10.00: Appendix

Note: The following are appendices to, but not part of, 310 CMR 10.00.

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", 2002 REGULATORY REVISIONS

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.

Appendix: 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.

Appendix: continued

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."

Appendix: 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.

Appendix: continued

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 determinitive. 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, cemetaries, 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 insoluable 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 applicatior 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 0FA 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.

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[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 impractical[6] or

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[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 compressable 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]

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[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).

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[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.

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[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

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[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

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[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]

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[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 be 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 an 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 juristiction 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.

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B. Disputes Regarding Amount of Notice of Intent Fee. Should the conser- vation 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 subtantive 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 transfering 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 recieved a great deal of public comment. Based on that comment, the Deparatment 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.

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Fees. Public comment ran the gamut on this issue, from oppostion 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.

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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 Departament'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 Divison 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.