environmental community repeatedly expressed concern that under the proposed regulations intermittent streams throughout the Commonwealth would no longer be subject to jurisdiction. This has never been the Department's intention, and the definition has consequently been clarified to indicate that intermittent streams are included within the definition, except those portions that are upgradient of all wetlands. (See 310 CMR 10.04, definition of stream.) This provides a clear, practical cut-off point for distinguishing between true streams and small drainage channels which flow in direct response to precipitation.

F. Identification and Regulation of Land Subject to Flooding

The public hearing draft made a distinction between bordering land subject to flooding (*i.e.*, flood plains) and isolated land subject to flooding (*i.e.*, trapped drainage areas), set forth methods for determining the boundaries of each, and, with respect to bordering land subject to flooding, required compensatory storage for all storage volume that would be lost. The Technical Review Group unanimously endorsed this approach, but did make several recommendations for refinement which have been incorporated into the adopted regulations. These include (1) a provision allowing any party to challenge the accuracy of the boundary of the 100-year flood as derived from the National Flood Insurance Program profile data, and (2) clarification of the definition of compensatory storage. See 310 CMR 10.57.

G. Use of the Standard "in the judgment of the issuing authority"

Several commentators objected to the above language, which is used throughout the regulation in characterizing the various decisions that must be made by the issuing authority. Their argument is that such language appears to authorize a totally subjective judgment, but similar language in local ordinances has been upheld in court against just such a challenge. The use of this language is not intended to give conservation commissions or the Department any more discretionary authority than they now have under law and these regulations; indeed, each of the decisions they must make has been carefully circumscribed by the precise definitions and explicit performance standards set forth in the regulations. The Department's intention in utilizing this language is to make clear that where discretionary authority is warranted it is to be exercised by the issuing authority and not by project opponents or proponents.

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H. Enforcement Orders

310 CMR 10.08 sets forth the procedures with respect to enforcement orders, to which some parties have objected because there is no explicit authorization for the issuance of such orders in M.G.L. c. 131, § 40. Conservation commissions have been issuing cease and desist orders for years, typically when work is commenced in a wetland without first obtaining an Order of Conditions. This emergency authority is clearly necessary, for significant and irreversible damage can be done to such areas if a conservation commission's only recourse under such circumstances is to institute legal proceedings.¹⁸

According to M.G.L. c. 131, § 40, "rules and regulations shall be promulgated by the commissioner to effectuate the purposes of this section." Under M.G.L. c. 21A, § 2(28), the Department shall "promulgate rules and regulations necessary to carry out (its) statutory responsibilities." Given the fragile and irreplaceable nature of wetlands, the emergency power to stop a project that is in violation of M.G.L. c. 131, § 40 or these regulations is both necessary and consistent with statutory authority. To the extent that a landowner wishes to challenge the jurisdiction of the conservation commission or the grounds upon which an enforcement order was issued, he may go to Superior Court and seek immediate injunctive relief.

I. Work Pending Appeals

In order to lessen the nuisance potential of frivolous appeals, which often serve no purpose other than to frustrate meritorious projects, the regulations permit work to proceed, at the applicant's risk, 35 days after a negative determination of applicability by the conservation commission, even if an appeal has been taken to the Department. Similarly, work may proceed at the applicant's risk immediately following a negative determination by the Department, even if a request for an adjudicatory hearing has been filed. 310 CMR 10.05(3)(d). It should be noted that this ability to perform work in the face of an appeal is limited to situations involving determinations of applicability; under M.G.L. c. 131, § 40, as the Department interprets it, no work can proceed pursuant to an order to conditions once a request for a superseding order has been filed or, in the case of a superseding order, once a request for an adjudicatory hearing has been filed.

VI. STUDY GROUP

The Department has made a major effort to consider all of the impacts of these revised regulations on both wetlands and development in the Commonwealth. There is no way to know with certainty how any new regulations will work in all situations until there has been significant experience in their implementation. To insure that they work the way they are intended the Department plans to set up a study group composed of representatives from the environmental, development and consulting communities to monitor the effects of the regulations during the first year of their implementation. The study group will be charged with the responsibility of making recommendations to the Department should they determine after their one year review that further amendments are necessary.

¹⁸ Indeed the Department and the Attorney General's Office jointly issued a report entitled "Recommended Procedures for Enforcement of the Wetlands Protection Act, Mass. M.G.L. c. 131, § 40, for Conservation Commissions," dated January 17, 1977, which included a sample cease and desist order similar to this enforcement order.

PREFACE TO WETLANDS REGULATIONS RELATIVE TO FEES

1989 REGULATORY REVISION

I. INTRODUCTION

A. Authority to Set Fees. Recognizing that conservation commissions and the Department of Environmental Protection need adequate resources to act expeditiously on filings under the Wetlands Protection Act, M.G.L. c. 131, § 40, ("M.G.L. c. 131, § 40") without compromising the quality of their decisions, the Legislature amended M.G.L. c. 131, § 40 during the Summer of 1988. St. 1988, c. 202, §§ 26 and 30 require the implementation of a sliding scale fee schedule for filing Notices of Intent, in order to defray state and local costs of administering the Wetlands Protection Act. The Act was further amended by St. 1989, c. 287, § 54 which requires that fifty percent of any Notice of Intent filing fee in excess of \$25 shall be made payable to the Commonwealth of Massachusetts and the remainder shall be made payable to the city or town in which the work is proposed.

In addition, the enabling legislation of the Executive Office of Administration and Finance, M.G.L. c. 7, § 3b as amended by St. 1988, c. 236, § 10, requires agencies which provide services of benefit to individuals to charge a fee commensurate with the cost of providing that service.

The wetlands fee system is codified at 310 CMR 10.00 WETLANDS PROTECTION (DEP) and 801 CMR 4.00 RATES (ADMINISTRATION & FINANCE). Department wetland regulations contain procedures and instructions regarding the fees established by Administration and Finance. Persons filing documents under the Wetlands Protection Act are advised to consult both regulations.

B. Purpose of Fee System. The purpose of the fee system is to defray local and state costs of administering the Wetlands Protection Act. The fee structure is intended to ensure that conservation commissions and the Department will have the resources to provide detailed project review and to issue regulatory decisions within required time frames.

C. Disposition of Notice of Intent Fees. For each Notice of Intent, the applicant must submit half of the fee in excess of \$25 to the DEP Lock Box and the balance to the city or town in which the work is proposed.

II. SUMMARY OF REGULATIONS

A. Notice of Intent Fees. An applicant must submit the correct fee amount in order to meet the minimum submittal requirements for a Notice of Intent. Fifty percent of the fee in excess of \$25 is paid to the DEP Lock Box. The remainder must be paid to the city or town where the work is proposed. If the conservation commission or the Department determines that an incorrect amount has been paid and has issued notification to the applicant, the filing is deemed incomplete and the time period for action is stayed. Once the correct fee amount has been paid and the filing is deemed complete, the time period for action will resume.

The list of project categories and associated fees can be found at 801 CMR 4.02(310). 310 CMR 10.03(7)(c) describes all the activities in each fee category. The filing fee is based on the project design as it is described in the initial Notice of Intent filing and applies only to activities proposed in areas subject to jurisdiction under M.G.L. c. 131, § 40. If the project is scaled down during the review process, the applicant does not receive a refund on any portion of the fee originally filed since the conservation commission and the Department have already spent the time reviewing the original proposal.

10.00: continued

B. Disputes Regarding Amount of Notice of Intent Fee. Should the conservation commission determine at any time during its deliberations that the incorrect fee amount has been paid by the applicant, the commission should notify the applicant and the Department. Further action on the filing is stayed until the correct fee has been paid. The applicant then may choose to pay the balance assessed by the commission without disputing it, pay the disputed amount (half to the Department and half to the city or town), or file a Request for Determination of Applicability. If the fee originally filed by the applicant is affirmed in a Final Order, the applicant is entitled to request a refund of the disputed amount, one half each from the Department and from the city or town.

If the applicant files a Request for Determination pursuant to a Notice of Insufficient Filing Fee, the Determination issued by the conservation commission, or by the Department on appeal, is determinative regarding the filing fee. During the processing of the Determination, action on the Notice of Intent is stayed.

C. Fees for Actions by the Department. Actions by the Department for which fees are assessed are specified in 801 CMR 4.02(310) and include Requests for Superseding Determinations of Applicability, Requests for Superseding Orders of Conditions, Claims for Adjudicatory Hearings, Requests to Intervene in an Adjudicatory Hearing, and Requests for Variances.

These fees shall be paid directly to the DEP Lock Box with a photocopy of the Request for Departmental Action Fee Transmittal Form accompanying the appeal. The Department will not proceed with review until receiving evidence that such fee has been paid.

D. Exemptions. 801 CMR 4.02(310) provides for certain exemptions to wetland filing fees.

PREFACE TO THE WETLANDS REGULATIONS RELATIVE TO TECHNICAL CHANGES
1992 WETLANDS PROTECTION ACT REGULATORY REVISIONS (310 CMR 10.00)

NOTE: The following is a preface to, but does not form a part of, the Wetlands Protection Act Regulations (310 CMR 10.00).

Definition of Pond. The proposed redefinition of the term "pond" in 310 CMR 10.00 is being undertaken in order to clarify the intention of the Department to include those water bodies which were created by means other than by impoundment. A recent judicial decision, *Warcewicz v. DEP*, 410 Mass. 548, 574 N.E. 2d 364 (1991), rendered a strict interpretation of the current definition of pond which limited the jurisdiction of the Wetlands Protection Act with respect to man-made ponds to only those ponds created by damming or impoundment. The proposed regulatory amendment is intended to extend the protection afforded by the Wetlands Protection Act (the "Act") to those non-impounded man-made surface water bodies which serve to protect the interests of the Act and function as wetland resources. In the case of gravel pits and quarries, the jurisdiction of the proposed regulations is intended only to apply to those ponds in which mining operations have ceased for five or more consecutive years.

Rare Species. The regulatory revisions are primarily administrative in nature, with slight substantive changes intended to clarify the regulations. The revised regulations (310 CMR 10.37, 10.59 and 10.99) eliminate the prior process whereby applicants with projects on the "Estimated Habitat Maps" of rare, state-listed animal species were required to file an "Appendix A" with the state Natural Heritage and Endangered Species Program prior to filing a Notice of Intent (NOI) with the conservation commission. Instead, a copy of the fully completed NOI itself will need to be filed with the Heritage Program (sent in such a manner that delivery will be made within two days of the filing of the NOI with the conservation commission and DEP). This change is designed to save time and paperwork for the applicant, while providing the Heritage Program with more detailed information on the project to assist it in its role of advising commissions on protection of rare species.

Changes in 310 CMR 10.00, and particularly in the 310 CMR 10.99 "General Instructions" for the Notice of Intent, seek to clarify that any project subject to the filing of a Notice of Intent (even such a project in the buffer zone) is required to notify the Heritage Program if it is on the Estimated Habitat Map. The performance standard, which seeks to protect rare species habitat only in wetland resource areas (not buffer zones), would not change. However, the language of the instructions clarifies that it is the conservation commission and DEP (not the applicant) which determines whether a buffer zone project (or any other project) would adversely affect the resource area habitat.

Form Changes. As noted directly above, some revisions have been made in the Notice of Intent, Abbreviated Notice of Intent, and the General Instructions forms (along with the deletion of the Appendix A form) which were necessitated by changes in the rare species procedures (discussed directly above). In addition, forms found in 310 CMR 10.99 may look slightly different from the previous versions, particularly due to deletion of logos from the tops of some forms, as well as changes in type faces, and pagination. This was necessitated by our transferring the forms to a computer format. However, there have been no substantive changes to the forms except for those referred to in the first sentence of this paragraph.

RESPONSE TO PUBLIC COMMENTS RELATIVE TO 1992 TECHNICAL CHANGES
TO THE WETLANDS PROTECTION ACT REGULATIONS (310 CMR 10.00)

NOTE: The following Response to Public Comments does not form a part of the Wetlands Protection Act Regulations (310 CMR 10.00).

Introduction. In February, 1992, the Department of Environmental Protection proposed a number of revisions to the Wetlands Protection Act Regulations (310 CMR 10.00). Because certain of these revisions could arguably result in a weakening of specific, existing regulatory standards, the Department filed an Environmental Notification Form (ENF) as required under the Massachusetts Environmental Protection Act (MEPA). Since those revisions were proposed, and the ENF on them filed, the Department has received a great deal of public comment. Based on that comment, the Department intends to promulgate final regulations which are considerably different from those originally proposed. For this reason, the Department has withdrawn the ENF previously filed under MEPA, and plans to refile the ENF with regard to its revised proposals on agriculture and aquaculture, Areas of Critical Environmental Concern, dam safety/lake drawdowns and airport tree clearing. However the new ENF will not cover those proposed regulatory changes which we view as being primarily technical in nature. These technical changes, discussed below, are being promulgated at this time.

Definition of Pond. Public response to the proposed regulatory amendment to redefine pond included comments from 20 communities, three public agencies, five special interest groups, three consultants, seven individuals, and one private company. The majority of comments supported the proposed changes. However a substantial number of comments suggested that the proposed language be further amended.

The proposed amendments contained in the public comments primarily related to the issues of: 1. clarifying the definition of man-made basins which are exempt; 2. defining what is meant by "natural conditions"; 3. redefining "drought"; and 4. clarifying what is meant by "inactive" gravel pits. As a result of these comments, the proposed definition of pond has been further amended in the following respects.

In order to clarify the exemption for "impervious retention basins" originally proposed in subsection (b) of the proposed definition, the exclusive reference to retention basins was eliminated and the proposed language was amended to reference all "impervious man-made basins" be they retention basins or otherwise. This more comprehensive phrase is intended to include those man-made structures which were created for a specific purpose and which were not created to provide all the functions which are provided by natural wetland systems.

Many comments were received referring to the difficulty of determining what is meant by "natural conditions" in the sentence: "Ponds shall contain standing water under natural conditions, except during periods of extended drought". Rather than attempt to further define what is meant by "natural conditions", the proposed language was amended to delete the reference to this phrase. As a result, ponds shall be required to contain water under any conditions except during periods of extended drought. Additional comments were received which suggested changes to the definition of "extended drought". Further research on this point revealed that there is no more acceptable definition of drought than that which exists in the current regulations. As a result, the definition of drought contained in this portion of the regulations was not amended.

In order to clarify the reference of the exclusion of gravel pits contained in subsection (c), this section was further amended to specifically reference "individual gravel pits...". Due to the extensive nature of some graveling operations, this clarification is specifically intended to include those individual gravel pits which, although located on the same property as a larger graveling operation, have been abandoned and inactive for five or more consecutive years.

10.00: continued

Fees. Public comment ran the gamut on this issue, from opposition to lowering of specific fees to proposals to exempt certain projects and parties from fees entirely. Regarding our proposal to lower the fee for new agriculture/aquaculture projects, we believe this is justified for two reasons: a) the majority of such projects are quite small and require a relatively short time for review, and b) the Commonwealth has an interest in reducing unnecessary burdens on an already hard pressed agricultural industry in order to keep farming viable in the state.

Rare Species Procedures. Public comments were overwhelmingly supportive of the proposed deletion of the "Appendix A" and the substitution of submitting a completed Notice of Intent (NOI) to the Natural Heritage & Endangered Species Program when a project is proposed within estimated rare species habitat. A few changes in the regulation as originally proposed were made in response to public comment:

It was clarified that the NOI to be sent to the Heritage Program must include all plans, reports and other materials required to be filed with the conservation commission.

Because of the statutory requirement that hearings on NOIs be held within 21 days and decisions made within 21 days after the hearing, it is impossible to create a perfect procedure for ensuring that the Heritage Program has adequate time to make its determination on rare species without delaying the permitting process. In the final regulations, we allow applicants to send the NOI to the Heritage Program "via the U.S. Postal Service by express or priority mail (or otherwise sent in a manner that guarantees delivery within two days)", so long as evidence of such mailing is included with the NOI submitted to the commission and DEP. This was done to ensure that project proposals are not delayed by the rare species regulatory requirement, while at the same time providing the Heritage Program with adequate time to review rare species impacts. It is important to note that if a project proponent refuses to extend a public hearing in a case where the Heritage Program has not yet issued its determination on rare species at the time of the hearing, the conservation commission is still free to consider the Program's determination if it is received within 21 days after the close of the hearing. Thus a wise applicant will generally agree to a hearing extension, so that he or she can have a chance to respond after the Heritage Program's determination has been received by the commission.

The word "delineated" was deleted in reference to Estimated Habitat Maps because the boundaries of such maps are estimated, and not clearly delineated.

Finally, it was noted in the NOI Instructions that rare species performance standards apply except in Designated Port Areas and where a Variance has been issued.

Prefaces for Former Revisions to Wetland Regulations. Public comment generally supported the concept of our retaining in the regulations the information contained in the Prefaces to past regulatory revisions. It was felt that this information provided invaluable guidance to conservation commissions and applicants alike regarding regulatory intent and interpretation. Therefore, the Preface to the most recent regulatory revisions will always appear at the beginning of the regulations, while the older Prefaces will hereinafter be printed as Appendices to the Regulations.

PREFACE TO 1993 REGULATIONS REGARDING
NORMAL MAINTENANCE AND IMPROVEMENT OF LAND IN AGRICULTURAL USE

NOTE: The following is a preface to, but does not form a part of, the Wetlands Protection Act Regulations (310 CMR 10.00).

Massachusetts is struggling to preserve both its dwindling agricultural base and its remaining wetlands. Both are threatened. While many agricultural practices are compatible with wetlands protection, some can result in temporary or permanent losses of key wetlands functions, such as flood control and pollution attenuation. The Wetlands Protection Act is intended to ensure that these functions are protected through regulatory review and permitting.

At the same time, because wetlands are such an integral part of many farming operations, requirements for environmental review could significantly reduce their economic viability. The Legislature has recognized the value of preserving agriculture in Massachusetts by including in the Wetlands Protection Act exemptions for normal maintenance and improvement of land in agricultural use, including cropland and pastureland. These exemptions recognize that some farming practices will affect wetlands from time to time.

In an effort to keep these competing interests in balance, the Legislative exemptions are limited to ongoing agricultural operations. That is, if tilling or harvesting is being conducted at the present time in or near wetlands, that work and any current work related to production of that agricultural commodity need not go through regulatory review. At the same time, the Legislature recognized that expanded or new agricultural activities, because they can result in new temporary or permanent impacts to wetlands, should be subject to review to ensure that they are conducted in the most environmentally sound manner possible.

The distinction between ongoing work on or related to land in agricultural production, and agricultural expansion, has not been sufficiently clear to farmers or to conservation commissions. The Department of Environmental Protection (DEP) has attempted to clarify the exemptions through policy. In 1991, the Legislature determined that stronger measures to reduce this confusion were necessary and it enacted legislation directing DEP to develop new, clearer regulations.

In response to that mandate, DEP has adopted the following regulations. They make it clear that normal maintenance and improvement of land in agricultural use is exempt from the Wetlands Protection Act and is not subject to regulations adopted pursuant to the Act - provided that the activities fall within the newly-adopted definitions. No Determination of Applicability is required for exempt activities; however, the Determination of Applicability process is intended for use when there is doubt as to whether or not an activity is exempt. Nothing in 310 CMR 10.00 changes the need to independently evaluate whether permits are required under federal laws such as Sections 401 and 404 of the Clean Water Act.

310 CMR 10.00 represents the collective input of dozens of farmers, environmentalists, many state and federal agencies, advocacy groups, and other concerned citizens. Most notable in this process were the efforts of the Farmland Advisory Committee, established by the legislation as an ongoing advisory body, and the Joint Committee on Agriculture and the Environment. These groups worked diligently with DEP and the Department of Food & Agriculture (DFA) to develop regulations that are sensitive to the needs of farmers while preserving valuable wetlands.

DEP believes that, while the appropriate regulatory balance has been achieved, the regulations cannot be specific enough to address all circumstances. Everyone involved in developing 310 CMR 10.00 believes that their successful implementation will depend largely on continuing efforts to provide education and outreach to conservation commissions and the agricultural community, as well as a good measure of common sense applied by all concerned.

10.00: continued

310 CMR 10.00 refers to a cooperative process in which certain projects can proceed only if the proponent has prepared a farm Conservation Plan approved by the United States Department of Agriculture, Soil Conservation Service (SCS). This process requires cooperation between the Department and SCS, and that cooperation is formalized by a written Memorandum of Understanding between the two agencies. Copies of the Memorandum of Understanding can be obtained from the Department.

In order to ensure that 310 CMR 10.00 achieves its goals, the Secretary of Environmental Affairs added conditions in her ENF Certificate (EOEA #9266) requiring DEP and the Department of Food and Agriculture (DFA) to convene an independent monitoring committee. DEP and DFA will chair a group of representatives of the agricultural and environmental communities to oversee the implementation of 310 CMR 10.00, to monitor the effects on both wetlands and agriculture in the Commonwealth, and to provide recommendations for possible further revisions at the end of a three year period.

This committee will evaluate cumulative impacts of exempt activities. The Committee should develop a system for gathering information by which it can assess the cumulative impacts of activities such as those listed at 310 CMR 10.04(Agriculture)(c)(1) (b, c, d, e, and g). Such a system could include, for example, notice from farmers that certain activities have been conducted.

PREFACE TO WETLANDS REGULATORY REVISIONS EFFECTIVE JANUARY 1, 1994
REGARDING LANDFILL CLOSURES, AIRPORT SAFETY, DAM SAFETY, WATER
SUPPLY DEVELOPMENT, CLEANUP OF OIL & HAZARDOUS MATERIALS,
AND EMERGENCY CERTIFICATION PROCEDURES
310 CMR 10.00

NOTE: The following is a preface to, but does not form a part of, the Wetlands Protection Act Regulations (310 CMR 10.00).

The Department of Environmental Protection has promulgated regulations creating five new "limited projects". All five have in common the fact that the types of projects covered are, by nature, important to the protection of public health, safety and/or the environment. The five new provisions apply to projects designed to promote, respectively, closure of solid waste landfills, airport safety, dam safety, development of safe drinking water supplies from groundwater, and cleanup of releases of oil and hazardous materials.

The purpose of the new regulations is to ensure that such projects, insofar as is practicable: avoid adverse impacts on wetland resource areas, and where avoidance is not practicable, minimize and mitigate such impacts.

Prior to the effective date of these new limited projects (January 1, 1994), such projects, if not able to meet normal Wetlands Protection Act regulatory standards, were required to obtain a variance from the Commissioner of the Department -- a more expensive and time consuming procedure than the normal Notice of Intent procedure. Establishment of limited project status means returning to the local conservation commissions the authority to review and condition these types of projects.

EMERGENCY CERTIFICATIONS
(310 CMR 10.06(5))

The Department has made revisions to Emergency Certification procedures, some of which affect only projects to contain and clean up spills of oil and/or hazardous materials (OHM). These are discussed in the OHM section of this preface, below. The Department also has changed an important Emergency Certification provision which applies to all emergency projects, not just OHM sites (310 CMR 10.06(5)). This change specifically gives the Department the authority to review denials and failures to act by conservation commissions on requests for emergency certification. This regulatory revision simply reflects the existing statutory right that exists under the Wetlands Protection Act:

"If the conservation commission ... fail(s) to act favorably within 24 hours of receipt of a request for certification of an emergency project, said project may be so certified by the commissioner (of DEP) or his designee."

LANDFILL CLOSURE LIMITED PROJECT
(310 CMR 10.24(7)(c)(4) and 10.53(3)(p))

This new limited project is designed to facilitate the closure of landfills adjacent to wetlands while ensuring that wetland impacts are avoided or minimized. The limited project regulation contains a detailed list of conditions for eligibility. Landfill closures eligible for limited project status are restricted to those mandated by the Department of Environmental Protection in accordance with the requirements of 310 CMR 19.00. Limited project provisions do not apply to the construction of new landfills or to the expansion or modification of existing landfills. In addition, a DEP policy has been adopted to establish an internal review procedure for evaluating landfill closure alternatives to ensure that wetland resource area impacts are, to the extent practicable, avoided and, to the extent such impacts cannot be avoided, minimized and mitigated. Copies of the policy can be obtained from the Department's Division of Wetlands & Waterways, One Winter Street, Boston, MA 02108.

Preface: continued

AIRPORT SAFETY/VEGETATION REMOVAL LIMITED PROJECT
(310 CMR 10.24(7)(c)(5) and 10.53(3)(n))

This new limited project covers tree clearing around airports and is intended to allow selective vegetation management in wetland resource areas for maintenance of safe airport landing zones. Activities under this limited project provision are limited to those required to be undertaken in order to comply with certain regulations of the Federal Aviation Administration (FAA). The provision does not apply to the construction of new airport facilities or to the expansion of existing airport uses that alter wetlands. A five year vegetation management plan must be included in the Notice of Intent.

In order to ensure that minimal wetland impacts will result from this type of project, a Generic Environmental Impact Report (GEIR) was prepared by the Massachusetts Aeronautics Commission and Massport (Final Generic Environmental Impact Report for Vegetation Removal in Wetlands at Public Use Airports, EOEA No. 8978, August 31, 1993). The GEIR presents substantial information regarding this class of projects and should be used to supplement the limited project regulation in order to identify the types of information to be provided in a Notice of Intent and the types of conditions that should be incorporated into the Orders of Conditions for applicable projects. Conservation Commissions and applicants are especially encouraged to refer to the GEIR's "WETLAND IMPACT EVALUATION CHECKLIST for vegetation removal at airports" found in Chapter 6 of the GEIR. Copies of the GEIR can be obtained from the Massachusetts Aeronautics Commission, 10 Park Plaza, Room 6620, Boston, MA 02116-3966.

The Massachusetts Secretary of Environmental Affairs has certified that the GEIR "adequately and properly complies with the Massachusetts Environmental Policy Act" and regulations. In that certification, however, the Secretary required that "the DEP, along with Massport and the MAC (Mass. Aeronautics Commission), prepare and file a new Generic Environmental Notification Form (ENF) in two years.... The objective of that ENF will be to evaluate the effectiveness of this new provision, and to provide all those involved with the opportunity to evaluate it based on actual field experience."

The Secretary went on to say in her certification that the GEIR did not deal adequately with the idea of mitigation banking and that this issue should be dealt with in much greater depth in the next GEIR. The Commonwealth has since initiated a feasibility study of wetlands banking. For this reason, the limited project just promulgated does not now include mitigation banking in its list of possible mitigation measures to be considered by project applicants.

PUBLIC GROUNDWATER SUPPLY LIMITED PROJECT
(310 CMR 10.53(3)(o))

This new limited project is designed to permit the development of safe public drinking water supplies from groundwater, while ensuring that wetland impacts are avoided or minimized. Except for exploration projects, eligibility for limited project status is restricted to projects approved by the Department of Environmental Protection in accordance with the provisions of the Public Water Supply Source Approval Process pursuant to 310 CMR 22.21 and/or the Water Management Act, M.G.L. c. 21G. A DEP policy has been adopted to establish an internal review procedure for evaluating water supply development alternatives to ensure that wetland resource impacts are, to the extent practicable, avoided and, to the extent such impacts cannot be avoided, minimized and mitigated. Copies of the policy can be obtained from the Department's Division of Wetlands & Waterways, One Winter Street, Boston, MA 02108.

DAM SAFETY/LAKE DRAWDOWN LIMITED PROJECT
(310 CMR 10.53(3)(i) & (m))

The purpose of this limited project is to provide a reasonable balance between dam safety and wetland protection interests, and to ensure that safety-related "drawdowns" of water levels in dammed impoundments do not drain wetlands for any longer a period than necessary. This has been accomplished in two ways.

Preface: continued

First, the existing limited project for maintenance, repair and improvement of "structures" (310 CMR 10.53(3)(i)) has been amended to specifically include dams and reservoirs. Both drawdowns and refilling of dams pursuant to dam repair are now covered. Second, a new limited project (310 CMR 10.53(3)(m)) has been created for drawdowns that occur in response to orders or other recommendations from the Department of Environmental Management's Office of Dam Safety (DEM).

In extreme emergency situations, DEM orders immediate drawdown of water levels to protect public safety. Such drawdowns are statutorily authorized to occur without prior filing of a Notice of Intent (M.G.L. c. 253, §§ 44 through 50). More commonly, however, DEM tries to identify unsafe dams well in advance of the point where they pose an imminent threat. When DEM identifies such an unsafe dam, it usually sends a request to the dam owner to "certify as to the safety" of the dam. These DEM "recommendation letters" usually include recommended response actions, but they do not order any specific response action, such as dam repair. In response, dam owners generally seek to draw down water levels to lessen stress on the dam. However, drawdowns made in response to DEM "recommendation letters" may not be undertaken without first filing a Notice of Intent and receiving an Order of Conditions.

Such drawdowns clearly "alter" wetlands and frequently alter more than 5,000 square feet of bordering vegetated wetland. Particularly if the drawdowns are allowed to continue for extended periods, they can result in significant adverse impacts. Yet drawdowns are often critical for dam safety purposes. For this reason, the new wetlands limited project has been established to allow drawdowns made in response to DEM "Orders" and "Recommendation Letters" to occur in two circumstances:

1. Where the drawdown is to occur for a limited time in order to render the dam safe until repairs can be made. In this circumstance, DEM has agreed in a Memorandum of Understanding (MOU) with DEP to issue a finding, on a case by case basis, establishing a reasonable period of time in which the drawdown and repair are to be completed. Such a finding by the DEM Office of Dam Safety should be included by the applicant with a Notice of Intent for this type of project.
2. Where DEM has found that the drawdown is necessary for public safety, and that it is not economically feasible at the time of such finding to repair the dam. Again, DEM has agreed in its MOU with DEP to issue such findings in writing, and to send copies to the conservation commission and DEP. DEM will generally find repair to be infeasible when the cost of the repair exceeds the value of the property containing the dam, except where the dam owner derives other financial benefits from the dam. DEM also has agreed in its MOU with DEP to issue a "superseding" finding of economic feasibility upon request of any person, organization, or agency if warranted by changed circumstances (*e.g.*, change in dam ownership, commitment by another person or group to finance the repair in whole or in part, *etc.*). When a DEM finding of economic infeasibility has been issued, conservation commissions may grant an Order of Conditions for up to three years for the drawdown, and may extend or reissue an Order as many times as necessary so long as repair continues to be economically infeasible.

This limited project provision should ensure that all drawdowns related to dam safety are permissible under 310 CMR 10.00, while limiting their duration to the time it takes to repair the dam, unless such repair is economically infeasible. By establishing this limited project, the Department hopes to create a clear mechanism whereby both dam owners and third parties are encouraged to take all reasonable actions to alleviate adverse impacts from dam safety-related water level drawdowns.

LIMITED PROJECT AND EMERGENCY CERTIFICATION PROCEDURES FOR
RESPONSE ACTIONS TO RELEASES OF OIL AND/OR HAZARDOUS MATERIALS
(310 CMR 10.06(3) & (7), 10.24(7)(c)(6), and 10.53(3)(q))

On July 31, 1993, the Department issued a new set of regulations governing cleanups of oil and/or hazardous materials (OHM) (310 CMR 40.0000). The Department now has revised its Wetlands Protection Act Regulations (310 CMR 10.00) to provide greater consistency and ease of administration in applying 310 CMR 40.0000 and 310 CMR 10.00 while ensuring that the interests of the Wetlands Protection Act are protected to the greatest extent practicable. (A short summary of 310 CMR 40.0000 is available from the Department's Division of Wetlands and Waterways, One Winter Street, Boston, MA 02108.)

Preface: continued

The Department has adopted a new wetlands "limited project" for OHM release response actions that are necessary to protect health, safety, public welfare, and/or the environment, but that cannot meet current wetland regulatory standards without obtaining a variance. Standards for the limited project are similar to, though considerably more detailed than, the Wetlands variance standards.

The Department also has amended the Wetlands emergency procedures as they relate to remediation of OHM spills in order to ensure that these procedures don't result in unnecessary delays and exacerbation of critical toxic pollution problems.

New Wetlands Regulation Limited Project for Oil and/or Hazardous Materials Release Response Actions

Because cleanups of oil and/or hazardous material (OHM) releases are critical for the protection of health, safety, public welfare, and the environment, the Department believes that they should be allowed to go forward so long as, to the maximum extent practicable: adverse impacts to wetlands are avoided and, to the extent this is not possible, such adverse impacts are minimized and mitigated.

310 CMR 40.0000 gives responsible parties (RPs) a number of alternatives for dealing with oil and hazardous material releases. Immediate Response Actions (IRAs) are generally required to be implemented on an emergency basis, and thus would normally be reviewed under the emergency certification provisions of the Wetland Regulations (see discussion of emergency certifications in this Preface, below).

Any other measure implemented pursuant to 310 CMR 40.0000 that can meet normal Wetland regulatory performance standards will continue to be governed by those standards and will not be eligible for limited project status. Furthermore, any measure undertaken pursuant to 310 CMR 40.0000 that is not needed to eliminate significant risk to health, safety, public welfare or the environment (*i.e.*, measures designed solely to reach "background" levels of pollution) will not be eligible for limited project status (see the language in parentheses in the first paragraph of 310 CMR 10.24(7)(c)(6) and 10.53(3)(q)).

Limited project status may be needed, however, for response actions such as Release Abatement Measures (RAMs), even though they are designed for relatively minor levels of contamination. RAMs can have large wetland impacts: *e.g.*, diverting contaminated ground or surface water in a manner that drains wetlands, building an access road through a wetland in order to reach a work site, *etc.* It should be noted that RAMs -- and all other remediation and containment measures except IRAs and Comprehensive Response Actions (described in the next paragraph) -- are not mandated, although they are allowed, by 310 CMR 40.0000.

Only Comprehensive Response Actions (CRAs) -- and not RAMs or other remedial actions -- are required under 310 CMR 40.0000 to be selected on the basis of an alternatives analysis that gives significant consideration to wetland impacts. Therefore, selection of the particular CRA technology or methodology (*e.g.*, pump and treat, dredge and fill, *etc.*) may be made without performing the additional alternatives analysis normally required under provisions of 310 CMR 10.24(7)(c)6.a. and 10.53(3)(q)1. However, the design, construction, implementation, and operation of all OHM-related limited projects, including CRAs, RAMs, *etc.*, must meet specific performance standards, including maximum practicable avoidance, minimization and mitigation of adverse wetland impacts (see 310 CMR 10.24(7)(c)6.b. and 10.53(3)(q)2.).

Finally, it is important to note that since only the most seriously contaminated sites will have BWSC oversight, the language of the limited project gives conservation commissions and the DEP Wetlands Program the authority to deny limited project status for any proposed project that clearly does not comply with 310 CMR 40.0000. Needless to say, such a conclusion will generally be very difficult to reach for persons who don't have considerable expertise in oil or hazardous materials issues, and the Department does not anticipate that claims of compliance with the standards of 310 CMR 40.0000 will be rejected by conservation commissions or the Wetlands Program in many cases. The Wetlands Program does intend, however, to work with DEP's Bureau of Waste Site Cleanup to examine projects applying for limited project status if it has reason to believe the project was not selected or designed in compliance with 310 CMR 40.0000.

Preface: continued

Revisions in Wetland Emergency Procedures Regarding Releases of OHM

310 CMR 40.0000 allows certain Immediate Response Actions (IRAs) to commence prior to written approval, and in some cases up to 24 hours before oral approval from BWSC, "where the delay involved in notifying and obtaining approval from the Department would substantially exacerbate release or site conditions or endanger health, safety, public welfare or the environment." Consequently, the revised regulations state (see revisions to 310 CMR 10.06(7)) that projects in these two categories shall be given up to 48 hours (but never more than 24 hours after BWSC has orally approved commencement of the work) to make a request for a Wetlands Emergency Certification with the conservation commission. Work on these types of projects is allowed to continue pending a decision on the request for Emergency Certification by the conservation commission or the DEP Wetlands Program on appeal. In cases where a conservation commission denies, or fails to act within 24 hours of a requests for Emergency Certification for these types of projects, the DEP Wetlands Program will review requests for emergency certification and issue a decision within seven days. It should be noted, however, that all of these types of emergency projects will have received at least oral approval from the Department's Bureau of Waste Site Cleanup within 24 hours of commencement.

Immediate Response Actions which are not so urgent as to be eligible for oral approval from BWSC are not be covered by the special provisions stated in the preceding paragraph. However, all emergency certifications granted for Immediate Response Actions are valid for up to 60 days, rather than the 30 day maximum for non-hazardous waste emergency projects (see revisions to 310 CMR 10.06(3)). The Department is doing this to make the Wetland Protection Act Regulations more consistent with 310 CMR 40.0000, and to encourage quick OHM clean-ups without excessive process.

To determine whether, and under what conditions, the Department's Bureau of Waste Site Cleanup (BWSC) has given written or oral approval to an Immediate Response Action, conservation commissions can call DEP's BWSC release notification unit the appropriate DEP regional office. If that office is closed, a person from that unit can be paged by calling the Massachusetts State Police at 617-566-4500. The current phone numbers for the Department's regional offices are: Northeast: 617-935-2160; Southeast: 508-946-2700; Central: 508-792-7650; and Western: 413-784-1100.