

**MUNICIPAL CODE  
ENFORCEMENT OFFICERS  
TRAINING AND CERTIFICATION  
MANUAL**



**Shoreland Zoning  
With Incorporation of  
Best Management Practices**

**184 State Street, Augusta, Maine 04333  
[www.maine.gov/spo](http://www.maine.gov/spo)**

**Executive Department ~ State Planning Office  
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# **SHORELAND ZONING**

## **WITH INCORPORATION OF BMPS**

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## ***EDUCATIONAL OBJECTIVES***

A number of major elements have been identified in this material as those which the reader should understand and retain a working knowledge of. The following objectives are based upon these selected elements. They are presented here to help the reader organize his or her study of the topic and to assist the applicant for certification in preparation for the Shoreland Zoning examination.

Each successful applicant for certification in Shoreland Zoning should be able to:

1. Discuss the three State laws from which a municipality derives its authority to engage in zoning.
2. Explain when and by whom the Code Enforcement Officer is appointed, under the Mandatory Shoreland Zoning Act.
3. Discuss the purposes of the Mandatory Shoreland Zoning Act.
4. Describe the relationships (including differences) between the Shoreland Zoning Act, DEP's Shoreland Zoning Guidelines, and the locally adopted shoreland zoning ordinance.
5. List the provisions of the Mandatory Shoreland Zoning Act a municipality must administer and enforce, whether or not a local shoreland zoning ordinance has been adopted.
6. Explain to which water bodies and wetlands the Act applies, and how the Act defines these water bodies and the Shoreland Zone around them.
7. Discuss the commonalities between a local floodplain management ordinance and a local shoreland zoning ordinance.
8. List the suggested land use districts contained in the Shoreland Zoning Guidelines, and the general types of land uses that might be permitted within each district.
9. Describe the minimum lot sizes and setbacks from the water bodies and wetlands for the various types of land uses regulated by shoreland zoning.
10. Explain the minimum standards regulating nonconforming uses, structures and lots under shoreland zoning.
11. Discuss the principal goal of dimensional standards in a shoreland zoning ordinance.
12. Define the term variance under shoreland zoning.
13. List and explain the four criteria for granting a variance under shoreland zoning.



14. Explain the special example of a disability variance and describe under what conditions it might be applied within a given municipality.
15. Explain the processes of adopting and amending a municipal shoreland zoning ordinance
16. List the three criteria that define a wetland.
17. Define the term normal high-water line and describe how this might be identified on a given site.
18. Discuss the significance of the upland edge of a wetland in a shoreland zone.
19. Apply the definitions found in the Shoreland Zoning Act to a given situation a CEO might encounter in the field.
20. Determine whether a structure has been damaged or destroyed by more than 50% of this market value.
21. Explain what constitutes principal vs. accessory structures.
22. Determine sustained slope.
23. Discuss timber harvesting standards adjacent to protected resources.
24. Define basal area and calculate it when given an example.
25. Know when a written soil erosion and sedimentation control plan must be submitted with an application for development in the shoreland zone.
26. Discuss clearing standards adjacent to protected resources.
27. List and explain at least eight duties of the CEO in connection with a shoreland zoning ordinance.
28. Explain the role of the Planning Board in connection with a municipal shoreland zoning ordinance.
29. Explain the purpose of the Zoning Board of Appeals, under shoreland zoning.
30. Discuss the role of the CEO in dealing with the Planning Board under shoreland zoning
31. Discuss the role of the CEO in dealing with the Zoning Board of Appeals under shoreland zoning.
32. Discuss the role of the CEO in dealing with the public.

33. Discuss and evaluate various “notification” options available to the CEO in cases of alleged violations of shoreland zoning.
34. List at least six elements a written violation notice should contain.
35. Explain the relationships between shoreland zoning and other local land use regulation, including floodplain management, site plan review, subdivision, and minimum lot size ordinances.
36. Describe the relationships between the Mandatory Shoreland Zoning Act, and the Site Location of Development Act, the Natural Resources Protection Act, other State Statutes, and Section 404 of the Federal Clean Water Act.
37. Outline the causes and adverse environmental and economic consequences of nonpoint source water pollution, and the importance of the CEO’s role in helping to prevent these adverse consequences.
38. Describe what BMPs are and the major categories of nonpoint source pollution that they are used to address.
39. Describe a CEO’s authority to recommend or require the use of BMPs to meet shoreland zoning standards.
40. Discuss a CEO’s role in incorporating the recommended or required use of BMPs into shoreland zoning administration and enforcement procedures, including permit applications and development review, inspections during construction, long term monitoring, and enforcement procedures.
41. Discuss in detail how BMPs may be applied to meet specific shoreland zoning ordinance land use standards.
42. Describe what a third party agreement is and how it may be used relative to implementation of BMPs at a given site.
43. Discuss municipal options for regulating timber harvesting activities in the Shoreland zone, and the role of the Department of Conservation’s Bureau of Forestry.

## ***INTRODUCTION***

The Mandatory Shoreland Zoning Act, 38 MRSA, Section 435-449 requires all municipalities to adopt, administer, and enforce ordinances which regulate land use activities within 250 feet of great ponds, rivers, freshwater and coastal wetlands, and tidal waters; and within 75 feet of streams as defined. A code enforcement officer must be appointed annually in each municipality to assist with administration and enforcement of the locally adopted shoreland zoning ordinance.

The Code Enforcement Officer is the municipal employee on the front line with respect to a municipality's shoreland zoning ordinance. The CEO is responsible for administration and enforcement of the ordinance. Usually, the questions first asked by landowners and developers about shoreland zoning are asked of the CEO. It is, therefore, critical that a CEO know her/his local shoreland zoning ordinance in order to provide accurate information.

There are a wide variety of locally adopted ordinances throughout the State of Maine. It is impossible for any training manual to accommodate the many variations in detail. Therefore, this manual addresses shoreland zoning as if all ordinances were identical to the State mandated minimum, the *State of Maine Guidelines for Municipal Shoreland Zoning Ordinances* (06-096 Department of Environmental Protection, Chapter 1000 as amended May 1, 2006) <http://www.state.me.us/dep/blwq/docstand/szpage.htm> which will be referred to throughout the manual as the "*Guidelines*". The reader will have to make notes of adjustment to meet personal needs. Local code officers should be aware that they are responsible for any and all specific requirements found in the ordinance adopted by the municipality in which they are employed, not only the standards of the *Guidelines*.

This manual explains the statutory and regulatory basis for local shoreland zoning ordinances and the basics of shoreland zoning administration and enforcement according to the *Guidelines*. Commonalities of shoreland zoning administration among municipalities are discussed, regardless of the differences among these ordinances.

The purpose of Chapters One through Three of this manual are to describe shoreland zoning within the context of the range of land use regulations authorized by the State of Maine for municipalities to administer. The principle features of Shoreland Zoning are discussed in the general context of zoning. The manual focuses on the role of the CEO as administrator and enforcer and attempts to clarify and interpret selected minimum standards of the *Guidelines*.

The major purpose of shoreland zoning is to minimize nonpoint source pollution to the significant waters of the State by regulating land use activities adjacent to these waters. It is important to understand the concept of nonpoint source pollution and to be aware of methods which may be used to minimize the impacts of such pollution through shoreland zoning. The Department of Environmental Protection led development of several publications which detail best management practices for controlling nonpoint

source pollution created by construction activities, forestry, and agricultural land uses. Many of these pollution control measures are easily understood and can be applied at most construction sites. Chapter 5 introduces CEOs to some of the common nonstructural methods which may be used to meet the standards of a shoreland zoning ordinance which address nonpoint source pollution. Advice for conducting site inspections where these practices are used is provided to ensure that such measures are used effectively.

## ***Chapter One: Land Use Planning, Zoning, and Shoreland Zoning***

### ***A. Land Use Planning and Zoning***

Historically, zoning developed before the concept of planning really took root. Zoning was a regulatory way to solve the problems associated with industrialization encroaching on residential areas in the early 1900s. It was and is premised on the police powers authority of municipalities to protect public health, safety, and welfare. Progressive thinkers of the time advanced the concept of planning and, using more sophisticated generations of zoning to implement their ideas, shaped the development of cities and towns across America.

Today, communities enact zoning ordinances for a number of reasons:

- To direct the growth of a community,
- To minimize financial impacts of growth on the community,
- To stabilize neighborhoods,
- To encourage safe traffic movement; and
- To protect significant cultural, historical, or natural areas.

Zoning is the division of a municipality into two or more districts in order to regulate the use of private and public land. The regulations within zoning ordinances take three basic forms:

- 1) the districting of a municipality into *zones* that distinguish allowed and prohibited uses. The zones have differing purposes, e.g., to support village center, commercial, industrial, residential, or rural land uses;
- 2) the imposition of *space and bulk standards* that regulate how large, how high and how close structures within the zone may be to each other;
- 3) the imposition of *performance standards* which provide measurable criteria that land uses must meet, i.e., minimum design standards for driveways or the amount and quality of storm water that is allowed to flow off a lot, etc.

Land use planning is an assessment of where a community is today, where it would like to be at some point in the future, and a discussion of how to reach its identified goals. It is accomplished by first creating an inventory of all current and pertinent information regarding the community. This is followed by an analysis of the potential problems and issues. Goals for the development of the community and resolution of perceived problems and issues are discussed. From these discussions, alternative solutions are weighed before establishing policies for achieving the goals. Finally, the desired steps required to implement the policies are identified. The development of a municipal comprehensive plan follows this basic planning concept.

One of the most important outcomes of the comprehensive planning process is the land use plan. A land use plan provides a vision for *how* a community wishes to grow. It identifies the areas within a community that should be targeted for future growth and development (i.e., residential, commercial, industrial), as well as, areas where development should be discouraged (i.e., forested areas, significant agricultural land, etc.). The land use plan links the planning and regulatory functions of the community. A zoning ordinance is typically the primary vehicle for implementing the land use plan. Since 1988, Maine law has specified the subject matter that a comprehensive plan must include and the issues that must be addressed by its goals and policies for the future. A comprehensive plan must contain policies regarding the provision or extension of municipal services, economic development, protection of important natural, historical and cultural resources, transportation, and housing. All of these policies are reflected in the land use plan, and therefore in the zoning ordinance. By linking the regulations in a zoning ordinance and the inventory, analysis and policy development in a comprehensive plan together, the Legislature has taken a step to assure that a community has well thought out reasons for the restrictions it places on private property.

Title 30-A, Chapter 187, Planning and Land Use Regulation contains Subchapter II, entitled, *Growth Management Program*. This subchapter, sections 4312 to 4349, was enacted in 1988 and substantially revised in 1991, 1992, 1994, 2000, and 2001. Additional amendments were adopted in 2002. It is here that the requirements for comprehensive planning and its relationship to land use regulation are found.

The statutory authority enabling municipalities in Maine to engage in zoning are contained in three basic State laws:

- 1) ***Maine Comprehensive Planning and Land Use Regulation Act***: 30-A MRSA §4312 establishes State goals and guidelines for municipal growth management programs. A program consists of a comprehensive plan and an implementation program, including a zoning ordinance and capitol investment plan based upon the plan. As a minimum, the plan must designate *growth areas* in which projected future municipal growth may be accommodated, and *rural areas* in which conservation of fishing, farming, and forestry enterprises, as well as, protection of natural resources, including shoreland resources may take place. The mandatory growth and rural areas are usually implemented by creating two or more zoning districts in the local zoning ordinance. There are now two exceptions for designating growth and rural areas. If a town can demonstrate that it is not experiencing much residential growth (and as of 2001 amendments, nonresidential growth) and that it does not project much change in that trend, or if it's natural features would prevent a compact development pattern, a town can be exempted from this requirement.
- 2) ***Maine Zoning Ordinances***: 30-A MRSA § 4352 requires that all zoning ordinances be based upon a comprehensive plan, regardless of whether a town chooses to accept guidance from the State Planning Office's Community Planning and Investment Program. Public participation is required in the development or amendment of a municipal zoning ordinance; and a zoning map delineating the

current zoning districts must be maintained.

- 3) **Maine Mandatory Shoreland Zoning Act.** 38 MRSA § 435-449 establishes that the State of Maine is trustee of all waters of the State and responsible for public health, safety and the general welfare. In keeping with these responsibilities, the State has declared that it is in the public interest to establish zoning and land use controls along shoreland and wetland areas. Shoreland zoning is the State's primary method of regulating land uses on public and private property that is adjacent to surface waters.

Municipalities are required to adopt local shoreland zoning ordinances that are at least as restrictive as the minimum standards contained in the *Guidelines for Municipal Shoreland Zoning Ordinances (Guidelines)* developed by the Maine DEP, except in instances where a municipality can document the need for a different set of standards. The State law specifically requires the DEP to adopt and periodically update land use controls, within this set of guidelines for municipalities, to assist their efforts toward compliance.

Incorporation of the protection of shoreland areas into a town's comprehensive planning process should result in Shoreland Zoning Districts and accompanying performance standards that are fully integrated into the town-wide zoning ordinance. This will facilitate administration and enforcement. However, many towns have enacted two separate ordinances. When there are conflicts between ordinances, the stricter of the provisions usually prevails.

## **B. Shoreland Zoning**

As a result of the Mandatory Shoreland Zoning Act, all municipalities must adopt, administer, and enforce zoning ordinances that regulate land use activities within 250 feet of all tidal waters, great ponds, rivers, coastal wetlands, and non-forested freshwater wetlands of 10 acres or more, and within 75 feet of streams.

The statute provides for the Board of Environmental Protection (BEP) to adopt a set of minimum standards, which a municipal ordinance must meet. These minimum standards are published as guidelines for municipal ordinances. Failure of a municipality to enact a local ordinance that meets these minimum requirements, or to provide adequate justification supporting a conclusion that the minimum requirements are not appropriate, will result in the adoption of the necessary ordinance or ordinance provisions by the Board of Environmental Protection "on behalf of" the municipality. An ordinance adopted by the Board must still be administered and enforced by the municipality.

The *Guidelines*, adopted by the BEP in 1990 and amended in 1992, 1994, 1999, 2000, and 2006, suggest the establishment of seven different districts in the ordinance, which recognize the differing levels of existing development and value of natural resource features. There is an extensive set of performance standards designed to protect water quality, wildlife habitat and waterfront aesthetics.

The *Guidelines* contain all of the provisions found in any zoning ordinance: the delineation of districts, the listing of permitted uses in each district, the specifications for minimum lot sizes and other dimensional requirements, and a number of other performance standards which are designed to protect water quality and maintain aesthetics.

The municipality, through the Planning Board and code enforcement officer, has the responsibility to administer and enforce shoreland zoning whether the ordinance has been adopted by the municipality or by the BEP on behalf of the municipality. There are several provisions of the State statute that take precedence over local ordinances. Regardless of whether these provisions appear in a local ordinance, the municipality must enforce them. They are as follows:

- The statute requires that all "substantial expansions" to a nonconforming structure meet the setback requirement. A substantial expansion is one which expands the structure by 30% or more in either floor area or volume. Even if apparently permitted by a locally adopted ordinance, a CEO is prohibited from issuing a permit for an expansion of 30% or more, for any part of the structure that fails to meet the shoreland setback requirement. The 30% expansion limitation applies for the lifetime of the structure, beginning on January 1, 1989.

However, in 1998 the Legislature provided an alternative method for limiting expansions of nonconforming structures in the shoreland zone. The alternative is provided as an option to the 30% rule for those municipalities that incorporate it into the local ordinance. The alternate method limits expansions based on the total floor area of all buildings within the setback area as well as the building height.

**Municipalities, which adopt the alternative method of limiting expansions of nonconforming structures, cannot also retain the 30% expansion rule.**

- In areas designated as a resource protection district adjacent to a great pond, timber harvesting is prohibited within 75 feet of the water, unless the municipality, in its locally adopted ordinance, permits harvesting if the following conditions are met:
  1. The ground is frozen;
  2. There is no resultant soil disturbance;
  3. No wheeled or tracked equipment enters the 75-foot strip of land;
  4. Cutting of trees is limited to no more than 30% of the volume of trees 6 inches or more in diameter in any 10-year period; and



5. The trees to be harvested are marked by a licensed professional forester.

- An amendment to a zoning provision, which affects the shoreland zone, must be sent to the DEP for review and is not effective until approved, or 45 days after its receipt if no response is received. However, permit applications received prior to the effective date shall be reviewed under the terms of the amended ordinance, if that amendment is approved by the DEP. If an amendment is one which may be interpreted as weakening the provisions, a code enforcement officer should keep in mind that it may not survive DEP review, and warn any applicant of that fact when issuing a permit prior to receiving approval from the DEP.
- There can not be any new cleared openings to the water, except for water-dependent uses and as provided for footpaths. Cleared openings legally in existence on the effective date of an ordinance may be maintained, but shall not be enlarged.
- The statute identifies a number of rivers throughout the State that are labeled "significant river segments". Along these river segments, special setback and other provisions apply. Most of these river segments are in the northern and eastern part of the State. The identification of these rivers and the special provisions governing development along their shores are the result of an in depth study of the State's rivers in the early 1980's. The river segments are those identified in the study as undeveloped stretches of rivers with values of statewide importance.
- The definition of "functionally water-dependent uses" specifically excludes recreational boat storage buildings, which must meet water setback requirements.
- A copy of each variance request, including the application and supporting information supplied by the applicant, must be forwarded by the municipal officials to the DEP at least 20 days prior to action by the Board of Appeals.

## ***Chapter Two: The Elements of Shoreland Zoning***

### ***A. Principal Features of Zoning and Shoreland Zoning Ordinances***

#### **1. Introduction**

A shoreland zoning ordinance, like any other zoning ordinance, consists of two parts: the text of the ordinance, and a map that shows the locations of the districts. Some towns in Maine have no town wide zoning ordinance; only a shoreland zoning ordinance. Others have both shoreland zoning and town wide zoning ordinances, separately. Still other communities have combined their shoreland zoning and community wide zoning into one ordinance, with separate or combined shoreland zoning and zoning maps. All of these options are legitimate ways for communities to fulfill their requirement for having local shoreland zoning.

The text of most zoning and shoreland zoning ordinances, whether combined or separate ordinances, follows the same basic structure, though parts may be rearranged. The essential parts of zoning and shoreland zoning ordinances are listed below. The description of structure of a shoreland zoning ordinance, which follows, is based upon these commonly essential parts of shoreland ordinances, rather than the form of the model ordinance contained in the *Guidelines*. This Chapter of the manual is modeled after Section III of the CEO Training Manual, *Zoning and Land Use Regulations*. This has been done to allow the reader to compare the functional relationships between parts of general zoning and shoreland zoning ordinances. In addition, each of the essential parts of has been cross-referenced to the applicable sections of the *Guidelines* by listing the corresponding section(s) of the *Guidelines* in parentheses. This helps link the essential parts of the variety of local shoreland zoning provisions, with which local CEOs must work, with the minimum standards of the *Guidelines*.

#### **2. Commonly Essential Parts of Shoreland Zoning Ordinances**

Elements common to shoreland ordinances are:

- statement of purpose (Section 1);
- reference to the State statutes from which legal authority for enactment is derived, a description of the land areas subject to shoreland zoning, and other legal provisions (Sections 2, 3, 4, 6, and 9);
- definitions for terminology used in the ordinance (Section 17);
- general provisions regarding the application of the ordinance (Sections 11, 12);

- delineation of land use districts with appropriate uses and lot sizes for each (Sections 9, 13, 14, 15);
- performance standards against which proposals for land use in each district must be compared (Section 15);
- procedures for the administration and enforcement of the ordinance (Sections 5, 7, 10, 16); and
- procedures for adopting and amending the ordinance and shoreland zoning map (Sections 4, 8, 9).

**a. Purpose.** An ordinance should open with a statement of its purpose. The broad purposes for shoreland zoning are listed in **Section 1** of the *Guidelines*. These may be listed among other purposes of a combined ordinance, or they may be listed separately in a combined ordinance as they relate to the standards that apply in the shoreland zone.

**b. Legal Provisions.** The legal provisions of an ordinance include:

- A reference to the statutes that authorize or direct the adoption of shoreland zoning is included in **Section 2** of the *Guidelines*. Although not necessary, many local ordinances based on the *Guidelines*, also include such a reference.
- Statements that detail the geographic area governed by the ordinance.
- The effective date of the ordinance.
- Provisions that direct the management of conflicts between the ordinance and other laws or regulations.
- A *separability* clause is included in **Section 6** of the *Guidelines*. Separability allows for one provision that is found unconstitutional or unenforceable by a court to be rendered ineffective without affecting the other provisions of the ordinance.
- The area under jurisdiction of a shoreland zoning ordinance is described in **Section 3** of the *Guidelines*. In combined or separate zoning and shoreland zoning ordinances, local zoning sometimes also applies in the shoreland area described in this section.
- DEP Commissioner's 45 day time limit for DEP review and approval of the local shoreland zoning ordinance provisions is established in **Section 4** of the *Guidelines*.
- The procedure for amendment of the ordinance should also be included, and it is contained in **Section 8** of the *Guidelines*. Amendments are subject to a 45-day DEP

review period, as the entire ordinance is, at the time of adoption.

- A map must be drafted and incorporated into the ordinance regulating the shoreland zone, which identifies the land area subject to the various districts established. This is mandated in **Section 9** of the *Guidelines*.
- Shoreland zoning map amendments are also subject to **Section 9** of the *Guidelines*, which requires that amendments of shoreland zoning maps be completed within 30 days of their approval by the DEP.

### 3. Establishment of Districts

Shoreland zoning is the division of a town's shoreland area into various parts (districts) with differing standards, as described in Section 3 of the *Guidelines*. Therefore, a method of delineating the districts must be included in the ordinance, i.e., a zoning map. Maine law and the *Guidelines*, **Section 9**, require that a map be drafted and incorporated into the ordinance regulating the shoreland zone. DEP encourages municipalities to also provide a detailed written description of district boundaries to minimize boundary disputes. This is usually the case where district boundaries follow a natural feature of the land (such as a wetland), which cannot be precisely designated, on the map. If there is a conflict between the map and a specific written description, the written description prevails (30-A MRSA § 4352). For example, if the zoning map indicates that a particular lot is in the RP district, but the text states that the lot (i.e., tax map 3, lot 12) is in the Limited Residential (LR) district, the written description would prevail.

**a. Generally.** In a town wide zoning ordinance, the number and variety of zoning districts provided for by ordinance depends upon the size of the community and the extent of existing development. Larger cities such as Lewiston or Bangor have a need for a greater number and variety of zoning districts than rural communities such as Etna or Sebago. However, there is commonality between these ordinances.

Larger communities most often divide the town or city into residential, industrial and commercial areas, and have more than one of each of these. Small, more rural communities may have only village and rural zones. Many small towns don't perceive the need to separate uses because of the larger lot sizes required without the provision of public water or sewer systems. They allow mixed uses in most zoning districts, but use the districts to direct the location and/or density of growth by, for example, requiring different lot sizes for the same use between districts.

Commercial zones are typically found within or around village centers, or in larger communities, within the central business district, and along major traffic routes. Commercial zones may differ from each other according to the types of uses permitted, dimensional requirements, and some performance standards. Frequently, automobile oriented businesses and businesses that require a lot of land such as garages, drive-

ins, building supply stores, and vehicle sales, are allowed only outside of the downtown or village center area. Manufacturing and other industrial uses are often segregated into their own districts, depending upon the size of the municipality and the sophistication of the ordinance.

The relative differences between zones have been evolving for as long as the concept of zoning has been with us. There is an obvious difference in the number and type of zoning districts needed in an ordinance that governs a large urban area as opposed to a small town with scattered development surrounding a village center. Early urban ordinances, created a hierarchy of uses, which permitted preferred uses, such as, residential and retail commercial, in districts that allowed for dirty, noisy, and therefore less desirable uses as well. Later, it was realized that there were valid reasons to segregate uses to a greater extent, protecting, in essence, the "less desirables" use districts from those who might later complain about their operations or to prevent congestion of otherwise exclusive truck routes. Just as industrial uses need to be kept from residential areas, industrial areas were not considered appropriate places for residences.

While this conviction generally remains, modifications have resulted from changes in lifestyles and marketing demands. Residences, shops, and offices in the same area, and in the same building are appearing with greater frequency. More recently, zoning ordinances in general, have been allowing a greater mixing of uses. This has been done to bring vitality to commercial areas that become empty after 5:00 pm, and to reduce traffic and energy consumption.

**b. Floodplain Management.** Without the federal government's participation, the private insurance industry would not provide coverage for property damage due to flooding. In order for property owners to be eligible for flood insurance, the community must participate in the National Flood Insurance Program. The most significant step necessary for participation is enactment of an ordinance that regulates development activity in the 100-year flood plain. This regulation most often does not involve the control of use or lot sizes, but establishes a set of structural performance standards designed to minimize flood damage and establishes a permit system for all development in special *flood hazard areas*. However, the federal regulations do require a community to prohibit new development in areas where floodwaters will move with significant velocity. In addition, the lowest floor of any structure must be one foot above the base flood elevation.

The Federal Emergency Management Agency has produced maps for most Maine communities designating the Special Flood Hazard Areas. This area, commonly known as the 100-year flood plain, is the area where there is a 1% chance that flooding will occur in any given year. Because of the statistical nature of the definition of the 100-year flood, it is not a flood that occurs only once every 100 years. A river or coastal area could experience any number of 100-year floods within several years of each other.

Because a floodplain management ordinance establishes two different districts and provides for regulations in one district, which do not apply in the other, it is a zoning ordinance. The Maine State Planning Office, Floodplain Management Program, publishes a manual on the administration of floodplain management ordinances. This manual, and/or the Office should be consulted for additional details.

**c. Overlay Zones.** There are times when it is desirable to impose an additional set of regulations beyond the basic district regulations, yet also continue to recognize the original provisions. For instance, a town may be interested in maintaining the architectural character of a section of town, which is in both business and residential zoning districts. Instead of the creation of two additional zoning districts, a historic preservation business district and a historic preservation residential district, an historic preservation "overlay" district can be developed. With an overlay district, the provisions of the "underlying district", business or residential, continue to apply regarding use and dimensional requirements. Overlaid on the regulations are those that affect the architecture and design of buildings.

Overlay districts are frequently used for historic and natural resource preservation, floodplain, shoreland, or wildlife protection. They are best used when seeking a particular objective, i.e., preservation of habitat or continuity of building design. This can be accomplished without regard to the use, lot size, or other requirements otherwise in place.

**d. Shoreland Zoning Districts.** Shoreland Zoning Districts are unique zoning districts designed to protect surface water and wetland resources of the State while allowing specified and conditional land uses, governed by dimensional standards, performance standards, and regulations on nonconforming land use. The *Guidelines* describe seven shoreland districts.

## 4. Shoreland Districts

**a. Resource Protection District.** This district includes shoreland areas which are undeveloped, and which meet any of the five characteristics listed below. The purpose of this district is to protect water quality, productive habitat, biological ecosystems, scenic and natural values. At a minimum, the following areas *must* be in a resource protection district, unless current development patterns dictate otherwise. Municipalities may choose to include other areas.

1. Areas within 250 feet, horizontal distance, of the upland edge of freshwater wetlands, salt marshes and salt meadows, and wetlands associated with great ponds and rivers, **that are rated "moderate" or "high" in wildlife value by the Maine Department of Inland Fisheries and Wildlife.**
2. 100-year floodplains along rivers, around artificially formed great ponds along rivers such as a large mill pond in a river, and 100-year floodplains adjacent to tidal waters.
3. Areas of two or more contiguous acres with sustained slopes of 20% or greater.
4. Areas of two or more contiguous acres within a shoreland zone supporting wetland vegetation and hydric soils but which are not directly connected to another wetland, lake or river.
5. Areas of severe bank erosion, bank undercutting, or river bed movement, along rivers or adjacent to tidal areas such as steep coastal bluffs.

The *Guidelines* encourage municipalities, although it does not require them, to include other sensitive natural wildlife, historical and archaeological areas in the Resource Protection District. This district generally does not allow for any new principle structures. Other limitations apply as defined by Table 1. of the *Guidelines*.

**b. Stream Protection District.** This district becomes a mandatory inclusion in the local shoreland zoning ordinance, if the resources targeted by the Act for protection (as listed below) are contained within municipal boundaries. The purpose of the stream protection district is to provide water quality protection for free flowing bodies of water which do not meet the definition of a river, but are considered significant State resources because they provide fisheries habitat, recreational opportunities and are a source of water to wetlands, rivers, and great ponds. Streams are defined as the confluence of two perennial streams mapped on a USGS map; or as a free flowing body of water from the outlet of a great pond. No buildings, unless water-dependent, are allowed within this district unless a variance is obtained. The following areas *must* be regulated consistent with a stream protection zone.

*All land within 75 feet, horizontal distance, of the normal high-water line of a stream except those areas within 250 feet of a great pond, river, saltwater body or a freshwater or coastal wetland of 10 acres or more that is non-forested. Where a stream and its associated shoreland area is*

*located within two-hundred and fifty (250) feet, horizontal distance, of the above water bodies or wetlands, that land area shall be regulated under the terms of the shoreland district associated with that water body or wetland.*

**c. Limited Residential District.** The purpose of this district is to allow for normal residential and recreational use of shorelands but still preserve the water quality of the water body. This district usually is applied to recreational lake and pond shores and along rural, rivers, and tidal areas that are not designated under mandatory resource protection because they do not meet any of the resource protection district criteria. This district can allow residential and recreational buildings within the zone up to 100 feet of the edge of a great pond or river flowing to a great pond and up to 75 feet from other water bodies.

**d. Limited Commercial District.** The purpose of this shoreland district is to allow for areas along waterbodies that already have or that could have, as supported by a municipal comprehensive plan, a mix of light commercial (less intensive uses than those in a General Development District) and residential uses within 250 feet of the waterbody or wetland. Depending upon the kind of water body, buildings would need to be set back 75 or 100 feet from the water.

**e. General Development I District.** The purpose of this district is to provide for mixed development as the Limited Commercial District does except that intensive commercial and industrial uses are also allowed. This particular shoreland district is often used by municipalities to designate existing and historic mill areas along rivers in cities and village centers. By allowing a reduced setback from 75 feet to 25 feet, the General Development I District allows for easier downtown revitalization along built-up riverfronts by reducing the number of buildings that are nonconforming with respect to setback from the water. The General Development I District also can apply to dense recreational developments, such as fairgrounds, next to a waterbody or to mixed use residential/commercial areas.

**f. General Development II District.** This district allows for the same uses as the General Development I District but applies to newly established districts where development density is not significant at the time the district is established. The water setback requirement for this district is 75 feet.

**g. Commercial Fisheries/Maritime Activities District.** The purpose of this district is to protect existing and planned harbors and marinas for water dependent uses such as piers and other related facilities that support a commercial fishing or recreational fleet. Except for residential uses, all other land uses are permissible (according to the *Guidelines*) in this zone so long as they have a functionally water-dependent purpose. For example, a government building could be allowed for the Harbor Master, or a school building for boat building classes and sailing instruction as well as the more traditional bait and tackle shops, loading and repair facilities found along working waterfronts.



## 5. Zoning Map

**a. General Provisions.** A zoning map delineates the boundaries of the zoning districts on a base map of the municipality and labels each district clearly. Most municipal base maps show the boundary of the town or city, major water bodies, State and town roads and the names of prominent features such as the local village or neighborhoods and local mountains, hills, harbors, bays, lakes, ponds and marshes.

The purpose of a zoning map is to apply district boundaries and associated standards to the face of the earth in order for municipal officials and the public to determine where the various zoning districts are located and to which properties the various districts apply. While some zoning ordinances also have verbal descriptions of zoning district boundaries, ordinances must refer to an official zoning map and may designate the Zoning Board of Appeals to decide where boundaries between zones are located when disputes arise. Some dispute resolution authority should be provided. Most ordinances require that one copy of the zoning map be signed by the town or city clerk and be kept in a permanent, safe and secure file as the official zoning map. The official zoning map may consist of more than one map. For example, one may show the basic zoning districts and others may show overlay districts or special districts such as shoreland zoning districts. Sometimes in a village area, where there may be a concentration of small zones, a separate map may be done at a larger scale for ease in distinguishing the zones. Most official zoning maps are done at 1" = 1000' or 1" = 2000' scale, with detailed village or city center maps sometimes at scales as large as 1" = 100' or 1" = 50' scale. Some municipalities make a large number of copies of the official zoning map or maps available for purchase by the public along with a sale of the zoning ordinance itself. Most zoning ordinances contain reduced copies of the official zoning map or maps on standard 8 1/2" x 11" paper in the ordinance itself for easy reference for the reader.

The town or city clerk, or the CEO is the principal keeper of the municipal zoning map or maps, usually at a larger scale pinned up on an office wall for easy viewing. The zoning map or maps are generally the first item consulted by both the CEO and landowners in determining which zones apply to a property when a landowner requests applications for building permits, conditional use permits, site plans or subdivision plans. Therefore, the more a zoning map includes measurements accurately scaled and labeled in feet or meters, such as, the distance of a zoning boundary from the center of a road, the fewer disputes the CEO and municipality may expect over the location of zoning district boundaries.

**b. Shoreland Zoning Map.** The Shoreland Zoning Law also requires that an official shoreland zoning map be a part of the municipal zoning ordinance, either combined on the same map or on separate sheets. The *Guidelines*, **Section 9** require that shoreland zoning districts in a municipality be mapped at a scale of not less than 1" = 2000', be clearly labeled on the official shoreland zoning map, be certified by signature on one

copy by the town or city clerk, and be kept in permanent custody in the town or city clerk's office.

## 6. Permitted Uses

**a. General Provisions.** The general provisions section of zoning ordinances presents the overall requirements for conformance with the ordinance, including permitting, and explains how existing properties, which do not meet the standards established by the ordinance (i.e., nonconforming), are treated. Ordinances should clearly define the permits that may be required for an activity, though few ordinances do. Included may be a permit to allow the establishment of a use on vacant land, a permit to authorize the construction of a building, and another that allows the use of an existing structure. Other permits required may include those for erection of signs or the establishment of a home occupation. In communities with a building code, the relationship between a permit required by that code and the one required by the zoning ordinance should be made clear. **Section 11** of the *Guidelines* contains very simple and brief language describing the requirement for obtaining a permit and compliance with shoreland zoning standards.

**b. District Regulations.** With the establishment of zoning districts, the zoning ordinance must spell out the standards and regulations applicable to each. These typically take the form of two tables: one establishing the uses permitted in each district and the other presenting the associated dimensional requirements. Most land use tables present a list of various land uses in one column and a series of columns represent the districts with an indication of whether the use is permitted, permitted after some type of review process, or not permitted. Some ordinances provide this information separately for each district. The dimensional features typically regulated by zoning are minimum lot size, minimum street frontage, building or yard setbacks, maximum building height, and maximum fraction of the lot allowed to be built upon.

**c. Shoreland Provisions.** The permitted uses and conditional uses in the municipality's shoreland zone may be set forth in the general table of land uses with all of the other community's zoning districts, or they may be contained in a separate land use table especially for the shoreland districts. Of course, if a community has a separate shoreland zoning ordinance the shoreland table of uses is a separate table.

The *Guidelines* provide a model of permitted and conditional uses in **Section 14** for shoreland districts. Table 1 of the *Guidelines* contains 35 separate land uses grouped into conservation/recreation, resource extraction, residential, commercial and institutional categories. For each shoreland district, the table indicates whether the land use is allowed by right or whether a permit needs to be first obtained (a conditional use) from the Planning Board, the CEO, or the plumbing inspector (who may or may not be the CEO).

## 7. Space Standards

**a. General Provisions.** Space standards, also called dimensional standards or space and bulk standards, provide for minimum required dimensions of lots and for the buildings and other structures on lots. The dimensions usually regulated by space standards within a zoning district include:

1. The minimum size of a lot.
2. The minimum frontage of a lot along a street.
3. The minimum distances that buildings and other structures must be set back from the boundaries on the lot lines of a lot.
4. The maximum size of the ground floor, i.e., the footprint of buildings and other structures on a lot.
5. The maximum amount of floor area of buildings usually expressed as a ratio called the FAR, floor to area ratio, of a lot; for example a 50% FAR would allow a one-story building to cover 50% of a lot, a two-story building 25% of the lot by each story, and a three-story building by 16.66% of the lot by each story, or any other combination of floor space not exceeding 50% of the lot area.
6. The maximum area covered by all impervious surfaces on a lot including footprints of structures, decks, paved driveways, parking areas and patios.
7. Other space standards can include the maximum height of buildings, maximum volume of buildings, width of buffer strips along lot lines, setback of driveways and parking areas from lot lines and others.

**b. Shoreland Provisions.** The principal goal of the dimensional standards of all shoreland zoning is to keep structures and other impervious surfaces, such as parking areas, sufficiently back from water bodies to allow for percolation into the ground and/or "scrubbing" of surface water runoff by natural vegetation in order to remove pollutants before the runoff reaches the water body. Directly or indirectly all required shoreland space standards serve this goal. The required standards are listed below:

1. Minimum lot sizes are specified for (1) residential uses; (2) institutional, commercial, industrial uses; and (3) for recreational facilities whether public water and sewer services are provided or not in order to provide sufficient uncovered land to provide for percolation of runoffs.
2. Minimum shore frontages are specified for the three land use categories above for shorelands adjacent to tidal areas and non-tidal areas.

3. In the shoreland zone, minimum lot area must be met for each dwelling unit or each principal commercial, institutional or industrial use, or combination thereof.
4. Land below the high water mark or upland edge of a wetland cannot be used to satisfy the minimum lot area of lots in the shoreland zone.
5. Except for structures that require direct access to the water, such as a pier, all structures in the shoreland zone must set back at least 100 feet from great ponds classified GPA (Great Ponds with the water quality classification "A") and rivers that flow to GPA classified great ponds. All natural great ponds are classified GPA. All structures must set back at least 75 feet from other water bodies. However, structures in the General Development I Shoreland District must be at least 25 feet from waterbodies and wetlands.

Note: Adjacent to “unstable” and “highly unstable” coastal bluffs, setbacks are measured from the top of the bluff, rather than from the upland edge of the coastal wetland.

6. Structures in the shoreland zone cannot exceed 35 feet in height, except in the General Development I and II Districts and the Commercial Fisheries/Maritime Activities district, and the ground floor of structures must be at least one foot above the base flood elevation. (Assistance with measuring height can be found in Appendix D).
7. The total area of impervious surfaces on shoreland lots cannot exceed 20% of the total lot area, except in the General Development I and II Districts and Commercial Fisheries/Maritime Activities districts that are not adjacent to great ponds, where lot coverage cannot exceed 70%.

## **8. Design and Performance Standards**

Dividing a town into different use districts still does not prevent one use from having adverse impacts upon another use or on public facilities. For this reason, ordinances contain performance standards or design criteria that are enforced to minimize off-site impacts or achieve some other community goal. A number of standards are common to most comprehensive zoning ordinances. These may be referred to as general performance standards.

**a. General Performance Standards.** Early zoning ordinances merely divided the town up into use and density districts. It later became apparent that additional standards were necessary to address some of the problems zoning sought to prevent. Eventually standards were incorporated into ordinances, which needed to be met in order to further protect neighboring property. These standards included such things as landscaping requirements, requirements for off-street parking, and control of noise, dust, odor and glare.

Most zoning ordinances today have two types of performance standards. Those that all uses must meet, such as those mentioned above, are referred to as general performance standards. Others, sometimes called design criteria or specific performance standards, are written for particular uses, such as gravel pits, mobile home parks and campgrounds. Specified performance standards or design criteria in zoning ordinances usually include but are not limited to:

1. off-street parking and loading requirements per lot, which specify the minimum number of parking spaces needed for the use or activity taking place on the lot such as residential use, office use or retail use, etc. Secondly, the design standards specify the minimum design and dimensions of parking spaces and parking areas.
2. signs advertising businesses and products which are usually regulated as to size, material, location on the lot and lighting in order to secure public safety for motorists, bicyclists and pedestrians by controlling the effects of obstruction of views, glare and dangerous visual distractions from poorly placed and lighted signs. There is sometimes an added aesthetic objective that communities seek through sign design criteria. Often advertising signs are altogether prohibited from residential districts.

**b. Shoreland Performance Standards.** Section 15 of the *Guidelines* presents 20 model sets of design and performance standards applicable to the shoreland zone. The first six sets of performance standards (Subsections A-F) deal generally with land uses and structures with respect to space standards, densities, setbacks and prohibited uses. Most, but not all, of these standards are discussed in the previous subsection of this Manual, 7. *Space Standards*.

The next group of performance standards (Subsections G-L of the *Guidelines*) deals with design standards of facilities such as parking areas, signs, storm water and septic wastewater management and essential services such as electricity.

The third group of performance standards (Subsections M-S) deals with management standards for natural resources in the shoreland including minerals, agriculture, forestry, erosion, sedimentation, soils and water quality. One final set of performance standards provides protection to identified archaeological resources in the shoreland.

The underlying purpose of all the design and performance standards is to afford environmental protection of the State's water resources. This includes the quality of the waterbody certainly, but also includes the natural productivity of associated habitats, for example fresh and saltwater marshes, as well as, the human-related functioning of the shoreland for water dependent economic uses, recreational, and educational benefits while maintaining the aesthetics of the State's shorelands.

Many of the performance standards are use-specified in that they relate to a specific land use or natural resource. For example, there are specific performance standards related solely to the placement of individual, private campsites on private lots including both space standards such as area per campsite and setback from the waterbody, and performance standards for the management of wastewater. Another example is the extensive set of standards for timber harvesting and clearing of vegetation for development. These standards attempt to strike the proper balance between protecting the water bodies adjacent to land use activities while allowing for reasonable use of private land for woodlot management and development.

## 9. Nonconformance

**a. Definition.** Shoreland zoning, like all zoning, is a tool to prevent problems not remedy them. Therefore, generally, properties that do not meet the standards of an ordinance are permitted to remain. The ordinance needs to address how these "non conformities" are to be treated and what, if any, improvements or changes are allowed. Older, simpler ordinances frequently refer only to "nonconforming uses" in addressing *non conformities*. However, in addition to uses which are not allowed where they are located, there will be lots which do not meet the dimensional requirements, and buildings which are too close to a property line or body of water. **Section 12** of the Shoreland *Guidelines* distinguishes between nonconforming lots, structures, and uses, treating them each separately.

Nonconforming structures or uses are those that have been targeted for gradual elimination. Provisions that allow for their continuation should be strictly interpreted, while provisions limiting them should be liberally interpreted. The common allowance for nonconforming structures is to permit their repair and maintenance, but prohibit any enlargement or replacement, unless the addition somehow makes the structure less nonconforming. A structure cannot be made more nonconforming. Similarly, nonconforming uses are usually allowed to continue but prohibited from expanding in size or changing the nature or purpose of their use. Existing vacant lots, which do not meet the dimensional requirements of the ordinance, are usually allowed to be used for some purpose, conditionally, if the owner owns no other adjacent land. If a person owns two or more adjacent, vacant nonconforming lots, most ordinances require they be combined to the extent necessary to meet the lot size or frontage requirements.

The most frequently encountered reason for nonconformance in shoreland zones is the setback of buildings closer to the water than the required 250, 100, or 75 feet. Most of these nonconforming setbacks are existing lakeshore cottages or ocean beach cottages constructed long before shoreland zoning in Maine. Legally existing nonconforming lakeshore or beach cottages are said to be "grandfathered" with respect to shoreland zoning. That is, they became legally nonconforming after the adoption of shoreland zoning because they were legally conforming to whatever the law was *before* shoreland zoning was adopted.

**b. Nonconforming Lots.** The thrust of **Section 12.E** of the *Guidelines* is to compel the combination of contiguous nonconforming lots, as much as possible, that are under common ownership. However, the Guidelines were amended in June of 1991 to allow municipal ordinances to permit structures on nonconforming lots without the combination of contiguous lots, where each lot contains (or can be reconfigured to contain) at least 100 feet of shore frontage and at least 20,000 square feet of lot area, and the lot is served by public sewer or can accommodate a subsurface disposal system in conformance with the *State of Maine Subsurface Wastewater Disposal Rules*. This allowance is only applicable to lots that were under the same ownership at the time the lots became nonconforming. Isolated nonconforming lots may be built upon so long as all setbacks and other dimensional standards are met, except minimum lot size and shore frontage. This reflects the reality that most lots are nonconforming in the first place because they are too small or do not have enough frontage on a lake or beach shore to satisfy the requirements of the new shoreland zone.

**c. Nonconforming Structures.** While a structure may be nonconforming because it covers too much of the lot or is too close to one of the front or side lot lines, the requirements of shoreland zoning focus on structures that are too close to a waterbody. The major purpose of **Section 12.C** of the *Guidelines* is to limit expansion of buildings and other structures and prevent greater encroachment toward water bodies than is allowed. This is accomplished by the requirement that the expansion of any portion of a structure that is closer to the water body than the shoreland zone allows may not be expanded in floor area or volume by more than 30% over the entire life of the structure with no expansion allowed closer to the shoreline than the existing structure. As noted earlier in this manual, the Legislature has provided an optional alternative for limiting expansions of nonconforming structures, basing allowable expansions on total floor area and building height within the required setback area. The details of the alternate method are found in Appendix A of the *Guidelines*. More information about nonconforming structures can be found in Chapter 3, section J of this manual.

**d. Nonconforming Uses.** An existing use of a lot that became nonconforming when shoreland zoning was adopted or amended in a municipality may continue if it is not expanded. For example, a retail store in a Limited Residential Shoreland Zone (which does not allow for retail stores) could not expand its floor space even if the expansion could meet all of the dimensional requirements on the lot. However, the nonconforming retail store use could be changed to an office use if the Planning Board finds that an office building is no more nonconforming than the retail store. Both a retail store and an office building are not permitted in the Limited Residential Shoreland Zone, but an office building is likely to be found to be less nonconforming than a retail store for several reasons; fewer people, cars parking, and waste water/solid waste would be generated by an office use. See **Section 12.D** of the *Guidelines*.

Sometimes there is a permitted use, i.e., a conforming use within a building, that is nonconforming with respect to one or more dimensional requirements of the shoreland zone. To change the use that is within a nonconforming structure to another use,

**Section 12.C.4** of the *Guidelines* specifies that the Planning Board must find that the new use would have no greater adverse impact on the water body or wetland or on adjacent properties or resources than the existing use.

**Section 12.D.** of the *Guidelines* also specifies that once a nonconforming use has been discontinued for one year, it cannot be resumed, nor can any other nonconforming use be made on that lot or within the structure. However, the Planning Board may grant an extension, up to one year, of the original one year period for a good cause shown by the applicant, such as but not limited to, difficult winter conditions to go forward on reconstruction activities after, for example, a fire had destroyed the building in which the nonconforming use had been carried on. Also, in the case of a nonconforming residential use in a RP district, the time that must pass before the use could not be resumed is increased to five (5) years.

## 10. Appeals

Every zoning ordinance must spell out the procedures for its administration and enforcement. This section of an ordinance should indicate who administers and enforces the ordinance, when a permit is necessary, how a permit is obtained, the inspection requirements, and how to obtain review for those uses which require it prior to permit issuance. In addition, Maine law requires that every zoning ordinance provide for an appeals process by which individuals may challenge the administrator's decisions or ask for relief from the standards of the ordinance (30-A MRSA § 4353).

Because the shoreland zoning ordinance administration procedures are quite similar to the general administrative procedures found in all zoning ordinances, municipalities that have adopted shoreland zoning into their general zoning ordinance provide only one set of Administration Procedures which apply to all districts including shoreland.

On the other hand, those communities that have adopted a separate shoreland zoning ordinance have included an administrative procedure section applicable just to their shoreland districts. **Section 16** of the *Guidelines* offers the DEP model administrative procedures for shoreland zoning ordinances. These administration procedures are based upon the requirement for securing a permit from the local government for a number of land uses allowed in the land use section of the ordinance. Major expansions or changes of use in the shoreland zone may also require a permit. A shoreland ordinance may designate both the CEO and the Planning Board as administratively responsible for different shoreland permits.

The appeals portion of administrative procedures details the process available to property owners and other local citizens who believe they have been somehow wrongfully affected by the administration of the local shoreland zoning ordinance. It is a three-step process:



**Step 1:** An applicant for a shoreland permit or another local citizen feels aggrieved by what she/he believes to be misinterpretation: by the CEO or Planning Board of the ordinance; of how the CEO or Planning Board administered the ordinance; by the lack of action by the CEO or Planning Board on a shoreland permit application; or to seek relief (a variance) from the shoreland ordinance finding it too restrictive relative to their particular shoreland lot.

**Step 2:** The shoreland permit applicant or other aggrieved local citizen files an appeal to the municipality's Board of Appeals or Zoning Board of Appeals to seek a third party understanding of the shoreland ordinance or relief from the strict application of the ordinance.

**Step 3:** If the permit applicant or other affected local citizen still feels aggrieved by the Board of Appeals ruling on the matter, the aggrieved applicant or citizen can then take the matter to the Superior Court.

Sometimes the local Board of Appeals remands a shoreland case back to the CEO or Planning Board for reconsideration; sometimes the Superior Court also remands a case back to the CEO or Planning Board for reconsideration of some point of law.

It is possible for the CEO to feel aggrieved of an interpretation or decision under the shoreland ordinance by the Planning Board and appeal to the Board of Appeals; or for the CEO to appeal a ruling by the Board of Appeals to the Superior Court.

## 11. Variances

Appeals to the Board of Appeals for relief from the strict application of a zoning ordinance, are called variance appeals. However, State law has made it very difficult to secure a variance (MRSA 30-A § 4353), which can only be given if the applicant's appeal meets four tests of hardship. They are:

1. *the land in question cannot yield a reasonable return unless a variance is granted;*
2. *the need for a variance is due to the unique circumstances of the property and not to the general conditions in the neighborhood;*
3. *the granting of a variance will not alter the essential character of the locality; and*
4. *the hardship is not the result of action taken by the applicant or a prior owner.*

Additional criteria under shoreland zoning, **Section 16** of the *Guidelines*, for securing a variance include:

- 1) Variances may only be granted from strict application of dimensional requirements such as for lot width, setback from lot lines, height of structures or lot coverage.

- 2) There is no such thing as a use variance. No variances can be granted for starting a use that is prohibited by the shoreland ordinance.
- 3) However, the *Guidelines* do allow the Board of Appeals to grant a variance for the purpose of making a dwelling accessible to a person with a disability who is living at the dwelling. The variance may be only for physical equipment and facilities to aid the disabled person's movement to, from, and within the dwelling, i.e., for someone in a wheelchair.

A change was made to Title 30-A § 4353, in 1991, regarding adoption of ordinances that permit the Board of Appeals to grant minimum setback reductions of up to 20% for single family dwellings that are primary year-round residences, where lot coverage criteria are met. In 1993, another amendment to this law provided that an ordinance may allow for a variance to **exceed 20%** of a setback requirement, **except for minimum setbacks from a wetland or water body required within shoreland zones, and only with written consent of an affected abutting landowner.** A different set of undue hardship criteria are used to evaluate requests for this type of variance.

Generally, the only times that variance appeals should come up is when a landowner wants to develop an old "grandfathered" lot that predates the adoption of the shoreland ordinance. Such a lot would characteristically be "substandard", i.e., smaller than required by the shoreland ordinance or have a dimension too short such as lot depth. Even then, a variance should only be granted if the proposed structure can meet all other provisions of the shoreland zoning ordinance except for the one nonconformity, for which the variance is being sought. **A Board of Appeals must send a copy of any variance granted within the shoreland zone to the DEP within 14 days of the decision.** Also, a copy of each variance request must be forwarded by the municipality to the DEP at least 20 days prior to action by the Board of Appeals.

## 12. Administrative Appeals

An administrative appeal is made when an applicant for a shoreland permit or other affected local citizen alleges that the CEO or Planning Board has misinterpreted or made an error in administering the shoreland zoning ordinance, or has failed to act under the ordinance. These appeals are taken to the municipality's Board of Appeals or Zoning Board of Appeals. If the appellant believes that, in its turn, the Board of Appeals has also misinterpreted the ordinance or that justice has not been done, then the appellant can appeal the decision made by the Board of Appeals to the Superior Court.

The DEP model shoreland ordinance refers both directly and indirectly to the administrative appeals process. Within the ordinance, the necessity for the CEO to bring controversial matters to the Planning Board, and empowering the Planning Board and the Board of Appeals to make judgment calls, are all preliminary steps in the overall administrative appeals process.

The *Guidelines*, **Section 10**, designate the Board of Appeals as the final authority (within the municipality) to resolve disputes about the exact location of zoning district boundaries. The Planning Board is given the responsibility to assess whether or not specified conditions have been met by applicants for permits to relocate nonconforming structures (**Section 12**), to reconstruct or replace nonconforming structures with respect to setback from water, to expand a nonconforming use or to change a nonconforming use to another nonconforming use. The administrative appeals process serves to resolve differences arising from various interpretations of the ordinance. Differences may also arise in the interpretation of the ordinance language, performance standards (**Section 15**), and the administration procedures themselves (**Section 16**), for which the administrative appeals procedure stands ready as a relief valve. Guidance on the performance standards should be sought from DEP where interpretation of *Guidelines'* language is at issue.

### **13. Enforcement Appeals**

The *Guidelines*, **Section 16**, state that the applicant, not the municipality, bears the burden of proving that her/his land use activity meets the standards of the shoreland ordinance. The CEO or Planning Board is responsible for finding that the proposed land use activity meets nine (9) criteria, which uphold the environmental quality objectives of the ordinance. The shoreland ordinance empowers the Planning Board to attach conditions to permits to assure that these nine criteria are satisfied.

Enforcement of shoreland permits by the CEO, especially those with conditions attached, can be difficult due to a difference of opinion regarding the intent of the conditions. Good record-keeping, as specified in **Section 16.I** of the Guidelines, is a part of the enforcement responsibilities of the CEO under the ordinance. This includes complete record keeping of administrative and enforcement actions. When results of a review are challenged, it is essential to have accurate records. When the normal inspections and discussions with landowners do not produce compliance with a shoreland permit, the CEO may take the matter to the board of selectmen/council or town or city manager for further enforcement action. These include seeking a consent decree with the permit holder with a request to the court to levy fines for each day a permit holder remains in violation. Both the CEO for the municipality and the land owner holding a shoreland permit (who is alleged by the CEO to be in violation of the shoreland ordinance) may appeal directly to the Superior Court for relief from an administrative decision. The appeals on both sides would generally be over misinterpretation of conditions in a shoreland permit or over the language of the municipal shoreland ordinance itself. This is appropriate. However, when an appeal involves an enforcement decision by a CEO, rather than an administrative decision, the Board of Appeals will not have jurisdiction.

## 14. Definitions

Municipal ordinances need to clearly define the words and terms used in the ordinance to reduce, as much as possible, misinterpretation of the regulations. Zoning ordinances incorporate terms that are vague and these should be defined in the ordinance. For example, what does the word *family* in the ordinance mean? What is meant by a *dwelling unit* versus a *motel room*? What is meant by *group living quarters* or an *elderly congregate care facility*? The list goes on and on.

Ordinance drafters make use of particular words and phrases that must be assigned a specific meaning for proper interpretation of the ordinance. These assignments may be different from the common meaning of a word or term, or it may be desirable to specify the exact meaning where there could be some doubt. Therefore, zoning ordinances, including shoreland zoning ordinances, contain a list of definitions. The last section of the *Guidelines*, **Section 17**, contains the definitions applicable to shoreland zoning. Reference to the definitions of these terms will help resolve conflict over the meaning of a sentence or requirement. For the code enforcement officer, it is important that definitions and standards are clear: clear to read and understand and clear to direct enforcement action.

In the Shoreland *Guidelines*, **Section 17**, definitions of words and terms used in the model ordinance are provided. It is vital to consult these definitions early in administering a shoreland zoning ordinance so both the CEO and the shoreland permit applicant are "on the same wave length" with regard to the terms used. In particular, terms such as *stream*, *river*, and *wetland* are defined precisely by referring to square miles of drainage area, USGS maps and information compiled by the Maine Department of Inland Fisheries and Wildlife.

### ***B. Major Agents of Shoreland Zoning Administration and Enforcement***

#### **1. Planning Board**

**a. General Duties.** In most communities the Planning Board has two general responsibilities regarding a zoning ordinance. The ordinance is generally drafted and revised by the Planning Board. It is also the purview of the Planning Board to review and authorize conditional land uses enumerated in the ordinance to ensure that the goals and objectives of the ordinance are safeguarded and the provisions designed to guide development toward those goals are met.

There are uses that a zoning ordinance will designate as permitted uses within certain districts, but which are required to be reviewed prior to the issuance of a permit by the code enforcement officer. There are also conditional uses that may be permitted after review by both the CEO and Planning Board. A variety of names are given to these

types of uses: conditional uses, special permits, special exceptions. Some ordinances may not give these uses a title, but simply refer to them as uses permitted after review.

Conditional uses are those which are generally permissible in a given district but which have the potential for impacts that need to be reviewed. Originally, planners envisioned the ability to regulate the location and number of these uses, but the Maine courts have made it clear that the discretion of the reviewing board is limited to determining if the standards in the ordinance are met or not. A decision based upon whether the proposed use is "appropriate" to the location is an impermissible delegation of legislative authority to an administrative body. Once the governing body has indicated that the use is permitted in a district of a zoning ordinance, the limit on the reviewing board's discretion is whether or not the standards of the ordinance are met.

In most ordinances, the Planning Board has been designated as the reviewing board for conditional uses. Some ordinances may require the Board of Appeals to review these uses, and in a few municipalities a separate board is established. The code enforcement officer should direct the applicant to the correct board and supply the applicant with the necessary application forms and other information needed. Many ordinances require the code enforcement officer to attend the meeting or hearing at which the Planning Board discusses the application.

Unless otherwise provided for in the ordinance, approval of an application or a site plan by the Planning Board is not permission (a permit) to commence construction. It is an authorization to use property for the purpose presented with whatever conditions the board finds appropriate. Following conditional approval, an application for a building or use permit should be filed with the code enforcement officer. The code enforcement officer should continue to review the application for compliance with the terms of the zoning ordinance. The CEO should advise the Planning Board as to the compliance with other ordinance requirements, so that the applicant is not granted a conditional approval for an activity that cannot meet other local ordinance requirements. Approval of a conditional use, special exception, or site plan by the Planning Board does not necessarily mean the permit should be issued. If the code enforcement officer discovers noncompliance not in the planning board's jurisdiction, the CEO can decide not to issue the permit, and advise the applicant that the plan needs amendment.

In some small communities, the level of development activity may be so low that the Planning Board is appointed as the shoreland zoning code enforcement officer. In this case, it is the board as a whole (by majority vote) that must make the decisions regarding the administration and enforcement of the ordinance, not individual members. Applications for permits should be reviewed and decisions made in public meetings. Where feasible, a quorum of the Planning Board should make the necessary on-site inspections. Where not feasible, a subcommittee or an individual board member may make the on-site inspections but should provide a thorough, preferably written, report to the entire board. **Every member of a Planning Board which has been appointed as the CEO for administration and enforcement of a shoreland zoning ordinance, must be certified, by the State Planning Office, in this area of jurisdiction.**

**b. Shoreland Zoning Duties.** Similar to other zoning ordinances, the *Guidelines* (**Section 16**) specify the responsibilities of the Planning Board to include review of certain applications for Shoreland permits. These permits include ones that are identified in *Table 1, Section 14* of the *Guidelines* and require some judgment in reviewing and applying relevant performance standards (**Section 15**) to the proposed land use. These land uses may include shoreland permit applications for mineral extraction, agriculture and aquaculture, residential uses, piers and docks, recreational areas, marinas, campgrounds, parking areas and larger scale earth moving and filling operations.

The CEO in many communities, but not all, provides staff assistance to the Planning Board for shoreland permit applications. As the CEO is the first municipal official the public, including potential shoreland permit applicants, usually meet, the CEO's first job is to determine whether, in fact, a shoreland permit is, indeed required and then whether the applicant needs to deal with the CEO or the Planning Board. But no matter who is responsible for processing the shoreland permit application, it is good practice for the CEO to process any accompanying building permit application and a State plumbing code application if the CEO is also the LPI (Local Plumbing Inspector). If not, the CEO should send the State plumbing code application to the LPI. The simultaneous review of multiple applications for one proposed new development provides the applicant with one-step knowledge of all the requirements they need to fulfill before her/his development can take place.

Some planning boards request that the CEO determine when a shoreland permit application is a "complete application", that is, when all required submissions are in order so that the board can make a fair decision on the application. Also, some planning boards request that the CEO review its shoreland permit applications and make a report on how it meets the shoreland zone requirements and on outstanding issues requiring further discussion among the board members and with the applicant. As a minimum, the *Guidelines* (**Section 16**) require a Planning Board to make positive findings on the following before a shoreland application can be approved outright or be approved with conditions:

1. Will maintain safe and healthful conditions;
2. Will not result in water pollution, erosion, or sedimentation to surface waters;
3. Will adequately provide for the disposal of all wastewater;
4. Will not have an adverse impact on spawning grounds, fish, aquatic life, bird or other wildlife habitat;
5. Will conserve shore cover and visual, as well as actual, points of access to inland and coastal waters;
6. Will protect archaeological and historic resources as designated in the comprehensive plan;
7. Will not adversely affect existing commercial fishing or maritime activities in a Commercial Fisheries/Maritime Activities district;

8. Will avoid problems associated with floodplain development and use; and
9. Is in conformance with the provisions of **Section 15**, Land Use Standards (of the *Guidelines*).

## 2. Code Enforcement Officer

**a. General Duties.** Once an ordinance is drafted and enacted by the municipal governing body, the code enforcement officer (CEO) is critical to its function. Ordinances may assign responsibility for administration to an individual, the Planning Board, or another review committee, or split these responsibilities among different parties. Effective administration is best achieved by assigning responsibilities to individuals with expertise for the tasks required. The task of administration involves the following activities:

- **Technical assistance.** The CEO is the resource that is most available to the public and therefore, this task is best performed by him or her. The code officer then, assumes the first steps in the process of administration. He or she should provide information to the public about the zoning ordinance such as procedures for application, review, and permit issuance.
- **Review and Permitting.** The code enforcement officer should serve as the coordinator in the review and permitting process. Applications should be scanned for completeness, and then reviewed for compliance with the many ordinances and codes governing development at the local level (State and local). If other municipal staff has responsibility for other applicable codes, perhaps a fire prevention specialist and/or public works official, the application should be circulated to them for review, as well. If the application involves an activity that is permissible according to the zoning ordinance, the CEO should issue a permit. If the application is for an activity that is considered a conditional use that requires that the Planning Board review the application, this should be done and a determination made to approve, deny, or approve with conditions. SPO recommends that the planning board's decision be rendered to the CEO, who will then make a decision to issue the permit with whatever conditions are required to allow the use to meet the objectives and provisions of the ordinances and codes adopted, or to deny the permit.
- **Compliance.** The code enforcement officer should visit the site, at least once, and perhaps several times depending upon the activity permitted to ensure that nothing more than what the permit allowed is taking place on the site, and that construction, if any, is proceeding according to approved plans.
- **Detecting and Acting Upon Violations.** The code enforcement officer must respond to complaints, perform inspections to observe violations, and work with a landowner to achieve compliance. On a routine basis, a drive around town to perform general windshield inspections will help the CEO monitor compliance with town codes and permitting requirements.

- **Record keeping.** This is an essential part of CEOs duties with respect to administration of ordinances. A record of every lot in the municipality and activities permitted and inspections performed, on those lots, must be maintained along with copies of any correspondence related to the activities.
- **Shoreland Zoning Duties.** Similar to general zoning administration, the model ordinance of the *Guidelines* (**Section 16**) calls upon the CEO to exercise all the zoning administration duties described above. In essence, the CEO is information central for shoreland zoning and over-all coordinator of its implementation in a municipality. The State shoreland statute (38 MRSA § 441) specifically requires municipalities to appoint or reappoint a CEO to administer the local shoreland ordinance.

Whenever acting as staff to the Planning Board or processing a shoreland permit application, the *Guidelines* outline the CEO's duties as follows:

1. Accept written permit applications completed by applicants on forms provided by the municipality, which include a site plan drawing.
2. Date accepted applications and either forward them to the Planning Board or keep them, according to local ordinance, for review within 35 days to determine whether the application is *complete*. If not complete, then those items needed to make it complete must be clearly stated to the applicant.
3. After receipt of a *complete* application, the CEO or Planning Board has 35 days to either approve, approve with conditions, or disapprove the application. Denials must be accompanied by a set of written findings which specify why the activity for which the permit was sought was not acceptable as compared with the standards of the shoreland zone ordinance.

Most shoreland ordinances delegate the more straightforward and easily measured land uses to the CEO for permit review and approval, such as for a single or duplex residence (*Guidelines*, **Section 14, Table 1**). The more complex land uses, which require some evaluation of impact such as marinas or parking areas, are usually delegated to the Planning Board for review and approval. The CEO and board should consult each other relative to any permit application, if not for assistance, then as a matter of information exchange.

Enforcement of the terms and conditions of any shoreland permit, no matter which municipal authority issued it, is the responsibility of the CEO. In keeping with this responsibility, the CEO is required by **Section 16.I.b.** of the *Guidelines* to make on-site visits to properties as appropriate and to investigate complaints of alleged violations of the shoreland ordinance.



The CEO is also required to keep complete records of all essential transactions for each permit application and must submit a summary to the DEP every two years. Thus, it is necessary for a CEO to maintain an organized filing system that includes every tax lot in the municipality to which a shoreland zone permit decision may be added. Such a file system allows the CEO, other municipal officials, the landowner, and public to have access to all of the land use decisions that over time have contributed to defining the land use constraints to which each lot is subject. See Appendix B for a sample biennial report.

### **3. Board of Appeals**

**a. General Duties.** State law requires that any municipality with zoning establish a Board of Appeals. A Board of Appeals is necessary for two reasons. The board has the authority to interpret the ordinance where there is a lack of clarity or disagreement, including a determination as to whether the code enforcement officer has correctly interpreted the ordinance. It is recommended that an ordinance not grant them the authority to reexamine an enforcement action of the code officer. However, some ordinances still allow it. The board maintains sole authority to grant zoning variances. A zoning variance is an authorization by the Zoning Board of Appeals that is given to a property owner to use his property in manner forbidden by the zoning ordinance. Some ordinances also give the board some additional responsibilities or power, such as reviewing conditional use or special exception permit applications, as described previously.

There are two different statutory provisions regarding boards of appeals. Title 30-A MRSA § 2691, intends that an "all purpose" board be created; one that is authorized to hear appeals concerning a variety of issues and decisions, not only zoning. This section establishes a framework for the size and composition of a board, procedures, record keeping, and jurisdiction. Section 4353, entitled "Zoning Adjustment", governs zoning boards of appeals. This section requires any municipality with zoning to establish a board. Generally, if a municipality has not authorized a board to hear other types of appeals, the Board of Appeals will hear only cases dealing with zoning. Section 4353 also limits the powers of a Board of Appeals in adjusting the ordinance.

Despite their best efforts, the drafters of a zoning ordinance will never create a document that is absolutely clear, with no room for interpretation. If there is a party aggrieved by an interpretation made by the code enforcement officer, or if the code enforcement officer is not clear as to the meaning of a provision of the ordinance, the Board of Appeals is the body which has authority to interpret the ordinance. These types of appeals are usually referred to as administrative appeals. A CEO may ask a Zoning Board of Appeals for an informed opinion on a matter of clarity. However, a formal petition before the board is required before a formal interpretation can be developed.

The variance is one form of administrative appeal that is to be granted only when "undue hardship" would result to the landowner if it were denied. State law establishes four criteria an applicant for a variance must demonstrate in order to prove that undue hardship exists. See Chapter Two, Section A. 11. (of this manual) for the four criteria of hardship.

The code enforcement officer should be in attendance at Board of Appeals meetings. If the appeal is an administrative appeal regarding a decision of the CEO, he/she should be prepared to present the reasons for the decision made. With other appeals, the CEO should be prepared to present the board with information needed to properly assess the application. The board will usually find it helpful to have the CEO highlight the appropriate sections of the ordinance that need consideration.

Additional reading on the Board of Appeals can be found in *A Handbook for Local Boards of Appeals* published by Maine Municipal Association.

**b. Shoreland Zoning Duties.** The *Guidelines* state that the applicant for a shoreland zone permit has the burden to prove to the CEO or Planning Board that the proposed land use activity meets the standards of the ordinance. Although it is usually left unstated, this is the way all zoning ordinances are intended. The Board of Appeals is a relief valve available to all citizens when disagreement arise between applicants and the CEO or Planning Board concerning application of ordinance standards to a particular set of facts.

The *Guidelines* specify the following duties of the Board of Appeals regarding shoreland zoning ordinances:

1. Administrative appeals: determine whether there has been any misinterpretation of the shoreland ordinance by the CEO or Planning Board; or error in any order or decision relative to the ordinance; or a failure of the CEO or Planning Board to act as required under the ordinance.
2. Variance appeals: to grant relief to an applicant from strict application of dimensional requirements of the shoreland zoning ordinance as governed by a strict set of requirements including the four state criteria for hardship.

#### **4. Other Municipal Boards and Staff**

**a. Board of Selectmen/Council.** The most important role of the Board of Selectmen (or Council) in zoning administration is the appointment of the code enforcement officer. Generally, there is no role for the municipal officers in the day-to-day management of the ordinance. However, a few communities have authorized the selectmen to serve as the municipal review board for subdivision plans. State law requires that the municipal officers appoint the individual with responsibility for the enforcement of shoreland zoning

on an annual basis. There is otherwise, no statutory direction for the selection or term of office for code enforcement officers. In most municipalities, the municipal officers appoint the code enforcement officer. In those towns where there are the positions of a manager and a code enforcement officer, the manager may hire the CEO.

Some zoning ordinances require that the municipal officers establish the fees for applications.

Although the procedures and protocol are frequently not included in the zoning ordinance, it is often a policy that prior to initiating court action for enforcement of an alleged violation, permission of the municipal officers be sought. Whereas enforcement action may involve the expenditure of funds for the town attorney and the municipal officers have the responsibility for the municipal treasury, their permission is needed. The code enforcement officer should clearly establish the policy with the board or council.

As those ultimately responsible for the operation of local government, the selectmen or council should be kept informed of the operations of the code enforcement officer on a regular basis. A periodic report of activities, such as the number of permits issued, inspections made, permit fees collected, and enforcement actions required will help to maintain good communication.

Unless specifically granted by the ordinance, the municipal officers do not have the authority to order the issuance or revocation of a permit or otherwise override a decision of the code enforcement officer. Conflict of interest rules should be kept in mind in any situation where boards are involved with permitting issues.

**b. Other Municipal Staff.** Though usually not specifically mentioned in an ordinance, additional municipal staff can play a role in the administration of the ordinance. As the assessors plot newly created lots on their maps, they should notify the code enforcement officer when lots smaller than the minimum required size are created. Frequently, the local plumbing inspector (LPI) is the same individual as the code enforcement officer. When this is not the case, good communication between the two is necessary to make sure permits are not issued until the LPI has issued a plumbing permit or determined that the site is adequate for a subsurface wastewater disposal system. The CEO can assist the LPI by providing a list of permits for new construction or substantial additions so the LPI can ensure plumbing permits are issued.

The Police Chief, Fire Chief, and Road Commissioner or Public Works Director can assist the CEO by reporting construction activity or other new land uses that appear to not have been authorized by the issuance of a permit. These officials can also be of assistance to the Planning Board by reviewing development proposals and providing their expertise.

**c. Other Citizen Boards.** The existence and number of citizen boards in addition to those mentioned will vary greatly from town to town. Depending upon the complexity of

the zoning or other land use ordinances, the town may have a historic preservation board, or a site review board. In some communities, the conservation commission is given a regulatory role in the administration of the zoning ordinance or some other land use ordinance in which the CEO is also involved. Regardless of whether they are given review authority, the Planning Board and code enforcement officer can utilize the conservation commission to assist them in the review of applications. Good communication and a flow of information between these boards/committees and the CEO will help municipal government function better.

## ***Chapter Three: General Interpretation Assistance with Selected Standards of State Shoreland Zoning Guidelines***

### ***A. Adoption and Amendment Procedures***

#### **1. Shoreland Zoning Ordinance**

In order to adopt local shoreland zoning, the legislative body of the municipality must approve each ordinance or amendment to the shoreland zoning ordinance text and/or map. In order for any shoreland zoning ordinance or amendments to the shoreland zoning ordinance text or map to become effective, however, they must be reviewed and approved by the Commissioner of the Department of Environmental Protection. The Commissioner must act on the ordinance or amendment within 45 days of his/her receipt of the ordinance or amendments, otherwise the ordinances or amendments are automatically approved. (See **Sections 4 and 8** of the *Guidelines*.)

If the amendment process involves the shoreland zoning map, then the change must be incorporated onto the municipality's official shoreland zoning map within 30 days from the date of DEP approval of the amendment, as described in **Section 9** of the *Guidelines*.

Whether a municipality has a combined zoning and shoreland zoning ordinance, or a separate zoning ordinance, it should follow whatever enactment or amendment procedures are contained within its zoning, shoreland zoning or other ordinances, as applicable. At a minimum, it should follow the notice and hearing requirements of Title 30-A MRSA, § 4353, as amended.

Maine law allows municipalities several options concerning the effective date of any shoreland zoning ordinance, or amendments thereto. These include a date somewhat prior to, the same as, or even after the date of adoption. Whoever drafts the ordinance or amendment should check with the town's attorney prior to the legislative body's vote on adoption to be sure that the desired effective date is acceptable.

The effective date selected should provide for a smooth transition from the old standards to the new. There should be no period of time during which there is ambiguity as to which standards apply. To this end, it would be preferable to avoid tying the effective date of an amendment to the beginning of the 45-day DEP review period, as suggested in the *Guidelines*. The DEP's 45-day review period does not begin at the date of adoption, or on any other effective date selected by the municipality's legislative body. It begins on the day of receipt of the ordinance or amendment by DEP. Depending on how the effective date actually selected by the legislative body differs from the date of the beginning of DEP's review period there could be an ambiguous overlap of old and new shoreland zoning standards or a gap during which there are no effective standards.

As a practical matter, the submittal of ordinances and ordinance amendments affecting the land use regulations applicable in the shoreland zone must be submitted to the Shoreland Zoning Unit of the DEP Bureau of Land and Water Quality, State House Station #17, Augusta ME 04333. This applies to all zoning changes that will affect the shoreland zone, even if these are not part of the local shoreland zoning ordinance, whether separate or combined with town-wide zoning.

When the submittal and review are promptly completed, and DEP approves an ordinance or amendment, the municipality can consider it law back to the date of DEP's receipt of the amendments (unless otherwise specified in the ordinance). If some or all of the ordinance or ordinance amendments are not acceptable to the Commissioner, then the municipal legislative body may need to meet again to reconsider their decision and may want to consider new language and standards that will meet the DEP's criteria for review. Especially in towns where ordinances must be amended or adopted by a vote at town meeting, this can consume a lot of time, money, energy, and patience. To minimize the chances that this will happen, draft copies of a municipality's proposed ordinance or amendments may be sent to the DEP Shoreland Zoning Unit for comment *before* a vote on adoption. It would be easier to change the language and content of proposed amendments than that of adopted amendments, when there is a need for such a change. Where only portions of amendments to local ordinances are not acceptable to the commissioner, he or she may approve the amendments if those amendments can be made consistent with the guidelines through the imposition of conditions.

## ***B. Interpretation of District Boundaries***

**Section 10** of the *Guidelines* states, "Unless otherwise set forth on the Official Shoreland Zoning Map, district boundary lines are property lines, the center lines of streets, roads and rights of way, and the boundaries of the shoreland area as defined herein. Where uncertainty exists as to the exact location of district boundary lines, the Board of Appeals shall be the final authority as to location." As a practical matter, it shall be the CEO's responsibility to be the first, (though not final) authority on this matter. Only in rare cases where an interested land owner or applicant for a permit wishes to challenge the CEO's interpretation of the ordinance and files an administrative appeal, will the Board of Appeals become involved. (The procedure for filing an administrative appeal is reviewed in **Section 16** of the *Guidelines*.)

To expedite applications and to minimize the number of such administrative appeals, the ordinance should be as specific as possible to give the CEO the best possible guidance in clearly determining the location of district boundaries. Although the *Guidelines* recommend clearly written descriptions of shoreland zoning boundaries, only minorities of zoning or shoreland zoning ordinances in Maine currently have such descriptions. Typically, the language of **Section 10** in conjunction with **Section 13**, or

something similar will be the basis upon which the CEO will make a determination of boundaries.

On most of these occasions, it will not be the boundaries between districts in the shoreland zone that are in question. Rather, it will be the district boundaries between the shoreland zone and the town-wide zoning district or land outside the shoreland zone adjacent to it. Collectively, these boundaries are longer than those between shoreland districts, therefore they cross or abut a far greater number of properties. And, possibly more to the point, they must be located in the field based upon the horizontal distance along a line perpendicular to a natural feature which may be very difficult to locate on the ground, for example, the normal high-water line of a water body or the upland edge of a coastal or freshwater wetland.

In almost all cases, more specific language of the ordinance which references for example, tax map and lot numbers identifying properties rather than the line on the map, should be used to locate the boundary on the ground, where the two conflict. Natural or cultural boundaries as listed in **Section 10**, or applicable section(s) of a local ordinance, should be treated in this manner.

### *C. Normal high-water lines and Upland Edges of Wetlands*

#### **1. Resource Protection Districts**

**Section 13** of the *Guidelines* states that a resource protection district:

*"shall include the following areas when they occur within the limits of the shoreland zone, exclusive of the Stream Protection District, except that areas which are currently developed and areas which meet the criteria for ...[other districts]... need not be included..."*

- 1. Areas within 250 feet, horizontal distance, of the upland edge of freshwater wetlands, salt marshes and salt meadows, and wetlands associated with great ponds and rivers, which are rated "moderate" or "high" value waterfowl and wading bird habitat, including nesting and feeding areas, that are depicted on the Geographic Information System (GIS) data layer maintained by Maine Department of Inland Fisheries and Wildlife (MDIF&W) or the DEP as of May 1, 2006.*
- 2. Floodplains along rivers and floodplains along artificially formed great ponds along rivers, defined by the 100 year floodplain ... [and] 100 year flood plains adjacent to tidal waters as shown on FEMA's Flood Insurance Rate Maps or Flood Hazard Boundary Maps.*
- 3. Areas of two or more contiguous acres with sustained slopes of 20% or greater.*
- 4. Areas of two (2) or more contiguous acres supporting wetland vegetation and hydric soils, which are not part of a freshwater or coastal wetland as defined, and which are not surficially connected to a water body during normal spring high water.*
- 5. Land areas along rivers subject to severe bank erosion, undercutting, or river bed movement and lands adjacent to tidal waters which are subject to severe erosion or mass movement, such as steep coastal bluffs."*

and a stream protection district includes:

*"all land areas within seventy-five (75) feet, horizontal distance, of the normal high-water line of a stream, exclusive of those areas within two-hundred and fifty (250) feet, horizontal distance, of the normal high-water line of a great pond, river or saltwater body, or within two- hundred fifty (250) feet, horizontal distance, of the upland edge of a freshwater or coastal wetland. Where a stream and its associated shoreland area is located within two-hundred and fifty (250) feet, horizontal distance, of the above water bodies or wetlands, that land area shall be regulated under the terms of the shoreland district associated with that water body or wetland."*

The intent of these two districts is to protect the water and wildlife resources of ponds, tidal waters, wetlands, rivers, and streams. They generally disallow development, with a few exceptions in the stream protection district, as allowed through variances granted by Boards of Appeals.

The above definitions reference two types of wetlands: those of coastal wetlands and those of freshwater wetlands. **Section 17** defines each of these wetland types. **Section 17** also defines forested wetlands. However, it should be noted that the land adjacent to forested wetlands is *not* subject to shoreland zoning under the Mandatory Shoreland Zoning Act. The Natural Resources Protection Act (NRPA), under the jurisdiction of the DEP, protects these wetlands.

## **2. Coastal Wetlands**

The State definition of Coastal Wetlands, as used in the Mandatory Shoreland Zoning Act, the *Guidelines*; and the Natural Resources Protection Act Wetland Protection Rules, is:

*"all tidal and subtidal lands; all lands with vegetation present that is tolerant of salt water and occurs primarily in a salt water or estuarine habitat; and any swamp, marsh, bog, beach, flat or other contiguous low land is subject to tidal action during the highest tide level for the year in which an activity is proposed as identified in tide tables published by the National Ocean Service. Coastal wetlands may include portions of coastal sand dunes."*

This definition includes all types of wetlands, of any size, which are within reach of annual **maximum spring tides**. The definition does not tell you how far inland, in any particular area, the tide waters will reach. It does tell you that where signs of tidal reach (wetland indicators) are recognizable, any wetlands within the identified bounds are protected wetlands. The most obvious recognizable sign (wetland indicator) is the presence of salt tolerant wetland vegetation. In cases where no evidence of high tide is obvious, tide tables may be used as a guide. They provide a record of maximum tidal reach. There are mud flats, rocky shores, and cobble beaches, for example, which are lacking vegetation (due to the scouring effects of tidal action) but are defined as wetlands if below the maximum spring tide level. Setbacks are measured from this upland edge of the "coastal wetland".



### 3. Freshwater Wetlands

The State definition of Freshwater Wetlands, as used in MSZA, is:

*“freshwater swamps, marshes, bogs, and similar areas (other than forested wetlands) which are:*

*1. of ten or more contiguous acres; or of less than 10 contiguous acres and adjacent to a surface water body, excluding any river, stream or brook such that in a natural state, the combined surface area is in excess of 10 acres; and*

*2. inundated or saturated by surface or ground water at a frequency and for a duration sufficient to support, and which under normal circumstances do support, a prevalence of wetland vegetation typically adapted for life in saturated soils.*

*Freshwater wetlands may contain small stream channels or inclusions of land that do not conform to the criteria of this definition.”*

Note that Part 2 above, mirrors the federal definition. However, the shoreland zoning definition differs from the federal definition in two ways:

- (1) it contains a size threshold. A wetland must be “10 or more contiguous acres”; or otherwise be adjacent to a surface water body such that their combined surface areas are more than ten acres
- (2) allows certain exceptions when calculating wetland area, such as small islands or small stream channels.

The definitions recognize a variety of wetland types, i.e., swamps, marshes, bogs, and similar areas... For the purposes of local code enforcement, it is not necessary to identify a particular type of wetland. It is, however, important to become aware of the variety of wetland types. For most readers, this will expand their understanding of what a “wetland” is, and perhaps bring them to reconsider some areas that have previously been disregarded. To recognize wetlands and roughly delineate their boundaries, it is necessary to:

- (1) recognize indicators of wetland hydrology;
- (2) identify dominant (prevalent) plant species; and
- (3) generally identify hydric soils.

### ***D. JOINT JURISDICTIONS***

It is the responsibility of a local code enforcement officer to enforce local ordinances, with the focus here being setbacks from wetland resources of the shoreland zoning ordinance, adopted by the municipality in which you are employed. Yet, you must also

be aware of and keep in mind permitting requirements under other jurisdictions. These are:

1. the State, under authority of the NRPA administered and enforced by DEP, which identifies the same standards (uses the same wetlands definitions) as the U.S. Army Corps of Engineers: and
2. the Corps, the primary enforcement agency of the federal government.

Remember, that while the State and federal authorities maintain independent jurisdiction, they are now jointly engaged in wetlands permitting, as explained later in this manual.

Local code officials are not expected to know, nor should they presume, the outcome of evaluations performed by officials of other jurisdictions. It is, however, important that local officials refer applicants to State and federal agencies when appropriate. This is discussed as a part of recommended local procedures in the section of this supplement entitled, Local Ordinances, Review and Permitting Procedures. Keeping these thoughts in mind, we will review the State MSZA, NRPA, and federal requirements in some detail.

## ***E. DEFINITIONS OF SHORELAND ZONING DETAILED***

Frequently, in the *State of Maine Guidelines for Municipal Shoreland Zoning Ordinances*, activities are permitted or restricted within a zone created by measuring horizontally a number of feet from a point defined as the “normal high-water line” of a great pond, river, or other water body, or a tributary stream; or the upland edge of a wetland. It is important to understand how these terms are defined and be able to roughly identify the location of the “line” and the “edge” in the field. Thus, the terms are discussed below according to the boundary each represents.

### **1. Boundary of a Great Pond**

A “normal high-water line” is defined as:

*“that line which is apparent from visible markings, changes in the character of soils due to prolonged action of the water or changes in vegetation, and which distinguishes between predominantly aquatic (environments) and predominantly terrestrial (land environments)”*

*Normal high-water* refers to high water levels which occur in the spring and remain for several weeks before receding and which recur every year. Visible markings are obvious signs of water action at the shoreline. These may be an erosion line created by wave action or a line formed by debris deposited at the uppermost boundary of spring high-water.

“Changes in the character of soils” carries a meaning here different from that applied in wetlands delineation. With respect to water bodies and rivers, these changes refer to

the alteration of the land mass at the water's edge (displacement of land material, rocks, soil erosion) created by ice shearing, freezing and thawing action in the winter months in addition to the effects of seasonal water level fluctuations noted previously.

A “change in vegetation” may be an obvious change of the dominant species of plants from those in one group, which are emergent (rooted under water) requiring frequent flooding including those requiring at least seasonal flooding, to those in another group that reflect a less frequent or more erratic water regime. If, for example, one were to walk a transect from the shore of a great pond to an upland position, he or she might encounter a transition of vegetation from emergent species such as cattails and pickerelweed (which require frequent flooding) through grasses, sedges, shrubs, and small trees such as willow, and alder (which require at least seasonal flooding) to species common to the outer fringes of the transitional zone such as, White pine, hemlock, and oaks (characteristic of erratic water regimes). Becoming familiar with these observed species (indicators) one would expect to find the *normal high-water line* somewhere along the shrub line.

The actual location of the normal high-water line will be found by taking into consideration both soils and vegetation characteristics, as well as obvious elevation changes.

## 2. Boundary of a Wetland

Under the MSZA, an area defined as a **wetland may include the acreage of an adjacent surface water body**. In this case, the boundary line from which to measure for the protective zone will not be the normal high-water line, but rather the delineated upland edge including the edge around the open water.

And, **great ponds and rivers may include the acreage of a wetland** under the definition of “Wetlands Associated with Great Ponds and Rivers”,

*“areas characterized by nonforested wetland vegetation and hydrolic soils that are contiguous with a great pond or river, and have a surface [water] elevation at or below water level of the great pond or river during the period of normal high water.”*

The “upland edge of a wetland”, and not the edge of open water, is defined as the point from which to measure for setback of a structure. For example, during normal high water, if the wetland and a great pond are connected by surface water, the wetland is considered to be a part of the pond and is protected by a 250-foot zone from the delineated upland edge.

Adjacent to tidal waters, the upland “edge of the wetland” is that line defined by the edge of the salt-tolerant vegetation, or the maximum spring tide level. Setbacks are measured from that edge, not the mean high-water line, as some mistakenly believe.

Examples that apply the above definitions are provided in section H.

### 3. Differences Between MSZA and NRPA

The differences between the standards of the MSZA and the NRPA were increased by the 1995 changes to the NRPA.

1. The first difference is a basic one. Shoreland Zoning addresses activities proposed in and adjacent to 10-acre wetlands, while the NRPA addresses activities proposed to take place in any wetland and those activities which disturb soil adjacent to peatlands or naturally occurring wetlands containing at least 20,000 sq. ft. of open water or aquatic vegetation.
2. The second difference relates to the removal of forested wetlands from protection under the MSZA and mandatory local jurisdiction. They do however, remain protected under the NRPA, and federal jurisdiction. Therefore, forested wetlands are included in this training program.
3. A third difference is that the level of permitting review required pursuant to the NRPA is based upon the size of the proposed "alteration" in the wetland as opposed to the size of the wetland itself. Permitting is discussed later in this manual.
4. A fourth difference involves wetlands associated with rivers, streams, and brooks: Under the NRPA (38 M.R.S.A. § 480-B (9)),

Pursuant to NRPA, a river, stream, or brook is:

*"a channel between defined banks. A channel is created by the action of surface water and has two or more of the following characteristics:*

- 1. It is depicted as a solid or broken blue line on the most recent edition of the U.S. Geological Survey 7.5-minute series topographic map or, if that is not available, a 15-minute series topographic map.*
- 2. It contains or is known to contain flowing water continuously for a period of at least 6 months of the year in most years.*
- 3. The channel bed is primarily composed of mineral material such as sand and gravel, parent material or bedrock that has been deposited or scoured by water.*
- 4. The channel contains aquatic animals such as fish, aquatic insects or mollusks in the water or, if no surface water is present, within the stream bed.*
- 5. The channel contains aquatic vegetation and is essentially devoid of upland vegetation.*

*River, Stream, or Brook does not mean a ditch or other drainage way constructed and maintained solely for the purpose of draining storm water or a grassy swale."*

Note that under NRPA, floodplain wetlands are not defined as a part of river, stream, or brook. They are wetlands in and of themselves protected not by a zone, but by general performance standards for natural resources under the NRPA where an activity is conducted in, on, over, or adjacent to a protected resource that involves:

- ✓ Soil that may be washed into resources;
- ✓ Dredging, bulldozing, or otherwise displacing soil, sand, or vegetation;
- ✓ Draining or dewatering;
- ✓ Filling; or
- ✓ Constructing or replacing permanent structures.

5. Under the MSZA, rivers are defined separately and include associated floodplain wetlands;

A river is:

*“a free-flowing body of water including its associated floodplain wetlands from that point at which it provides drainage for a watershed of twenty-five (25) square miles to its mouth”.*

A river is recognized for protection only for the reach beginning at the point where it drains a watershed of at least 25 square miles and continuing for its extent. It is protected by a 250 foot zone measured from the normal high water line or upland edge of any associated floodplain wetlands. Associated floodplain wetlands are considered to be part of the river. The shoreland zone begins at the delineated upland edge and extends 250 feet. Forested wetlands are excluded from consideration.

6. Under the MSZA, streams are defined separately;

A stream is

*“a free-flowing body of water from the outlet of a great pond or the confluence of two (2) perennial streams, as depicted by a solid blue line, on the most recent edition of a United States Geological Survey 7.5 minute series topographic map, or if not available, a 15-minute series topographic map, to the point where the body of water becomes a river (or flows to another water body or wetland within a shoreland area)”.*

A shoreland zone protects streams and brooks only if they are an outlet of a great pond, or a stream resulting from the confluence of two perennial streams. The shoreland zone will be only 75 feet and this will be measured from the normal high-water line at the edge of the stream channel, as opposed to the upland edge of any floodplain wetland.

## ***F. DEFINITIONS OF FEDERAL REGULATIONS DETAILED***

### **1. Jurisdiction**

Section 404 of the Clean Water Act is the cornerstone of the federal regulatory authority regarding wetlands. The U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) administer the Section 404 program jointly. The Corps provides routine administration of the regulatory program according to mutually agreed upon policies. The EPA serves as an oversight agency and will support and assist the Corps review and enforcement action. Generally, the jurisdiction of the Corps encompasses all “*waters of the United States*”, including wetlands.

The Corps has primary responsibility for permit application review and related action regarding any of the following activities:

1. Dams and dikes in navigable waters of the United States (Section 9 of the Rivers and Harbors Act of 1899);
2. Other structures or work including excavation, dredging, and/or disposal activities, in navigable waters of the United States (Section 10 of the Rivers and Harbors Act of 1899);
3. Activities that alter or modify the course, condition, location, or physical capacity of a navigable water of the United States (Section 10 of the Rivers and Harbors Act of 1899);
4. Construction of fixed structures and artificial islands on the outer continental shelf (Outer Continental Shelves Act);
5. Discharges of dredged or fill material into the waters of the United States (Section 404 of the Clean Water Act); and
6. The transportation of dredged material for the purpose of dumping it in ocean waters (Section 103 of the Marine Sanctuaries and Research Act of 1972).

### **2. Evaluation Standards**

Chapter 22 of the Corp's Rules describes their regulatory program. Section 3, *General Policies for Evaluating Permit Applications* (provided in Appendix C) describes the criteria used to evaluate every application. One of the criteria involves assessing the potential impact of a proposed project on wetlands. The functions of wetlands the Corps considers important to the public interest, referred to in the policies, are contained in another Corps publication, *Guidance for Permit Applicants*, June 1989 (provided in Appendix C). These two pieces together provide a glimpse of the policies

and standards the Corps of Engineers use in regulating activities in or adjacent to wetlands. Generally, the list of functions considered important to the public interest is all-encompassing and the standards established to protect the public interest allows very little flexibility in application. However, through its values assessment, it does give weight to those wetlands it considers to be of a higher value. Wetland functions and values are used by the Corps to describe site characteristics, compare project alternatives, avoid and minimize project impacts, determine significance of impacts, weigh environmental impacts against project benefits, and to design and monitor compensatory mitigation.

There are differences in focus between the State and federal regulators arising out of federal responsibilities that are generally more encompassing including a greater emphasis on avoidance and minimization, historic preservation, federally endangered and threatened species, and wild and scenic rivers. Additionally, the law as amended prohibits DEP from taking into account wetland alterations performed prior to the amendment's effective date. But, the Corps considers prior fill activity in the area of the project and evaluates the cumulative impact of the proposed fill project. These differences may lead to an application approval by DEP, while the Corps requires an applicant to file an individual permit application with them that may not receive approval.

### **3. General and Nationwide Permits**

General permits were issued for activities that the Corps determined essentially alike in nature and caused only minimal environmental impact, both individually and cumulatively. Nationwide and regional general permits are no longer available in Maine. The State of Maine Programmatic General Permit (PGP) replaced all general permits in 1995. Under this permit, the State and Corps are in agreement regarding threshold standards for review and will, in most cases, jointly authorize or deny permits for activities. Regional permits were likewise replaced and reissued.

## ***G. STATE/FEDERAL JOINT REVIEW AND PERMITTING***

### **1. Amendments to the Natural Resources Protection Act**

Amendments to the State's Natural Resources Protection Act were made for the purpose of creating consistency in wetlands regulation and permitting between the State and federal governments. Effective September 29, 1995, activities for which the DEP (under NRPA) and the ACOE both had jurisdiction and which were separately permitted, are now for the most part jointly reviewed and permitted. Application need be made only to DEP if the activity is regulated by DEP, and involves (filling, draining, flooding, clearing) less than 3 acres of fresh water wetlands or less than 1 acre of tidal waters. The DEP and Corps conduct review jointly. Applicants may apply directly to the DEP, who will in most cases forward a copy to the Corps, or an applicant may mail a copy directly to the Corps. The latter ensures a more timely review by the Corps and

minimizes the risk of “slipping through the cracks”. For work not regulated by the DEP, a separate application must be mailed to the Corps. An applicant may append his Corps application with any State application (Site, NRPA, Hydro, PBR, LURC).

NOTE: For work requiring Corps review and permitting, written approval from the Corps is necessary before work in waters of the U.S. can proceed. State approval is not a substitute for Corps approval.

The definition of *River, Stream, or Brook* was changed twice in 1995. Changed once as Public Law 92 as an act of clarification. Changed again by the removal of *associated floodplain wetlands* as part of Public Law 460. Floodplain wetlands are now protected independently, as wetlands in their own right. Applications for alteration of Floodplain wetlands are considered only under the full review process (Tier 3).

The changes in the State’s wetlands regulatory program include the following:

1. Wetlands of less than 10 acres in size are now regulated;
2. An exemption exists for wetland alterations that affect less than 4,300 sq. ft. (approx. 0.1 acre) of freshwater wetland, provided:
  - the activity does not occur in, on or over another protected natural resource
  - a 25 foot setback from other protected natural resources is maintained and erosion control measures are used
  - the activity is not located in a municipal shoreland zone; or in a wetland or water body protected by a shoreland zone;
  - the activity does not occur in a wetland normally consisting of or containing at least 20,000 sq. ft. of open water, aquatic vegetation or emergent marsh vegetation, except for artificial ponds or impoundments;
  - the activity does not take place in a wetland containing or consisting of peatland dominated by shrubs, sedges and sphagnum moss; and
  - the entire activity constitutes a single, complete project.
3. The exemption for agricultural activities now mirrors the federal exemption and is limited to *normal farming activities such as clearing of vegetation for agricultural purposes if the land topography is not altered* (note: removal of tree stumps would be considered an alteration), *plowing, seeding, cultivating, minor drainage and harvesting, construction or maintenance of livestock ponds or irrigation ditches, maintenance of drainage ditches, and construction or maintenance of farm roads*. This exemption does not apply to alterations of other protected natural resources such as rivers, streams and great ponds; and
4. Vegetative clearing of a freshwater wetland for the installation of telephone or electrical service is exempt if:



- a. the line does not cross or run beneath a coastal wetland, river, stream, or brook;
  - b. the placement of wires or installation of utility poles is located entirely upon the premises of the customer requesting service, roadway right-of-way, or in the case of telephone service, on existing poles; and
  - c. the total length of the extension is less than 1,000 feet.
5. On a case-by-case basis and as determined by the department, the term “alteration” may not include:
- a. an activity disturbing very little soil such as installing a fence post or planting shrubs by hand;
  - b. the addition of a minor feature to an existing structure such as a bench or hand rail; and
  - c. the construction, repair or alteration of a small structure with minimal impact such as a nesting box, pasture fence, or staff gauge.
6. A 3-tiered review process was established in order to streamline the review process for most activities affecting freshwater wetlands. The tiers are as follows:

Tier 1: For projects affecting up to 15,000 square feet of wetland, where the wetland is not considered to be of *special significance*; a maximum 30 day review; application form does not require professional assistance to complete.

Tier 2: For projects affecting between 15,000 sq. ft. and 1 acre of wetland not of special significance; a maximum 60-day review; if alteration is over 20,000 sq. ft., additional application requirements pertain including wetland functional assessment and compensation.

Tier 3: For projects affecting greater than 1 acre of wetland; a full review occurs. A full review also occurs for activities affecting wetlands of *special significance*, unless DEP staff determines that a tier review may be allowed. DEP rules allow up to 150 days for full review; these projects are generally the most complex due to analysis of project alternatives and compensation requirements to mitigate for lost wetland functions.

Applicants for Tier 1 or 2 projects must meet the following requirements:

- alteration may not be avoided by utilizing upland areas;
- alteration of freshwater wetlands on the property must be minimized;
- erosion control measures must be used to prevent sedimentation of protected resources;
- a 25 foot buffer strip must be maintained between the activity and any river, stream, or brook; and
- the activity must comply with the water quality standards applicable to any affected waters of the State (38 MRSA § 464).

The following activities are not eligible for Tier 1 or Tier 2 review unless the department determines that the activity will not negatively affect the freshwater wetlands and other protected natural resources present:

- a. Activities located within 250 feet of a coastal wetland; or the normal high water line of any lake or pond classified as GPA (under section 465-A);
- b. Activities occurring in freshwater wetlands, other than artificial ponds or impoundments, containing under normal circumstances at least 20,00 square feet of aquatic vegetation, emergent marsh vegetation or open water;
- c. Activities occurring in freshwater wetlands that are inundated with floodwater during a 100-year flood event based upon FEMA flood insurance maps or other site-specific information;
- d. Activities occurring in freshwater wetlands containing significant wildlife habitat that has been mapped identified or defined, as required pursuant to section 480-B(10), at the time of the filing by the applicant; significant wildlife habitat now includes vernal pools.
- e. Activities occurring in peatlands dominated by shrubs, sedges and sphagnum moss (essentially bogs), except that applications proposing work in previously mined peatlands may be considered by the department for Tier 1 or Tier 2 review, as applicable; or
- f. Activities occurring within 25 feet of a river, stream, or brook;
- g. Activities in freshwater wetlands containing a natural community that is imperiled (S1) or critically imperiled (S2) statewide, as defined by the Natural Areas Program (NAP), Dept. of Conservation. The NAP identifies and maps rare and vulnerable species of plants and animals and their common environments. Information is provided to municipalities as part of their comprehensive planning process or as requested by individuals or communities. Staff of the Natural Areas Program may be reached at 207-287-8040 for more information.

Acreage of temporary impacts count. If this number is greater than the permanently affected acreage of wetlands, then that is the acreage against which the rules apply.

Cumulative impacts are recorded against a parcel of land, not its current landowner. In this way, impacts on a particular wetland are considered cumulatively from one landowner to the next. The 4,300 sq. ft. exemption is for the lifetime of any project on a given site. Also, the Corps will consider under cumulative impacts, any prior fill activity, where the DEP is not allowed to consider fill activity prior to September 29, 1995.

EPA Chapter 401 and Coastal Zone Management Certification Requirements are automatically met with approval of a PGP permit from the Corps (DEP = PGP permit where jurisdiction is joint).

DEP and ACOE are continuing to use the 1987 Federal Manual for Delineation procedure (NO CHANGE).

Tier 1 applicants must display a copy of the application submitted to DEP at the town office of the municipality in which the project will be located.

Manmade ponds legally created are exempt, where they are not part of a great pond, coastal wetland, river, stream or brook provided the pond is not expanded beyond its original size.

## 2. Comparison of DEP and CORPS Freshwater Wetland Regulations

Regulated by DEP	Corps Programmatic General Permit (PGP)	Application Screening by Corps
< 4,300 sq.ft. EXEMPT	Category I	NO
Tier I 4,300 - 15,000 sq.ft.	Category I	YES
Permit By Rule (PBR)	Category 1 Category II if tidal. Refer To additional information sheet	Yes Yes*
Tier II 15,000 sq.ft. - 1 Acre	Category II	YES*
Tier III > 1 Acre	Category II (1-3 Acres) Category III (>3 Acres)	Category II: YES* Category III: Separate* application to Corps required. Applicants may submit Corps application appended by DEP application.

\* Separate COE written approval is required

Notes:

### 3. Summary of State/Federal Freshwater Wetlands Permitting Review Process Effective September '95

Activity	Tier I Review Process	Tier II Review Process	Tier III Review Process
Altering Freshwater Wetlands	Up to 15,000 sq. Ft.	15,000 sq.ft. up to 1A	1Acre or more; or less than 1 A and involve any below:
			within 250 feet of a coastal wetland or the NHW of GPA lakes/ponds within same watershed as activity;
			in freshwater wetland with at least 20,000 sq.ft. aquatic veg., emergent marsh vegetation., or open water;
			in freshwater wetland located in 100 yr. floodplain;
			freshwater wetlands containing significant wildlife habitat;
			within 25 feet of a river, stream, brook;
			containing an imperiled or critically imperiled natural community
Minor Alteration of Freshwater Wetlands that are not peat & don't contain 20,000 sq.ft. of open water or emergent	Exempt if less than 4,300 sq. ft. And involves no other resource and not in SZ. The entire activity must qualify.		

Note: This chart contains summary information. Consult the technical language of the wetland rules for the *ifs* , *ands*, and exceptions.

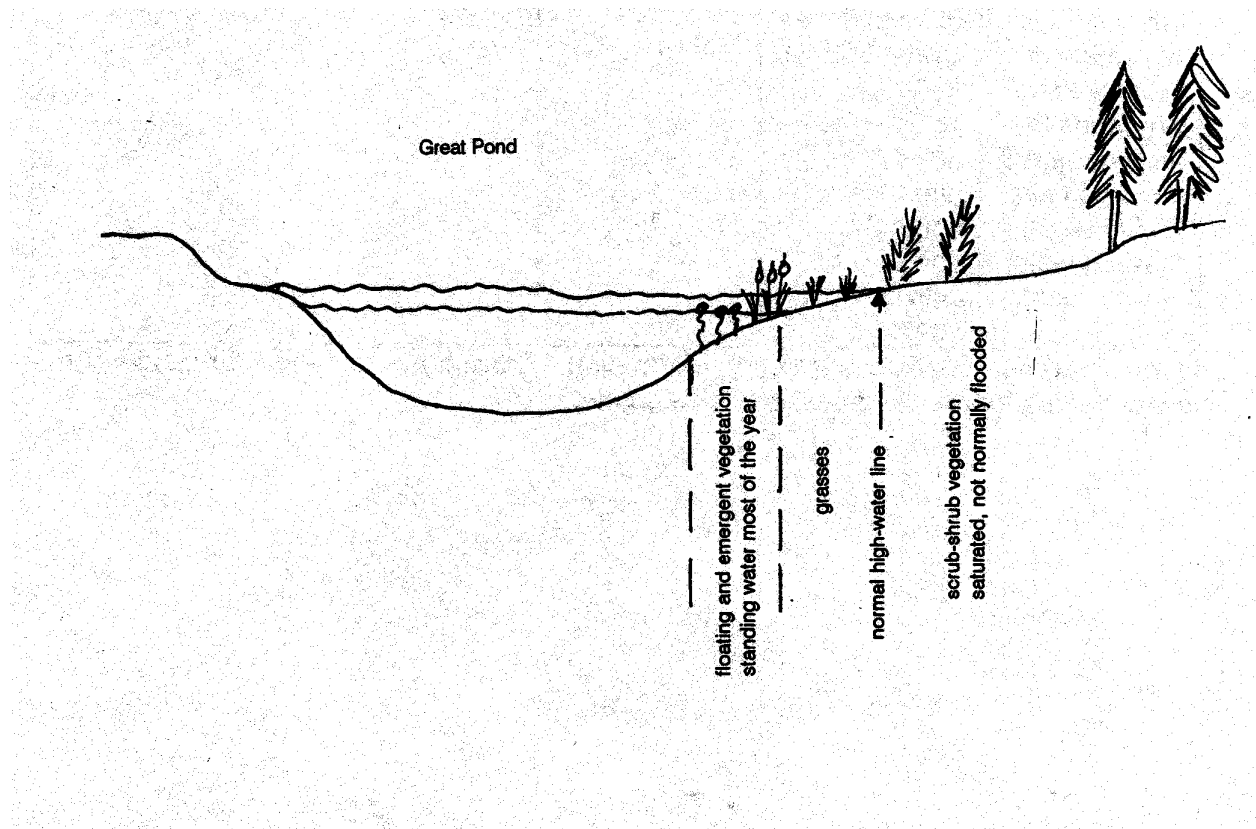
## H. DEFINITIONS AND REVIEW BY EXAMPLE

### 1. Applying Shoreland Zoning Definitions to Specific Situations

Any given low-lying topographic area will frequently contain small open-water bodies, great ponds, and wetlands in some association with each other as defined by the hydrologic regime of the area. Many different combinations of these wetland areas occur. The shoreland zoning maps, which your town has adopted, show those areas that are to be protected. The zoning maps are based upon wetlands maps provided by the Department of Environmental Protection and more recently, based upon more accurate *National Wetland Inventory Maps* available from the Maine Geological Survey of the Department of Conservation. The DEP recognizes that the actual boundaries of the wetlands may differ from those shown on the maps. These maps were created using aerial photo interpretation. Thus, local zoning maps must state that the actual boundaries must be determined based upon site inspections. The following examples will help you to correctly apply the definitions of the Mandatory Shoreland Zoning Act to some of the possible combinations of wetland areas discussed above.

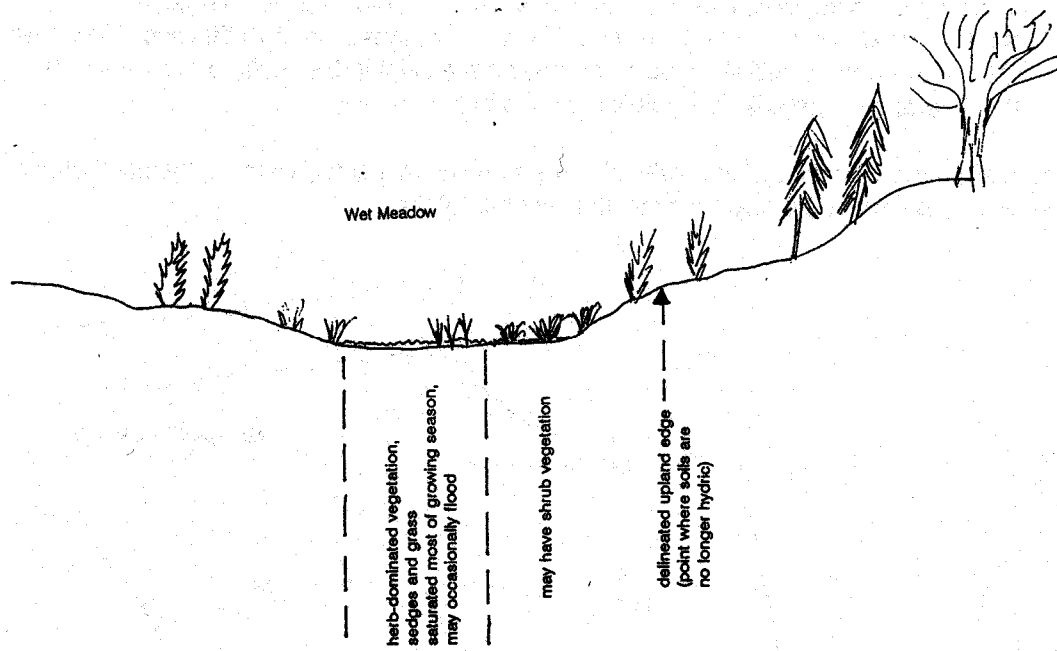
EXAMPLE A: An open-water body is equal to or greater than 10 Acres.

It is defined as a Great Pond. The normal high-water line must be identified and the protective zone defined in the field by measuring from this line.



EXAMPLE B: An unforested wetland with no open-water body associated is equal to or greater than 10 Acres.

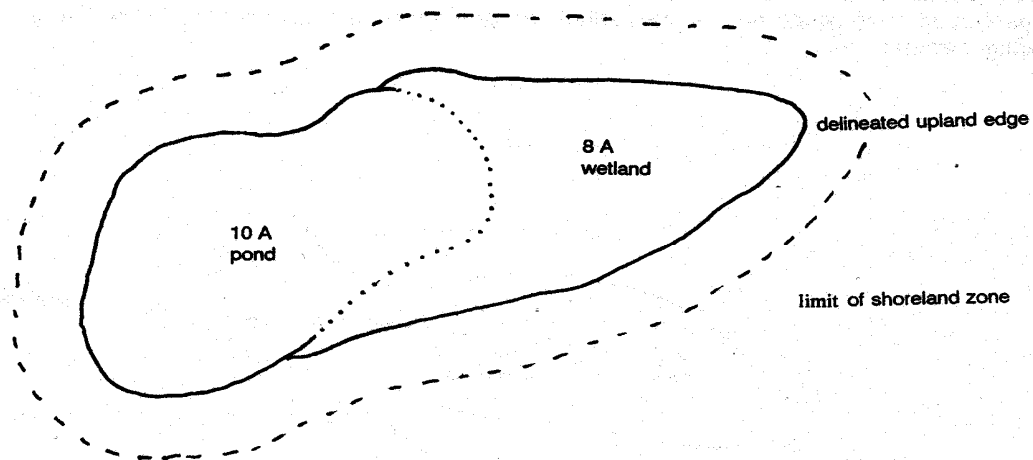
The upland edge of the wetland must be identified and the protective zone defined in the field by measuring from this line.



EXAMPLE C: An open-water body is 10 Acres; adjacent to it is an 8 acre emergent wetland.

This is defined as an 18 Acre great pond. The protective zone is identified by measuring from the normal high water line of the open water and from the delineated upland edge of the associated wetland.

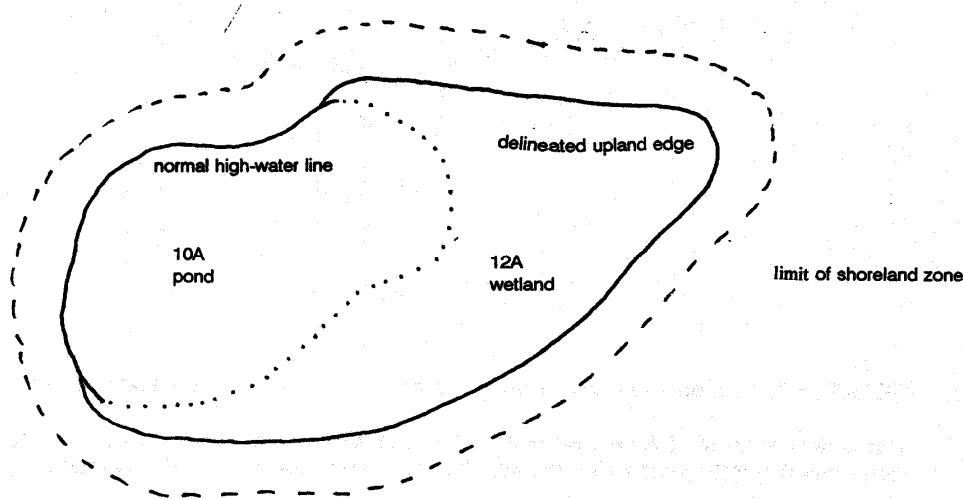
Note: measuring from the upland edge of wetland rather than the normal high water line of a water body will, in most cases, create a wider zone of protection for the wet environment.



EXAMPLE D: A 10 Acre open-water body is adjacent to a 12 Acre unforested wetland, which is elevated above the NHWL of the pond.

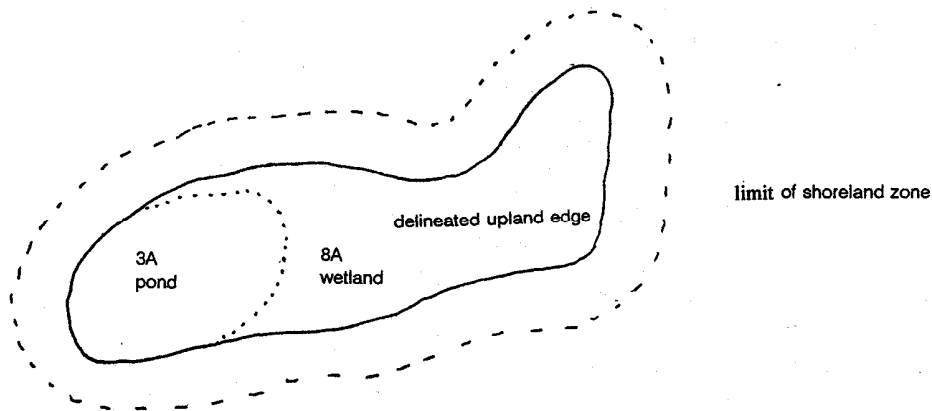
Each of these will be defined separately. The open-water body = a 10 Acre Great Pond. The normal high-water line must be identified and the protective zone defined in the field by measuring from this line. The wetland is separately defined as a protected 12 Acre wetland. The upland edge of the wetland must be delineated and the protective zone identified by measuring from this line. Note that, on site, the zone around the wetland will likely be measured from a point farther upland than that of the pond. This reflects the difference in criteria that define a pond and a wetland.

Note: If the elevation of the wetland is the same as that of the water in the pond during normal spring high- water, the wetland would be considered as part of the pond.



EXAMPLE E: An open-water body is 3 Acres and is associated with an unforested wetland of 8 Acres.

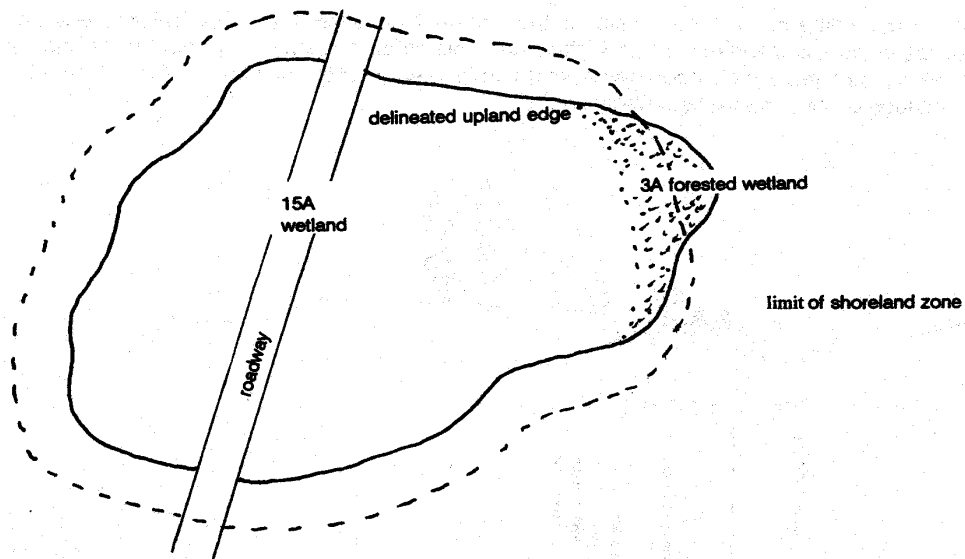
This entire wet environment is defined as an 11 Acre wetland. The upland edge of the wetland including the edge around open water must be delineated and the protective zone identified in the field by measuring from this line.





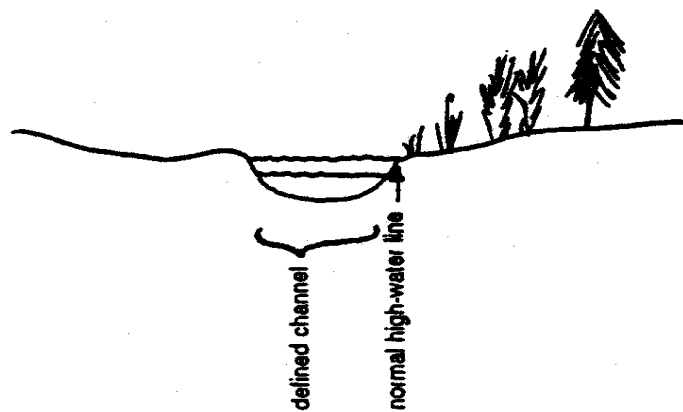
EXAMPLE F: An 18 Acre wetland is dissected by a roadway. The width of the roadway berm is 85 feet. Three acres of the total 18 are forested. The elevation of the water is the same on either side of the roadway berm.

This is defined as a 15 Acre wetland under the MSZA. The non-forested acreage of the wetland must be protected by a shoreland zone. The equal elevation of water on either side of the roadway berm allows the wetland to be contiguous.



A Riverine floodplain environment is one different from that of a great pond or wetland. It is protected by the MSZA and NRPA. Frequency and duration of flooding are measures that help to describe the hydrologic regime of a river or stream. This flooding then determines the location of the *normal high-water line* and the extent of associated wetlands. For several weeks of each year, the normal high water line at a site subject to spring flooding can be easily recognized. The remainder of the year, indirect evidence such as a debris line, hydrophytic vegetation species, and the character of the soils must support an assumption that is made about the hydrologic regime of the river and aid in identifying the *normal high water line* or the *upland edge* of a wetland.

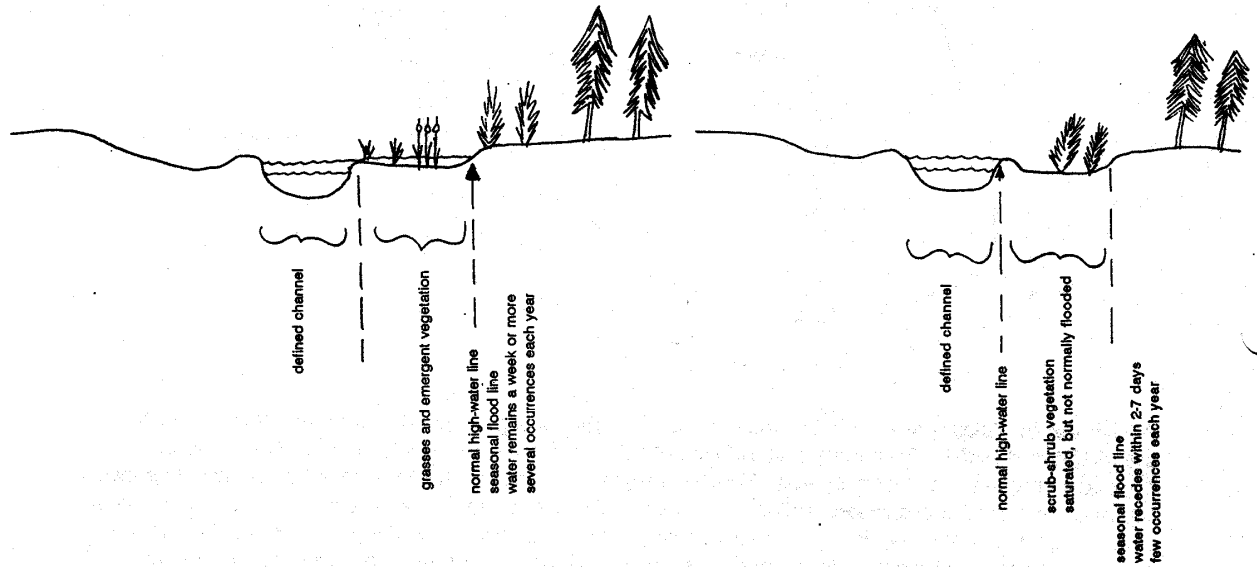
EXAMPLE G: In this example of a riverine floodplain environment, there are no associated wetlands. This river is protected by a shoreland zone defined by measuring 250 feet from the normal high water line of the river.



EXAMPLE H: Presented are two different situations that may occur in riverine environments. What is emphasized here is the difference in vegetation that is likely to occur as a result of a difference in the floodplain environment.

In both situations, the vegetation is predominantly hydrophytic and hydric soils are present. Hydrology is confirmed by indirect evidence found on site. Therefore, despite the difference in appearance, both of these areas are associated wetland. They are protected under shoreland zoning because wetlands are associated with a river (not a stream).

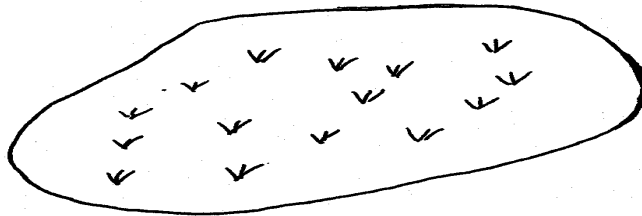
Notice also the difference in the location of the "normal high water line". This difference is caused by a difference in the water regimes of each situation. This difference is not important to defining the shoreland zone, since the zone will be measured from the upland edge of the wetlands. Yet, it does offer a visual interpretation of the "normal high-water line".



## I. Overlapping NRPA And Shoreland Zoning With Specific Wetland Situations

The following examples are presented to: 1) aid in determining jurisdiction under NRPA; and 2) highlight differences regarding jurisdiction between the NRPA and the MSZA. In this way, both laws will become more clearly understood.

EXAMPLE I. A wetland is greater than or equal to 10 acres. It is protected under both the NRPA and MSZA, while the NRPA regulates wetlands of all sizes. It is mapped and recognized as significant wildlife habitat. Any activity, which would impact this wetland, would require review under tier 3, specifically, of the NRPA, because of the wildlife habitat. For purposes of the MSZA, the *upland edge* of the wetland must be delineated and the protective zone identified by measuring from this line.



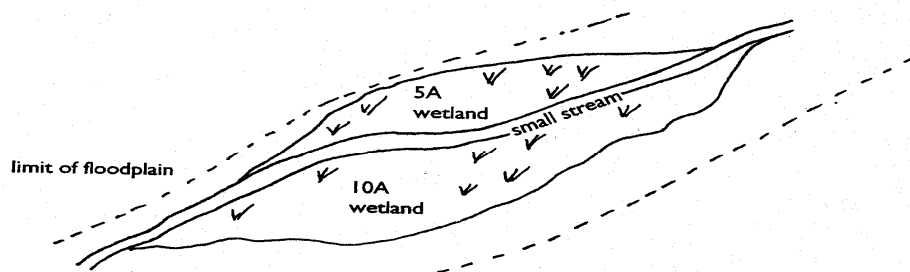
EXAMPLE J. Difference between small streams and streams. Floodplain wetlands.

Part I. A "small stream" (as depicted by a broken blue line on a 7.5 minute topo map) separates a 10 A wetland and a 5 A wetland. The small stream flows through an urban area where properties are at risk from seasonal flooding. Both wetlands are entirely contained within the boundaries of a 100 year flood event as depicted on FEMA flood insurance maps.

Under NRPA: -Small streams are protected.  
-Each wetland is protected as a floodplain wetland.  
-Activities, which would impact these wetlands, would require a permit under tier 3 review.

Note: NRPA protects freshwater wetlands or those portions of wetlands, that are inundated with floodwater during a 100-yr event and requires detailed review for these project proposals. It protects the floodway as it is a part of a river, stream, or brook channel.

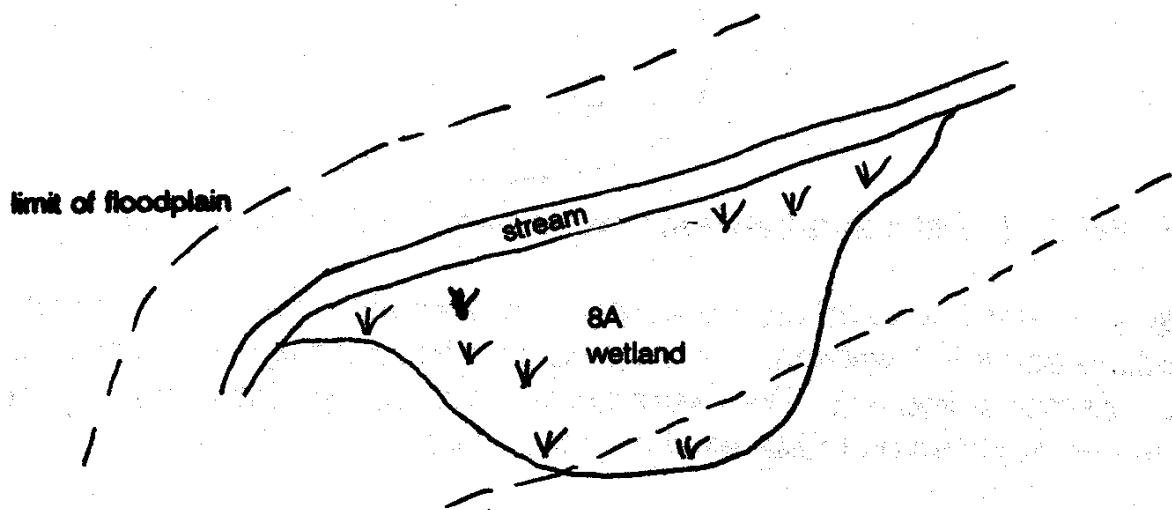
Under MSZA: "Small streams" are not protected by a shoreland zone. Floodplain wetlands are protected only if they are 10 or more acres, meeting the definition of a coastal or freshwater wetland. All streams are considered a part of the wetland, and not something which divides a wet environment. (A stream alone does not constitute a wetland.) Therefore, the acreages are added together and this is considered a 15 A wetland and protected by a 250 foot shoreland zone.



Part II. A wetland of 8 acres is associated with a "stream". The boundary of the 100 year floodplain passes through it.

Under NRPA: -The entire wetland is protected. Activities proposed to impact the portions of this wetland within the 100 year floodplain boundary would require permitting under tier 3 review. An activity proposed to affect only portions of the wetland outside of the 100 year boundary would require review consistent with the State's wetland protection rules. It is more likely that all of the wetland has been included within the 100 year boundary by FEMA (Federal Emergency Management Agency).

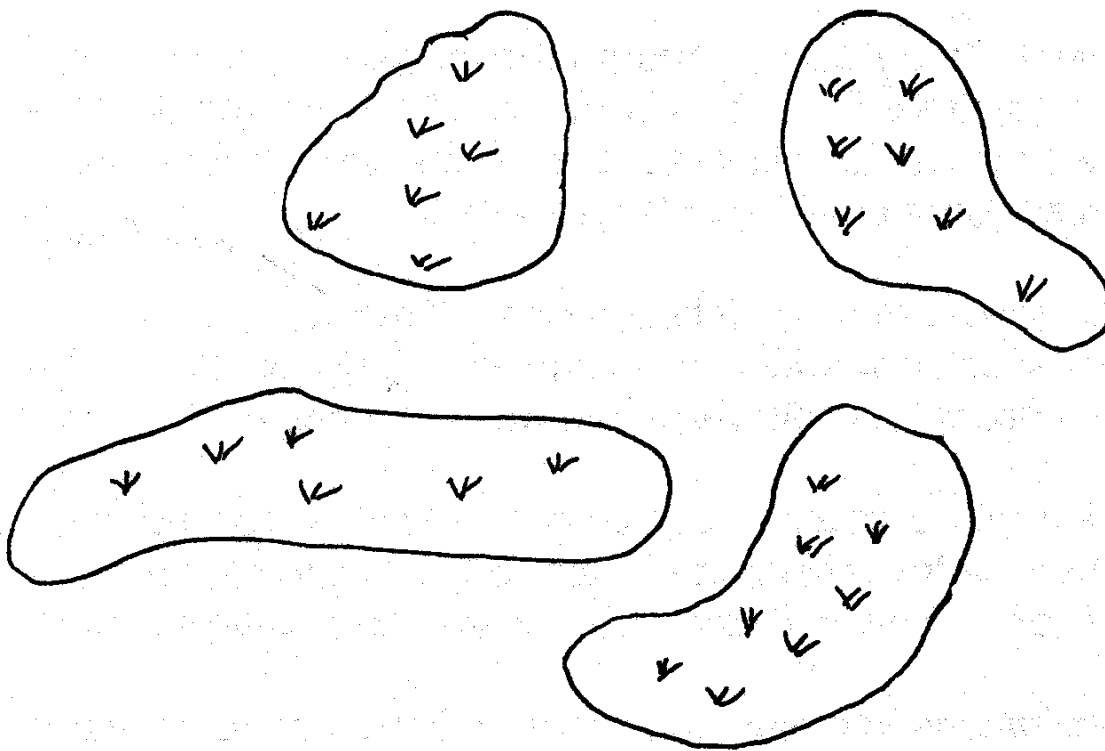
Under MSZA: The stream is protected by a 75 foot shoreland zone measured from the *normal high-water line*. Any stream associated wetlands are dealt with as isolated wetlands and must meet the 10 A minimum threshold to be considered under the jurisdiction of the MSZA.



EXAMPLE K: Several small wetlands of 4 acres each are found at a site nearby each other, separated by natural occurrence. A review of MDIFW's maps reveals these are an important habitat for ducks. Are any of these, separately or added together, protected wetlands under the jurisdiction of the NRPA or the MSZA?

Under NRPA: With or without the duck habitat, each of these wetlands is protected under NRPA. The ducks make these "wetlands of special significance". Any proposed activity that would impact these wetlands to be reviewed under tier 3.

Under MSZA: In order for the acreage of any wetlands to be added together, they must be adjacent and/or contiguous, i.e., physically touching. None of these are touching, no individual wetland is greater than or equal to 10 acres, and none are contained within a shoreland zone. Therefore, none of these are wetlands under the jurisdiction of the MSZA.



## *J. Nonconformance*

### **1. Expansions of Nonconforming Structures**

This provision of the law should not be overlooked! If violations occur, the municipality and landowner are subject to potential legal action, fines, and reconstruction costs, and landowners may not be able to sell their property because lenders are justifiably unwilling to hold mortgages on property which violates the local ordinance and State law. The *Guidelines* address this provision in Section 12.C.1.

The reader should review definitions from **Section 17** of the *Guidelines* that are especially relevant to this provision. These include: *accessory structure (or use), basement, expansion of a structure, floor area, foundation, increase in nonconformity of a structure, nonconforming structure, principal structure, setback, structure, and volume of a structure.*

As discussed in Chapter 2, a **nonconforming structure** is one that does not meet one or more of the following dimensional requirements: shoreline setback, height, or lot coverage. It is allowed to remain solely because it was in lawful existence at the time the ordinance or subsequent amendments took effect.

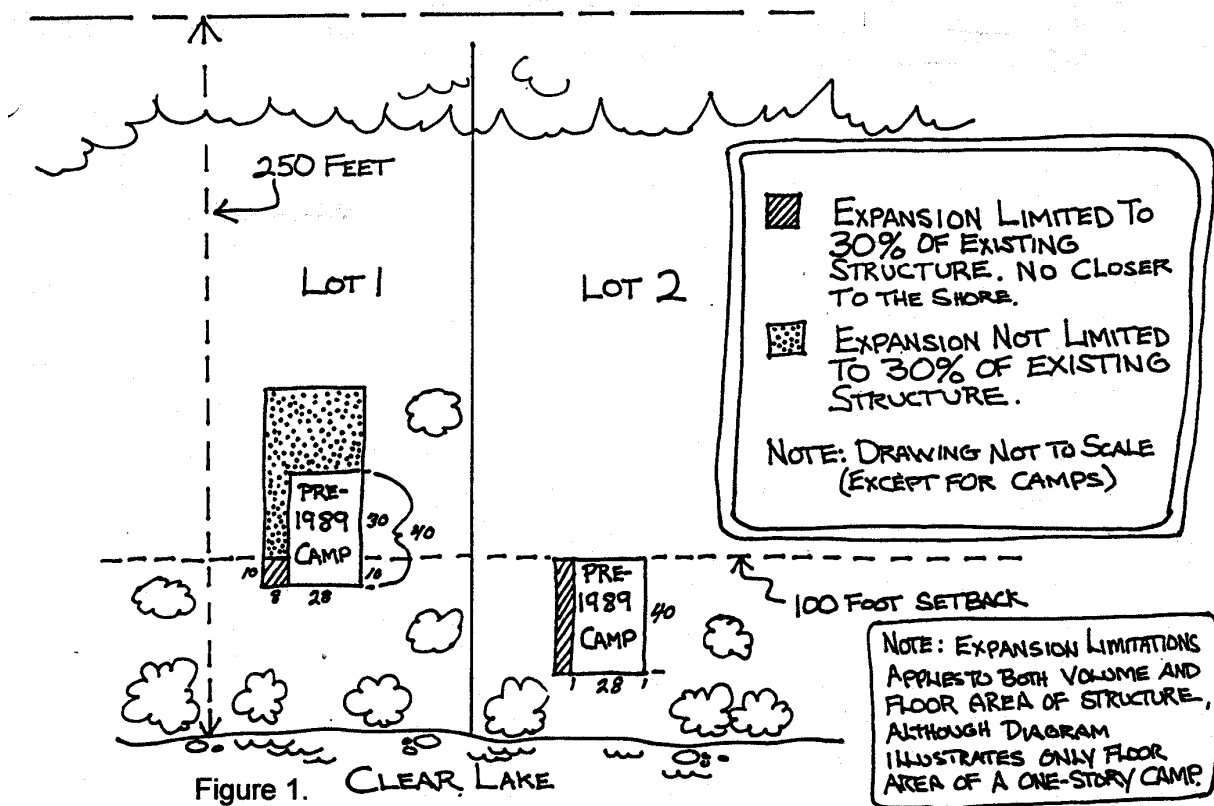
Nonconforming structures can be maintained and improved, without a permit, as part of *normal* upkeep. However, *new* additions, expansions, replacements, relocations, or changes in use require a permit from municipal officials before work can begin.

The use of a nonconforming structure can be changed provided that the **new use will have no greater adverse impact** on the water body or wetland, on the property itself, or on adjacent properties. The Planning Board makes that determination.

There are several limitations imposed on nonconforming structures that do not meet setback from the water. These include:

- **The statute limits the expansion of any and *only* that portion of the structure, which does not meet the shoreline setback requirement, to less than 30% of the existing floor area or volume as of January 1, 1989.** For example, if only a 10' x 28' section of a 40' x 28' building is nonconforming as to setback, only the 10' x 28' section is subject to the floor area and volume limitation. The remainder of the building can be expanded in compliance with other applicable standards, including lot coverage limitations. (see figure 1.)

There are several reasons for the 30% expansion limitation. However, the primary goal is to balance the need to maintain vegetated areas near the shoreline in order to protect water quality and control stormwater runoff, and to preserve the natural character of Maine's shoreland areas, while providing some expansion potential for structures which are closer to the shoreline than current standards allow.



- **The 30% expansion rule applies to all affected structures as of January 1, 1989.** Any expansion after that date must count toward the 30% lifetime allowance of the nonconforming portion of the structure. Smaller expansions must be cumulatively recorded and limited to less than 30%.
- **No expansions may make the structure more nonconforming.** For example, regarding water and wetland setback requirements, no structure that is less than the required setback from the water or wetland, can be expanded toward the water or wetland. Similarly, a structure, which exceeds the height limitation, cannot be expanded upward. The same is true for the lot coverage limitation. If the buildings, driveways, and other non-vegetated areas already exceed the total lot coverage limitation, these areas cannot be expanded to further increase the lot coverage. Although the *Guidelines* do not require structures to be set back a minimum distance from roads and side lot lines, many local ordinances do contain such limitations and must be considered.
- **A foundation may be added to a nonconforming structure, provided that the structure and new foundation are placed such that the setback requirement is met to the greatest practical extent.** A basement addition or enlargement will

**count toward the 30% expansion limitation unless:** the structure and new foundation are placed such that the setback requirement is met to the greatest practical extent; the completed basement does not extend beyond the exterior dimensions of the structure; and the foundation does not cause the structure to be elevated by more than three (3) additional feet.

The *Guidelines* do not require a structure to be moved away from the water or wetland when the replacement foundation is simply new posts. As with basements, the addition of a slab or frostwall will require the relocation of the structure away from the water or wetland if practical.

- **A structure relocated must meet the shoreline setback requirement to the greatest practical extent.** If the lot has enough depth to relocate the structure beyond the setback requirement, the owner will be required to move the structure to that location. If the structure cannot be moved to the setback line, the owner will be required to move the building to the furthest practical distance from the waterbody or wetland. If trees are removed in order to relocate the structure, the permitting authority may require replanting to compensate for the trees removed.

Rules related to nonconformance and particularly the 30% limitation requires careful definition and calculation of both existing and additional floor area and volume. Careful records of floor area and volume must be maintained and updated by the CEO for structures nonconforming with respect to setback to provide consistent administration of this provision of the ordinance. In order to assess with accuracy and fairness when the 30% limit on expansion of floor space or volume of a nonconforming structure has been reached, it is necessary to have documentation of the size of the structure as of 1989, and dates and dimensions of any additions since. This documentation can be maintained in a file, notebook, or computer spreadsheet indexed by tax map and lot number and perhaps cross-referenced by landowner name. **You must measure and record both floor space and volume, since neither the area nor the volume can be increased by 30% or more.**

**Floor area** is the total square footage of all floors plus any porch and deck area.

**Volume** is the cubic footage of all spaces enclosed within the exterior walls and roof of a structure.

**IMPORTANT NOTE:** Some town ordinances define volume and floor area to exclude certain areas such as unfinished attics, basements and certain storage areas. Recheck the municipal ordinance before proceeding.

When reviewing a permit application to expand a nonconforming structure:

Step 1. Determine the original, pre-1989, size and volume of the structure:



Note: The addition of a basement that does not exceed the existing structure's footprint or cause the structure to be elevated more than three (3) additional feet will not count toward the 30% calculation, provided that the basement is placed so that it meets the setback requirement to the greatest practical extent.

For a structure that is located partially outside the setback area, calculate the floor area and volume of only that portion within the setback area. Likewise, if only a portion of the proposed expansion will be within the setback area, calculate the floor area and volume of only that portion within the setback area. Compare only these values.

**Volume-** The total volume is calculated by dividing the structure enclosed by a roof and exterior walls into three-dimensional cubes and triangles. Measure cube length, width, and height from the exterior faces or roof and walls. The length, width, and height measures for each cube section of the structure are multiplied to calculate a subtotal in cubic feet. Calculate the volume of the triangles (attic space and other significant three sided areas. See Appendix D for diagram) and use the following formula:

$$1/2(N \times (H1-H2)) \times Y$$

1/2(floor length under gable N x difference between ridge pole height H1, and plate height H2) x floor length not under the gable Y.

The subtotal volumes of all sections of the structure are then added to arrive at the total volume of the structure.

Note: Assistance with measuring height can be found in Appendix D.

**Square footage-** The square footage of a structure is measured in much the same manner as the volume. Divide the floor of the structure, including decks and porches, into rectangles or squares. For each section, measure the length and width from the outside edges and multiply together. Add together the resulting measures, in square feet, to arrive at the total square footage for the structure.

Step 2. Record all data in the appropriate column and row on the sample form provided in Table 1 (See page 68).

Step 3. Compare the volume and square footage of the existing structure with the proposed expansion. Use the same method as was used to determine the original measure to ensure consistency.

Step 4. Calculate the difference in volume or square footage between that proposed and the existing and express in percentage. Compare with the regulated standards using the following example as an aid.

Note: Both the volume and floor area can be expanded up to the 30% limitation. However, neither the floor area nor volume expansions can exceed the limitation. For

example, if a proposal is made to expand the floor area by only 10%, but the proposed volume expansion is 35%, the project cannot be approved until the volume expansion is reduced below 30%.

Example:      New total volume = 46,200 ft<sup>3</sup>  
                  -Original volume = 40,000 ft<sup>3</sup>  
                  Difference         = 6,200 ft<sup>3</sup>

Express the difference in percentage:

- a.   6,200 ft<sup>3</sup> = X40,000 ft<sup>3</sup>
- b.   6,200 ft<sup>3</sup>/40,000 ft<sup>3</sup> = .155
- c.   .155 x 100 = 15.5%

Step 5. Record the date, dimensions, and percentages of each new expansion. You may copy and use the form provided in Table 1.

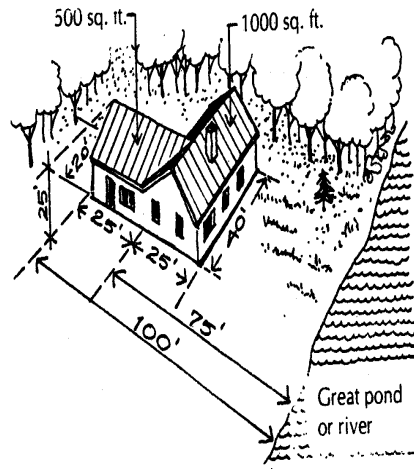
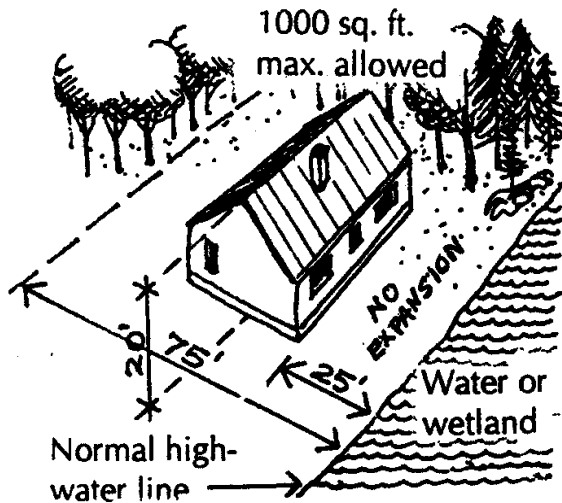
### **Alternative to 30% Rule for Limiting Expansions of Nonconforming Structures**

In 1998 the Legislature provided an alternate method for municipalities to limit the size of nonconforming structures in the shoreland zone. **This new method of limiting expansions is optional, and can only be administered if incorporated into the local ordinance.**

The optional method limits the amount of building size based on building height and the total floor area of all structures within the setback area. This new method does not base allowable expansions on volume, as the 30% rule does. Thus, in municipalities, which adopt the alternative, code officers and landowners will no longer be required to undertake complicated volume calculations. Also, because allowable expansions are based on the total floor area for all structures and a height limitation, there will no longer be a need to know the amount of floor area and volume of a structure, as it existed on January 1, 1989. Nor will there be a need to track expansions over time.

The basic provisions of the alternative method of limiting expansions are as follows:

- a. Within 25 feet of a waterbody or wetland there can be no expansions.
- b. Within 75 feet of a waterbody or wetland, the total floor area of all structures can not exceed 1,000 square feet, and the height of any building can not exceed 20 feet or the existing height of the building, whichever is greater.
- c. Where the setback requirement extends to 100 feet, the total floor area of all structures cannot exceed 1,500 square feet, and the existing height of any building cannot exceed 25 feet or the existing height of the building, which ever is greater. However, the limits established in paragraph b above must also be adhered to.
- d. No portion of an accessory structure that is closer to the waterbody or wetland than the principal structure on the lot can be expanded.



The alternate method of limiting expansions also allows a municipality to permit an additional 500 square feet of floor area if the structure is at least 50 feet from the waterbody or wetland and the landowner has maintained a strip of vegetation at least 50 feet in depth that meets the Guideline standards for vegetated buffers, or the landowner is willing to plant a buffer at least 50 feet in depth in accordance with minimum planting requirements as established by the Board of Environmental Protection. In order to receive approval for the 500 square feet bonus expansion, the owner must also be willing to undertake certain measures to control runoff and other nonpoint source pollution from the lot.

**Municipalities which adopt the above described alternative for limiting expansion of nonconforming structures may not also retain the provisions of the 30% expansion limitation.**

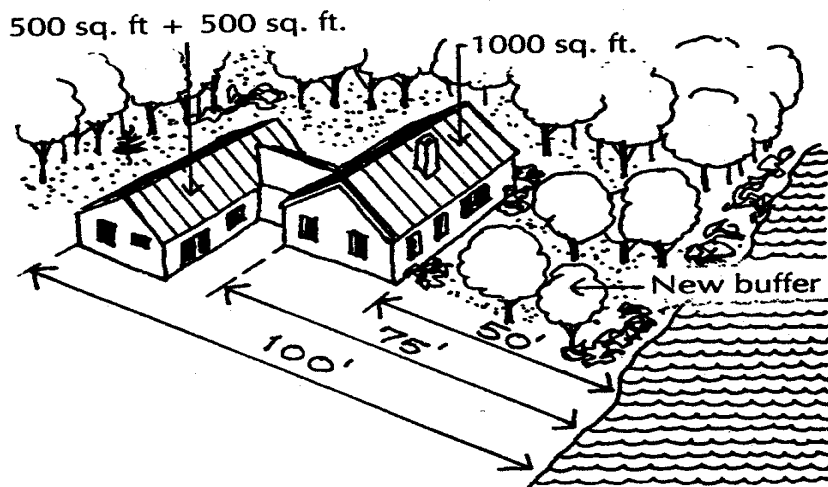


Table 1. Tracking expansions of nonconforming structures, pursuant to 30% expansion rule.

Property Owner: Address:		Origin Date:			Map:			Lot:		
<i>Subject Structure</i>	<i>Volume ft<sup>3</sup></i>	<i>Floor Area ft<sup>2</sup></i>			<i>Percent Increase in Volume</i>			<i>Percent Increase in Floor Area</i>		
Existing Principal Date:										
Expansion 1 Date:										
Expansion 2 Date:										
Expansion 3 Date:										
<b>Total Percent Increase</b>	1 2 3 %	1 2 3 %	1 2 3 %	1 2 3 %	1 2 3 %	1 2 3 %	1 2 3 %	1 2 3 %	1 2 3 %	1 2 3 %
Existing Accessory A Date:										
Expansion 1 Date:										
<b>Total Percent Increase</b>										
Existing Accessory B Date:										
Expansion 1 Date:										
<b>Total Percent Increase</b>										

## 2. Reconstruction or Replacement of Nonconforming Structures

A structure, which is damaged or destroyed by less than 50% of the market value before such damage or destruction, may be reconstructed in place after obtaining a permit from the local code enforcement officer. However, **Section 12.C.3.** of the Guidelines allows nonconforming structures located less than the required setback from wetlands and water bodies and which are removed, damaged or destroyed "by more than 50% of the market value of the structure before such damage, destruction or removal, to be reconstructed or replaced provided that **a permit is obtained within one year of the date of said damage, destruction or removal...**" In addition, the Planning Board must find that the reconstruction or replacement **meets the water setback to the greatest possible extent.** The Planning Board must consider several factors when determining the appropriate setback, including the type and condition of any foundation that may have been part of the original structure.

The words "damaged" and "destroyed" include voluntary removal by the owners, as well as "Acts of God" such as fire, flood, wind or other causes.

To Determine Whether a Structure has been Damaged or Destroyed by More Than 50% of its Market Value:

Step 1. Confirm that the structure is nonconforming with respect to the water setback. Then inform the owner:

- a. that because of this nonconformance he or she may have only 18 months in which to obtain a permit to replace the structure to be removed, if desired.
- b. that such a building permit, once obtained, would be valid for only one year from its date of issue, if no substantial start of construction has been made.
- c. that before the CEO can issue a building permit, the Planning Board will need to have determined that the replacement meets the water setback to the greatest practical extent.

Step 2. Determine the date of damage or destruction.

Those applicants who seek a permit to rebuild or replace pursuant to filing for or receiving an insurance claim will likely know the date of the flood, fire or other accident or vandalism which caused the damage or destruction. If it is not known, inquiries of nearby residents, the Weather Bureau, or the fire department, depending on the nature of the damage or destruction, should help the CEO to determine with reasonable accuracy when it occurred. If possible, it is best to have more than one source for such information to help confirm the date determined.

Step 3. Determine the percent of value lost.

In most instances, the owner will have to produce a cost estimate in order to file a claim involving National Flood Insurance and/or home insurance.

Federal flood insurance permitting procedures require submission of some documentation which allows a CEO to estimate market value, cost for the work that requires a permit, and from these, value lost. The CEO should require a prior-to-damage appraisal and cost estimate for reconstruction or replacement in order to determine compliance with the 50% market value standard of the ordinance. This should include all costs of reconstruction or replacement, whether or not a permit is needed to complete every particular phase of the project. Consulting the tax assessor's records may be helpful if they offer sufficient detail. The assessor's office can provide at least three types of information that may be useful. Usually local tax assessors keep records of the floor plans and other basic descriptors of the property used for assessment purposes. This information may be helpful in recalling the condition of the property prior to its damage or destruction. Based upon the standard relationship of assessed value to market value, the CEO may be able to project market value. And, if there was a recent transfer of the property, the assessor should have on file the real estate transfer tax form that reflects the actual market price paid.

Make a judgment as to whether the cost of replacing what was lost amounts to more than 50% of the structure's market value immediately prior to the damage or destruction. Issue a written determination stating the decision and the basis for the decision. If the applicant disagrees with the CEO's determination and cannot present any additional evidence, then the applicant should be informed of his/her right to file an administrative appeal to the Board of Appeals pursuant to **Section 16 H.4.a (i)** of the *Guidelines*.

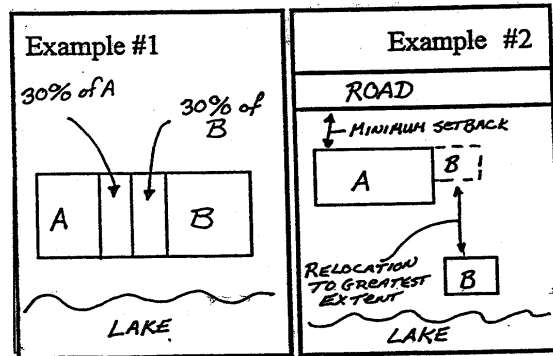
### **3. Questions and Answers Regarding Nonconforming Structures**

(Reprinted from *Shoreland Zoning News*, a publication of the DEP - Shoreland Zoning Unit.)

**#1.** If there is more than one nonconforming building too close to the shoreline, can one be torn down and its floor area and volume plus 30% "credited" to an addition to one of the other buildings?

As a general rule, the answer is NO. The 30% expansion cap for nonconforming structures applies to each structure individually. In addition, when any nonconforming structure is relocated or reconstructed, it must meet the shoreline setback standard to the greatest practical extent. It cannot simply be moved over to another building, and certainly not closer to the water than its current location.

Two situations where a nonconforming building might be joined or “credited” to another building is if they are already very near each other, so that a 30% expansion of one or both would bring them together (figure 2, example #1). The other possibility is if the site of relocation to the greatest practical extent brings two structures close enough so that they could be joined (figure 2, example #2).



**#2.** Assume a camp has a legally existing nonconforming deck attached. If a roof is added over the deck, will additional volume be created?

Unless a municipal ordinance specifically addresses open sided roofed additions, simply adding a roof over the existing deck would not add volume to the structure for the purpose of calculating the 30 percent volume limit. Volume is defined as “all portions of a structure enclosed by a roof and fixed exterior walls as measured from the exterior faces of these walls and roof”. Since the roofed deck does not have walls, no volume is created.

If the deck is screened, without fixed walls, no additional volume has been created. However, if the deck is enclosed with fixed walls and/or glass (such as a half-wall porch with windows), volume has been created and is limited to the lifetime 30 percent expansion limit.

**#3.** Assume a new full basement has been added beneath a nonconforming camp in 1994. No other expansions or additions were proposed at the time. In approving the project, the Planning Board required the owner to move the camp to maximize the water setback and ensure that the basement did not raise the building by more than three feet. A year later, the owner wants to expand the camp and use the previously approved basement area toward calculating the 30 percent expansion allowance. Is this allowed?

No! The 30 percent expansion limit applies to the floor area and volume of the camp as of January 1, 1989 (the date the 30 percent rule became effective). The new basement area, while exempted from the 30 percent calculation, can not be used toward a new expansion because it did not exist on January 1, 1989.

Included in Appendix A is an Issue Profile, *Non-conforming Structures in the Shoreland Zone*, which offers more detailed discussion of how to administer the nonconforming structures provisions of shoreland zoning.

## ***K. Selected Performance Standards from Section 15 of the Guidelines***

### **Section 15 B. Principal and Accessory Structures**

By definition, an accessory structure is a structure that is incidental and subordinate to the principal use or structure. By example, accessory structures include gazebos, stand alone decks, terraces or patios and satellite antennas. A deck or garage attached to the principal structure is considered part of the principal structure. There are other things that do qualify as structures under strict interpretation of the definition, but are not significant to the purposes of shoreland zoning and would not be considered “structures” for purposes of administration and enforcement of the ordinance. These things might include lawn furniture, picnic tables, flagpoles, feeders, and water supply wells with minimal or no covering structure.

The setback distance for principal and accessory structures is measured horizontally. The distance is measured by extending lines vertically from the two points on the ground between which the individual is measuring and then measuring along a horizontal straight line perpendicular to these two lines.

Accessory structures and measurement of setback were both issues in a Maine Supreme Judicial Court case *Town of Union v. Michael Strong et al.*, decided July 31, 1996, case number 7758.

### **Section 15 C. Piers, Docks, Wharfs, Bridges, etc.**

These performance standards, as presented in the Guidelines, are somewhat unique in that they are the only shoreland zoning performance standards that apply beyond the normal high water line or within a wetland. Perhaps more importantly, the Mandatory Shoreland Zoning Act and the Guidelines do not require that municipalities regulate such structures at all. They are however, regulated by the State's Natural Resources Protection Act administered by the DEP. They are also regulated by local Floodplain Management Ordinances. The State Planning Office offers a set of model performance standards for those communities that want to take a more comprehensive approach in regulating docks, piers, and wharfs.



## Section 15 E. Individual Private Campsites

**Section 15 E 5.** requires a written sewage disposal plan approved by the LPI. For purposes of shoreland zoning such a written sewage disposal plan should meet not only the Maine Subsurface Waste Water Rules, but also the water quality standards of **Section 15 S.** of the *Guidelines*. On-site disposal may prove infeasible. In most cases, connection to local sewers will not be an option simply because there are none. Off-site disposal may involve connection to a neighbor's system if there is adequate capacity and permission is granted by written agreement, or a contract to dispose of wastewater at a State licensed RV sewage disposal station, depending in part on whether a tent or RV occupies the campsite. Other arrangements that meet the Code, the written permission, and **Section 15 S.** criteria may be possible. Sewage disposal on-site must take place in an approved system. If the municipality has a local floodplain management ordinance, the applicable maps and standards of that ordinance should be followed.

## Section 15 G. Parking Areas

**Section 15 G.1.** requires parking areas to meet the same setback distance as for structures in a particular district. Generally, the setback requirements are:

1. 75' from wetlands, rivers, tidal waters and streams; and
2. 100' from great ponds classified GPA, except in the Commercial Fisheries/Maritime Activities (CMFA) district where water and wetland setbacks shall be 25'. In addition, the Planning Board may reduce the required parking area setback for public boat launching facilities in any location outside the CFMA district down to no less than 50' where no other reasonable alternative exists.

**Section 15 G.2.** requires that parking areas shall be adequately sized for the proposed use and shall be designed to prevent stormwater from flowing directly into a water body, and where feasible, to retain all runoff on site.

It will be the Planning Board that decides in most, if not all cases, when it is feasible to retain all runoff on-site. Though the *Guidelines* offer no suggestions as to how they should reach a decision, or how to make a balanced decision considering cost, the physical locations available for retention and the amount and nature of the runoff generated should be considered.

What does this mean for the CEO monitoring construction projects approved by himself or herself or the Planning Board? What constitutes direct flow as opposed to indirect flow when stormwater cannot be retained on-site?

The principal purpose of the regulation is to prevent or minimize nonpoint source pollution entering water bodies and wetlands. This pollution is of two types: (1)

sediment and nutrients eroded from parking areas, and (2) automotive runoff, which includes oil and other fluids which drip from parked cars onto the lot surface. Automotive pollutants include oils and detergents containing phosphates, heavy metals, polyaromatic hydrocarbons, and other substances. (For a more detailed description of nonpoint source pollution and its adverse environmental effects on lakes, streams, wetlands, rivers and estuarine and marine waters and resources, see Chapter 5 of this manual.)

Indirect flow is stormwater that passes across a filter medium or buffer strip of vegetation that lies within the required setback and allows some portion of the runoff to infiltrate the soil before reaching the water body or wetland. Measures controlling runoff are considered effective if the flow does not channelize, but spreads out allowing greater infiltration. In practical terms, this means that existing vegetation should be preserved wherever possible within the setback and parking area surfaces should act like level spreaders, or if necessary, incorporate level spreaders to ensure that evenly distributed, nonchannelized flow enters the vegetative buffer. Swales or anything else that concentrate flow should be avoided, except where such concentrations of flow are necessary for collecting sheet flow and redirecting it for respreading on a vegetative filter strip at least equal to the minimum setback in width.

If there is no vegetation where stormwater will flow within the setback, new vegetation of sufficient width to accommodate the runoff from the parking area should be established. Or, if this is not feasible the drainage should be diverted to the top of an existing buffer strip of minimum width nearby, if available. If neither of these solutions will work for a given site, the applicant should be directed to obtain the assistance of an engineer or the County Soil and Water Conservation District to design measures which will be at least as effective as a vegetative buffer strip.

The requirement that parking areas be adequately sized for the proposed use is supplemented with requirements for minimum parking space dimensions and minimum internal travel aisle dimensions in **Section 15 G.3**. Together, along with providing convenient and safe access for vehicles, these standards should minimize the tendency of any drivers to park outside the existing lot when the facility is used, and in so doing create new erosion potential and/or change the drainage of the lot in a manner which increases nonpoint source pollution.

## **Section 15 H. Roads and Driveways**

Table 1 of the *Guidelines* show that roads and driveways are to be reviewed by the Planning Board. The CEO's role may involve advising the applicant regarding the applicable standards and monitoring construction once roads and driveways are approved. In some communities where site plans involve the creation of new roads or substantial upgrading or relocating of existing roads, particularly roads being built for eventual acceptance by the municipality, it may make sense for the CEO to coordinate with the road commissioner and /or consulting engineers serving as inspectors on the

project. Before construction of buildings or the sale of lots begins in subdivisions with new roads, the roads, which will usually need to conform to subdivision ordinance road design and construction standards, must be completed. In some cases, it may be more cost effective and a better use of the CEO's time if the public works inspector, who will frequently be needed on the site, can assist the CEO with reports of activities and ongoing development at the site during the road construction phase of the project. The CEO should verify these reports before any action is taken.

A question likely to arise on some projects will be: To what point on the road or road right of way should setbacks from water bodies and wetlands be measured? Whether it should be measured from the edge of the pavement or gravel surface or from the right of way line may vary with the development and the municipality's other policies and ordinance standards for roads. Ideally, the local shoreland zoning ordinance should specify how the setback is to be measured. If it does not, this should be addressed by the CEO raising the issue with the Planning Board or municipal planner, preferably as a general policy question rather than during development review. In any case, the issue will need to be resolved for each development at, if not prior to, the time of development review in order to give proper guidance to the developer and the CEO when it comes time to lay out the road location in the field after approval. The measurement of setbacks for roads and driveways is made horizontally. The distance is measured by extending lines vertically from the two points on the ground between which the individual is measuring and then measuring along a horizontal straight line perpendicular to these two lines.

**Section 15 H.7.** which is intended "to prevent road surface drainage from directly entering water bodies" requires that road drainage "empty onto an unscarified buffer strip at least (50) feet plus two times the average slope, in width between the outflow point of the ditch or culvert and the normal high-water line of a water body, tributary stream or upland edge of a wetland."

For purposes of advising the Planning Board on the correct width of the unscarified buffer, and for determining it in the field, the applicant who proposes construction of a new road within the shoreland zone should be required to submit a topographic map of the site, based on a survey, with contour intervals no greater than five feet. In most instances, the subdivision review process already requires this of an applicant for subdivision approval, but in some cases it may be necessary to require it for shoreland zoning review alone.

To determine the average slope at any one location along the edge of the proposed road between the road and the water body or wetland:

- Measure the **horizontal** distance, from the road to the water body or wetland, and
- divide the **difference in elevation** between the normal high-water line or upland edge and the edge of the proposed roadway surface drainage discharge point by the

### **horizontal distance.**

- This will yield the average slope along a line from the road to the water or wetland from each ditch outflow point or culvert.
- Add 50 feet to twice the average slope to yield the minimum buffer width for the buffer adjacent to each culvert or ditch outflow point.
- Compare the distance shown on the plan to the required distance, given the average slope and the limits of unscarified vegetation (should also be shown on the plan), to prove whether the proposed road layout meets the buffer width requirement at all points along the road.

The plan, once approved, should be used as a guide in the field for ensuring that the layout of proposed roadways is in compliance with the plan and the minimum buffer width standards.

**Section 15 H.8.** provides more specific standards for the types of drainage structures, including drainage dips, ditch relief culverts, and water turnouts that should be located and spaced along roadways, depending upon the slope of the road (road grade). A good source of information, for determining whether these have been constructed properly, is the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices (BMP) Manual.

**Section 15 H.9.** requires that these drainage/storm water control features be maintained on a regular basis to ensure proper functioning. The *Guidelines* do not specify who the responsible party for maintenance should be at any point during the potentially infinite life of the development. Unless a municipality already addresses this in their local subdivision or shoreland zoning ordinance, the CEO should raise this as an issue requesting the Planning Board to develop a consistent policy. Until and unless the road becomes a public road, the Planning Board should assign clear responsibility for maintenance of storm water control structures so that the CEO will know whom to hold accountable if maintenance does not occur. Similarly, reasonable maintenance intervals should be established. For more information on options available for maintenance of structural control measures, see Chapter 5.

### **Section 15 J. Storm Water Runoff**

It is reasonable to require that additional maintenance be done when needed to ensure proper functioning of the drainage/storm water management systems. **Section 15 J.2.** is explicit regarding storm water control systems.

A stormwater law (38 M.R.S.A. § 420-D) now separately addresses this issue. See Chapter 4, section 5 of this manual for more information.

## Section 15 M. Mineral Exploration and Extraction

**Sections 15 M.2. and 3.** establish setbacks for mineral extraction sites from adjacent properties and from water bodies and wetlands, including Significant River Segments. **Section 15 M.2.** states that "no part of any extraction operation, including drainage and runoff control features shall be permitted within..." and then lists setbacks from various water bodies and wetlands. **Section 15 M.3.** requires that gravel pits in the shoreland zone next to Significant River Segments must be as "as far as practicable from the normal high-water line and no less than 75 feet ". For purposes of interpreting both of these paragraphs, (a) "no part of an extraction operation including drainage and runoff control features" should also apply to paragraph 15 M. 3., and (b) the intent of the Guidelines is to provide a vegetative buffer of existing vegetation at least 75 feet wide. Where the setback requirement is 100 feet the intent is to retain a buffer of existing vegetation that is at least 100 feet wide.

Although it is the Planning Board who will need to determine whether, as required by **Section 15 M.3.** the developers of new gravel pits along Significant River Segments have demonstrated that "no reasonable mining site outside the shoreland zone exists", the CEO may well be called upon to help interpret the meaning of this standard and/or give an opinion as to whether it has been met in any particular case. The standard should be interpreted to mean that no reasonable mining site outside the shoreland zone exists on the property that is the subject of the application for a mineral extraction permit. It is not intended to include consideration of other properties owned by the same applicant as potentially reasonable mining sites.

Since it is likely that mining of sand and gravel aquifers may be contemplated by a developer in such cases, the Maine Geological Survey series of sand and gravel aquifer maps may provide some perspective on sand and gravel deposits in the vicinity of the area proposed to be mined, and whether or not reasonable mining sites exist outside the shoreland zone. For purposes of providing such an opinion, the CEO in any municipality with Significant River Segments may wish to obtain a copy of the applicable sand and gravel aquifer map quadrangle from the Maine Geological Survey or the regional council or planning commission of which the municipality is a member. Such maps should be treated as only a general indicator rather than conclusive evidence. Sand and gravel deposits that are minable are not always part of aquifers, but may instead be unsorted unconsolidated tills or other materials, which are not generally recorded on such maps. Further assistance may be available from MGS, the DEP Bureau of Land and Water Quality, or the regional planning commission or council of governments in determining whether other reasonable mining sites exist outside the shoreland zone. Also, many communities have enacted extraction ordinances to more fully regulate mining activities. Contact the Office of Community Development for assistance with ordinance development.

To determine when an approved mineral extraction operation in the shoreland zone is complete, as defined in **Section 15 M.4.** the CEO should advise the Planning Board to

require that the developer keep records of the volume of materials extracted on a monthly basis. This will keep the operators and the owners cognizant of their production, and its relation to the level of production at which they will be required to implement their approved reclamation plan. The CEO could request that the Board require at the time of approval that the operator provide the CEO with an annual report of monthly volumes of materials removed. If the threshold for implementing the reclamation plan is crossed, the CEO will be alerted, and can take appropriate action.

## **Section 15.N. Agriculture**

The Shoreland *Guidelines* balance agricultural use of land with maintenance of water quality of waterbodies by requiring:

- setbacks of agricultural activities from the edge of waterbodies,
- a Conservation Plan for agricultural activities involving tillage of soil greater than 40,000 sq. ft. in surface area, and
- adherence to management practices referenced in the *Manure Utilization Guidelines* published by the Maine Department of Agriculture on November 1, 2001.

The *Guidelines* require that there be setbacks from water bodies for **new tilling of soil** and **new grazing areas**. New grazing and tilling operations are those that are initiated on newly cleared areas that have not been part of an existing farm's operation. Fields which are in a farm's normal rotational use may be maintained in the rotational use. However, if a field reverts to primarily woody vegetation, any reuse of that field must be done in accordance with the clearing standards, which contain provisions for maintaining vegetated buffer strips between the land use and the water body or wetland.

The guidelines for manure utilization, referenced above, are intended to protect human and animal health, minimize pollution and environmental abuse, limit nuisance, and are economically sound. The regulations are based upon maintenance of the natural cycle of nitrogen in the environment by limiting the amount of nitrogen from manure that is allowed to leach into soil at any given time. This allowance is below the amount that would accumulate in ground water and flow to a surface water body. By and large, upland soils that do not become saturated are more suitable for manure spreading than periodically wet floodplain soils. The Manure Utilization Guidelines are incorporated into agricultural best management practices and Conservation Plans discussed below.

In 1991, the NPS Agricultural Task Force published best management systems for agriculture and a strategy for implementation of these systems on a site specific basis. The systems address sediment, manure, pesticides, and nutrients and are found in the *Strategy for Managing Non Point Source Pollution from Agricultural Sources and Best Management System Guidelines*.

The *Guidelines* do not specify the requirements for available agricultural BMPs. Rather, the Maine Department of Agriculture oversees a two-tier compliance program to implement agricultural BMPs. Voluntary compliance is expected based upon technical assistance from the Soil and Water Conservation Districts (SWCD), USDA Natural Resources Conservation Service (NRCS), and the University of Maine Cooperative Extension (UMCE). Mandatory compliance is a complaint driven program that is coordinated by the Maine Department of Agriculture. Agricultural operations, which are non-compliant, may be considered a *nuisance* under the law. The Department of Agriculture has enforcement authority related to nuisance complaints and failure to adopt BMPs. The DEP has enforcement authority related to water quality issues i.e., discharges of pollutants including sedimentation into surface waters. The Maine Board of Pesticide Control has enforcement authority for pesticide use and label violations. Local CEOs have enforcement authority for violations of Shoreland Zoning Ordinances that include a failure to have or to implement a conservation plan, where applicable. Agricultural BMPs are the State's jurisdiction unless local ordinances specify otherwise or there are issues that should be addressed by a conservation plan. While the Dept. of Agriculture may request the first opportunity to correct issues of erosion on farms in the Shoreland Zone, they cannot forbid municipalities enforcement of their shoreland ordinances. For more information, contact the DEP Shoreland Zoning Unit at 287-2111; or for assistance with agricultural issues, contact the Maine Department of Agriculture in Augusta at 287-3118.

### Conservation Plan

Tillage, manure handling, and livestock management are all a part of the conservation plan required by **Section 15.N** of the *Guidelines* which must be filed with the Planning Board. With respect to grazing livestock, new farms are required to meet specified setbacks from waterbodies for grazing animals. Farms existing before this shoreland zone amendment are given a choice to either meet the new setbacks or to continue as before provided they do so in accordance with a conservation plan.

While any qualified professional can do a conservation plan, the registered agronomists and soil scientists at the various Natural Resources Conservation Service District Offices do most across the State. These offices, funded by both the federal and State governments, provide free and low cost professional conservation services to farmers and other landowners. A list of the District offices statewide can be found in Appendix C.

A conservation plan is tailored to the uniqueness of each farm to develop the most effective means for conserving air, water and soil resources. However, there is a fair degree of similarity between plans. About 90 conservation techniques are available to be selected from and reassembled into individual plans.

## **Section 15. O and 15.O-1. Timber Harvesting, Including State-Wide Timber Harvesting Standards (see supplement)**

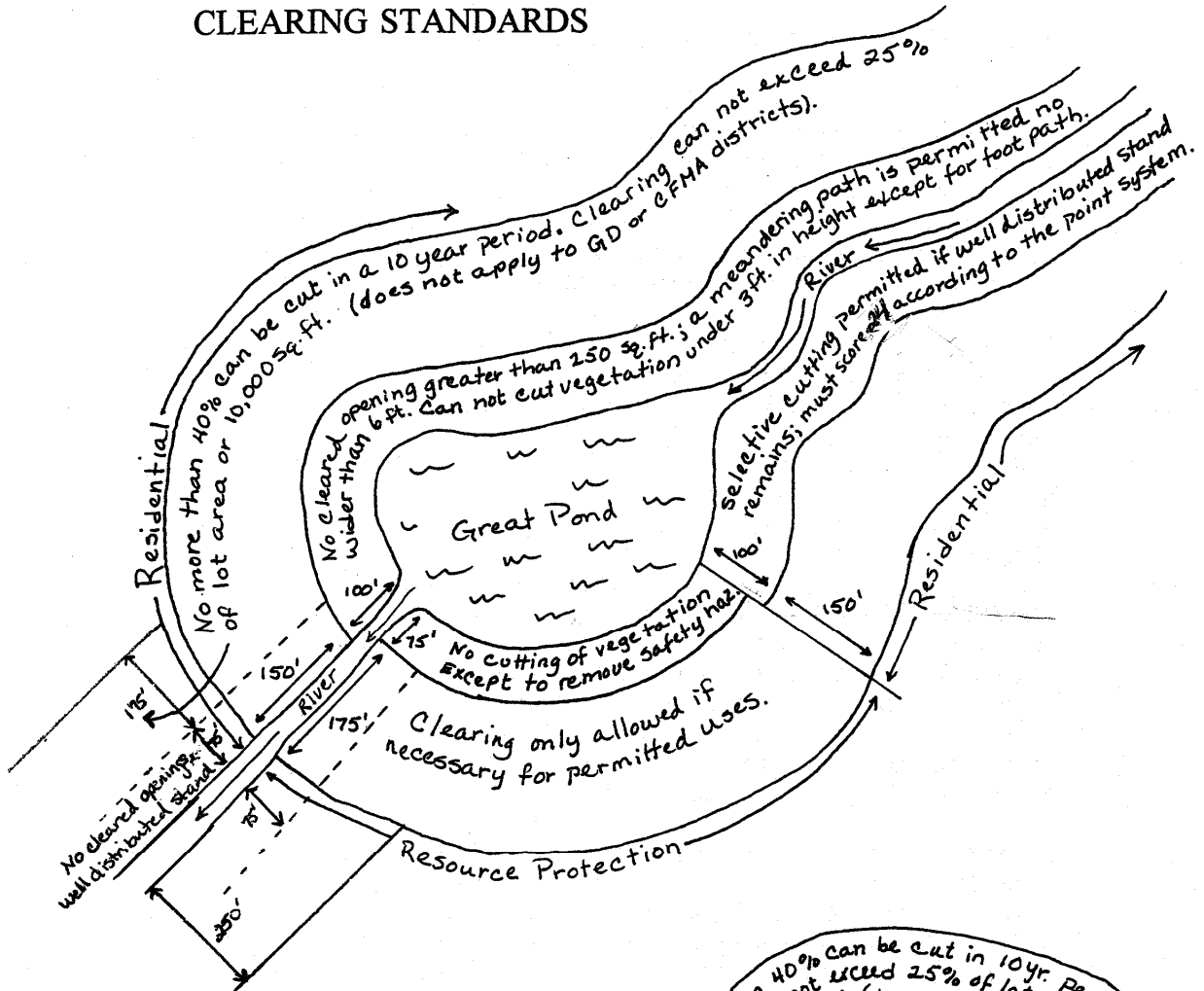
### **Section 15 P. Clearing of Vegetation for Development**

Clearing of vegetation for development is not allowed within 75 feet of the *normal high-water line* in a resource protection district abutting a great pond, except to remove safety hazards. Otherwise, in a resource protection district, clearing of vegetation is limited to that necessary for uses permitted in the district. **Section 15 P.2** lists standards that apply to clearing within 100 feet of ponds and 75 feet from other resources not protected by a resource protection district. Standards that apply to areas at distances greater than 100 feet from ponds and 75 feet from other resources not included in a resource protection district are listed in **Section 15 P.3**. Definitions of a "*cleared opening*" and a "*well distributed stand of trees and other vegetation*" are specifically provided in **Section 15 P.2**, where in **Section 15 O**. they are left to the judgment of the enforcement officer. Limited clear cutting for timber harvesting is an acceptable practice. Additionally, cleared openings legally in existence on the effective date of the locally adopted shoreland ordinance may be maintained, but not enlarged, except as permitted by the ordinance. Fields that have grown in and are primarily shrubs, trees, or other woody vegetation are regulated according to these standards. The volume of trees removed from a given lot, whether for purposes of timber harvesting or for clearing for development, must be added together when assessing compliance with the limitation on volume removal within a ten year period. See Figure 8.

**Section 15 P.3.** references a particular forest management method known as *selective cutting*. This is a harvesting technique which calls for the removal of culls, i.e., dead, dying, and noncompetitive trees for the purpose of improving the health and growing potential of those trees remaining; to generally improve the condition of trees remaining in an area of tree growth following the harvest. This method may also include the selection of a particular species that is favored to remain. For purposes of enforcement, it is important that 60% of the volume of live trees remain and that they will continue to live, regardless of their species or value commercially.



# CLEARING STANDARDS



## Additional Provisions:

Except in RP areas adjacent to great ponds, selective cutting is permitted within the buffers provided a well distributed stand remains, i.e., the stand must score a 10 (adjacent to great ponds and rivers flowing to great ponds) according to the point system described in the guidelines. Also, within the 100' and 75' buffer zones, no more than 40% of the volume of trees may be cut in a 10 year period.

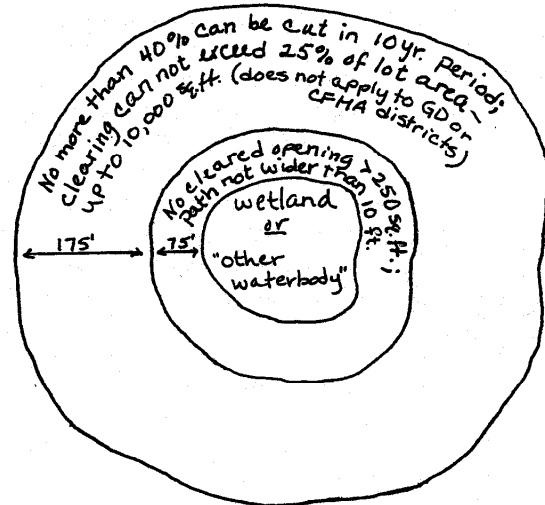


Figure 8. Diagram of clearing standards common to zones under Shoreland Zoning.

## **Section 15 Q. Erosion and Sedimentation Control**

**Section 15 Q.1.** requires that "[all activities] which involve filling, grading, excavation or other similar activities which result in destabilized soil conditions and which require a permit shall require a written soil erosion and sedimentation control plan." This means that single family homes and other residential development, as well as, timber harvesting operations in a Resource Protection District and new agricultural uses need to have an erosion and sedimentation control plan prepared. For new agricultural uses, however, the conservation plan will suffice.

**The plan must be submitted to and approved by the permitting authority before a permit can be granted, and it must address, in the more specific terms called for by Section 15 Q.1 through 5., both erosion and sedimentation due to construction activity and use of the site following development.** Broadly speaking, this means that an erosion and sedimentation control plan must address and prevent short term erosion and sedimentation due to the activity or construction process and long term site use. Erosion and sedimentation control is a key component of the strategy used to implement the purposes of the Mandatory Shoreland Zoning Act.

Four (4) manuals have been developed on best management practices for construction sites, agriculture, timber harvesting, and stormwater management. Chapter 5 of this manual recommends the use of these best management practices for development of written erosion and sedimentation control plans to meet the requirements of this subsection. It also provides guidance in tabular form for selecting among the many different BMPs available for particular land uses that must meet the standards of this section and several other subsections of **Section 15**.

Probably the most common and most controversial requirement related to erosion and sedimentation controls is their application to single family residential development. However, with some careful planning, the CEO can help minimize the perceived difficulty of meeting this requirement for individual home sites. For example, whether or not BMPs are required to be used, a short standardized erosion and sedimentation control plan can be developed based upon short answers to questions regarding site conditions, development plans and how the applicant will meet each of the standards in **Section 15 Q** using selected BMPs. Such a plan would still require the unique aspects of each site to be addressed, but standard practices for all or most sites could be prescribed. A sample site evaluation checklist is contained in Appendix E. It should be tailored to meet whatever special concerns there are in a municipality and must yield information necessary to make a decision relative to the specific ordinance standards of any given municipality.

Technical assistance for landowners is always available through the county soil and water conservation district offices.

## Section 15 R. Soils

The *Guidelines* contain four objectives with respect to maintaining the quality of soils in the shoreland zone: avoidance or minimization of severe erosion, mass soil movement, improper drainage, and water pollution. In order to accomplish these objectives, **Section 15 R.** of the *Guidelines* require that permit applications which include subsurface waste disposal, and commercial, or industrial development and similarly intensive land uses be required to include a soils report as part of the application. This report must be based upon an on-site inspection by a State-certified professional. State-certified professionals include soil scientists, professional engineers, and geologists, among others.

This requirement merely reaffirms the State Code requirement to base septic system leach field sizing and placement on an on-site soils analysis. This requirement is part of HHE 200 forms and other DHS application forms for approval of larger, engineered subsurface waste disposal systems. The on-site soils report for intensive commercial and industrial land uses is required in order to ensure that wastes generated by the proposed use will be adequately treated on-site.

The recommendations contained in the soils report will help the CEO and the Planning Board in reviewing the impacts of a proposed development. In some municipalities this type of report may already be required for uses that require site plan review. The CEO should check the requirements of the site plan review ordinance to see whether such a required report must address the soil objectives listed above and will apply to all uses for which the shoreland zoning soils report is required. In some cases, this requirement will be met by existing standards. In others, it may need to be supplemented to address what is needed for shoreland zoning. And in still other instances, site plan review will not apply to the project and shoreland zoning will provide the only requirement for a soils report.

No soils report other than an HHE 200 form is required for residential and less intensive uses. And no soils reports are required for residential and less intensive uses in the shoreland zone that are connected to a public or other off-site sewage disposal system.

## Section 15 S. Water Quality

**Section 15 S.** of the *Guidelines* states "No activity shall deposit on or into the ground or discharge to the waters of the State any pollutant that, by itself or in combination with other activities or substances will impair designated uses or the water classification of the water body." The terms, *designated uses* and *water classification* refer to the State's system for classification of surface and ground waters according to different categories of designated uses. Under Title 38 MRSA, Article 4-A, the DEP Land and Water Bureau classifies groundwater, great ponds, rivers, streams, and estuarine waters. The classification is based upon existing or desired water quality and existing or intended uses ranging from the highest class AA to C. AA standards require

preservation of water quality; no direct discharge of pollutants is allowed. All naturally created great ponds in Maine are classified "GPA" (Great Ponds of classification A), the second highest classification which requires that these waters be of such quality that they are suitable for drinking after disinfection, fishing, recreation, industrial processes, hydroelectric power generation, navigation, and provide natural habitat for fish and other aquatic life. Class B waters may have permitted discharges which do not cause adverse impact to aquatic life. Class C waters may have permitted discharges that may alter aquatic life provided that water quality is sufficient to support all indigenous fish species and the structure and function of the resident biological community. Groundwater is classified into only two classes, A and B. Class A water must meet federal standards developed pursuant to the Safe Drinking Water Act and adopted by reference by the State of Maine. Class B groundwater must be suitable for all uses other than drinking water. The classifications for streams, rivers and estuarine waters vary from place to place and time to time. Periodically they are changed by the Legislature based upon changing water quality or designated uses or both.

To learn how specific water bodies are classified and more about the designated uses for those water bodies and their associated water quality parameters, the CEO should contact the State or regional office of the DEP Land and Water Bureau. Depending upon the availability of recent data, the DEP Land and Water Bureau may also be able to determine whether or not a given water body is attaining its classification goal, under existing pollutant loading.

Direct discharges of pollutants to streams and great ponds are prohibited and are permitted only by license from the DEP for rivers, estuaries and marine waters. Because licensed discharges account for all legal point sources, the CEO must consider any point source discharge which is unlicensed by the State to be a violation not only of shoreland zoning, but also other State and federal water quality laws. This is true whether or not the water body's designated uses or water classification is impaired.

In contrast to point-sources, the origin of nonpoint source pollution is more elusive. How can a CEO determine if **Section 15 S.** has been violated by any particular discharge of pollution, "by itself, or in combination with other activities or substances"? Each classification is described in Title 38 MRSA, Article 4-A by specific quantitative water quality parameters, in addition to designated uses. Technical assistance in monitoring water quality should be sought from the DEP when the designated uses appear to be impaired or specific water quality parameters are in question. This could help establish whether a violation of **Section 15 S.** has occurred. Finding the use or uses responsible among many nonpoint sources may be difficult and time consuming, however. This standard is explicit, but it is likely that the State is better able to enforce it in many, if not most instances where violations occur. If a violation does come to the CEO's attention, whether or not the source or sources are identifiable, it should be reported to the DEP Land and Water Bureau. See Chapter 5 for information and assistance with nonpoint source issues.

The difficulty of assigning responsibility and obtaining any meaningful pollutant reduction serves to highlight the importance of landowner and land user compliance through the use of preventive measures, over the long term. This includes meeting performance standards for erosion and sedimentation control and manure storage, use of vegetative filter strips and other stormwater quality controls, and imposition of conditions of approval as imposed by local planning boards and State agencies on new development.

## **Section 15 T. Archaeological Sites**

When any land use activity which involves "structural development or soil disturbance" is proposed for a site that is listed, or is eligible to be listed, on the National Register of Historic Places, the permitting authority is required to consider the comments received by the Maine Historic Preservation Commission before rendering a decision on an application. **Section 15.T.** of the *Guidelines* states that an applicant must submit information which describes the proposed land use to the Maine Historic Preservation Commission at least 20 days before the permitting authority takes any action on the application.

In order to ensure that this requirement is not overlooked, the CEO should keep an up-to-date list of all sites in the municipality that are eligible to be on the National Register of Historic Places. It is important to note that the *Guidelines* state that sites need only *be eligible to be listed* on the National Register of Historic Places in order to require comments from the Maine Historic Preservation Commission. For assistance in identifying suspected archeological sites, contact the Commission at 207-287-2132.

### ***L. Special Exception Permit in the RP District***

In August of 1994, the *Guidelines* were amended to add Section 16. E. which allows for a single-family home in a Resource Protection district in certain limited situations. To accommodate these instances, Table 1 of the *Guidelines*, *Land Uses in the Shoreland Zone*, has been changed to allow private sewage disposal in the RP zone with a permit from the LPI. This amendment was incorporated into the *Guidelines* to provide an escape valve for an individual whose undeveloped parcel is located entirely in a Resource Protection district, and whose land may otherwise be developable. The amendment states that a Planning Board may approve a permit for a single-family residential structure in a RP district provided that the applicant demonstrates that all of the following conditions are met:

1. There is no location on the property, other than a location within the Resource Protection district, where the structure can be built.
2. The lot on which the structure is proposed is undeveloped and was established and recorded in the registry of deeds of the county in which the lot is located

before the adoption of the RP district.

3. The proposed location of all buildings, sewage disposal systems and other improvements are:
  - a. Located on natural ground slopes of less than 20%; and
  - b. Located outside the floodway of the 100-year floodplain along rivers and artificially formed great ponds along rivers and outside the velocity zone in areas subject to tides, based on detailed flood insurance studies and as delineated on FEMA Flood Boundary and Floodway Maps and Flood Insurance Rate Maps; all buildings, including basements, are elevated at least one foot above the base flood elevation; and the development is otherwise in compliance with any applicable municipal floodplain ordinance.

If the floodway is not shown on the FEMA Maps, it is deemed to be one-half the width of the floodplain.

4. The total ground-floor area of all principal and accessory structures is limited to a maximum of 1,500 square feet.
5. All structures, except functionally water-dependent structures, are set back from the normal high-water line or upland edge of a wetland to the greatest practical extent, but not less than 75 feet. In determining the greatest practical extent, the Planning Board shall consider the depth of the lot, the slope of the land, the potential for soil erosion, the type and amount of vegetation to be removed, the proposed building site's elevation in regard to the floodplain, and its proximity to moderate-value and high-value wetlands.

Conversion of seasonal residences to year-round is now allowed in a RP district where compliance with the Maine Subsurface Waste Water Disposal Rules is possible. Table 1 of the *Guidelines, Land Uses in the Shoreland Zone*, has been changed to allow seasonal conversion in the RP zone with a permit from the LPI.

### ***M. Significant River Segments***

Significant river segments are defined in the Mandatory Shoreland Zoning Act (See Appendix H of this manual). They are so recognized because of their scenic beauty and undeveloped character. The Act sets restrictions upon development along these segments to preserve this beauty and protect water quality. These segments of the State's rivers should be reflected in a municipality's shoreland ordinance. They are referenced in the *Guidelines* in **Section 15 B.1.b.** that requires a setback from the *normal high-water line* of at least 125 feet for any principal structure. These structures must also be screened from the river with existing vegetation. The language of **Section 15 H.3.** prohibits any new permanent roads within the shoreland zone along significant

river segments except to provide access to structures or where an applicant can prove there is no feasible alternative route. **Section 15 M.3.** requires developers of new gravel pits along these river segments to demonstrate that there is no reasonable mining site outside of the shoreland zone. When gravel pits are permitted, they must be set back from the river's *normal high-water line* as far as practicable, but at least 75 feet and screened from the river by existing vegetation.

#### ***N. Landowner Notification Requirement for Resource Protection Zoning***

This requirement was added to the shoreland zoning **law** (Title 38 § 438-A1(1-B)), effective July 4, 1996. It requires municipalities to provide written notice to landowners whose property is being considered for placement in a Resource Protection District.

The law requires that notice be sent by first class mail to the last known address of the persons against whom property tax on each parcel is assessed. The notice must be mailed no later than 14 days before the Planning Board votes to establish a public hearing on the proposed rezoning. Direct notice is not required if a parcel is being proposed to be removed from the RP district.

A sworn, notarized certificate indicating the persons to whom notice was mailed, at what address, when, by whom, and from what location notice was mailed, must be filed with the town clerk. The certificate is the Town's evidence that notice was provided.

#### ***O. Alternative 75-foot Wetlands Zoning***

The Mandatory Shoreland Zoning Act was amended (Title 38 § 438-A(2)) to allow a municipality to reduce the width of the shoreland zone to 75 feet adjacent to non-rated and low value freshwater wetlands, if the municipality establishes a 75 foot shoreland zone along all outlet streams of all freshwater wetlands, including those rated moderate and high value. This alternative reduces the land area that is regulated adjacent to low value and non-rated wetlands, while establishing buffer areas, for water quality and wildlife usage, on a more watershed oriented basis.

## ***Chapter Four: The CEOs Role in Administration and Enforcement of Shoreland Zoning***

This manual makes a distinction between two major roles of the code enforcement officer in relation to the shoreland zoning ordinance. As the zoning administrator/compliance officer, the CEO is responsible for the review of permit applications, determinations of conformance with land use ordinances, issuance of permits or denials of applications, and inspections to assure compliance. The role of enforcement officer is assumed when, as a result of inspections or upon receipt of a complaint, violations of the ordinances are observed or suspected.

### ***A. Administration And Compliance***

#### **1. CEO's should become familiar with . . .**

As administrator/compliance officer, the CEO has a number of responsibilities. These will range from answering general questions about ordinances over the phone to follow-up inspection of properties after completion of a permitted activity. The most important aspect to keep in mind at all times is that the CEO, whether part time or full time, is a public employee. As a public employee, impartiality and fairness are a vital aspect of the position.

As primary administrator, the duties of the code enforcement officer can be listed to include the following:

**Maintaining zoning maps and texts.** Typically, the municipal clerk maintains the attested original ordinances and maps within his/her records. At times distribution of copies of zoning and shoreland maps may become the responsibility of the CEO. The CEO usually keeps large scale copies of zoning maps on display in her/his office for public use.

**Receiving, reviewing, and issuing use and building permits.** Permit application review and issuance is the most visible and time consuming portion of the CEO's job. The CEO should prepare application forms for each of the different types of permits which need to be issued. It may make sense to have different forms for building projects, changes of use, signs, and certificates of occupancy. Applications for permits should include the name and address of the property owner, applicant and contractor, location of the property, zoning district(s) in which the property is located, existing use, size of the property, lot dimensions, size of proposed structure(s), distances from existing and proposed structures to property lines, water bodies and wetlands, proposed use, and type of sewage disposal. The application should include or be accompanied by a site plan showing the above information. These forms should make clear what is required for a complete application.



Upon receipt of an application, the first step should be to determine whether the application form has been fully completed, and if all necessary plans or information accompany it. Incomplete applications should be returned, with a written statement indicating the information necessary to make them complete.

Following a determination that the application is complete, the plans and accompanying information should be reviewed for compliance with the ordinance. As part of the permitting process, the CEO shall determine what approvals are necessary for the proposed project. This may include but not be limited to review by the Planning Board or the Zoning Board of Appeals.

If the proposed project meets the minimum specifications of the ordinance, a permit is issued. In the shoreland zone, where a use requires approval by the Planning Board, this should be secured first before the CEO can approve construction plans. A filing system should be developed to maintain a copy of all permits. This should include the application and supporting documentation. Depending upon the size of the municipality and the relationship between various municipal officials, a third copy of the permit may be desirable to forward to the assessors. In municipalities with both a full time CEO and assessor it may be convenient to forward the CEO's copy to the assessor and have it returned. If the two do not have offices in the same building, a third copy most likely is desirable.

**Reporting to other parties in local government concerning the effectiveness of land use ordinances.** The CEO is responsible for daily administration of the municipality's land use ordinances. Therefore, it is his/her obligation to inform the Planning Board, the municipal officers and when appropriate, the townspeople, of the ordinance's performance. The CEO's role is not that of a policy maker, and thus recommendations regarding the ordinance should concern themselves with administrative ease and clarity of interpretation. In many towns, the CEO makes a monthly report to the Planning Board of activities such as permit issuance and inspections or complaint investigations. These reports provide the opportunity to point out areas within the ordinances that are internally contradictory, difficult to interpret, and difficult to administer as well.

Periodic reports of a similar nature should be made to the municipal officers. The municipal annual report provides an opportunity for the CEO to inform the townspeople of the activities and concerns of the office over the past year.

**Educating the public about zoning regulations.** The CEO is likely to be the person most familiar with the provisions of the zoning ordinances. In many municipalities, realities of the zoning ordinance are not widely understood. Through day-to-day contact with the public, the CEO has the opportunity to inform the public about the ordinance. Taking time to fully explain the pertinent regulations will assist applicants and potential applicants to understand what is expected of them or their projects.

**Related land use laws and regulations.** Local CEOs should be familiar with the variety of State and federal laws and regulations that affect land use, even though they do not have jurisdiction in these areas. A landowner must comply with all applicable requirements of federal, State and municipal regulation in order to begin a proposed activity. If a permit is required under a State or federal program, it is helpful for the CEO to make the property owner aware of the possibility that other agencies may have jurisdiction in a particular situation and refer the applicant to the appropriate agency. It is also helpful for the CEO to report activities that may require a State or federal permit to the appropriate agency, so they can enforce their rules.

**Serving as Public Relations Agent.** The code enforcement office plays an important role in presenting land use ordinances to the public. Regardless of the specific provisions of an ordinance, and how it may affect a piece of property, the property owner's perception of the ordinance will often be colored by how they learn of its provisions more than by its content.

As it is not the CEO's job to determine the policies that are implemented in the ordinances, it also is not the CEO's responsibility to justify them once in place. However, the CEO is responsible for making sure the public does understand the provisions of ordinances, and therefore a CEO must have the ability to explain them in a clear manner. The CEO must be prepared to provide correct information and explain how it will or will not impact a property owner.

**Serving as Staff.** It may be the CEO's responsibility to maintain and publish the agendas for the Planning Board or appeals board and make sure the proper notices are published or mailed. Some communities may expect the CEO to be available to meet with prospective applicants for conditional use permits or subdivision approval and discuss the planning board's policies on certain issues. These duties, outside the strict definition of the CEO's role as described by most zoning ordinances, are left to be resolved in each community as needs arise.

## **2. Powers and Duties of the CEO**

The duties of the CEO with respect to shoreland zoning ordinances include elements from the entire general administrative and compliance duties as described above.

**Interpretation of the Municipality's Shoreland Ordinance.** The *Guidelines* not only specifically require municipalities to appoint and reappoint a CEO annually, but to also designate the CEO to generally process shoreland permit applications (**Section 16.C.3**) and review to approve or disapprove permit applications for certain shoreland activities as presented in the Land Use Table (**Table 1, Section 14** of the *Guidelines*). Therefore, the CEO's position relative to the public also requires that a CEO be authorized by the Planning Board to interpret the language and intent of the ordinance relative to any proposed use that the ordinance designates the Planning Board responsible for.

**Limits of Authority.** The CEO's authority under the shoreland ordinance is, as for all ordinances, limited to the language and intent of its written word. This includes strict adherence to procedures provided for administrative and variance appeals. When this language is unclear or a shoreland application is very controversial, the CEO should consult with the Planning Board, seeking their recommendation.

The language of any shoreland zoning ordinance will require review and modification over time to make it more clearly understood and more easily and fairly enforceable. Suggestions for changes should be presented, preferably in writing, to the Planning Board for their consideration. The Planning Board may or may not decide to act on the CEO's request to prepare a shoreland zoning amendment. The CEO has recourse to present her/his ideas to the Selectmen or Council, who may either assign the CEO to write the amendment(s) or request the Planning Board to do so. Amendments to the ordinance may also be sought by citizen petition.

In general, the following ways are available to adopt or amend land use ordinances:

- 1) Planning Board on its own initiates a new ordinance or amendment.
- 2) Citizen requests Planning Board to write a new ordinance or amendment. Planning Board can say yes or no.
- 3) Citizen can go to the Selectmen or town/city council to submit the citizen's new ordinances or amendment. Selectmen can say yes or no; or submit the draft ordinance or amendment to the Planning Board to prepare for a town meeting or town/city council vote.
- 4) Citizen can circulate a petition, which if signed by 10% or more of the municipality's voters from the last election, forces the town or city to present the ordinance or amendment for ballot vote in the next election.

**Requiring Expert Opinion.** Some of the *Performance Standards* contained in the *Guidelines* reference a number of State publications. Proper administration and enforcement of these standards may require expertise beyond that of the CEO. In such cases, assistance should be sought. This expertise could be found with the State agency that published the reference standards. It is also acceptable to seek counsel from other experts when it would be beneficial. Many experts normally required for shoreland zoning matters are government employees whose services are rendered free of charge. However, be aware that private consultants charge a fee for services rendered. Following are publications referenced in the Performance Standards (**Section 15**) of the *Guidelines* and expertise available:

Individual Camp Sites; Septic Waste Disposal : *State of Maine Subsurface Wastewater Disposal Rules*

Maine Department of Human Services (DHS) Division of Health Engineering at 287-5672, soil scientists, engineers, and others.

Metallic Mineral Mining and Exploration: State of Maine Department of Environmental Protection, Chapter 200 Metallic Mineral Exploration, Advanced Exploration and Mining.

Agriculture : *Manure Utilization Guidelines*, November 2001.

Maine Department of Agriculture at 287-3117, USDA Natural Resources Conservation Service regional offices, and University of Maine County Extension Service Soil Scientists and others.

Timber Harvesting and Clearing of Vegetation for Development

Department of Conservation Forest Service and Maine County Extension Service registered foresters and others.

Erosion and Sedimentation Control

USDA Natural Resources Conservation Service regional offices and Maine County Extension Service Soil Scientists, DEP Nonpoint Source Training and Resource Center at 287-7726.

Private sector expertise includes Maine certified soil scientists, Maine registered professional engineers, Maine certified geologists or hydrogeologists, botanists, wildlife biologists, historic preservationists and others. In addition, the local regional planning commission, a public municipal support agency can provide assistance with shoreland zoning and/or direct the CEO to an appropriate source of information.

### **3. Assistance to the Planning Board and the Zoning Board of Appeals**

The code enforcement officer should be prepared to assist various municipal boards or committees. Some municipalities require this and other are silent on the issue. It is always good practice for the CEO to develop a good working relationship with these boards. The two boards with whom the CEO will have the most contact will be the Planning Board and the Board of Appeals.

**Planning Board.** There are three areas where the CEO can provide assistance to the Planning Board. As mentioned above, it is usually the planning board's responsibility to write and draft amendments to the zoning ordinance. The CEO should maintain communication with the Planning Board to identify portions of the shoreland or other ordinances that are difficult to administer or interpret. If the CEO sees other problems with the ordinance, such as an issue not addressed, or provisions that appear to be widely burdensome, the Planning Board should be informed of this also.

In many shoreland and other zoning ordinances there a number of land uses that need to be reviewed by the Planning Board prior to the CEO issuing a permit. These uses are referred to variously as conditional uses, special exceptions or special permits in different ordinances. In some communities the Board of Appeals rather than the Planning Board reviews these uses. It is good practice for the CEO to participate in the review process by reviewing the application and advising the Planning Board as to

whether the objective standards of the ordinance are met. This determination should be communicated to the board in writing to become a part of the board's record.

In many communities, the planning board's issuance of a conditional use permit is construed to have the same significance as the issuance of a permit from the code enforcement officer. The specific wording of the zoning ordinance should be checked to determine procedure. In addition to the procedural section for conditional uses, the definitions of conditional use, conditional use permit, code enforcement officer and Planning Board should be reviewed. In most ordinances, the issuance of a conditional use permit is authorization for the CEO to issue a permit, should all terms of the ordinance be met, not authorization to commence construction or perform other activities. In some ordinances, the Planning Board is given other authority. Where authority is assigned to the Planning Board to issue permits to commence activities, the CEO needs to inform the board of any other permits required. Regardless of the history of the CEO and Planning Board roles in a municipality, the ordinance must be followed.

The Planning Board must review all proposed land subdivisions and multifamily developments under the State subdivision law. One of the statutory criteria for approval is compliance with the zoning ordinance. It is good practice for the CEO to review all proposed subdivisions and report, in writing, as to whether they comply with the provisions of the zoning ordinance and shoreland ordinance.

**Zoning Board of Appeals or Board of Appeals.** Assistance the CEO can provide to the appeals board has been mentioned previously. The CEO should make the board aware of the ordinance provision(s) in question concerning any variance or administrative appeal the board is preparing to hear. A statement of facts regarding any shoreland or other case should also be provided, along with other relevant information.

The appeals board should not rely on the appellant as their source of information. In addition to a statement of facts, the CEO should forward copies of all permit applications, correspondence, permits or other pertinent information to the board prior to the hearing. The CEO should also be present at the actual hearing and available to answer questions or to elaborate on her/his interpretation of particular ordinance language.

The CEO must always be sensitive to actual and even the appearance of conflict of interest. Whether before the appeals board or the Planning Board, it is always wise for the CEO to declare any possible conflicts of interest. These can include, but are not limited to, knowing an applicant for a shoreland permit, being a neighbor to a property owner who is seeking a shoreland permit, or having a financial interest in any property where a permit is sought. In such situations, the CEO should divulge all relevant information to the Planning Board or the Board of Appeals so that the board is aware of the CEO's position as it pertains to the particular application.

**Planning Board as the CEO.** In some small communities the Planning Board has been designated as the Code Enforcement Officer. In that case the board, as a body, assumes all of the responsibilities of the CEO as if it were an individual.

#### 4. Permitting

The *Guidelines* in **Section 16.B** require a shoreland permit be obtained by any person engaged in any activity or use of land or structure in any shoreland district identified by the ordinance, or to expand, change, replace an existing use or structure, or renew a discontinued nonconforming use in any shoreland zone in the ordinance. However, a permit is not required to replace an existing road culvert under certain conditions.

**Section 16.C** of the *Guidelines* spells out the requirements for a citizen to make an application for a shoreland permit. **Section 16.D** of the *Guidelines* describes the time limits within which the CEO and Planning Board must process permit applications, the citizen's burden of proof that her/his application will meet the purposes and provisions of the ordinance, and a set of criteria the Planning Board is required to find satisfied before issuing a shoreland permit.

Whenever an application is received for an area near a waterbody, the property location should be checked closely to determine if the property falls within the shoreland zone. If so, then permitting requirements relative to the property should be reviewed.

In some municipalities, if there are multiple permits required for a particular building, structure or land use activity, then they are all processed simultaneously. SPO recommends that the CEO coordinate the various permit reviews between the appropriate town or city agencies: Planning Board, Board of Appeals, local plumbing inspector and/or electrical inspector, the municipal engineer and/or planner, other municipal offices such as public works, and any outside consultants serving the municipality, such as professional engineers, soil scientists, biologists, etc.

**Relationship to Planning Board and Board of Appeals Permits.** Generally, when there are multiple permits required for an activity in the shoreland zone, the CEO should coordinate the permits required from other municipal offices first before approving his/her own. The CEO is generally the first and the last municipal official a land owner or developer sees with respect to any development.

Using the land use table, **Table 1, Section 14** of the *Guidelines* as an example, consider, the following: a building permit application for a two unit apartment building on a grandfathered, sewered, substandard lot in a limited commercial shoreland zone. The depth of the lot is shallow, so the water setback requirement can not be met. After reviewing the building plans, the CEO should deny the permit applicant. The applicant could go to the Board of Appeals to seek a setback variance. If the applicant is successful in securing approvals from the Board of Appeals, the CEO could issue a building permit to the applicant.

## 5. Relationship of Shoreland Permits to Other State and Federal Permits

Sometimes parts of large developments, as proposed in a subdivision plan or a site development plan, are located in a shoreland district. In such a case, other State laws or federal laws may affect the proposed land use. The CEO should be familiar with all of the State and federal laws that may be pertinent. Similar to the situation where multiple permits apply to an application locally, a local permit application that involves multiple jurisdictions cannot be used to meet the requirements of other jurisdictions. As a general rule, if different laws create conflicting regulations, the more restrictive regulations always take precedence. For example, a person may be able to obtain an NRPA permit by rule to place fill to within 25 feet of a great pond with the intent of creating a lawn. However, the shoreland zoning rules require the maintenance of ground cover and vegetation less than three feet in height. Therefore, the CEO must not permit the filling of the buffer area within 100 feet of the lake. It is important for the CEO to inform the applicant of these permit relationships at the outset.

The applicant must receive the subdivision permit and any other local, State, or federal permits, as well as the CEO's approval of a permit for construction of buildings on the property.

Following are descriptions of State and Federal land use laws that affect property.

### a. Land Use Controls at the Municipal Level

**Subdivision Review.** A subdivision, as defined by State statute, must be reviewed and approved by a municipal reviewing authority. Title 30-A § 4301 defines the municipal reviewing authority as the planning board, agency or office if one exists, or the municipal officers where there is no planning board. It is a code enforcement officer's responsibility to identify a proposed development as a subdivision, in order to avoid prohibited issuance of permits.

Sections 4401-4407 provide the framework and content of the municipal subdivision statute. Section 4401 defines a subdivision as **the division of a parcel of land into three or more lots within a five year period**. There are, however, a number of exceptions and exemptions to be considered. A complete definition of a subdivision appears below. In 2001, the Legislature amended many of the exemptions in the law. This amendment became effective on September 21, 2001, however was written to apply retroactively to June 1, 2001. Any transactions, where the deed has been signed since June 1, 2001, should be looked at in light of these new restrictions.

A subdivision is the division of a parcel of land into three or more lots within a five year period (beginning on or after September 23, 1971) whether accomplished by sale, lease, development, buildings, or "otherwise." The first division of a parcel creates the

first two lots and the next division of either of the first two lots, by whomever, creates the third lot *unless*:

- 1) both divisions are accomplished by someone who has retained one of the lots for their own use as their principal residence for at least five years immediately prior to the second dividing. That is, the subdivider must **have lived** in the “homestead” for **the five year period immediately preceding the creation of the third lot**. In addition, **both** divisions must be accomplished by the person who has lived in the homestead for five years. If the owner of the homestead sells one lot, the buyer of that lot cannot then divide it within five years without creating a subdivision. After five years, the lot sold is no longer part of the original parcel and further division would be possible without triggering subdivision review .
- 2) the division of the tract or parcel is otherwise exempt.

Lots created by the following transactions are exempt from being counted in determining whether three lots are created in a five year period unless the intent of the transfer is to avoid review under the law:

- **any division created by devise** (left in a will);
- **condemnation** (taken through eminent domain proceedings);
- **order of a court** (divorce settlement, bankruptcy);
- **gift to a person related to the donor by blood, marriage, or adoption** provided the property has been owned by the donor for at least five years prior to the gift. The 2001 amendments added the five-year ownership restrictions and two other restrictions to the gift exemption. The recipient of the gift must be with the second degree of relation (that is a spouse, parent, grandparent, brother, sister, child or grandchild). In order to define what constitutes a gift, the law now stipulates that there may be no consideration in excess of 50% of the assessed value of the lot. The statute rescinds the exempt status of any lot transferred to someone not related to the original owner, if the transfer takes place within 5 years.
- **gift to a municipality**; or
- **transfer of any interest in land to the owner of land abutting that land provided a new lot is not created**. The law now forbids the abutter from reselling the land transferred within five years without it being considered a lot. The transfer to an abutter, to be exempt, must be to the abutter(s) only. That is, only those whose names currently appear on the deed to the property abutting may have their name appear on the deed to the property transferred.



Lots 40 or more acres in size are not counted as lots *unless* the lot or the original parcel is located, in whole or in part in a shoreland zone, or the municipality has adopted a more restrictive ordinance and decided to count all 40-acre (or larger) lots. There is no limit to the number of 40-acre lots that may be sold without triggering subdivision review. **Code enforcement officers should be familiar with the municipality's subdivision ordinance to know whether 40-acre lots are exempt or not.**

A *subdivision* also includes the division of a new structure or structures on a parcel of land into 3 or more dwelling units within a 5-year period, the construction or placement of 3 or more dwelling units on a single parcel, and the division of an existing structure or structures previously used for commercial or industrial use into 3 or more dwelling units within a 5-year period. Under the statutory definition, the division of a new structure into three or more commercial or industrial uses is not a subdivision. A "new structure" is any structure or portion of a structure for which construction began on or after September 23, 1988.

As part of the 2001 amendments to the statute, municipalities are prohibited from expanding the definition of subdivision to include any divisions other than specifically listed in the statute until October 1, 2002. The State Planning Office has been charged with conducting a study on the adoption of definitions that expand what is considered a subdivision and report back to the Legislature. It is possible that as a result of that study that the Legislature will either extend the prohibition permanently or repeal it and give municipalities greater flexibility.

The effective date of the Subdivision Law was September 23, 1971. Subdivisions created prior to that date are exempt from review. These include:

- 1) subdivisions previously approved in accordance with the laws then in effect. Prior to 1971 Maine law required municipalities to review plans only when they were going to be recorded in a registry of deeds, but not otherwise. Thus, municipal ordinances often provided for review, but did not require it, making this a difficult exemption to prove;
- 2) previously existing subdivisions that did not require approval under the law (previously existing means the lots were actually surveyed and marked by steel pins or regular markers and numbered, *State ex rel Brennan v. R.D. Realty Corporation*); and
- 3) subdivisions for which a plan was legally recorded in the proper registry of deeds before September 23, 1971.

Code enforcement officers must be familiar with the definition of subdivision. Section 4406 prohibits a CEO from issuing a building or use permit for a lot in a subdivision that has not received municipal approval. The CEO, in the review of applications for permits, should routinely determine when a lot was created and whether other lots have been created from the same parcel within five years. Permit application forms should ask the question: *was the lot for which a permit is being requested created by division from another lot in the past five years?* One way to resolve the issue of whether the proposed structure or use will be in an older unapproved subdivision is for the CEO to require that the applicant provide either a title attorney's opinion or a notarized statement of his or her own. This shifts the burden of making a determination with certainty away from the CEO who otherwise would be forced to conduct his or her own records search.

Through their reception of newly recorded deeds each month and plotting new lots on the tax maps, the municipal assessor(s) is (are) usually in the best position to alert the code enforcement officer or the planning board that a subdivision may have been created. Open communication between the assessor, the CEO, and the planning board will help with enforcement of the subdivision law. The assessors receive copies of all deeds recorded at the registry and real estate transfer tax forms on a monthly basis. The deeds and the tax forms will be helpful in researching the history of transactions.

Upon learning that a subdivision has been created without municipal approval, the CEO should notify the seller, the buyer (if applicable), and the planning board. An application for a permit on a lot in an unapproved subdivision must be denied. The applicant should be informed of the reason and be instructed to proceed to the reviewing authority (planning board) for subdivision approval. The planning board should receive a copy of the letter to the applicant. By local ordinance or by established procedure, some CEOs are required to attend all of the board's meetings. In some way, the CEO should participate in planning board review, assisting where necessary.

Other than the prohibition on the issuance of a permit in unapproved subdivisions, the code enforcement officer is not specifically mentioned in the statute. The authority to enforce the subdivision law is usually delegated to the CEO, either by ordinance or by vote of the municipal officers. The determination of whether a subdivision has been created can be a complicated issue. Seeking assistance from an attorney, the regional council, the State Planning Office, or other CEOs is recommended. Please see the discussion of subdivision in Chapter VI in the Site Location of Development Law discussion. There is substantial overlap.

Under the Subdivision Law, it becomes incumbent upon the subdivider to ensure that the subdivision is developed consistent with the approved plans. It is incumbent upon all utilities that may install service to a lot or dwelling unit in a subdivision to require a "written authorization" that all permits were appropriately issued by local officials and remain valid and current. Following the installation, the utility provider must send the

written authorization to the municipal officials having jurisdiction that the installation has been completed. 30-A MRSA §4406 (3).

**Site Plan Review.** Many municipalities, either in addition to or instead of a zoning ordinance, have enacted a site plan review ordinance. This ordinance is not a zoning ordinance, in that it does not divide the municipality up into various districts, but it does prescribe a set of performance standards for certain types of development and establishes a review procedure to determine if these standards are met. The review procedure is usually similar to a conditional use or special exception review.

Typically the Planning Board acts as the review body, although some municipalities have established separate site review boards. The ordinance must define the types of developments needing to be reviewed. In many ordinances multifamily developments and all commercial and industrial uses must be reviewed; everything except a single family house. The ordinance must also define when a change or expansion to an existing use must be reviewed.

## **b. Land Use Controls at the State and Federal Level**

The CEO should be familiar with the jurisdictional requirements of State and federal land use laws in order to inform property owners of the requirement to obtain State or federal permits. While the CEO has no formal jurisdiction in the enforcement or administration of these laws, a cooperative effort between the CEO and agency of jurisdiction will promote the enforcement of these laws. When the CEO is aware of an activity that does (even though no local permit is required) the CEO should inform the property owner, applicant or contractor, of the potential need for a State or federal permit, and notify the appropriate State or federal agency of the activity. There are some local land use ordinances that require acquisition of a State or federal permit as a prerequisite for obtaining the municipal permit.

**Site Location of Development Law.** This law was substantially altered in 1996 with some changes becoming effective July 4, 1996 and others on July 1, 1997. The purpose of this law was also altered and is now to regulate the location of developments of State or regional significance that may substantially affect the environment. Municipalities are assuming responsibility for permitting some projects, while the State Department of Environmental Protection, Division of Land Resource Regulation reviews other project applications, based upon established thresholds. The law recognizes the shoreland zone created by the MSZA, as well as, wetlands under the NRPA.

A proposed project must be reviewed, if it meets the definition of a "development" as defined by the law. Effective July 1, 1997, a "development" is any federal, State, municipal, quasi-municipal, educational, charitable, residential, commercial or industrial development of the following nature:

**Large Area Projects** occupying a land or water area in excess of 20 acres.

## **Metallic Mineral Mining or Advanced Exploration Activity.**

**Subdivisions** A “subdivision” is the division of a parcel of land into 5 or more lots to be offered for sale or lease to the general public during any 5-year period, if the aggregate land area includes more than 20 acres; except that when all lots are for single-family, detached residential housing, common areas or open space a “subdivision” is the division of a parcel of land into 15 or more lots to be offered for sale or lease to the general public within any 5-year period, if the aggregate land area includes more than 30 acres. The aggregate land area includes lots to be offered together with the roads, common areas, easement areas and all portions of the parcel of land in which rights or interests, whether express or implied, are to be offered. Lots of 40 or more acres but not more than 500 acres may not be counted as lots except where the proposed subdivision is located wholly or partly within the shoreland zone. Lots of more than 500 acres in size may not be counted as lots. Many of the same exemptions as are in the municipal subdivision law apply here, as well.

**Structures** shall include buildings and/or areas that will not be revegetated, such as roads, parking lots, wharves, and paved areas which cause a complete project to occupy a ground area greater than 3 acres. Areas to be revegetated within one calendar year do not count toward the 3 acres. Three acres are cumulatively calculated from October 1, 1975.

Any project that **generates 100 or more passenger car equivalents at peak hour.**

Who has responsibility for review and permitting, whether the DEP or a municipality is primarily dependent upon the size of a proposed project and the municipal “capacity” to review projects? A municipality is determined to have capacity when that municipality has an adopted site plan review ordinance, adopted subdivision regulations, the technical ability to complete the review, and have adopted a comprehensive land use plan and land use ordinances or zoning ordinances that are consistent with the Growth Management Act. A list of those municipalities has been published by the Department and is available upon request.

There are two types of subdivisions, commercial and residential. DEP will review and permit, as appropriate, all commercial subdivisions. Residential subdivision review is split between municipalities and the DEP. As of July 1, 1997, DEP reviews only divisions involving 15 or more lots for single family residential housing (including lots, roads, common areas, easement areas other parcels in which rights and interests will be offered) exceeding more than 30 acres during any five year period. Municipalities that are deemed to have capacity can review residential subdivisions of 15 or more lots on 30 to 100 acres.

When considering a subdivision "development", its proposed location within a shoreland zone does not by itself trigger Site Law jurisdiction for any project. However, the Site Law does prohibit the use of an exemption under the subdivision definition for projects that lie wholly or partly with the shoreland zone. Assistance with the Site Law may be obtained from the DEP Division of Land Resource Regulation.

As of July 1, 1997, municipalities deemed to have "capacity" are reviewing structures between 3 and 7 acres for compliance with the site law; DEP will review those greater than 7 acres.

A number of "developments" are exempt from review as listed under 38 MRSA § 488, *Applicability*. These include:

State highways, State aid highways and borrow pits for sand, fill or gravel of less than five acres, or borrow pits regulated by the Department of Transportation are not under the jurisdiction of the Site Law. Neither are activities located within the area under the jurisdiction of the Land Use Regulation Commission.

Hazardous activity, multiunit housing located wholly or partly within a shoreland zone, and "conversions of existing structures" were removed from the law as triggers for review. Mining activities involving borrow, clay, topsoil or silt will be regulated under a new statute, 38 MRSA § 490 *et. seq.*, entitled *Performance Standards for Excavations for Borrow, Clay, Topsoil or Silt*. Mining activities involving the quarrying of rock, which is defined to exclude metallic mineral materials, will be regulated under another new statute, 38 MRSA §§ 490-W *et. seq.*, entitled *Performance Standards for Quarries*".

***State Required Minimum Standards for Gravel Pits.*** Though not located in Chapter 187, Title 30-A MRSA § 3105 places minimum standards on gravel pits which are less than five acres in size and are not subject to review by DEP under Article 7, *Performance Standards for Excavations for Borrow, Clay, Topsoil or Silt* (38 MRSA Sec. 490-A to 490-M) or the Site Location of Development Act, or subject to a municipal ordinance. The standards, under this section, require the top of the cut bank to be no closer than ten feet from the property line. In addition, the slope from a point ten feet from the property line to the bottom of the cut back may not exceed a ratio of two horizontal to one vertical measure. A town may adopt an ordinance that exceeds the requirements stated above.

If a pit is not subject to any other control, the above standards apply by virtue of the statute. In addition, the statute establishes a procedure for enforcement and requires the municipal officer to conduct an inspection upon the request of an abutting property owner. The State Department of Transportation is required to conduct the inspection if requested by the municipality.

**Erosion and Sedimentation Control Law.** Within and beyond the boundaries of the Shoreland zone, the State of Maine has two additions to its Natural Resources Protection Laws (Title 38, chapter 3, subchapter I, article 5-A), Erosion and Sedimentation Control, section 420-C and Stormwater Management, section 420-D, enacted during 1996.

These laws are incorporated into the new Site Location of Development Law that took effect on July 1, 1997.

Title 30-A MRSA § 4452(7) has been amended to allow CEOs certified in rules of the district courts (80K) to enforce the new erosion control law, under and on behalf of, the authority of the municipality that they represent.

The erosion control law states,

*“A person who conducts, or causes to be conducted, an activity that involves filling, displacing or exposing soil or other earthen materials shall take measures to prevent unreasonable erosion of soil or sediment beyond the project site or into a protected natural resource as defined in section 480-B. Erosion control measures must be in place before the activity begins. Measures must remain in place and functional until the site is permanently stabilized. Adequate and timely temporary and permanent stabilization measures must be taken.”*

Agricultural and forest management activities are exempt.

**Stormwater Management Law.** The stormwater law states:

*“A person may not construct, or cause to be constructed, a project that includes 20,000 square feet or more of impervious area or five acres or more of disturbed area in the direct watershed of a body of water most at risk from new development, or one acre or more of impervious area or five acres or more of disturbed area in any other area without prior approval from the department.”*

The DEP is responsible for drafting the regulations to implement the law including stormwater quality and quantity standards, and the identification of those water bodies most at risk.

Exempted from stormwater permit requirements are normal farming activities, forestry management activities, activities in municipalities where a local ordinance meets or exceeds the provisions of the stormwater law and those municipalities which have the resources to enforce the ordinances, projects supervised by the Dept. of Transportation or the Maine Turnpike Authority which are constructed pursuant to stormwater quality and quantity standards, construction at industrial sites that are subject to a federal stormwater permit, construction or expansion of a single-family home on a parcel, and activities where storm water is addressed through other permits (e.g., landfills).

**State Natural Resources Protection Act.** The Natural Resources Protection Act (Title 38 MRSA § 480-A *et seq.*) establishes a permit review process designed to provide protection of natural resources of statewide importance. Generally, activities involving

soil disturbance or filling within 75 feet of protected resources, or which take place in or over protected resources are required to obtain a permit from the Department of Environmental Protection.

The protected resources are:

**Rivers, Streams, and Brooks**, which are generally channels between defined banks in which water runs at least six months of the year, and which are characterized by the lack of upland vegetation, and by the presence of a stream or river bed devoid of top soil containing waterborne deposits on exposed soil, parent material or bedrock;

**Great ponds**, which are inland bodies of water with a surface area in excess of ten acres in their natural state, or manmade ponds of 30 acres or more;

**Fragile Mountain Areas** above the elevation of 2,700 feet;

**Freshwater Wetlands** of any size;

**Significant Wildlife Habitat** mapped by the Department of Inland Fisheries and Wildlife including habitat for endangered or threatened species, high and moderate value deer wintering areas and travel corridors, high and moderate value waterfowl and wading bird habitats, critical spawning and nursery areas for Atlantic sea run salmon, and shoreland nesting, feeding and staging areas, seabird nesting islands; and

**Sand Dunes** where any activity, whether a soil disturbance or construction may require a permit from the DEP.

The DEP has established a permit by rule procedure for many activities in which notification to the Department of intent to begin an activity and an assurance of compliance with applicable standards substitutes for the normal review process. As part of any permit review, the DEP must insure that any significant soil disturbance adjacent to water bodies or wetlands be done with appropriate erosion and sedimentation controls, and that the area is properly stabilized when the work is completed. Shoreland zoning ordinances address more issues including aesthetics, water quality, and wildlife habitat, and has greater restrictions than NRPA does over activities occurring within the buffer area immediately adjacent to the resource.

Frequently, activities adjacent to water bodies require permits under shoreland zoning ordinances from municipal offices *and* under NRPA rules from the DEP. NRPA permitting of soil disturbance activity on land adjacent to the water creates most of the confusion between the NRPA, administered by the DEP, and shoreland zoning ordinances, administered by municipal officials. It is not uncommon for the DEP to receive a NRPA permit application from a landowner to do filling or grading work within 100 feet of the shoreline, even though that work may not be approvable under the town shoreland zoning ordinance. It is also equally common that the applicant does not provide the reasons for the filling or grading work, such as a larger building project.

The DEP recognizes that some work permissible under the NRPA may not be allowed under a local shoreland zoning ordinance. In those cases where the DEP staff are provided with information regarding the larger project, and it is clear that the project may not be permissible under the local shoreland zoning ordinance, the DEP staff does make a note of that fact to the landowner and the municipal officials.

Under shoreland zoning, particularly adjacent to a great pond, the buffer area cannot be replaced with lawn. Existing ground cover, including the leaf and duff layer, and vegetation less than three feet in height must be maintained within 100 feet from lake shorelines. Therefore, the CEO cannot permit fill for a lawn that may be permitted under NRPA, if the area is comprised of woody buffer. The CEO should not approve the activity simply because the erosion control plans were adequate under the NRPA.

**Maine Endangered Species Act.** Since many species of wildlife are dependent upon wetlands for “essential habitat”, it is important to briefly review the requirements of the Maine Endangered Species Act. The Act prohibits State agencies or municipal governments from permitting, licensing, funding or carrying out projects that will significantly alter the habitat of any species designated as threatened or endangered or violate the protection guidelines established by the Department of Inland Fisheries and Wildlife (MDIFW) (12 MRSA §§ 7751- 7758). **Projects require MDIFW evaluation when occurring within a designated essential habitat.** Projects requiring review include, but are not limited to:

subdivision of land;

- construction or alteration of buildings, waste water systems, or utilities;
- conversion of seasonal dwellings to year round;
- exemption to minimum lot size requirements;
- construction or relocations of roads;
- exploration or extraction of minerals;
- alteration to wetlands, submerged bottomlands, or shoreland zones; and
- installation of docks, moorings, or aquaculture facilities.

Examples of projects that are exempt from MDIFW evaluation include:

- emergency repairs to existing structures and utilities;
- emergency activities necessary for public health and safety;
- interior repairs and construction
- any project not requiring a permit or license from, or funded or carried out by a State agency or municipality.

The MDIFW has identified and designated areas as essential habitat for the conservation of endangered and threatened species, specifically four species to date. Maps of designated areas are published in an *Atlas of Essential Wildlife Habitats for Maine's Endangered and Threatened Species*. This atlas is intended to be updated annually. Copies of the Act and Rules governing essential habitat are located in



Appendix F, along with information about the review process and MDIFW's form for requesting project evaluation.

**Minimum Lot Size Law.** Where a municipality has enacted neither zoning nor a minimum lot size ordinance, Title 12 MRSA § 4807-A requires a minimum lot size of 20,000 square feet for any lot with a dwelling unit served by a subsurface wastewater disposal system. Additionally, if the lot abuts a lake, pond, stream, river or tidal area, it must have a minimum frontage of 100 feet on that water body. Any lot created legally prior to January 1, 1970 shall be exempt from this requirement. If a lot contains more than one single family dwelling, 20,000 square feet is required for each dwelling unit. Minimum lot sizes for other uses are based upon projected wastewater flow and compared to that of a single family house. The Department of Human Services must approve development on smaller lots requiring subsurface disposal.

**Replacement Subsurface Disposal Systems.** Title 30-A MRSA, section 4211, *Plumbing regulations*, states:

“For purposes of this section, “expansion” means the enlargement or change in use of a structure using an existing subsurface waste water disposal system that brings the total structure into a classification that requires larger subsurface waste water disposal system components under regulations promulgated under Title 22, section 42 *Subsurface Waste Water Disposal Rules*, and this section.”

“No person may expand a structure using a subsurface waste water disposal system until documentation has been provided to the municipal officials and a notice of the documentation is recorded in the appropriate registry of deeds that, in the event of a future malfunction of the system, the disposal system can be replaced and enlarged to comply with the rules promulgated under Title 22, section 42, and any municipal ordinances governing subsurface waste water disposal systems. No requirements of these rules and ordinances may be waived for an expanded structure. The Department of Human Services shall prescribe the form of the notice to be recorded in the registry of deeds. ...Copies of the notice shall be sent by certified mail, return receipt requested, to all owners of abutting lots.”

**Transfer of Shoreland Property.** Title 30-A, section 4216 states:

“Any person transferring property on which a subsurface waste water disposal system is located within the shoreland area, as defined in Title 38, section 435, shall provide the transferee with a written statement by the transferor as to whether the system has malfunctioned during the 180 days preceding the date of transfer.”

**Seasonal Conversion of Shoreland Property.** Title 30-A, section 4215(2) requires a permit from the local plumbing inspector before a seasonal dwelling can be converted to a year-round dwelling in the shoreland zone if the disposal system is located within the shoreland zone. A “seasonal dwelling” is defined in 30-A MRSA § 4201(4) as “a dwelling which existed on December 31, 1981, and which was not used as a principal or year round dwelling during the period from 1977 to 1981.” Listing that dwelling as the occupant's legal residence for the purposes of voting, payment of income tax, or automobile registration or living there for more than 7 months in any calendar year is

evidence of use as a principal or year-round dwelling. Before issuing a conversion permit, the LPI must find that the applicant has met one of three conditions: (1) the system is in compliance with the Maine subsurface disposal rules and municipal ordinances, (2) a replacement system has been constructed so that it substantially complies with the rules and municipal ordinances, and (3) the dwelling's wastewater is connected to an approved sewer system.

***Federal Clean Water Act.*** Under the federal Clean Water Act all discharges into the waters of the United States must receive a permit from the Environmental Protection Agency. The EPA and Army Corps of Engineers have executed a memorandum of agreement that gives the permitting authority for the discharge of dredge and fill material to the Corps. The EPA maintains veto authority over the Corps' decisions. The Corps' and the EPA's interpretation of the "waters of the United States" includes freshwater wetlands. Therefore a permit is required prior to the placement of fill in a wetland. There is no minimum size for jurisdiction as found with shoreland zoning.

Amendments to the State's Natural Resources Protection Act were made for the purpose of creating consistency in wetlands regulation and permitting between the State and federal governments. Effective September 29, 1995, activities for which the DEP (under NRPA) and the ACOE both had jurisdiction and which were separately permitted, are now for the most part jointly reviewed and permitted. Application need be made only to DEP if the activity is regulated by DEP, and involves (filling, draining, flooding, clearing) less than 3 acres of fresh water wetlands or less than 1 acre of tidal waters. The DEP and Corps conduct review jointly. Application is made only to the Corps if an activity is not regulated by DEP, but is regulated by the Corps. Application must be made separately if either an activity involves greater than 3 acres of freshwater wetlands or involves only tidal waters (DEP and ACOE are still working on a joint application and permitting procedure for this category). Hydro modification projects require separate application to the Corps. When application is made to DEP for joint review, only DEP will respond to the applicant. Whenever an application is made directly to the Corps, the Corps will respond.

***State Required Permitting for Community Living Arrangements.*** In response to legislative policy to deinstitutionalize the mentally handicapped and developmentally disabled, while facing municipal and neighborhood opposition to the establishment of community facilities for these persons, the Legislature established a requirement to permit these facilities in residentially zoned areas. The statute requires that a housing facility for eight or fewer mentally handicapped or developmentally disabled persons be considered a single-family use. A procedure is established in the statute requiring the Board of Appeals to hold a hearing if these facilities are not listed as permitted uses and an application to permit one is received. The board is directed to permit the facility, unless it finds that the facility's establishment would result in a traffic problem, that there is a lack of convenient access (for the residents) to shopping, medical care, or fire and police protection, or that it is otherwise not in conformance with the ordinance. Provision is made in the statute to allow the town to prevent the concentration of facilities in a neighborhood.

**State Required Permitting of Manufactured Housing.** Again, concerned that municipalities were not providing an adequate opportunity for the establishment of mobile homes in communities, the Legislature has placed restrictions on a town's ability to regulate the placement of manufactured housing. Prior to passage of the first statute in 1983, many municipalities either did not allow manufactured housing at all, or placed substantially greater restrictions on manufactured housing than on site built housing. The Legislature responded by requiring that municipalities permit manufactured housing to be placed on individual lots in a number of locations where site built housing is permitted, subject to similar restrictions. Municipalities were permitted to require the exterior of the housing look like site built housing and that it be placed on a foundation. The protection extended by the original law did not apply to units built prior to 1976, when federal safety, design, and construction standards went into place. Since 1983, the law has been amended so that municipalities may not prohibit manufactured housing built prior to 1976 solely because of the date of manufacture. The amendment also requires towns to allow older units to be moved within the town.

In response to municipal restrictions on the development of mobile home parks, the statute was expanded to restrict zoning regulation of parks, as well. The statute requires towns to permit the development of parks and the expansion of existing parks in a number of suitable areas and limits the lot size or density restrictions that may be placed on parks. There are additional limitations placed on the extent to which zoning can control the design of parks.

Finally, code enforcement officers are prohibited from issuing a permit for the placement of new manufactured housing, unless the applicant provides evidence of sales tax payment.

## **6. Record keeping**

**Maintaining records of the office.** As all CEO business is the public's business, records must be kept of all transactions. A good filing system will be necessary for providing adequate records in cases under dispute. This will eliminate time-consuming controversy and will be invaluable when prosecuting a violation. In addition, Title 1 MRSA, § 404-A requires a "written record of every decision involving the conditional approval or denial of an application, license, certificate or any other type of permit". The importance of keeping good records cannot be overemphasized. As personnel change over the years the importance of clear record keeping becomes obvious.

A permanent filing system should be established for maintenance of records. The record should be a compilation of all communications affecting a piece of property, i.e., the application, plans, supporting documents, a copy of an approved permit or findings and notice of denial, and inspection reports. Even notes from phone conversations may be helpful. If there is a permit or application fee, adequate financial records must be kept, as well as a system for transferring the fees to the municipal treasurer. For ease

of reference in future years, filing according to the assessor's tax map and lot numbers will prove far more beneficial than an alphabetical or chronological filing system.

The Mandatory Shoreland Zoning Act requires CEOs to make a biennial written report to the Department of Environmental Protection regarding activity in the shoreland zone. The report must include information on the number and type of applications submitted, permits granted and denied, variances granted or denied, revocation actions, appeals, court actions, potential violations investigated, violations found and fees collected.

The records of the following shoreland zone activities must all be filed for the particular property, again strongly recommended to be recorded by tax map and lot number:

- CEO actions
- Planning board actions
- Board of Appeals actions
- variance appeals
- administrative appeals
- enforcement appeals
- permit applications
- biennial report to DEP or portion thereof pertinent to the particular lot
- any other land use actions pertinent to the particular lot.

## ***B. Inspections and Enforcement***

### **1. Permitting Inspections**

The CEO is the primary municipal officer authorized by law to conduct inspections of both private and public land and property. As part of her/his duties, the CEO makes several kinds of inspections relative to a permit application:

1. During review of shoreland permit applications and other permit applications, the CEO may need to inspect property to make measurements and observe the site to identify any limiting factors related to the site, for example, the presence of wetlands, streams, or steep slopes, etc.

Some planning boards want the CEO to accompany board members on their field inspections of permit applications for which the Planning Board is responsible, including subdivision, site plan, and shoreland permit applications. This familiarizes the CEO with plans and the particulars of different properties. After a permit has been approved, the CEO will be responsible for compliance with the plan during the construction phase of development.

2. In general, after any land use permit has been approved, the CEO is responsible for the developer's compliance with approved plans. The CEO should schedule a preconstruction conference with a developer and create a complete checklist for subsequent inspections based upon the particular plan. Because building permits issued by the CEO are often the last obtained by a developer, the CEO can take advantage of this in setting up a preconstruction field inspection and a schedule for construction phase inspections during a conversation relative to the permit. Usually, the final field inspection is the CEO inspection for issuance of a certificate of occupancy.
3. After construction has been completed, other inspections may be necessary. Some plans call for periodic inspection. These may be plans for cluster subdivisions or site plans including a commercial wastewater leach field that the plan requires the CEO to inspect annually.

While State law empowers CEOs to make on-site inspections on private property for legitimate permit application review and enforcement of plans, the application and permit issued should guarantee authorization, as well. It is always advisable to be accompanied by the landowner or her/his agent and in an enforcement situation, the CEO should first obtain permission of the landowner. If a landowner refuses permission, the district, county and State court system affords the opportunity for the CEO to obtain a warrant to enter private property to conduct lawful business.

## **2. Inspecting Property for Compliance with an Ordinance**

It will usually be necessary to conduct several inspections between the time an application for a permit is received and the time a certificate of occupancy is issued. It may be necessary to inspect the property prior to issuing the permit for the verification of existing conditions. When the permit application indicates that the setback planned is minimal, a site visit may be wise to confirm property lines, the normal high water mark, or the upland edge of a wetland. Confirmation with the property owner or applicant of important features may avoid future problems when space is tight. This is also the appropriate time to ensure erosion control plans fit the site and make sense. This is the time to make the landowner aware of what is expected, especially regarding installation of any preconstruction erosion control measures.

When permitting the construction of new buildings, an inspection should be made when the foundation footings are in place to confirm setback requirements are met and the structure's location conforms to the location shown on the permit application. If the foundation is located in violation of the ordinance, perhaps by error, it is more easily corrected at the time the footings are in the ground than after the building is completed.

Depending upon the applicable standards of the zoning and/or building ordinance, periodic inspections during construction may be called for. There should be an

established policy and set procedures for inspections to ensure consistency. Once the CEO is satisfied that the placement of the building conforms with the ordinance, attention should turn to other ordinance requirements, such as erosion and sedimentation control requirements during construction, as well as, after.

Many ordinances require the issuance of a certificate of occupancy prior to the occupancy of a new structure, the change of use of an existing structure, or the use of vacant land. Appointed building inspectors are under statutory obligation to issue a certificate of occupancy. An inspection should be carried out prior to the issuance of an occupancy permit for a new structure, and it may be required prior to its issuance at other times. This inspection should track the appropriate permits to the approved construction and/or use. Any nonconformance(s) with the ordinance(s) should be noted and resolved. Besides setback requirements, the inspection should note building height, parking and landscaping requirements, signs, and other aspects of the plan pertinent to its approval. Assistance with measuring height can be found in Appendix D.

Additional inspections may be required under the provisions of the ordinance, subsurface wastewater disposal rules, and electrical code as deemed necessary.

The CEO should prepare a clear and concise report of her/his findings, conclusions and recommendation if also appropriate. This is necessary if an inspection is to be legitimately usable as the basis for some subsequent enforcement action.

### **3. Enforcement and the Shoreland Zoning Ordinance**

The *Guidelines* spell out the CEO's enforcement duties under shoreland zoning ordinances in **Section 16.H**.

Violations of shoreland zoning ordinances are deemed *nuisances* under the law. The CEO is authorized to enforce the provisions of the shoreland ordinance, conduct on-site inspections to assure compliance with the ordinance and to keep complete records of all applications submitted, permits granted or denied, variances granted or denied, revocation actions, revocations of permits, appeals, court actions, violations investigated, violations found, and fees collected. Also, a biennial report to the Bureau of Land and Water Quality, Department of Environmental Protection (DEP) is required. The report summarizes all of the above municipal activity under its shoreland zoning ordinance. Periodic reports to the local regional planning agency are also recommended.

Establishing a general shoreland zone file, as well as a file of each tax lot in the municipality, may be something to consider. The biennial shoreland report to the DEP, as well as any reports to the regional planning agency and any information regarding the shoreland zone or shoreland zoning ordinance as a whole, should be kept in this **General Shoreland Zone File**.

All municipal land use actions by the CEO, Planning Board, Board of Appeals, selectmen or council or other municipal board or department, on or affecting a lot in the shoreland zone, should be filed in the individual **Tax Lot File** maintained by the CEO. Actions or decisions under the shoreland zoning ordinance are only one source of impact upon lots in the shoreland. A number of land use ordinances may impact upon lots, as well. This information may affect the outcome of future decision-making regarding a particular lot. Therefore, it is important to maintain all land use actions and decisions affecting a lot in one place for ease in reviewing the status of a particular lot at any given time.

Violations will range from starting construction without a permit to establishment of uses not permitted in their location. The CEO is the individual to investigate, stop work where appropriate, send notice to a violator, work with a violator to achieve compliance, and if necessary, initiate court action to prevent or halt zoning violations. Court action should be a last resort. The ordinance should always be reviewed to ensure procedural correctness necessary to successful enforcement efforts.

The CEO will become aware of potential zoning violations by various means. As routine inspections are made, an eye should be kept open for violations during travel. In most Maine communities, the pace of development is slow enough that the CEO will usually be able to remember whether a permit has been issued while driving past a construction site. Construction without a permit, changes in use, expansions of nonconforming uses, and occupancy of new buildings are examples of conditions to be checked on. Citizen complaints are another way the CEO receives information about potential violations. The CEO may wish to develop a standard form for citizens to register information regarding potential violations of the ordinance. It can be a useful piece of evidence if enforcement requires court action and will guide the citizen to provide needed information.

When the CEO becomes aware of a violation, the evaluation should begin by asking the following questions: Is the violation a potential health and safety hazard that requires immediate action to correct? Is it necessary to request an injunction or temporary restraining order in order to prevent further violation? Answering these questions will allow the CEO to decide how to proceed. Answering these questions may also require additional investigation, and a written record of the investigation should be maintained, noting the date and time of each observation.

At times, the use of a camera will prove beneficial. An instamatic camera will allow each photograph to be marked with the location, date, time and name of the photographer. This is important in order to verify the photograph as an accurate picture of the violation should it later be used as evidence in court.

The following procedure is recommended to achieve compliance. It is important to be sure that any specific procedural requirements of the ordinance are followed.

**(1) Oral Notification.** When the CEO determines that there has been or is a violation, or that there are reasonable grounds to believe there is a violation, the person(s) responsible must be informed. A phone call or visit to discuss a violation and what can be done to correct the situation should be the first step, when possible and where health or safety concerns do not require immediate action. If possible, offer several solutions which allow a builder or landowner to select the one that he/she thinks is best. Should the violator not be available to talk with, it may be appropriate to post a "stop work order" in a conspicuous location at the site. When making a visit, it will be helpful to bring the proper permit application forms to initiate permitting procedures.

If it is not possible to speak with the violator, a letter may be sent asking them to contact you to talk about a potential violation. The ordinance should be quoted specifically rather than presented in generalities.

It is important that the first meeting between the CEO and a potential violator be as non-confrontational as possible. It would be helpful to begin a conversation by explaining the purpose of the visit. Then review the zoning regulations and discuss how the ordinance affects the property in question. The alleged violation can then be pointed out.

A 1992 Maine Supreme Court decision, *Town of Freeport v. Greenlaw*, 602 A.2d 1156 (Me. 1992), outlines the essential elements of a notice of violation. A legal note from the June 1992 Maine Townsman discussing this case is included in Appendix G. Before using the sample violation notices in Appendix G, be sure to make any additions required by Greenlaw in light of the specific appeals, enforcement, and penalty sections of the ordinance being violated.

**(2) Written Notice of Violation.** Following the oral notification, the CEO should issue a written notice that includes:

- a description of the property sufficient for identification (street location and assessors map and lot numbers);
- the nature of the violation, including specific sections of the ordinance violated;
- the action necessary to correct the violation, such as discontinuance of illegal use of land, buildings, structures, or work underway, removal of illegal buildings or structures, abatement of nuisance conditions, or simply filing an application for a permit;
- the amount of time the violator has in which to comply;
- the penalties or actions which are to be taken if the violator fails to respond. These provisions are found in the ordinance or in Title 30-A MRSA § 4452. Also mention the possibility of negotiating a consent agreement with the CEO



and municipal officers as a way to resolve a violation, where this is appropriate; and

- note any avenues available to appeal the CEO's decision.

If the violator is not the owner of the property, a copy of the notice should be sent to the owner. A contractor should also receive a copy.

**(3) Follow-up letter.** The property should be checked periodically up to the deadline for compliance assigned in the notice of violation to determine whether corrective action has been taken. If the violation has ceased or been removed, a letter recognizing this should be sent. If the violation continues, the CEO should send a letter to the violator noting (1) the CEO has inspected the property again and the violation has continued, (2) that the CEO gave previous written notice of the violation including the date of that notice, (3) the nature of the violation and the ordinance section violated, (4) indicate that within a specified number of days legal action will begin unless certain corrective measures are taken to bring the property into compliance, and (5) that if the violation continues after the specified date, the CEO will recommend that the municipal officers refer the violation to a municipal attorney for legal action. Some ordinances require this notice be sent by certified or registered mail. Regardless of whether it is required by the ordinance, it is wise to do so, in order to document that the letter was sent.

**(4) Third Written Notice.** If the second letter does not result in an abatement of the violation, the CEO should send a third letter informing the violator that: (1) the CEO conducted another inspection, (2) the violation still exists even though the CEO has given the violator previous written notice, and (3) the CEO will recommend that the case be referred for legal action unless the violator is willing to negotiate a consent agreement. (See Appendix G for sample letters).

**(5) Legal Action.** If the CEO has the authority to file a complaint in District Court under Rule 80K, then the letter may state that the CEO is preparing to file a complaint. If the municipal officers make the final decision about whether to go to court, the letter should state that the CEO is recommending that the municipality prosecute the violation. The letter should also state the date, time and place when the municipal officers will be meeting to make their decision, and should inform the violator that he or she has a right to attend. Once the municipal officers have made their decision, the CEO should send a letter to the violator to inform him of this fact.

The CEO should keep copies of all correspondence concerning the violation and should also be sure to retain the postal receipts from certified letters. If the notices, which the CEO sends by certified mail, are refused by the person to whom they are addressed, the CEO may want to hand-deliver them or ask a local law enforcement officer or a sheriff's deputy to do it. If the notices are hand-delivered, then the CEO should keep on file a "return" prepared by the person making the delivery as proof that the notice was received.

The number of notices sent to a violator, their contents, and the method of delivery generally is not specified by the ordinance. The procedure outlined above is a recommended approach, but the CEO should modify it where necessary to suit his or her workload and budget or where the facts of a particular case require it.

Once the case has been referred to court, the CEO should continue to monitor the property periodically up to the time the CEO is asked to testify. This will enable the CEO to testify from personal knowledge that the violation continued to a certain time or still exists.

**(6) Types of Voluntary Corrective Action.** The type of corrective action that a CEO may order to eliminate a violation depends primarily on the nature of the violation and the language of the ordinance being violated. Some common examples include:

**a. Obtaining a Permit After-the-Fact.** When the violation involves a failure to secure a necessary permit, but the project is otherwise in conformance with the law, the code enforcement officer should encourage the property owner to apply for a permit after-the-fact. Such an application would involve the normal review procedures, and there is no guarantee that the permit will be approved. If the permit is granted, it should be dated from the time of the decision to issue it, rather than "back dated" to the time the work was actually done. Some municipalities have ordinances that require a higher permit fee for after-the-fact permits to help the town or city recover the additional administrative and enforcement costs that it incurs in connection with such a permit. *State v. Brown*, 135 Me. 36, 188 A.713 (1937); *City of Commerce v. Cooper*, 609 P.2d 106 (Colo., 1979).

**b. Removal or Reconstruction.** If the project involves other violations, such as inadequate setback, undersized lot, improper drainage or use of unsafe building materials, the CEO may need to order seemingly harsh corrective measures, such as removal of the illegal structure or its reconstruction or relocation in conformance with ordinance requirements. (To obtain relief from the CEO's order, the property owner must appeal the CEO's order to an appeals board, if authorized. If an appeal is not authorized, and the landowner fails to comply, the CEO is forced to resort to court action; the landowner could raise objections to the CEO's order as part of his defense.)

**c. Reseeding a Clear Cut Area.** If a forested area was cut too heavily in violation of a local ordinance, the CEO can order the owner to reseed it in a manner that will achieve the required forest density.

**d. Penalty.** Even if the violator agrees to obtain a permit or take other corrective action, the CEO may believe that the municipality should also request payment of a monetary penalty covering the period of noncompliance. This would be especially true where the CEO felt that the granting of a permit after-the-fact would not provide

a sufficient deterrent to future violations of local ordinances. The amount of the penalty should be based on the penalty provision in 30-A MRSA § 4452, which establishes penalties for specific violations ranging from \$100-\$2,500 per violation per day for first-time violators and higher penalties for subsequent violations.

If the violator refuses to perform the corrective action ordered by the CEO or to pay a penalty voluntarily, the only way to force compliance is by filing a complaint in court requesting a court order.

**Consent Agreements.** It cannot be emphasized enough that resolving a violation out of court through the voluntary compliance of the violator should be every local enforcement official's goal. Serving a citation or summons and filing a complaint in court normally should be a last resort. This does not mean that the municipality should "go easy" on a violator or always settle for less than full compliance. It does mean that the CEO normally should give the violator a reasonable opportunity to solve the problem before looking to the court for an answer. It also means that the CEO should be creative and think of remedies which the violator might agree to perform and which would be satisfactory to the town or city without having to involve a judge. If all else fails, though, and the violation is well documented, the CEO should not hesitate to refer the case for legal action.

If a person responsible for a violation is willing to resolve the problem without a court order, the CEO should attempt to negotiate an administrative "consent agreement" which spells out what the violator agrees to do in return for the town's or city's promise not to go to court. Such an agreement is in the nature of a contract between the violator and the municipality. Unless the CEO has been expressly authorized to sign a consent agreement on behalf of the municipality, the municipal officers must sign it. Sample consent agreements are included in Appendix G.

In trying to persuade a violator to enter a consent agreement with the town or city, the CEO may find it helpful to emphasize the potential costs and penalties that a judge could order the violator to pay if the case went to court. Title 30-A, section 4452 authorizes a penalty of up to \$2,500 for first time violators and up to \$25,000 where a person has been convicted of the same violation within the past two years. The statute also requires the court to order the violator to pay the municipality's court costs and attorney's fees if the town or city wins. In addition to these penalties and costs, the court also could order the violator to pay for necessary remedial work (i.e., removing a building, reseeding a forest).

If the violator is not the landowner, then the CEO should attempt to obtain written permission from the landowner allowing the violator to perform any necessary corrective action involving land or buildings. This is because a person who does not own the property cannot legally agree to make changes to the property; therefore a court would not enforce such an agreement against him.

The terms contained in consent agreements can include an agreement to remove an illegal structure, pay a large penalty, reseed a clearcut area, an agreement to discontinue an illegal use of property, to submit an application for a permit or a variance after-the-fact, or any appropriate combination of these and other agreements. For example, the enforcement official could negotiate a large penalty and agree to waive a portion if certain corrective action is taken within a specified period of time. Some CEOs have negotiated agreements in which a violator agreed to pay for new zoning maps and for the cost of sending the CEO to a particular training session. The agreement should be very clear about what actions the violator is promising to take and the compliance deadlines. For example, if an area is to be revegetated with tree seedlings, the agreement should specify the type and size of trees, how far apart to plant, when to start, and what happens if some or all of the seedlings die within a certain time frame.

In negotiating agreements involving illegal structures or activities, the enforcement official ordinarily should not settle for less than the removal of the structure or cessation of the activity since any settlement that allows such violations to continue would be condoning illegal activity. In most cases such an agreement probably would not be authorized under the enforcement provision of the statute or ordinance being enforced. Davis, *Administrative Law Treatise*, §§ 9.2, 9.5. See, *State v. Town of Franklin*, 489 A.2d 525 (Me. 1985). It also would send a message to the public that the municipality is willing to "sell" violations. In these cases the most the enforcement official should offer is additional time to correct the problem and no penalty or a small penalty. Most, if not all, shoreland zoning ordinances expressly prohibit consent agreements that allow a violation to continue unless certain factors are present. CEOs should look at their ordinances to determine what limitations they impose.

Section 4452 provides a number of factors which a judge must consider in deciding how much of a penalty to award or what kind of corrective action to order. If the court finds that a violation was willful, the statute requires the court to order corrective action unless it would 1) result in a threat or hazard to public health or safety, 2) result in substantial environmental damage, or 3) result in substantial injustice. In setting a penalty, the statute requires the court to consider 1) prior violations by the same person, 2) the degree of environmental damage that cannot be abated or corrected, 3) the extent to which the violation continued following the CEO's order to stop, and 4) the extent to which the municipality contributed to the violation by providing the violator with incorrect information or by failing to take timely action. A violator is subject to a potential \$25,000 penalty per violation per day for a second conviction of the same offense within a two year period. The maximum penalty may be increased where the economic benefit resulting from the violation exceeds the statutory maximum penalty. The maximum penalty may be as high as twice the economic benefit in such a case. "Economic benefit" includes costs avoided or enhanced value accrued at the time of the violation as a result of the failure to comply with the law. In weighing the strengths of the town's or city's case against a violator and in deciding what to include in a consent agreement, the CEO should keep these statutory factors found in Section 4452 in mind. If the CEO determines that it is unlikely that a judge would order a penalty or elimination of a

violation because of one or more of the factors listed in section 4452, then the CEO may decide that he or she will have to settle for less in a consent agreement. Before doing so, however, the CEO may want to consult with the municipality's attorney.

Many CEOs and attorneys have found it more effective to negotiate a consent agreement after a Rule 80K or other land use violation court complaint has been filed. Once the terms of the agreement have been resolved, the parties submit the agreement to the court for endorsement by the judge as the decision in the case. It is then referred to as a "consent decree" rather than a "consent agreement".

**Non-Action Letters.** Some CEOs have begun issuing what they refer to as "non-action" letters instead of negotiating consent agreements. Such a letter basically says that the municipality is aware that a particular property is in violation of a municipal ordinance, but that the municipality has no intention of prosecuting at this time. Apparently title attorneys and landowners have been willing to accept this in some parts of the State in order to resolve title problems and pave the way for financing. However, such a letter makes no guarantees that a future council or board or selectmen will agree to abide by it. Such letters are typically issued in cases involving minor dimensional violations that have existed for years and gone unchallenged by the municipality. See Appendix G for sample letters.

**Additional Enforcement Techniques.** The CEO may find that he or she can gain some additional leverage with violators by providing information about violations to the following individuals or companies:

**a. Notify Applicable Utility Company.** The State Subdivision Law and the Mandatory Shoreland Zoning Act state that no public utility, water district, sanitary district or any utility company of any kind shall install services to any lot or dwelling unit in a subdivision, or to any new structure in the shoreland zone, unless given written authorization by the town or city attesting that all necessary local permits have been issued and are valid and current. 30-A MRSA § 4406(3); 38 MRSA § 444. If a CEO discovers an unapproved project and contacts these utility companies, the utilities should refuse new service to the owner until the project has been approved.

**b. Contractor Liability.** Title 30-A, section 4452 makes contractors liable for violations of land use ordinances that they commit. Local contractors should be made aware of this.

**c. Realtors.** The CEO should maintain a list of detected violations and make it available to the public upon request. Local real estate agents should be interested in such a list, since it would enable them to avoid selling a building or land that did not comply with local or State requirements.

**Temporary Restraining Order (TRO) or Preliminary Injunction.** There may be times when a local enforcement official finds a violation in progress and cannot locate the person responsible or cannot persuade the person conducting the illegal activity to stop voluntarily until the project has been reviewed and approved by the proper local official(s) or until the project has been brought into compliance with the law. The CEO may decide to seek an injunction even though the violation can theoretically be undone by later order of the court. If the activity is going to cause immediate harm which cannot be undone by a later agreement or court order, then the local official should consider seeking a type of injunctive relief called a "temporary restraining order" (TRO) or a preliminary injunction either on his or her own (if certified to do so) or through the municipality's attorney. If a flagrant violation is ongoing, and if the CEO seeks an injunction, most judges will be willing to restrain the violation.

Both a TRO and an injunction order a person to act or cease acting in a particular manner. Both require a showing of "irreparable harm." The difference between them is the speed with which the court will act, the amount of evidence necessary to obtain them, and their duration. A TRO is, by its very nature, of brief duration. The court acts quickly on a motion for a TRO because the nature of the acts complained about is such that irreparable harm will result immediately if the court does not intercede. Because a TRO only lasts for a short time, the court does not normally require the same evidentiary showing required to obtain a preliminary or permanent injunction, both of which require more evidence. While a TRO can be granted based only on evidence contained in an affidavit attached to the motion or complaint, an injunction requires a fuller evidentiary hearing. It should be emphasized that in the case of both a TRO and a preliminary injunction, the court will be reluctant to grant the requested relief without convincing evidence as to the type of irreparable harm that will occur.

Additional information on the particulars of court proceedings and enforcement actions is available in the Rule 80-K Handbook and the Legal Issues manual of the State Planning Office Code Enforcement Program.

## ***Chapter Five: Best Management Practices (BMPs) and Shoreland Zoning***

### ***A. Defining Nonpoint Source Pollution***

As point sources of pollution have been addressed nationally, problems associated with non-point sources are receiving more attention. Nonpoint source pollution is water pollution that comes from a multitude of locations within a watershed of streams, rivers, wetlands, ponds, and lakes that drains into estuaries, bays, and ultimately the ocean. Its source is widespread and not identifiable as a single discharge point, such as, a straight pipe from an industrial source. Examples of nonpoint pollution include erosion and sedimentation, nutrients, pesticides, and urban runoff. Stormwater runoff carries nonpoint pollutants from the land surface into the nearest surface waters during rainstorms, thunderstorms, and periods of rapid snowmelt.

Land uses which contribute to nonpoint source pollution include agriculture, timber harvesting operations, roads, driveways, parking areas, and the ditches which drain them, and construction sites, among others. There are many more land uses that contribute nonpoint source pollution to water bodies than are listed here. And there are many more types of nonpoint source pollutants than are described here. These have been selected because (a) they are forms of nonpoint source pollution from land uses which administration and enforcement of local shoreland zoning standards can help reduce, and (b) there are published methods for achieving compliance with the standards set forth in the DEP publication, ***State of Maine Guidelines for Municipal Shoreland Zoning Ordinances***, which are now available in the form of Best Management Practices Manuals for agriculture, timber harvesting, construction sites, and stormwater management. Applying the methods contained in these manuals to provide for compliance with shoreland zoning is the subject of this section of the manual.

Each of the principal forms of nonpoint source pollution, which this manual and the BMP Manuals address, is discussed below:

#### **1. Erosion and Sedimentation**

Erosion and sedimentation is the most common form of nonpoint source pollution in Maine. Its principal sources are agriculture, development (including construction and urban runoff), silviculture (timber harvesting, skid roads and stream crossings), resource extraction, and transportation (road network and the ditches which serve them).

The cost of erosion damage in the State of Maine is largely unmeasured. On-farm damage from erosion is measured in lower yields, higher fertilizer requirements, more difficult tillage, and increased farm maintenance costs. The direct result of erosion is sedimentation. Sediment clogs rivers and decreases reservoir capacity, restricts

navigation, reduces recreation and scenic value, and increases the severity of flooding. Pollutants (nutrients, pesticides, other toxins) carried by transported soil particles can impair fish and wildlife habitat and pollute water supplies. These associated costs are untabulated. The effects and costs of related pollutants, on human health for example, are unmeasured as well.

**Erosion is defined as the detachment and transportation of soil.** *Geologic (normal) erosion* is the natural wearing away of the landscape by the forces of wind and water and is largely unaffected by the activities of people. Geologic erosion generally occurs very slowly. Erosion becomes a problem when human activity speeds up the natural process. This is known as *accelerated erosion*.

The natural forces (agents) acting upon the soil are water, wind, freezing and thawing, and gravity. **Flowing water, rain, and freezing and thawing are the agents which loosen and detach soil particles. Raindrop splash, flowing water, and wind are the transporting agents.** The most significant of these is flowing water. However, the impact of raindrops is also significant. The impact of a raindrop hitting soil is twofold: (1) it loosens and breaks away soil particles, beats the particles and destroys soil granulation creating a fine silt-sized particle, and (2) the raindrop's splash serves to transport the soil. On a soil where granules are easily detached, a very heavy rain may splash up to 100 tons of soil per acre. Some of the drops may rise 2 feet and move horizontally 4 to 5 feet. The slope of the landscape and/or intensity of winds are factors which help to determine the total *wash*, i.e., the amount of soil moved any given distance.

In summary, the factors that contribute to erosion are:

- erosive potential of rainfall (amount and intensity);
- soil erodibility (relative ease of detachment);
- slope of landscape (length and grade of slope; and
- ground cover.

There are several types of erosion by water:

*Splash erosion* occurs when raindrops break the physical and chemical bonds between soil particles and splash them away. These particles then become vulnerable to water flowing over the ground surface.

*Sheet erosion* occurs when rain falls faster than the soil can absorb it. Water collects and begins to flow over the ground carrying with it the particles that were broken away by raindrops or otherwise loosened soil particles.

*Rill erosion* occurs when flowing water begins to establish paths of travel. The water erodes the path, easily detaching soil particles from the sides and bottom of the path



creating what is known as a *rill*. As the water moves farther downslope, the rills enlarge as volume and velocity of the water in the rills increases and rills join together.

*Gully erosion* occurs when an eroding path of water reaches a vertical drop. Water flowing over the drop is very erosive, undercutting soil at the head of the drop, scouring the gully bottom, and removing soil that has slumped from the gully's sidewalls.

*Mass erosion* or *slumping* occurs where a hillside becomes so saturated by water that large areas of soil separate and slide downhill. Gullies usually form rapidly in these areas.

Any one or combination of these erosion processes may take place at any given site. *Sedimentation* occurs where the energy of the water decreases; where the water has slowed (or stopped) to the point that it can no longer carry soil particles, usually at the bottom of a hill, in a depression, or where the "wash" enters a water body.

Wind, freezing and thawing, and gravity are agents of lesser significance than water, but are contributors in the Northeastern region of the U.S. Wind is most erosive where soil moisture is low. Sandy and peaty soils dry rapidly. As with water erosion, wind erosion involves two processes, detachment and transportation. Wind breaks soil particles from the clods of which they are a part. When the wind is laden with soil particles, its abrasiveness is increased greatly. The impact of these particles moving at high velocity detaches even more particles, all of which move closely to the ground in a series of short distance bounces. As with water, erosiveness increases with velocity. Coastal dunes are easily susceptible to erosion when protective vegetation is removed. Freezing and thawing loosens and breaks the bonds between soil particles and alters soil structure on a larger scale. Cracks in the soil are exposed travel routes where rills can form. Gravity plays an obvious role in soil movement, but this is most striking with mass erosion.

Seasonal variation and ground cover have a tremendous impact on the potential for erosion. Rainfall is most erosive when the most intensive storms coincide with minimal soil cover. In the Northeast, this period is usually spring, early summer and late fall before ground freezing. Living plants, plant residue, and bits of rock absorb energy from the impact of raindrops. An artificial layering of mulch acts similarly preventing the loss of both water and soil and reducing degranulation. These ground covers slow any flow of water across the surface and improve the rate at which water soaks into the soil. This is the reason *quick revegetation and vegetative buffer strips* are so important to controlling nonpoint source pollution.

## **2. Nutrients**

Nutrients are naturally occurring chemical elements and related simple compounds that are necessary for both plant and animal growth and development. They are normally present in the environment in the atmosphere, in the mineral components of the soil and

subsoil, and in plant and animal tissues. They become pollutants when they are present in excessive quantities. A nutrient is *excessive* when its availability is greater than the capacity of the environment to absorb and utilize it without detrimental consequences. Land use and development practices which release excessive quantities of nutrients into the environment include all the same uses listed above which cause erosion and sedimentation, plus those agricultural, silvicultural, residential and recreational uses and activities involving the application of fertilizers, pesticides, and herbicides.

The two nutrients of greatest concern as water pollutants are phosphorus and nitrates. Both cause oxygen depleting algal blooms. Phosphorus is of greatest concern, in this regard, for lake water quality, and nitrates are of greatest concern for ground water, estuaries and embayments along the coast.

**a. Phosphorus.** Phosphorus is present virtually everywhere in the environment. It is naturally occurring and a part of most soil particles. Erosion causes the release of phosphorus into water (runoff), which transports it. In forested areas, the export of phosphorus in runoff is very low as compared to phosphorus export from agricultural fields and developed land. This results largely from the addition of fertilizers to the naturally occurring phosphorus in agricultural and developed areas. Improperly located or malfunctioning septic systems are an additional source. This addition of phosphorus combined with the tillage of fields and soil disturbance of development makes export from developed land especially high. All lakes have the ability to absorb and utilize some phosphorus before there is an adverse impact on water quality. *Excessive*, as it relates to phosphorus, is a term relative to this tolerance for lakes to absorb phosphorus. An amount excessive for one lake may not be for another. Whatever amount is delivered to a lake through runoff that is beyond its tolerance is considered *excessive*. A measure of this tolerance must be made, in order to determine how restrictive controls of phosphorus in a lake watershed must be to protect water quality.

**b. Nitrates.** Manure, commercial fertilizers, community sewage treatment plants, and failing subsurface waste disposal systems also make nitrates available in excess. Nitrates are another common ingredient in the runoff mix of nonpoint source pollution. This is potentially significant for all waterbodies, but especially so for drinking water supplies (surface and ground water) and estuaries. There is a limit of nitrate concentration in drinking water considered safe for consumption. Nitrogen sources can ultimately leach into groundwater and surface water, which in large enough concentration, can make the supply unusable without treatment. Estuaries, particularly shallow estuaries are sensitive to nitrogen. In shallow estuaries, nitrogen can be the limiting nutrient, i.e., the nutrient that in excessive amounts causes over production or blooms of phytoplankton. Blooms can cause unpleasant odors, kill other plants and animals, reduce dissolved oxygen needed by fish and other animals, and interfere with the feeding mechanisms of animals. Blooms can threaten man's health by making shellfish toxic for human consumption. They are responsible for creating red, brown, and green tides. The color is related to the type of phytoplankton blooming.

### **3. Pathogens**

A pathogen is an agent that causes disease. Failing septic systems and sewage overflows from treatment plants add human bacterial and viral pathogens, along with nitrates, to the runoff mix of nonpoint source pollution. Humans who eat contaminated seafood and swim in contaminated water ingest these pathogens and can then transfer the pathogens to others. Pathogens can be responsible for contamination of shellfish beds and beach closures.

### **4. Components of Urban Runoff**

Less common in Maine, but still significant, especially in urban areas, are toxins. These include heavy metals, PCBs, petroleum hydrocarbons, and pesticides. Nutrients, sand, salt, are added to the toxins to make up a group of stormwater pollutants collectively known as *urban runoff*. They come principally from automotive fuel combustion byproducts and lubrication, and road salt applications, all of which settle on paved surfaces and are washed into adjacent storm sewers that ultimately discharge into natural waterbodies. Storm drainage discharges to wastewater treatment plants, if storm sewers are part of a combined sanitary and storm sewer system. But more often than not, there is insufficient capacity at these plants to accept stormwater from major events and it is discharged without treatment.

### **5. Combined Sewer Overflows**

Where urban areas are served by combined sanitary and storm sewers and treatment plant capacity is inadequate, combined raw sewage and urban stormwater may be released into waterbodies during storm events. This release is termed a *combined sewer overflow*. It occurs when the rate of flow into the local sewage treatment plant exceeds the capacity of the plant to treat it. This excess must be discharged so that it will not back up into the streets and is typically released to the nearest large waterbody. Although a combined sewer overflow outfall pipe, or any storm sewer outfall pipe for that matter, is an identifiable point of pollutant discharge, it is still classified as a nonpoint source. This is due to the fact that the pollution is collected from all over the watershed before it is discharged.

### ***B. Adverse Impacts of Nonpoint Source Pollution***

There are many different kinds of impacts caused by uncontrolled nonpoint source pollution. One characteristic common to all, to some degree, is that it may be translated into increased economic cost. This is true for the individual land user, developer and/or property owner, on a lot by lot basis. And when these individual impacts accumulate within a watershed, the degraded or lost natural resources which result translate into economic losses for particular resource-based industries and for society as a whole. A third, less tangible, but still real aspect of such individual lot and cumulative

environmental and economic impacts, is that they can degrade the quality of life through losses of local and regional scenic beauty, degraded hunting, fishing, swimming, boating and other recreational opportunities, reduced water quality and/or increased treatment costs for public water supplies, and a diminished abundance of local and migratory non-game wildlife.

The following paragraphs describe many of these broadly labeled ecological and economic impacts in more detail. Since most of the nonpoint source pollution to be regulated by shoreland zoning is erosion and sedimentation, it is this particular impact that is the principal focus of this discussion.

#### Adverse Impacts of Uncontrolled Nonpoint Source Pollution:

**1. On-site.** If an individual parcel of land is cleared, plowed and/or built upon, the topsoil's vulnerability to erosion losses, especially erosion by water, will be increased. Topsoil is the most fertile part of the soil, which contains most of the nutrients necessary for productive plant growth. Unless the site has already lost its topsoil, any use or development activity that is done, without erosion and sedimentation control measures in place, will subject the property to some degree of loss of whatever topsoil is exposed and/or disturbed. Whether the area is to be reseeded for grass cover, or used for agricultural crop or timber production, restoring the loss of this preexisting, already-owned-and-paid-for, soil resource from the site will require the additional costs of fertilizers, soil additives, sod, or other restoration measures in attempting to regain the original long term productivity of the soil. With lands used for timber production or agriculture, the cost of the loss of productivity will be reflected in the lower timber harvest volume or other reduced crop yields from an unrestored site.

**2. Off-site.** To the degree that topsoil or subsoil sediment erodes from a site and washes off-site onto other properties or into neighboring water bodies, there will be adverse environmental and economic impacts off-site downstream, as well as, on-site.

When sediment leaves a site and washes into a swale from which runoff flows into a stream; or when runoff carries sediment directly into a stream, several adverse impacts occur within the stream. When several sites within the watershed of a stream contribute eroded sediment to the same stream these impacts on the stream are cumulatively increased.

**a. Streams and Rivers.** The addition of sediment to a stream increases the cloudiness, or turbidity, of the stream water and the flow of water slows due to the loss of energy involved with the transportation of the sediment. As stream flow slows, the temperature of the water increases. It is exposed to sunlit areas for a longer period.

**b. Fish, Fishing, and Local Economies.** Sediment not only increases stream temperature, it can totally impair the ability of fish to breathe, feed, migrate and

spawn. Coldwater fish species, such as trout, species common in streams and rivers near the coast, such as salmon, alewives, herring and other anadromous fish are particularly susceptible to this impairment.

Breathing is affected in two ways. The level of dissolved oxygen decreases as the temperature of stream water rises, and the sediment suspended in the water clogs and damages fish gills. Feeding is adversely affected by the inundation of bottom dwelling animals and stream vegetation, as the sediment settles to the stream bottom and on stream banks. For successful spawning, these species of fish require a clear, well oxygenated, cold water and a gravelly, porous, streambed in a pool where the flow is not rapid. They also require a migratory path upstream to such a location to be free of barriers. Barriers include fallen trees, sediment banks, extremely shallow stretches, and debris dams. Because spawning grounds are often located in deep pools where rapid currents carrying sediment will slow and drop out even the finest, lightest sediment particles, spawning areas can easily become clogged with fine sediments. These sediments cover the well oxygenated gravel of the beds and render them impaired or useless for spawning. Even if spawning areas themselves are not impacted, other parts of the stream can become so sediment-choked that they block passage of migrating fish coming upstream to use them.

A decreased natural ability of fish to survive and reproduce means a decreased capacity of these streams to support fishing. Related tourist economy dollars spent on bait, tackle, food, lodging, boating equipment, and other items will also be decreased. In some instances, the costs and required frequency of stocking streams with certain species will increase and initially compensate for this loss. But if left unchecked, sedimentation can eventually greatly diminish or ruin the fishing altogether.

**c. Increased Flood Hazard.** Another consequence of the cumulative impacts of uncontrolled erosion and sedimentation on streams and rivers is increased flood hazard downstream. In all watersheds, the stream channel serves to store flood waters until the rising flood level pours into stream-associated wetlands and ponds. Here, a portion of storm runoff is held in long-term storage and then released more slowly downstream well after the peak flow from the storm has already passed. When sediment from uncontrolled erosion accumulates in stream channels and reduces storage of runoff in pools, stream banks are more easily overflowed. Accumulated sediments also diminish absorption of runoff by wetlands and the total portion of runoff from large storms that is retained and released slowly diminishes. Consequently, that portion of the storm that runs off rapidly is increased. In large watersheds, these effects combine to cause significant increases in the height of flood waters lower down in the watershed. Properties that never before experienced storm flooding will be damaged and land previously suitable for development will no longer be.

It is worth noting that the amount of impervious area that new development adds to a watershed will have at least as significant an impact on increased flood hazard as accumulated sediment in streams. It should also be noted, however, that communities, families and individuals experience both types of development impacts that lead to increased flood hazard--increased impervious area and sedimentation from uncontrolled erosion. This is why, in some communities of the more populated lower portions of large river watersheds in Maine, where increased flood hazard is likely to be of greatest concern, both the quantity of stormwater runoff **and** erosion and sedimentation from new development are regulated.

**d. Lakes and Ponds.** Eroded sediment from watershed development, timber harvesting, agriculture, roads, ditches and other sources which is carried into lakes by streams and rivers, as well as, sediment eroded from shorefront land use and development, can also have serious and even devastating cumulative ecological and economic impacts on lakes and ponds.

Besides being vulnerable to sedimentation, lakes and ponds are also vulnerable to excessive amounts of dissolved phosphorus. Phosphorus enters lakes and ponds from many diverse sources, including synthetic fertilizers, manure, detergents, dead plant materials, and failing septic systems, among others. Eroded soil and the runoff that carries it delivers a significant amount of phosphorus from these sources to water bodies.

Because the phosphorus problem can have severe environmental and economic impacts if not controlled, the Maine DEP Bureau of Land and Water Quality has developed a phosphorus control method for limiting the cumulative phosphorus impacts of development in lake watersheds. This method is presented in a series of manuals. One of these manuals, *Comprehensive Planning For Lake Watersheds* (Androscoggin Valley Council of Governments and the Maine DEP, July 1990), summarizes the phosphorus problem in its introduction:

“All lakes have the ability to absorb some phosphorus before there is an adverse impact on the quality of the lake. However, when the phosphorus load to the lake becomes too great, the phosphorus acts as a fertilizer and causes algae to flourish. An abundance of algae turns the lake green and blocks sunlight to deeper levels. As the algae crowding the upper part of the lake die and drop to the bottom, they are decomposed by bacteria. The oxygen supply in the bottom waters is exhausted by this bacterial decomposition of the algae. Under depressed oxygen conditions, phosphorus, which usually is bound in the sediments, may be released. Trout and salmon, which live in the colder bottom waters of many lakes, can suffocate. The decay of algae generates obnoxious odor and taste. Fish, plants, and wildlife of the lake ecosystem are endangered in this process. In lakes used for drinking water supply, these conditions make water treatment necessary which is expensive.

A lake rich in dissolved nutrients such as phosphorus, and often deficient in oxygen, is termed *eutrophic*. Once a lake becomes eutrophic, it is extremely slow to recover and, in fact, requires intensive action to immobilize phosphorus in the sediments. Thus, it is well advised to plan for and manage the amount and sources of phosphorus entering a lake in order to prevent *eutrophication*.”

It is important to emphasize that one key element of the DEP lake phosphorus control method is erosion and sedimentation control through the use of best management practices (BMPs). It is equally important to emphasize that erosion and sedimentation control alone, without the DEP lake phosphorus control method offers no guarantee that lake phosphorus will not be a problem. However, use of BMPs to control erosion and sedimentation can significantly help reduce overall phosphorus export from the watershed to the lake.

**e. Lake Recreation Economies and Property Values.** A somewhat sinister aspect of the lake phosphorus problem is that it can build significantly over time without showing any visible signs of water quality deterioration and then suddenly, within a very few years, become dramatically apparent in the form of widespread algae blooms and lost fisheries.

The experience of China Lake in Maine in the mid-1980's is instructive in this regard. Excellent water quality and trout, togue, and salmon fisheries were lost over the course of about three years during which the cumulative impact of phosphorus loading due to development, at first unnoticed, suddenly made itself apparent. Large algae blooms caused unsightly and odorous floating yellow, green and brown mats of algae on the surface of the lake. The water lost its clarity, its oxygen content decreased, and its coldwater fisheries were destroyed.

The loss of the pristine quality of the lake and its fisheries has, in turn, caused adverse economic impacts, including declining property values around the lake and a loss of fishing and other recreation related business in the area. In addition, the costs of lake restoration will exceed \$1,000,000 and it is still unlikely that the former water quality of China Lake will ever be regained by these efforts.

**f. Coastal Waters: Ecological and Economic.** The impacts of nonpoint source pollution on coastal waters can occur anywhere, but are most readily apparent in small embayments. The full range of nonpoint source pollutants enters Maine coastal waters from a multitude of sources. There are a multitude of complex interrelated impacts from these pollutants on coastal resources, ecosystems, and economies. Much is still not known about how some pollutants affect these systems.

**1) Shell fishing.** Nitrogen is one pollutant of primary concern in marine waters. Nitrogen is introduced from a number of sources other than septic and overboard discharge systems. These include atmospheric deposition, stormwater runoff, and upwelling (an upward surge) of nutrient rich deep waters. Even a properly designed septic system is not designed to remove nitrogen. The impacts from overly enriched water range from mildly altered ecosystem processes, such as subtle shifts in phytoplankton (a food source fish populations are heavily dependent upon) populations to severe oxygen depletion that kills fish and shellfish.

“The loading of nutrients into near shore embayment waters can lead to a condition known as eutrophication. Excessive amounts of nutrients cause phytoplankton to multiply and or bloom in great quantities. When the phytoplankton sink and die, bacteria decompose the plankton and deplete the dissolved oxygen in the estuary. If dissolved oxygen levels become too low, shellfish and other bottom dwellers may die. A massive shellfish kill in Maquoit Bay in the fall of 1988 was caused by an unusual bloom of phytoplankton that settled to the bottom and within 48 hours had smothered 80% of the soft-shelled clams, European oysters, and other shellfish in the bay.” (The Estuary Book, Maine Coastal Program, State Planning Office, January 1991, page 25)

Excessive nitrates from land runoff may also contribute to or increase the frequency and/or duration of red tide algae blooms. Red (tide) algae blooms pose a health hazard when shellfish, which eat the algae, also ingest the toxins that these algae produce. These toxins are dangerous and can be lethal to humans who eat the contaminated shellfish. Accordingly, red tide alerts force the temporary closure of shellfish beds and a consequent loss of shell fishing income. Current research is inconclusive regarding the causes of red tides, but it indicates that they may be linked to the availability of nitrates and perhaps iron, as well.

**2) Eelgrass Beds.** Another adverse impact of excessive sediment entering coastal waters in runoff can be the loss of eelgrass beds. Eelgrass plays important ecological roles in establishing shellfish beds, supporting the growth of mussel and other shellfish larvae, serving as a nursery area for small flounder and other fish, and providing important feeding areas for migratory waterfowl that feed on the grass and leaves. Eelgrass also helps take up nutrients from the water, utilizing and storing them, then releasing them slowly through decomposition of its dead leaves. This helps to buffer the surrounding waters against excessive nutrient levels.

When waterborne sediment is excessive in an area of eelgrass, the beds can be smothered and die off causing the loss or diminution of these important ecological functions, with corresponding losses to shellfish, finfish and migratory waterfowl populations. Eelgrass is also subject to other threats, including boat traffic, heavy drags used to harvest fish and shellfish that uproot them, dredging, herbicides in runoff, and eel grass wasting disease. Although the use of BMPs alone cannot ensure protection of eelgrass beds, they can mitigate some impacts to these resources.

Excessive sediment can also smother shellfish beds and block light from reaching aquatic plants. High levels of suspended sediment can damage fish gills in many estuarine and marine species.

**3) Anadromous and Catadromous Fisheries.** There are eleven anadromous fish species and one catadromous species that inhabit the waters of Maine. Anadromous fish spend most of their lives in saltwater, but swim upstream into freshwater to spawn. These species include: Atlantic salmon, Atlantic sturgeon, rainbow smelt, blueback herring, searun brook trout, sea lamprey, striped bass, American shad, alewife, shortnose sturgeon, and searun brown trout. The shortnose sturgeon is on the federal endangered species list. It is currently found in the Kennebec, Sheepscot and Penobscot estuaries. The American eel is Maine's one catadromous species, which



lives in inland waters and travels to the sea to spawn.

All of the catadromous and anadromous fish are affected adversely by sediment in both estuarine waters and stream and river waters. Because many of these species are food for commercial marine finfish and/or are commercial finfish themselves, the degree to which sediment and other pollutants in stormwater runoff diminishes their numbers or impairs their habitat will result in lost finfish resources and lost income from their harvest.

### ***C. Shoreland Zoning Helps to Control Nonpoint Source Pollution***

All parts of every watershed have the potential for contributing nonpoint source pollution to waterbodies through runoff. Shoreland zoning helps control nonpoint source pollution by regulating the use of land within those portions of watersheds which, because of their immediate proximity to streams, rivers, great ponds, inland and coastal wetlands and the coastline itself, are potentially more significant contributors of nonpoint source pollution than those uses which occur at a location more distant from the water body within a given watershed. It does this in several ways:

**1. Resource Protection and Stream Protection Districts.** Shoreland zoning helps control nonpoint source pollution by regulating the density and type of development permitted within different shoreland zoning districts. For example, the Resource Protection and Stream Protection Districts, which municipalities establish, prohibit most significant developments in especially environmentally sensitive areas. (Section 13 of the shoreland zoning *Guidelines*).

**2. Regulation of Permitted Uses.** Shoreland zoning also restricts the types of new uses that can be developed within those shoreland zoning districts which do allow development. Several specified uses that generate chemical pollutants are prohibited entirely from locating within the shoreland zones of great pond watersheds. (Section 15 F. of the *Guidelines*).

**3. Minimum Space Standards.** Shoreland zoning minimum space standards for shore frontage, lot size, and required setbacks from the water for structures and other uses help to limit development densities and thus, nonpoint source impacts of shoreland development. Water and wetland setbacks help ensure that an ample buffer strip of undisturbed land is maintained between structures and/or uses and the *normal high waterline* of the adjacent waterbody or upland edge of a wetland. This buffer helps filter nonpoint source pollution as runoff flows across it to the waterbody or wetland. Together, these standards reduce the cumulative impacts associated with eventual full buildout on the waterbody or wetland. This is especially true for inland lakes and wetlands. (Section 15 A. and B. of the *Guidelines*).

**4. Nonconformance.** Shoreland zoning is designed to phase out many nonconforming uses, lots and structures. This plays an important role in nonpoint pollution control by

limiting or prohibiting expansion of nonconforming structures and uses within the water setback, and thereby limiting the additional amount of disturbed area within the setback. The requirements for combining nonconforming lots under certain circumstances helps to ensure that the impact of developing previously established, smaller, subdivision lots is reduced to a density and number of lots consistent with current space standards and State minimum lot size and Plumbing Code standards. Limitations on expansions, changes, and resumptions of nonconforming uses and structures also encourage the eventual phase out of existing excessive nonpoint source impacts of such uses and structures. (Section 12 of the *Guidelines*).

**5. Performance Standards.** Finally, Shoreland zoning requires that those land uses permitted within the shoreland zone must meet minimum performance standards. The *Guidelines* provide such standards, called *Land Use Standards* to regulate the nonpoint source impacts of campgrounds, individual private campsites, parking areas, roads and driveways, stormwater runoff, septic waste disposal, essential services, mineral exploration and extraction, agriculture, timber harvesting, clearing for approved development, erosion and sedimentation control, and the use of soils. In addition, the *Guidelines* provide optional minimum standards for regulating the nonpoint source impacts of piers, docks, wharves, bridges, and other structures and uses extending over or beyond the normal high water mark of a water body or within a wetland. (Section 15 C. through S. of the *Guidelines*).

## ***D. Best Management Practices***

### **1. Definition**

***“A Best Management Practice [BMP] is a method, measure or practice that when installed or performed will prevent, reduce or correct [a] water pollution [problem].*** It is the most basic tool that land users in Maine will be expected to use at the sites where nonpoint pollutants are generated.” (*Nonpoint Source Pollution Management Plan*, DEP, November, 1989.) There are BMPs to address nonpoint source pollution from agriculture, timber harvesting, stormwater management, erosion and sedimentation from construction sites, and other uses.

BMPs are characterized as *nonstructural* or *structural* measures. The nonstructurals consist of easily installed techniques that do not require engineering to design or construct. They do require some planning and management. Nonstructural techniques include such things as seeding sites to grass within a specified time frame, use of mulch to absorb the impact of rain on exposed sites, and installation of sediment barriers to trap sediment that does run off slopes, preventing it from leaving the construction site and/or entering water bodies. There are specifications associated with each of these measures that must be followed to achieve success. Used properly, they are an effective and inexpensive means of controlling erosion and sedimentation. These are measures that CEOs can help oversee the proper use of during construction and ensure that maintenance is provided for after construction. They are key to the

successful implementation of shoreland zoning ordinances. Structural measures are more complex structures that require a skilled professional to design and oversee their construction. These measures include constructed channels, diversions for water conveyance away from the site, stream crossings, and basins and ponds to trap sediment from flows on site.

## **2. Current Uses**

The Department of Environmental Protection is using Best Management Practices in many of their review activities. The Department's Nonpoint Source Control Program is also encouraging cities and towns to require the use of BMPs as a condition of permitted construction activity. Through demonstration projects and grants to regional and local public agencies, the NPS Program performs public outreach to encourage voluntary use of BMPs by land owners, developers, and contractors. Maine's Coastal Program is also coordinating technical assistance to towns for the purpose of incorporating BMPs into standard review procedures and as conditions of development. The land area for which BMPs are used, recommended, or required includes, and extends inland from the shoreland zone. This is because all portions of all watersheds are potential contributors of nonpoint source pollutants to water bodies and/or wetlands.

## **3. Best Management Practices (BMP) Manuals**

The DEP has worked with other regional and State agencies and with advisory committees of Maine land users to produce four manuals describing and providing technical assistance for using BMPs. They provide BMPs for agriculture, timber harvesting operations, erosion and sedimentation from construction sites, and stormwater management. Each manual lists many different types of BMPs suitable for a variety of conditions and circumstances from which the developer or land user can select options to create the most workable and cost effective strategy for his or her particular site. The manuals describe and illustrate the use of each BMP, and are the best source of information for this purpose. The manuals are listed below:

1. *Strategy for Managing Nonpoint Source Pollution from Agricultural Sources and Best Management System Guidelines*, Nonpoint Source Agricultural Task Force, October, 1991.
2. *Erosion and Sediment Control Handbook for Maine Timber Harvesting Operations: Best Management Practices*, Maine Forest Service, June 1991.
3. *Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices*, Cumberland County Soil and Water Conservation District and Department of Environmental Protection, March 1991.

4. *Stormwater Management for Maine: Best Management Practices*, Department of Environmental Protection, November 1995.

## ***E. Relationship of Best Management Practices (BMPs) to Shoreland Zoning***

Best Management Practices have been developed in Maine pursuant to federal nonpoint source pollution control mandates of the Clean Water Act. They are also an excellent set of tools that can be used to implement Maine's water quality protection goals pursuant to the Mandatory Shoreland Zoning Act. Both of these State and federal mandates are approximately 20 years old.

### **1. Historical Development of BMPs**

Congress passed, and President Nixon, signed the Federal Water Pollution Control Act of 1972, and since, there has been a federal policy and mandate for states to begin to address point and nonpoint source pollution of water bodies and water supplies. Later, when amended in 1977, the Act became known as the *Clean Water Act*. Among other requirements, the Act requires that states develop plans and programs to control nonpoint pollution from a variety of sources using best management practices.

In Maine, the Department of Environmental Protection's Nonpoint Source Pollution Control Program has developed and is actively promoting the use of Best Management Practices that are described in the four BMP manuals listed above.

### **2. BMPs for Implementing Local Shoreland Zoning**

BMPs offer flexible and feasible methods for land owners, users and developers to achieve compliance with the minimum requirements of Section 15 of the shoreland zoning *Guidelines, Land Use Standards*, as well as, the performance standards of most local shoreland zoning ordinances. They are flexible because there is a "menu" of methods to choose from (to fit site conditions). They are feasible because many of the methods, as described below are relatively easy to use and are not costly.

Although it is not specifically mandated that local governments require the use of any BMPs in order to assure that the minimum requirements of a local shoreland zoning ordinance are met, this is a reasonable option for cities and towns to explore. Best management practices are recommended for use, particularly within especially sensitive watersheds such as those with estuaries, high value wetlands, and lakes, and notably those lakes used for public water supplies and/or endangered by high lake phosphorus concentrations.

Even if the use of BMPs is not required by local ordinance, control of erosion and sedimentation is, and the ordinance should encourage use of standardized methods. The code enforcement officer, and/or the Planning Board can and are encouraged to use BMPs as a tool for administering and enforcing local shoreland zoning ordinances. To address the nonpoint source pollution problems of the most common shoreland zoning land uses involving structural development, the *Maine Erosion and Sedimentation Control Handbook* will provide the needed BMPs. In the vast majority of cases, the nonpoint sources from development in the shoreland zone may be addressed by using the one or more of the first 14 nonstructural BMPs listed in that manual.

## ***F. Use of BMPs to Implement Shoreland Zoning***

**Each code enforcement officer should review his or her town's ordinances and consult with the town's attorney, and town planner, if available, to determine the extent to which its ordinances may safely be interpreted to authorize the use of BMPs.**

### **1. Local Authority to Enforce Conditions of State Approvals**

Few local ordinances explicitly require the use of BMPs. Some State regulations for new development, such as the Natural Resources Protection Act, that require State review and approval do require use of BMPs. To the extent that Planning Board approvals and building permits issued under local ordinances include standards and/or conditions of approval requiring compliance with all applicable conditions of State approval, local enforcement authority can require use of BMPs on some developments requiring State approval, even if there is no specific requirement for using them under local ordinance standards.

### **2. Local Authority under Shoreland Zoning and Subdivision Statutes**

*The Mandatory Shoreland Zoning Act (38 MRSA § 438) and the law, Subdivisions (30-A MRSA, Chapter 187) offer ample justification for requiring the use of BMPs at the local level, even without explicit State standards requiring their use. The Guidelines for Municipal Shoreland Zoning Ordinances and Subdivisions clearly mandate that municipal reviewing authorities require erosion and sedimentation control, stormwater management, and general water pollution prevention, and that other adverse impacts of development be prevented or controlled.*

Local shoreland zoning and subdivision ordinances adopted pursuant to these statutes, along with selected local site plan review and zoning ordinance standards in some cases, often echo or even go beyond the statutory requirements for erosion and sedimentation control.

### 3. Local Regulatory Authority for Applying BMPs

**a. Incorporation of BMPs by Reference.** Direct incorporation of language into local ordinances referencing the BMP manuals and requiring the use of appropriate methods of nonpoint source control is the most efficient approach. This directly provides for local review and attachment of permit conditions requiring BMP methods for any particular development. Below are two options for incorporating such language. These options also apply to incorporation by reference into other land use ordinances, as well.

Both the CEO and applicants for shoreland zoning permits need to have a clear understanding as to when BMPs are required by the ordinance. Therefore, every section of the ordinance in which BMPs come into play, namely within the performance standards contained in **Section 15** of the DEP model shoreland zoning ordinance, should cite separately the *Maine Erosion and Sediment Control Handbook for Construction* and the specific BMPs within that publication that apply to a performance standard in the shoreland ordinance. The specific BMPs are found in Sections 1.0 to 14.0 in the *Maine Erosion and Sediment Control Handbook for Construction*.

**Option #1:** Incorporation of an outside document as an integral part of the shoreland zoning ordinance:

This option requires that all of the regulations within the outside document be met by the shoreland permit applicant just as all of the regulations within the shoreland ordinance itself. Typical language in the section containing performance standards (such as Section 15 of the DEP model shoreland ordinance) would be as follows:

The requirements of the Subsection shall be met by employing the best management practices (BMPs contained in Section(s) 1.0 - 14.0 of the publication, *Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices*, Cumberland County SWCS, Department of Environmental Protection, March, 1991 and as amended. The terms of Sections 1.0-14.0 of the *Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices* are hereby specifically incorporated herein and shall be enforced in accordance with this Ordinance.

**Option #2:** Incorporation of an outside document as a reference to meeting requirements within the shoreland zoning ordinance:

This option simply states that the specified outside document offers methods that will meet the requirements of the shoreland zoning ordinance, but a shoreland permit applicant is not *required* to refer to this specified outside document. In other words, the applicant can refer to other documents besides the specified document, but in doing so may or may not meet the requirements of the shoreland ordinance. Typical language in Section 15, *Performance Standards*, of the model shoreland zoning ordinance would be as follows. It need be stated only once to apply to all the subsections of Section 15:

The publication, (*Title, Author, Publication Date*), is hereby incorporated as a guide for BMPs to meet the performance standards of Section 15. Adherence to the BMPs of said (*Title*), shall constitute meeting the requirements of Section 15 of this ordinance.

**b. Related Provisions.** In order that the Town (City) may be assured that the landowner who has acquired an approved shoreland zoning permit complies with all applicable BMPs, language in the ordinance can allow for appropriate monitoring by the Town (City). It should be clear who is to pay any costs for monitoring involving experts other than the CEO. Outside consultant experts would bill the town or city for their services. Ordinance language could be as follows:

At least ten (10) days before beginning construction or any improvement pursuant to an approved shoreland zoning permit involving any BMP, the permit holder shall notify the code enforcement officer (CEO). The notice shall include the type of construction or improvement, the BMP involved, beginning date, and expected duration of the project. The CEO, who may consult with the Planning Board on any shoreland permit, may contact a county Soil and Water Conservation District Office (SWCD) or other appropriate experts to monitor the BMPs during the construction or improvement on behalf of the Town (City) of X.

The CEO shall inform the shoreland permit holder of the reasonable monitoring schedule her/himself or through the Soil and Water Conservation District or other third party expert monitor chosen by the CEO and/or the Planning Board. Any costs to the Town (City) for third party monitoring shall be passed onto the shoreland permit holder. The CEO and/or Planning Board should set up a special sequestered escrow account for the specific permit at the time of approval of shoreland zoning permit. Such account shall be for a reasonable amount of money and time. If the amount does not cover all of the costs to the Town (City) for the expert third party monitoring, the CEO and/or Planning Board shall charge the permit holder an additional reasonable amount of money, which shall be paid by the permit holder to the CEO and/or Planning Board before the CEO shall approve the work under the shoreland permit and any related building permit or certificate of occupancy. Any unexpended funds in such escrow accounts shall be returned to the permit holder at time of approval of the construction or improvement under the shoreland permit.

Adoption of BMPs for construction activities in a shoreland zoning ordinance will require the CEO to more carefully tailor a project's inspection schedule to ensure installation and maintenance of the BMPs throughout the entire construction phase of a project, however long that may be. Whether monitoring the BMPs used in a construction project her/himself or overseeing a third party expert monitor, the CEO will need to establish a long-term schedule for inspections. This should include some expected, but unannounced site visits to be sure of compliance on the permit holder's part.

**c. Third Party Agreements.** A third party agreement is a useful tool that ensures a municipality that inspection and/or maintenance work necessary to a particular development project will be performed as specified. A third party agreement is a contract with a third party (someone other than the municipality and the developer) to perform regular inspections and to ensure that any conditions agreed to by the Planning Board and the developer are met.

For example, the Planning Board requires that a soil and water conservation district representative annually inspect the detention ponds and natural buffer strips that are

requirements of a phosphorus control program related to an approved subdivision development. As part of the plan's approval:

- both the Planning Board and the developer agree in writing on the plan and by written contract that the Conservation District will be employed,
- a District representative also signs the contract,
- the contract specifies that annual inspections will be made by District staff and recommendations will be made according to the terms of the contract,
- the contract specifies who will pay for the inspections,
- the contract should also include provisions for maintenance, such as who is responsible to pay for maintenance work recommended by the inspector and what arrangements are necessary to get it done.

Third party agreements are regarded as a benefit to the municipality. They relieve the CEO of long-term scheduling for inspections lasting 30 years or more into the future. Often more than several CEOs may have come and gone from the municipality within 30 years, thereby breaking the continuity and knowledge so necessary to properly fulfill long-term commitments. Therefore, the third party in three party agreements is usually an agency with paid staff as opposed to a volunteer group. Volunteer groups, such as a town conservation commission characteristically have a fairly rapid change of membership and sometimes are inactive for long periods of time. Agencies with paid staff and long-term commitments, often legislatively created, such as a conservation district, a water district, or a land trust, characteristically have professional employees or access to professional people who can perform the required inspections and oversee the maintenance or reconstruction work specified in the contract.

Third party agreements are usually reserved for structural BMP measures such as detention ponds and storm drainage facilities that are part of a permanent system to maintain water quality. Often these facilities are in or near a shoreland zone or have been required as part of a plan to meet the water quality objectives of a shoreland zoning ordinance. See Appendix E for a sample third party agreement.

## ***G. Shoreland Zoning Standards for Which BMPs Should Be Applied***

### ***1. Land Use Standards, Section 15***

Compliance with Section 15 of the *State of Maine Guidelines for Municipal Shoreland Zoning Ordinances* is the ninth criterion for issuance of a shoreland zoning permit by a Planning Board, as noted in Section 16. D(9).



Applicable to more than Planning Board review, however, Section 15. of the *Guidelines* also contains the minimum performance standards which ***all land uses in the shoreland zone must meet***. Local ordinances may be more restrictive in some instances. In a few instances, municipal ordinances have received DEP approval to be less restrictive than the *Guidelines* because they have documented "special local conditions" which justify less restrictive standards, as permitted by the Mandatory Shoreland Zoning Act (38 MRSA, Section 438-A.2.).

It should be noted at the outset that Section 15 Q, *Erosion and Sedimentation Control*, which requires that applicants for shoreland zoning approval prepare and submit written erosion and sedimentation control plans for activities which create soil disturbance, will play a central role in ensuring that the other standards of Section 15 which are listed below, are met. The written erosion and sedimentation control plan will specify how these standards are to be met, influencing the life of the development and its compliance, from the beginning of development review to inspections during construction to long term monitoring, maintenance, and if necessary, repair or replacement of BMPs needed for the project.

Although Section 15 is organized as a single section, there are really two types of performance standards within it, beginning with Sections 15 C. - 15 E. and ending with Sections 15 G.- 15 T. (Sections 15 A. and 15 B. are really space and bulk standards, and Section 15 F. is a list of prohibited uses. None of these subsections has anything to do with the use of BMPs.)

The two types of performance standards in Sections 15 C. through 15 T. are:

- (a) those which apply to all or nearly all projects in the shoreland zone; and
- (b) those standards which apply only to specific elements of these projects or only to projects involving specific land uses.

This manual will refer to the first type as "**universal**" and to the second type as, "**use-specific**".

Section 15's Universal standards include those for:

- 15 J. Stormwater Management
- 15 P. Clearing of Vegetation for Development
- 15 Q. Erosion and Sedimentation Control
- 15 R. Soils
- 15 S. Water Quality

Section 15's Use-specific standards include those for:

- 15 C. Piers, Dock's, Wharfs, Bridges and Other Structures and Uses Extending Over or Beyond the Normal High-Water Line of a Water Body or Within a Wetland
- 15 D. Campgrounds
- 15 E. Individual Private Campsites
- 15 G. Parking Areas
- 15 H. Roads and Driveways
- 15 I. Signs
- 15 K. Septic Waste Disposal
- 15 L. Essential Services
- 15 M. Mineral Exploration and Extraction
- 15 N. Agriculture
- 15 O. Timber Harvesting
- 15 T. Archaeological Sites

## ***H. BMPs Selection Tables***

### **1. Introduction to the BMP Tables**

The following BMP tables are provided to offer guidance in determining which BMPs are applicable to different land uses. BMPs offer many options to land users. The particular characteristics of each site's soils, topography, exposure to erosive forces, development, and use plans are unique. Thus, no table can accurately prescribe precisely which BMPs should be used. However, the tables are illustrative of the *range* of applicability of each BMP to the *range* of land uses permitted under shoreland zoning. They will provide a quick overview of the range of BMPs available for, or needed by, any particular land use in meeting both the universal and use-specific performance standards of Section 15.

When an applicant is preparing an application for a shoreland zoning permit, or when an application is being reviewed, the written erosion and sedimentation control plan which accompanies the application **must** spell out which erosion and sedimentation control measures (BMPs) will be used **and** the manner, location, sequence, and scheduling for their use.

The written erosion and sedimentation control plan should be developed and reviewed based upon Section 15 Q. of the *Guidelines*. A more detailed guide for erosion and sedimentation control planning is contained in the Introduction of the *Maine Erosion and Sedimentation Control Handbook for Construction*, on pages iv - x.

The process for selecting BMPs for compliance is as follows:

- a. Review the "universal" standards from Section 15 of the *Guidelines* to see how they apply to the particular project under consideration.

- b. Check to determine if "use-specific" standards are given for the particular project under consideration.
- c. Use the following three BMP tables to relate applicable performance standards to particular land uses; and BMPs to these performance standards.

Table 1: ***Land Uses in the Shoreland Zone***, is *Table 1* as contained in Section 14 of the *Guidelines*.

Table 2: ***Application of Standards to Land Uses***, identifies which uses the specific and/or universal standards apply to.

For each permissible land use in *Table 1*, *Table 2* identifies with an *X*, those standards (applicable subsections of Section 15's *Land Use Standards*) that could involve the use of BMPs.

Table 3: ***Selecting BMPs Applicable to Land Uses***, is used to identify BMPs, with potential applicability for meeting the particular standards established for each land use listed.

For each subsection of Section 15 of the shoreland zoning *Guidelines*, this table identifies:

- the potential applicability of each of the first 14 nonstructural BMPs for erosion and sedimentation,
- structural BMPs, collectively, which are applicable, and
- agricultural or timber harvesting BMPs which are applicable.

- d. A site inspection (as described in Section G of this manual) should be performed to check on the practical application of the BMP options available, or those identified for use in a submitted erosion and sedimentation control plan.

**TABLE 1. LAND USES IN THE SHORELAND ZONE**

<b>LAND USES</b>	<b>DISTRICT</b>					
	<b>SP</b>	<b>RP</b>	<b>LR</b>	<b>LC</b>	<b>GD</b>	<b>CFMA</b>
1. Non-intensive recreational uses not requiring structures such as hunting, fishing and hiking	yes	yes	yes	yes	yes	yes
2. Motorized vehicular traffic on existing roads and trails	yes	yes	yes	yes	yes	yes
3. Forest management activities except for timber harvesting & land management roads	yes	yes	yes	yes	yes	yes
4. Timber harvesting	yes	CEO	yes	yes	yes	yes
5. Clearing or removal of vegetation for activities other than timber harvesting	CEO	CEO <sup>1</sup>	yes	yes	yes	yes
6. Fire prevention activities	yes	yes	yes	yes	yes	yes
7. Wildlife management practices	yes	yes	yes	yes	yes	yes
8. Soil and water conservation practices	yes	yes	yes	yes	yes	yes
9. Mineral exploration	no	yes <sup>2</sup>	yes <sup>2</sup>	yes <sup>2</sup>	yes <sup>2</sup>	yes <sup>2</sup>
10. Mineral extraction including sand and gravel extraction	no	PB <sup>3</sup>	PB	PB	PB	PB
11. Surveying and resource analysis	yes	yes	yes	yes	yes	yes
12. Emergency operations	yes	yes	yes	yes	yes	yes
13. Agriculture	yes	PB	yes	yes	yes	yes
14. Aquaculture	PB	PB	PB	yes	yes	yes
15. Principal structures and uses						
A. One and two family residential, including driveways	PB <sup>4</sup>	PB <sup>9</sup>	CEO	CEO	CEO	no
B. Multi-unit residential	no	no	PB	PB	PB	no
C. Commercial	no	no <sup>10</sup>	no <sup>10</sup>	PB	PB	PB <sup>5</sup>
D. Industrial	no	no	no	no	PB	PB <sup>5</sup>
E. Governmental and institutional	no	no	PB	PB	PB	PB <sup>5</sup>
F. Small non-residential facilities for educational, scientific, or nature interpretation purposes	PB <sup>4</sup>	PB	CEO	CEO	CEO	PB <sup>5</sup>
16. Structures accessory to allowed uses	PB <sup>4</sup>	PB	CEO	CEO	yes	yes
17. Piers, docks, wharfs, bridges and other structures and uses extending over or below the normal high-water line or within a wetland						
a. Temporary	CEO <sup>11</sup>	CEO <sup>11</sup>	CEO <sup>11</sup>	CEO <sup>11</sup>	CEO <sup>11</sup>	CEO <sup>11</sup>
b. Permanent	PB	PB	PB	PB	PB	PB <sup>5</sup>
18. Conversions of seasonal residences to year-round residences	LPI	LPI	LPI	LPI	LPI	no
19. Home occupations	PB	PB	PB	CEO	yes	yes
20. Private sewage disposal systems for allowed uses	LPI	LPI	LPI	LPI	LPI	LPI
21. Essential services	PB <sup>6</sup>	PB <sup>6</sup>	PB	PB	PB	PB
A. Roadside distribution lines (34.5kV and lower)	CEO <sup>6</sup>	CEO <sup>6</sup>	yes <sup>12</sup>	yes <sup>12</sup>	yes <sup>12</sup>	yes <sup>12</sup>
B. Non-roadside or cross-country distribution lines involving ten poles or less in the shoreland zone	PB <sup>6</sup>	PB <sup>6</sup>	CEO	CEO	CEO	CEO
C. Non-roadside or cross-country distribution lines involving eleven or more poles in the shoreland zone	PB <sup>6</sup>	PB <sup>6</sup>	PB	PB	PB	PB
D. Other essential services	PB <sup>6</sup>	PB <sup>6</sup>	PB	PB	PB	PB
22. Service drops, as defined, to allowed uses	yes	yes	yes	yes	yes	yes
23. Public and private recreational areas involving minimal structural development	PB	PB	PB	CEO	CEO	CEO <sup>5</sup>
24. Individual, private campsites	CEO	CEO	CEO	CEO	CEO	CEO
25. Campgrounds	no	no <sup>7</sup>	PB	PB	PB	no
26. Road construction	PB	no <sup>8</sup>	PB	PB	PB	PB <sup>5</sup>
27. Land management roads	yes	PB	yes	yes	yes	yes
28. Parking facilities	no	no <sup>7</sup>	PB	PB	PB	PB <sup>5</sup>
29. Marinas	PB	no	PB	PB	PB	PB
30. Filling and earth moving of <10 cubic yards	CEO	CEO	yes	yes	yes	yes
31. Filling and earth moving of >10 cubic yards	PB	PB	CEO	CEO	CEO	CEO
32. Signs	yes	yes	yes	yes	yes	yes
33. Uses similar to allowed uses	CEO	CEO	CEO	CEO	CEO	CEO
34. Uses similar to uses requiring a CEO permit	CEO	CEO	CEO	CEO	CEO	CEO
35. Uses similar to uses requiring a PB permit	PB	PB	PB	PB	PB	PB

<sup>1</sup>In RP not allowed within 75 feet horizontal distance, of the normal high-water line of great ponds, except to remove safety hazards.

<sup>2</sup>Requires permit from the Code Enforcement Officer if more than 100 square feet of surface area, in total, is disturbed.

<sup>3</sup>In RP not allowed in areas so designated because of wildlife value.

<sup>4</sup>Provided that a variance from the setback requirement is obtained from the Board of Appeals.

<sup>5</sup>Functionally water-dependent uses and uses accessory to such water dependent uses only (See note on previous page).

<sup>6</sup>See further restrictions in Section 15( L)(2).

<sup>7</sup>Except when area is zoned for resource protection due to floodplain criteria in which case a permit is required from the PB.

<sup>8</sup>Except as provided in Section 15(H)(4).

<sup>9</sup>Single family residential structures may be allowed by special exception only according to the provisions of Section 16(E), Special Exceptions. Two-family residential structures are prohibited.

<sup>10</sup>Except for commercial uses otherwise listed in this Table, such as marinas and campgrounds, that are allowed in the respective district.

<sup>11</sup>Excluding bridges and other crossings not involving earthwork, in which case no permit is required.

<sup>12</sup>Permit not required' but must file a written "notice of intent to construct" with *CEO*.

NOTE: Item 17, in its entirety, should be deleted from Table 1 if a municipality elects not to regulate "piers, docks, wharfs, bridges and other structures and uses extending over or below the normal high-water line or within a wetland".

NOTE: A person performing any of the following activities shall require a permit from the Department of Environmental Protection, pursuant to 38 M.R.S.A. section 480-C, if the activity occurs in, on, over or adjacent to any freshwater or coastal wetland, great pond, river, stream or brook and operates in such a manner that material or soil may be washed into them:

- A. Dredging, bulldozing, removing or displacing soil, sand, vegetation or other materials;
- B. Draining or otherwise dewatering;
- C. Filling, including adding sand or other material to a sand dune; or
- D. Any construction or alteration of any permanent structure.

TABLE 3 Selecting BMPs Applicable to Land Uses BMP's		SZ Guidelines		Section 15C Piers, Docks, Wharfs, and Bridges and Other Structures & Uses Extending Over or Beyond NHWL of Water Body or Wetland	Section 15D Campgrounds	Section 15E Individual Private Campsites	Section 15G Parking Areas	Section 15H Roads & Driveways	Section 15I Signs	Section 15J Stormwater Runoff	Section 15K Septic Waste Disposal	Section 15L Essential Services
#	Name	Manual	Page #									
1.0	Temp. Mulch	E&S	N-1	✓	✓	✓	✓	✓	✓	✓	✓	✓
2.0	Temp. Grass & Legume Cover	E&S	N-9	✓	✓	✓	✓	✓	✓	✓	✓	✓
3.0	Permanent Grass & Legume Cover	E&S	N-12	✓	✓	✓	✓	✓	✓	✓	✓	✓
4.0	Sodding	E&S	N-21	✓	✓	✓	✓	✓	✓	✓	✓	✓
5.0	Trees, Shrubs, Vines & Ground Covers	E&S	N-26	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.0	Permanent Mulching	E&S	N-44	✓	✓	✓	✓	✓	✓	✓	✓	✓
7.0	Tree Protection	E&S	N-46	✓	✓	✓	✓	✓	✓	✓	✓	✓
8.0	Vegetative Sand Dunes and Tidal Bank Protection	E&S	N-50	✓	✓	✓	✓	✓	✓	✓	✓	✓
9.0	Vegetated Filter Strip	E&S	N-65	✓	✓	✓	✓	✓	✓	✓	✓	✓
10.0	Gravel Pit Reclamation	E&S	N-68									
11.0	Vegetative Stream Bank Stabilization	E&S	N-73		✓					✓		
12.0	Topsolling	E&S	N-84		✓		✓	✓	✓	✓	✓	
13.0	Topsoil Substitutes and Soil Amendments	E&S	N-88		✓		✓	✓	✓	✓	✓	
14.0	Sediment Barriers	E&S	N-90	✓	✓	✓	✓	✓	✓	✓	✓	✓
	E&S BMPs 15.0-29.0											
	E&S BMPs 30.0-69.0			✓								
	Agricultural BMPs											
	Timber Harvesting BMPs											
	Stormwater Mgmt BMPs			✓						✓		

TABLE 3 continued Selecting BMPs Applicable to Land Uses  BMP's		SZ Guidelines Section #: Name:		Section 15M Mineral Exploration and Extraction	Section 15N Agriculture	Section 15O Timber Harvesting	Section 15P Clearing of Vegetation for Development	Section 15Q Erosion and Sedimentation Control	Section 15R Soils	Section 15S Water Quality	Section 15T Archaeolog- ical Sites
#	Name	Manual	Page #								
1.0	Temp. Mulch	E&S	N-1	✓			✓	✓	✓	✓	✓
2.0	Temp. Grass & Legume Cover	E&S	N-9	✓			✓	✓	✓	✓	✓
3.0	Permanent Grass & Legume Cover	E&S	N-12	✓			✓	✓	✓	✓	✓
4.0	Sodding	E&S	N-21					✓	✓	✓	✓
5.0	Trees, Shrubs, Vines & Ground Covers	E&S	N-26				✓	✓	✓	✓	✓
6.0	Permanent Mulching	E&S	N-44				✓	✓	✓	✓	✓
7.0	Tree Protection	E&S	N-46				✓	✓	✓	✓	✓
8.0	Vegetative Sand Dunes and Tidal Bank Protection	E&S	N-50				✓	✓	✓	✓	✓
9.0	Vegetated Filter Strip	E&S	N-65					✓	✓	✓	✓
10.0	Gravel Pit Reclamation	E&S	N-68	✓				✓	✓	✓	✓
11.0	Vegetative Stream Bank Stabilization	E&S	N-73				✓	✓	✓	✓	✓
12.0	Topsolling	E&S	N-84	✓				✓	✓	✓	✓
13.0	Topsoil Substitutes and Soil Amendments	E&S	N-88	✓			✓	✓	✓	✓	✓
14.0	Sediment Barriers	E&S	N-90	✓			✓	✓	✓	✓	✓
	E&S BMPs 15.0-29.0			✓				✓	✓	✓	✓
	E&S BMPs 30.0-69.0							✓	✓	✓	✓
	Agricultural BMPs				✓			✓	✓	✓	✓
	Timber Harvesting BMPs					✓		✓	✓	✓	✓
	Stormwater Mgmt BMPs						✓	✓	✓	✓	✓

## **2. Identifying BMPs That May Be Used To Comply With Specific Standards**

In order to show in greater detail how BMPs may be applied to achieve standards for the above subsections, each shoreland zoning performance standard is considered individually below.

Note the language of each standard that identifies the BMPs that are options for compliance with the standard. That language will be given emphasis using bold italics. This is a selective listing. Not all of the standards in each subsection of Section 15 are listed. Only those that have particular relevance to the use of BMPs are presented.

### **A. "Universal" Standards**

#### **15 J. Storm Water Runoff**

- (1) All new construction and development shall be designed to minimize storm water runoff from the site in excess of the natural predevelopment conditions. Where possible, existing natural runoff control features, such as berms, swales, terraces and wooded areas, shall be retained in order to reduce runoff and encourage infiltration of stormwaters.

Storm water runoff control systems shall be maintained as necessary to ensure proper functioning.

#### **15 P. Clearing of Vegetation for Development**

- (2.e.) In order to maintain a buffer strip of vegetation, when the removal of storm-damaged, diseased, unsafe, or dead trees results in the creation of cleared openings, these openings shall be replanted with native tree species unless existing new tree growth is present.

#### **15 Q. Erosion and Sedimentation Control**

- (1) All activities which involve filling, grading, excavation or other similar activities which result in unstabilized soil conditions and which require a permit shall require a written soil erosion and sedimentation control plan. The plan shall be submitted to the permitting authority for approval and shall include, where applicable, provisions for:
  - (a) Mulching and revegetation of disturbed soil.
  - (b) Temporary runoff control features such as bay bales, silt fencing or diversion ditches.
  - (c) Permanent stabilization structures such as retaining walls or riprap.
- (2) In order to create the least potential for erosion, development shall be designed to fit with the topography and soils of the site. Areas of steep slopes where high cuts and fills may be required shall be avoided wherever possible, and natural contours shall be followed as closely as possible.
- (3) Erosion and sedimentation control measures shall apply to all aspects of the proposed project involving land disturbance, and shall be in operation during all stages of the activity. The amount of exposed soil at every phase of construction shall be minimized to reduce the potential for erosion.



- (4) Any exposed ground area shall be temporarily or permanently stabilized within one (1) week from the time it was last actively worked, by use of riprap, sod, seed, and mulch, or other effective measures. In all cases permanent stabilization shall occur within nine (9) months of the initial date of exposure. In addition:
  - (a) Where mulch is used, it shall be applied at a rate of at least one (1) bale per five hundred (500) square feet and shall be maintained until a catch of vegetation is established.
  - (b) Anchoring the mulch with netting, peg and twine or other suitable method may be required to maintain the mulch cover.
  - (c) Additional measures shall be taken where necessary in order to avoid siltation into the water. Such measures may include the use of staked hay bales and/or silt fences.
- (5) Natural and man-made drainage ways and drainage outlets shall be protected from erosion from water flowing through them. Drainageways shall be designed and constructed in order to carry water from a twenty five (25) year storm or greater, and shall be stabilized with vegetation or lined with rip-rap.

**15 S. Water Quality.** No activity shall deposit on or into the ground or discharge to the waters of the State any pollutant that, by itself or in combination with other activities or substances, will impair designated uses or the water classification of the water body.

#### **“Use-Specific” Standards**

**15 C. Piers, Docks, Wharves, Bridges and Other Structures and Uses Extending Over or Beyond the Normal High-Water Line of a Water Body or Within a Wetland.**

- (1) Access from shore shall be developed on soils appropriate for such use and constructed so as to control erosion.

**15 G. Parking Areas**

- (2) Parking areas shall be adequately sized for the proposed use and shall be designed to prevent stormwater runoff from flowing directly into a water body, and where feasible, to retain all runoff on-site.

**15 H. Roads and Driveways.** The following standards shall apply to the construction of roads and/or driveways and drainage systems, culverts and other related features.

- (1) Roads and driveways shall be set back at least one-hundred (100) feet from the normal high-water line of a great pond classified GPA or a river that flows to a great pond classified GPA, and seventy-five (75) feet from the normal high-water line of other water bodies, tributary streams, or the upland edge of a wetland unless no reasonable alternative exists as determined by the Planning Board. If no other reasonable alternative exists, the Planning Board may reduce the road and/or driveway setback requirement to no less than fifty (50) feet upon clear showing by the applicant that appropriate techniques will be used to prevent sedimentation of the water body. Such techniques may include, but are not limited to, the installation of settling basins, and/or the effective use of additional ditch relief culverts and turnouts placed so as to avoid sedimentation of the water body, tributary stream, or wetland.

On slopes of greater than twenty (20) percent the road and/or driveway setback shall be increased by ten (10) feet for each five (5) percent increase in slope above twenty (20) percent.

This paragraph shall neither apply to approaches to water crossings nor to roads or driveways that provide access to permitted structures, and facilities located nearer to the shoreline due to an operational necessity.

- (5) Road and driveway banks shall be no steeper than a slope of two (2) horizontal to one (1) vertical, and shall be graded and stabilized in accordance with the provisions for erosion and sedimentation control contained in Section 15. (2).
- (6) In order to prevent road surface and driveway drainage from directly entering water bodies, tributary streams, or wetlands, roads and driveways shall be designed, constructed, and maintained to empty onto an unscarified buffer strip at least (50) feet plus two times the average slope, in width between the outflow point of the ditch or culvert and the normal high-water line of a water body, tributary stream, or upland edge of a wetland. Surface drainage which is directed to an unscarified buffer strip shall be diffused or spread out to promote infiltration of the runoff and to minimize channelized flow of the drainage through the buffer strip.
- (7) Ditch relief (cross drainage) culverts, drainage dips and water turnouts shall be installed in a manner effective in directing drainage onto unscarified buffer strips before the flow gains sufficient volume or head to erode the road, driveway, or ditch. To accomplish this, the following shall apply:
  - (a) Ditch relief culverts, drainage dips and associated water turnouts shall be spaced along the road at intervals no greater than indicated in the following table:

Grade (Percent)	Spacing (Feet)
0-2	250
3-5	200-135
6-10	100-80
11-15	80-60
16-20	60-45
21 +	40

- (b) Drainage dips may be used in place of ditch relief culverts only where the grade is ten (10) percent or less.
  - (c) On sections having slopes greater than ten (10) percent, ditch relief culverts shall be placed at approximately a thirty (30) degree angle downslope from a line perpendicular to the centerline of the road or driveway.
  - (d) Ditch relief culverts shall be sufficiently sized and properly installed in order to allow for effective functioning, and their inlet and outlet ends shall be stabilized with appropriate materials.
- (8) Ditches, culverts, bridges, dips, water turnouts and other storm water runoff control installations associated with roads and driveways shall be maintained on a regular basis to assure effective functioning.

**15 M. Mineral Exploration and Extraction.** Mineral exploration to determine the nature or extent of mineral resources shall be accomplished by hand sampling, test boring, or other methods which create minimal disturbance of less than one hundred (100) square feet of ground surface. A permit from the Code Enforcement Officer shall be required for mineral exploration which exceeds the above limitation. All excavations, including test pits and holes shall be

immediately capped, filled or secured by other equally effective measures, so as to restore disturbed areas and to protect the public health and safety.

Mineral extraction may be permitted under the following conditions:

- (1) A reclamation plan shall be filed with, and approved by the Planning Board before a permit is granted. Such plan shall describe in detail procedures to be undertaken to fulfill the requirements of Section 15 (M) (4) below.
- (2) No part of any extraction operation, including drainage and runoff control features shall be permitted within one hundred (100) feet of the normal high-water line of a great pond classified GPA or a river flowing to a great pond classified GPA, and within seventy-five (75) feet, horizontal distance, of the normal high-water line of any other water body, tributary stream, or the upland edge of a wetland. Extraction operations shall not be permitted within fifty (50) feet, horizontal distance, of any property line, without written permission of the owner of such adjacent property.
- (4) Within twelve (12) months following the completion of extraction operations at any extraction site, which operations shall be deemed complete when less than one hundred (100) cubic yards of materials are removed in any consecutive twelve (12) month period, ground levels and grades shall be established in accordance with the following:
  - (a) All debris, stumps, and similar material shall be removed for disposal in an approved location, or shall be buried on-site. Only materials generated on-site may be buried or covered on-site.
  - (b) The final graded slope shall be two to one (2:1) slope or flatter.
  - (c) Top soil or loam shall be retained to cover all disturbed land areas, which shall be reseeded and stabilized with vegetation native to the area. Additional topsoil or loam shall be obtained from off-site sources if necessary to complete the stabilization project.
- (5) In keeping with the purposes of this Ordinance, the Planning Board may impose such conditions as are necessary to minimize the adverse impacts associated with mineral extraction operations on surrounding uses and resources.

## **15 N. Agriculture**

- (1) All spreading of manure shall be accomplished in conformance with the Manure Utilization Guidelines published by the Maine Dept. of Agriculture on November 1, 2001, and the Nutrient Management law (7 M.R.S.A., §§ 4201-4209)
- (2) Manure shall not be stored or stockpiled within one hundred (100) feet, horizontal distance, of a great pond classified GPA or a river flowing to a great pond, classified GPA, or within seventy-five (75) feet horizontal distance, of other water bodies, tributary streams, or wetlands. All manure storage areas within the shoreland zone must be constructed or modified such that the facility produces no discharge of effluent or contaminated storm water.
- (3) Agricultural activities involving tillage of soil greater than forty thousand (40,000) square feet in surface area, within the shoreland zone shall require a Conservation Plan to be filed with the Planning Board. Non-conformance with the provisions of said plan shall be considered to be a violation of this Ordinance.
- (4) Newly established livestock grazing areas shall not be permitted within one hundred (100) feet, horizontal distance, of the normal high-water line of a great pond classified GPA; within

seventy-five (75) feet, horizontal distance of other water bodies and coastal wetlands, nor; within twenty-five (25) feet, horizontal distance, of tributary streams, and freshwater wetlands. Livestock grazing associated with ongoing farm activities, and which are not in conformance with the above setback provisions may continue, provided that such grazing is conducted in accordance with a Conservation Plan.

#### **15 O. Timber Harvesting**

- (1) In a Resource Protection District abutting a great pond, timber harvesting shall be limited to the following:

Within the strip of land extending 75 feet, horizontal distance, inland from the normal high-water line, timber harvesting may be conducted when the following conditions are met:

The ground is frozen;

There is no resultant soil disturbance;

The removal of trees is accomplished using a cable or boom and there is no entry of tracked or wheeled vehicles into the 75-foot strip of land;

There is no cutting of trees less than 6 inches in diameter; no more than 30% of the trees 6 inches or more in diameter, measured at 4 ½ feet above ground level, are cut in any 10-year period; and a well-distributed stand of trees and other natural vegetation remains; and

A licensed professional forester has marked the trees to be harvested prior to a permit being issued by the municipality.

- (2) Except in areas as described in Section 15 (O)(1) above, timber harvesting shall conform with the following provisions:

(a) No accumulation of slash shall be left within fifty (50) feet of the normal high-water line of a water body. In all other areas slash shall either be removed or disposed of in such a manner that it lies on the ground and no part thereof extends more than four (4) feet above the ground. Any debris that falls below the normal high-water line of a water body or tributary stream shall be removed.

(b) Timber harvesting equipment shall not use stream channels as travel routes except when:

(i) Surface waters are frozen; and

(ii) The activity will not result in any ground disturbance.

(c) All crossings of flowing water shall require a bridge or culvert, except in areas with low banks and channel beds which are composed of gravel, rock or similar hard surface which would not be eroded or otherwise damaged.

(d) Skid trail approaches to water crossings shall be located and designed so as to prevent water runoff from directly entering the water body or tributary stream. Upon completion of timber harvesting, temporary bridges and culverts shall be removed and areas of exposed soil revegetated.

(e) Except for water crossings, skid trails and other sites where the operation of machinery used in timber harvesting results in the exposure of mineral soil shall be located such that an unscarified strip of vegetation of at least seventy-five (75) feet, horizontal distance, in width for slopes up to ten (10) percent shall be retained between the exposed mineral soil and the normal high-water line of a water body or upland edge of a wetland. For

each ten (10) percent increase in slope, the unscarified strip shall be increased by twenty (20) feet, horizontal distance. The provisions of this paragraph apply only to a face sloping toward the water body or wetland, provided, however, that no portion of such exposed mineral soil on a back face shall be closer than twenty five (25) feet, horizontal distance, from the normal high-water line of a water body or upland edge of a wetland.

## ***I. Erosion and Sedimentation Control Plan Review and Construction Site Inspection***

### **1. Review the Approved Plan**

A copy of any approved erosion and sedimentation control plan submitted in conjunction with an application for construction activity, which is to be used for construction of the measures on site, should be given to the code enforcement officer. Appendix G contains a review checklist for plan submission that provides a thorough list of items that should be on a submitted plan and must be if it is to be reviewed by the Cumberland County Soil and Water Conservation District. This checklist may be used to determine whether additional information should be requested. In the case of a large project, a plan may include several construction phases designed to minimize soil and vegetation disturbance at the site at any one time. The plan should consist of a map showing the location of measures to be implemented, in addition to a written narrative detailing whatever control measures are to be implemented on site including the dimensions of structural measures. The construction plans (blueprints) themselves should also have a narrative summary detailing the control measures to be implemented on site. Without this narrative printed on the blueprints, the contractor is without vital information during construction. This narrative should include:

- 1) A summary and description of materials to be used.
- 2) A summary of materials application, including manufacturers recommendations for selection and installation techniques for materials chosen.
- 3) A building schedule outlining the sequence of construction activities, including dates (estimates).
- 4) Winter construction schedule and additional measures of soil protection.
- 5) Sequencing of control measures consistent with that of construction activities.
- 6) Seasonal restrictions.
- 7) Temporary vs. Permanent measures clearly identified.
- 8) Temporary seeding measures (mixes and dates).
- 9) Permanent seeding measures (mixes and dates).
- 10) Where and when to use mulch netting taking into consideration slopes, wind, and winter months.

- 11) Maintenance schedule for measures during and following construction, if needed.
- 12) Clearing restrictions and covenants, if required.
- 13) Deed restrictions on clearing and cutting.
- 14) Covenants on buffer protection when appropriate in lake watersheds or references to recorded documents at the registry of deeds.

From this information the code enforcement officer should be able to learn the location of proposed structures on site, what erosion control measures will be implemented at locations disturbed by the project construction, and when and where construction activities will begin and proceed according to a schedule. When reviewing all of the information contained on a plan, it would be advantageous to highlight on the plan the following information:

- a. location of building(s) and other associated structures.
- b. critical areas including, but not limited to, steep slopes, streams and brooks (intermittent and perennial), lakes, ponds, wetlands, vegetation which has been planned around and is marked for preservation, and other unique features that are to be preserved, all of which must be safeguarded during construction. Make note of any time limits for completing construction in sensitive natural areas. For example, waterways, ditches and ponds should be revegetated before September 15th.
- c. erosion control measures to be employed. Identify which of these will be under the supervision of a consulting engineer and which will be enforced by a CEO, thus requiring inspection for compliance.

## **2. Consult the BMP Manual and Prepare an Inspection Schedule**

The next step in this process will be to review in the BMP manual those measures that are planned for this project that the CEO is responsible for inspecting. Identify what the focus of an inspection should be. That is, identify what about a particular measure is critical to its success. This may be the application of the correct volume of mulch material, use of the materials specified in the plan or their equivalent; or the correct installation of some measures may be critical to ensure their value as a part of the control plan. (Hint: focus on the specifications associated with each measure.) Putting it all together, determine which aspects of this plan are most subject to fail. This will help to prioritize an inspection process, allowing a CEO to utilize limited inspection

hours in the most efficient way. Below is a review of the first 14 nonstructural measures of the *Maine Erosion and Sediment Control Handbook for Construction: Best*



*Management Practices.* The objectives of this review are: for each measure, to assist with difficult language, clarify application rates, identify what CEOs should be considering, identify likely points of failure, and from this identify inspection needs.

### **1.0 Temporary Mulching.**

Inspect application coverage, especially near sensitive areas, before and after rain:

- regardless of the application rate specified (number of hay bales per 1000 sq. ft.), the soil should be covered, not visible, so that rain impact can not occur.
- critical when close to sensitive water bodies.
- may check delivery receipts for quantity.
- inspect and maintain **before** it rains, then check after.
- lack of use of netting and/or binder where there is strong wind or on slopes greater than 8% is the most common reason why a day or two after mulching it looks inadequate.
- check contact between mulch mats and soil. Firm contact is necessary to prevent undermining of mulch.

Check for adequacy of stapling on mats:

- too few staples is likely to cause failure.

Upgradient surface runoff must be diverted from flowing over the newly seeded and mulched area.

Where failure of netting or mat material is occurring, compare manufacturers recommendations for use of products against characteristics of the site where application is being made. Selection of the wrong product for the job can cause failure.

**2.0 Temporary Grass and Legume Cover.** Far too often this is overlooked. The greatest soil loss occurs just after disturbance before final grading.

Inspect 7 days after planting and mulching:

- at a minimum, 95% of the soil surface should be covered by vegetation. Percent coverage can be checked by bending over and looking for fine growth at a low angle and scratching a 12" square in the ground. Evaluate the cover on a small scale.

- slopes greater than 15% should be netted to hold the mulch in place. During the winter months, this requirement applies to slopes greater than 8%.
- any evidence of erosion or sedimentation must be dealt with by repair or use of additional temporary measures (different mulches, filter barriers, check dams, etc.).
- temporary seedings should then be inspected periodically.

### **3.0 Permanent Grass and Legume Cover.**

Inspect 7 days after seeding and mulching:

Check percent of vegetative cover:

- check as for temporary seeding above.

Check adherence to seeding dates:

- failure is likely when seeding is done too late in the fall when no seeding or dormant seeding should be done instead.

Where failure has occurred, review seed bed preparation and seed mixture with developer:

- often failure results from inadequate seedbed preparation and/or inadequate moisture.
- seed selection is also critical to success. If the site is located where maintenance and fertilizing is unlikely, a legume should be used.

**4.0 Sodding.** Definition of rhizomes: horizontal stems that have a mass of roots which spread underground and send up vertical leaves or shoots above ground.

Check for proper layout of sod and staples on steep slopes (pages N23 - N25 of BMP manual). In critical areas sod should be secured with chicken wire or netting and staples:

- failure is likely where there has been a lack of moisture after transplant. Requirements are 1" per day the first week, 1" every other day during week two, and 1" every third day for week three, then regular watering for the season.

**5.0 Trees, Shrubs, Vines & Ground Cover.** Careful adherence to selection of species compatible with soil and moisture conditions at a site and proper planting

techniques will assure success. Failure is likely otherwise. Ensure that maintenance is performed according to agreements made.

**6.0 *Permanent Mulching.*** Fiber mulches mixed with hydroseed is not enough protection.

- Strongly recommend a layer of straw or hay mulch over the hydroseed to protect them from thunderstorms after dry spells.
- The resource conservation mix that DOT has been using recently has proven to be very hardy and resists erosion better on steeper slopes than regular landscaping bark mulch.

**7.0 *Tree Protection.*** Review site planning with an applicant. No trees should be destroyed or altered until the layout of buildings and utility systems is final. During any preconstruction conference, tree preservation and protection measures should be reviewed. Before clearing begins, the limits of clearing should be defined. Clearing activity should not intrude upon the drip line area beneath a tree and must not be closer than 5 feet away from the trunk of a tree. Trees within the clearing limits to be retained should be flagged for identification and those within 40 feet of a building proposed for construction should be physically protected. See page N48 section 7.6.7 of the BMP manual for acceptable means. Altering the grade around any tree to be retained should be carefully planned for. When the root zone of a tree has been compacted, the soil should be aerated. Any damage to trees on the site, which will remain, should be repaired immediately. The use of rubber hoses, wood, and wires in contact with the bark is not recommended any more when staking a tree. It is now suggested that nylons be used.

**8.0 *Vegetative Sand Dune and Tidal Bank Protection.*** Remember that any work on coastal dunes must be permitted by the DEP under the Natural Resources Protection Act.

- Require adherence to planting schedules and ensure that fencing is erected immediately after planting at a distance of 15 feet from the planted area.

Where plans include building dunes:

- check the distances between lines of dunes and from the mean high tide line (MHT). Also check for position of fence relative to the water line and prevailing winds. A lack of understanding about placement of fencing to trap wind blown sands causes failure.
- check the condition of fencing, for weaving of fence between posts, gauge of tie wires, and exposure of fence at the base.

- check spacing of posts and depth of set.
- check planting patterns. They are specific and proven to work.

**9.0 *Vegetated Filter Strip.*** A constructed or natural strip or area of vegetation for removing sediment, organic matter and other pollutants from runoff.

- Check the width of a filter strip as compared to plans. Filter strips should be a minimum of 15 feet and placed along contours whenever possible. No construction activity is allowed within the strip.
- Check for soil leaving strips during rain or evidence of it. This is a sign of failure.
- Failure is likely if the filter is used for continuous trapping of sediment, i.e., parking lot sands. Vegetation will be lost when covered. In this case, the strip should be power brushed to remove sands. Strips filtering parking lot runoff should be a minimum of 25 feet wide.

**10.0 *Gravel Pit Reclamation.*** When topsoil is added to the sloped gravel surface, it must be mixed at the interface of the two materials. Otherwise failure is likely. Where the two layers remain separate, the soil layer slips off the gravel when vegetation becomes too heavy. Many highway side slopes are testimony to this.

- Require adherence to seed selection and scheduling. Failure is otherwise likely.
- Check that mixes, which require incorporation with soil, are properly seeded. This is critical for success.
- Check that upgradient runoff has been diverted.
- Note that some of the seed mixes specified germinate and grow more slowly than mixes used on other sites. Complete cover may not occur for 2-4 years. Follow up seeding can be determined the year after seeding. Mulching at specified rates is critical to the success of these seedings.

**11.0 *Vegetative Streambank Stabilization.*** Don't underestimate the man power required to accomplish this work. The failure rate can be high. Patience and periodic inspection is a must. Repairs will be needed periodically.

- Banks must be checked after every high water event is over. Repairs must be made immediately.

- Placement of the wrong material in active currents where the roots cannot establish themselves will likely cause a failure.
- Check for essential anchoring of new plant material.
- Check that grasses are seeded immediately following shrub planting. Grass is essential to stabilization, since shrubs are generally not effective for the first two years.

Note: an additional source of live native material is *Bestman Products*, Cambridge, Mass.

**12.0 Topsoiling.** Definition: friable - readily crumbled.

- Check that all perimeter sediment controls are in place prior to any stripping of topsoil on site.
- Check the location of stockpiled soil relative to plans. It should not obstruct natural drainage nor cause damage off-site.
- Check side slopes of the stockpile. They must not exceed 2 to 1.
- Check for sediment barrier that must surround all topsoil stockpiles. Sediment should not be leaving the site, crossing property boundaries, or entering a water transport channel.
- Check that temporary seeding of stockpiles with annual rye grass is completed within 15 days of the formation of the stockpile (7 days in critical areas).
- Topsoil must not be spread when frozen or muddy, or when the subgrade is excessively wet. Check that topsoil is uniformly distributed to a minimum compacted depth of 4 inches (it must be in good contact with subgrade). Irregularities in the surface must be corrected to prevent the formation of depressions or water pockets.

When seeding results in failure, the likely cause is an improper amount of fertilizer added.

**13.0 Topsoil Substitutes and Soil Amendments.**

**14.0 Sediment Barriers.** The best measure is not to expose any parts of the site unnecessarily. This will reduce the maintenance and failure of barriers. Measures should be in place **before construction begins**.

Review section 14.5.1 of the BMP manual, *Problems with Straw or Hay Bale Barriers*. Improper use of hay bales in flowing conditions leads to increased erosion around the bales, as bales are not very porous. Also review section 14.6, *Specifications*.

- Check location of barriers against the plan.
- Inspection of bale barriers should conclude that they are properly entrenched and that flow around them can be prevented. They should not be found encircling catch basins on slopes.
- Bales must be placed in a square or rectangular shape around depressed catch basin inlets.
- Check for proper positioning of bales along the contour of a slope.
- Check for binding of bales around the sides, rather than along the tops and bottoms.
- When bales are used as a type of dam in a ditch with a low middle, water will pond behind them, allowing sands to settle out. Check that the waterfall over the top has a stone splash pad on the other side to prevent impact erosion.
- Check for manufacturer's certification of silt fence material.
- Check for proper installation of silt fencing. Failures are primarily due to lazy installation.
- Check that silt fence runs along the contours of the land. They will otherwise act as a channel wall and concentrate all the run off at one spot. This will inundate the fence with water and sediment and lead to failure, as well.
- Silt fence should not be found across channels. It cannot filter the volumes of water generated by channel flows.
- Check for removal of hay bales and silt fences after the completion of construction when upslope areas are vegetated or ditches are stabilized with growth or rip rap. The scar should be seeded and mulched or sodded. Hay bales left in place long after vegetation is established will eventually decay. On a slope, this will leave a hole and the erosion process will begin again. In a ditch they cause increased erosion around them once they clog with fine material. Bales also impede the migration of animals and vegetation, as well as stormwater. The best method of disposal is to use them as mulch. Silt fence stakes should be snapped off at grade and the fabric cut just below the surface with a sharp knife. Pulling it up will cause a channel to form and

erosion to begin again. Hay bales and silt fencing should not become a permanent part of the landscape.

**70.0 Riprap.** Riprap is a significant and widely used component of erosion control techniques, and proper sizing and installation is critical to the success of many erosion control techniques on site. Therefore, an understanding of its designation on erosion control plans is appropriate. Review the material specifications for riprap on pages M-1 through M-5 of the BMP manual for construction for a more complete understanding of riprap than is offered here.

D50 is the designation that specifies rock size. D50 = 6" means that 50% of the rock you see should be 6" (longest dimension) or greater and the rest smaller. The maximums and minimums are that no rock should exceed 1.5 times the D50 (9" in this example) and that no rocks shall be finer than 1". Dusty crushed rock is not acceptable. The thickness of the rip rap layer when placed should be 2.25 times the D50. That would be 14" in this case. The rock should be well graded, meaning a good mixture of sizes, versus uniform, which is all one size.

If plans call for an angular rock, one would look for rock that appears to be ledge blast, rough and angular. If the plans call for stone in general, expect to see rounded rock that has been sifted from bank run material.

- Check stone or rock size designation on plans and compare with what has been installed.
- Check for a variety of sizes in the mixture.
- Check the thickness of the applied riprap against plan specifications.
- Check for stability; are the rocks holding?
- Check that geotextile (erosion control blanket) specified is in place under rock channels; move some rocks and look for it.
- Check that rip rap has been installed in all areas specified on the plans, i.e., channels, culvert inlets and outlets, or as aprons or plunge pools at culvert outlets.

Prepare an inspection schedule and a checklist specific to the project that will detail when and where inspection efforts should be focused. See Appendix F for a sample inspection checklist.

### 3. Schedule a Preconstruction Conference

Prior to the onset of site work for a construction project, it is always a good idea to meet with the property owner, logger, contractor, and any engineers or consultants taking part in either the construction itself or monitoring the work in progress. Make the members of the construction team aware that you or others will be conducting inspections. Try to get off to a good start. Make sure the contractor has copies of plans with narrative detail. Review the details of plans on site to better understand what to expect. Discuss vegetation protection, scheduling of work, and when and where protection measures will be installed. Make a note of what vegetation there is in areas that are to be protected from construction impact. Take a look at the current condition of streams, wetlands, and waterbodies that are sensitive to the impact of erosion.

### 4. On site Inspection

With a completed inspection schedule and checklist, an inspection officer is ready to monitor construction and perform inspections. The best conditions for a site visit are rainy days or just after a storm event, and in winter during a thaw. Aside from trying to catch the site at its most vulnerable time, it is best to plan the site visit when the contractor is there. Visits should be timed around critical phases of construction, seasonal changes, and dates of particular interest, such as the last seeding date for the county. Once on site, look at the general layout and grade, having already studied the plans. Look for site layout as it was approved. Is the area exposed larger than expected or approved. Consider whether the disturbed area can be revegetated within the approved exposure window. This window of exposure will vary from site to site depending upon the time of year and proximity to sensitive areas. For example, an open area in the winter near a lake would require temporary mulch every Friday or before a snowfall. The same area in any other season would have a seven day exposure window. See the BMP manual for more information. Check that the slope grades toward erosion control structures. Check for obvious signs of flooding or erosion. Look for dirty water leaving the site.

The plans are best left in the vehicle as they get wet, can be distracting and hard to handle in the wind. Generally, the inspection should:

**Focus on sensitive/critical areas:** particularly streams and brooks (intermittent and perennial), lakes, ponds, and wetlands. Make sure efforts to protect these areas from erosion or sedimentation are being made when activities adjacent to them represent a threat.

Check to make sure vegetation that is to remain on sight is not damaged. Ensure that installed measures are working, i.e., there are no signs of erosion such as rilling or deposits of sediment outside of traps.

Make construction workers aware that no vehicles can be allowed to drive over



areas that have been seeded and/or mulched. Rutting and root damage will increase the potential for erosion.

In sensitive areas, the plan should call for two levels of erosion and sedimentation protection to prevent failure of a single measure from degrading the natural resource. Check for installation of backup control measures that should be in place within 100 feet of lakes, ponds, streams, rivers, and wetlands. These measures include:

- temporary mulches or seeding which offer surface protection;
- sediment barriers such as silt fencing and hay bales;
- vegetative buffer strips, road ditch turnouts, and level spreaders which serve as filters;
- sediment traps, sediment basins, and stone check dams which trap debris from runoff; and
- temporary diversions used to divert clean water away from construction areas or to divert dirty water away from sensitive areas.

If a sediment basin has been installed, check the quality of the water at the outlet, especially during a storm event. Be aware that a sediment basin is not a very effective control measure. Settling must be complete. Any fine soil particles released from the basin are a sign of failure. Fine soil particles carry phosphorus with them, delivering it to water bodies. A filter may be necessary, i.e., filtering the water through vegetation or good woods cover. The water cannot be allowed to channelize in this filter zone.

Dirty water leaving the site cannot be allowed and the problem will require correction.

Ensure that temporary cover (mulch, or temporary seeding) is being used, especially prior to storm events and from September 15th on. In sensitive areas, temporary cover for exposed soil should be in place within 7 days. Require it more quickly if bad weather is expected.

Permanent seeding should be mulched. Permanent cover including seedings, sod, trees, shrubs, vines and other ground covers should be checked for adequate growth, when making before an assessment for compliance. There should be 95% vegetative coverage at the time of this assessment.

**Check the location of topsoil storage** according to previous recommendations.

**Check for channel stability in drainage ways carrying runoff** from the project site. These are a priority for inspection, whether man made or natural. Make sure that they are not eroding, filling with sediment, or carrying sediment off site. The design engineer should be contacted when problems are identified.

Hay bales or silt fences should not be substituted for stone or log check dams in areas of concentrated flow.

**Check slope stability:** Look at slopes for signs of rill or gully erosion.

**An activity taking place in a stream, or which requires stream crossings** to accomplish, must be carefully monitored. The design engineer should be present while streams are diverted.

Carefully check protection along stream perimeters. Check to ensure that silt fencing has been installed correctly. This should not be installed across the channel, but along embankments. It must be embedded. Silt fencing must be maintained! Check to see if maintenance is required. It may be reinforced at the seams or supported with hay bales.

Temporary stream crossings should be erected for heavy machinery. Stream banks must remain in tact. No equipment should ever be found in a stream.

**Access ways to work sites** need to be established with a minimum of soil disturbance and protection provided for vegetation around these points.

## **5. Late Season Projects**

A late season project is one which is not completed prior to 45 days before the first killing frost for the region (see Figure 3.1, page N-15, of Construction BMP manual). After the average date of the first killing frost, seedings are not likely to be successful. The seeds may germinate, but probably the seedlings will not survive the winter. Control plans adjusted for construction after the first killing frost (during late fall or winter months) require a little different focus. Areas which require careful monitoring include slopes, disturbed areas adjacent to water bodies, streams, and wetlands, ditches, and side slopes of ponds. When these plans include seedings, expect to see double seeding rates and mulch, and/or more tackifier. While slopes greater than 15% require netting in all seasons, the slope that requires netting during the winter is reduced to 8%. Light grade mats are recommended for slopes of 3-8%. Heavy grade mats (excelsior) with anchoring are recommended for slopes greater than 15%, especially in areas adjacent to water bodies, streams, and wetlands. Heavy grade mats usually include some mulch material. If light grade netting is used, mulch should be used with it. If the product installed is something other than what the plan specifies, the substituted product should be similar. Ditches and ponds should be lined. Sod may be substituted for excelsior until November 15th. All late season project plans should have

contingency requirements written on the plans.

## 6. Special Projects

There are some special types of construction projects that by their nature, will expose extensive areas with erosion potential for long periods of time. These include gravel pits, clay mines, and golf courses. This exposed soil can be controlled through a combination of BMP measures that should all be carefully monitored. These measures include the following:

Surface protection: temporary mulch, temporary seeding

Filtering measures: sediment barriers (silt fencing, hay bale barriers), vegetated buffer strips, road ditch turnouts, and level spreaders.

Trapping measures: sediment traps, sediment basins, and stone check dams

Diversion measures: temporary diversion of clean water away from the construction areas and/or dirty water away from sensitive areas.

## 7. Construction Completion

When work at the project site is completed, there are two requirements that should be met prior to finding the project in compliance with the approved control plan. These are:

**Determine if the site is well stabilized:** Check for the establishment of good vegetative cover (95% coverage with healthy vegetation). Require reseeding, as necessary to achieve 95% coverage.

**Temporary measures must be removed.** These include:

- Silt fencing
- Hay bales
- Stone check dams
- Temporary slope drains
- Temporary diversions
- Perforated risers

## ***Appendix A***

## Issue Profile

### Clearing Vegetation in the Shoreland Zone

Revised: September, 2003      contact: 207-287-3901

The information presented in this Issue Profile is based on the standards in the *State of Maine Guidelines for Municipal Shoreland Zoning Ordinances* (Guidelines). If your community's locally adopted shoreland zoning ordinance has more restrictive standards those more restrictive provisions apply.

### Background

The Mandatory Shoreland Zoning Act requires municipalities to adopt land use regulations for all areas within the shoreland zone. The shoreland zone consists of areas within 250 feet of the normal high-water line of great ponds, rivers, and tidal waters; within 250 feet of the upland edge of non-forested freshwater and coastal wetlands; and within 75 feet of certain streams. Distances are measured horizontally.

The land use controls adopted by the municipalities must be consistent with or no less restrictive than the Board of Environmental Protection's *State of Maine Guidelines for Municipal Shoreland Zoning Ordinances*.

### Do the Guidelines for Municipal Shoreland Zoning Ordinances include limitations on vegetative cutting for development activities in shoreland areas?

Yes. The Guidelines limit the amount of vegetation that can be cut in the shoreland zone. In order to maintain water quality, protect wildlife, and to preserve the natural beauty of shoreland areas, it is important to maintain naturally vegetated shoreland areas. Studies have shown that the removal of natural vegetation and the subsequent conversion of the land to unvegetated surfaces, lawns, or other uniform vegetative cover fails to adequately protect water quality, mostly due to phosphorus and nitrogen runoff (nutrient runoff). An increase in the concentration of phosphorus within a lake of just 1 part per billion can result in a noticeable decrease in water quality.

Nutrient runoff into surface waters can be reduced or prevented by maintaining an uneven-aged stand of trees and other vegetation, including natural ground cover. Furthermore, by leaving the ground surface undisturbed, and by retaining natural depressions for water to collect, nutrients will be removed as water percolates through the upper layers of organic duff.

Water quality is not the only environmental issue affected by the loss of shorefront vegetation. Valuable habitat is lost, and disturbance of wildlife is greatly increased by the loss of a vegetative "screen". As a result, waterfowl, songbirds, shorebirds, and mammal populations are negatively affected.

Although natural beauty is a rather subjective term, most will agree that a Maine coast or inland waterbody with excessive removal of trees and other natural vegetation is not in the best interest of the people of Maine.

### What are the restrictions on clearing of vegetation in the shoreland zone?

Generally, in the first 75 feet from the normal high-water line or the upland edge of a wetland, no "clear-cut openings" (openings in the forest canopy greater than 250 square feet) are permitted, although 40% percent of the volume of trees four inches or more in diameter, measured at 4 1/2 feet above ground level can be removed in any ten year period. The cutting must be done such that a well-distributed stand of trees and other vegetation remains. This area is commonly referred to as the buffer strip. Adjacent to great ponds and rivers flowing to great ponds, the buffer strip extends for a distance of 100 feet from the normal high-water line.

Beyond the buffer strip, vegetative cutting limitations are less restrictive. In this area cleared openings are permitted provided that such clearings do not exceed 25% of the lot area, or ten thousand square feet, whichever is greater. In total, however, no more than 40% of the volume of trees can be removed in any 10-year period from the shoreland zone.

**Do the Department's Guidelines define a "well-distributed stand of trees and other vegetation"?**

The Department's Guidelines define a well-distributed stand of trees and other vegetation by a "point system". This system, which assigns values to trees down to two (2) inches in diameter, requires a certain total value of trees be maintained in any 25-foot by 25-foot square (625 square feet) area within the buffer strip.

The tree values are based on tree diameters and are as follows:

<u>Diameter of Tree at 4-1/2 feet</u>	<u>Points</u>
<u>Above Ground Level (inches)</u>	
2-4 inches	1
>4-12 inches	2
>12 inches	4

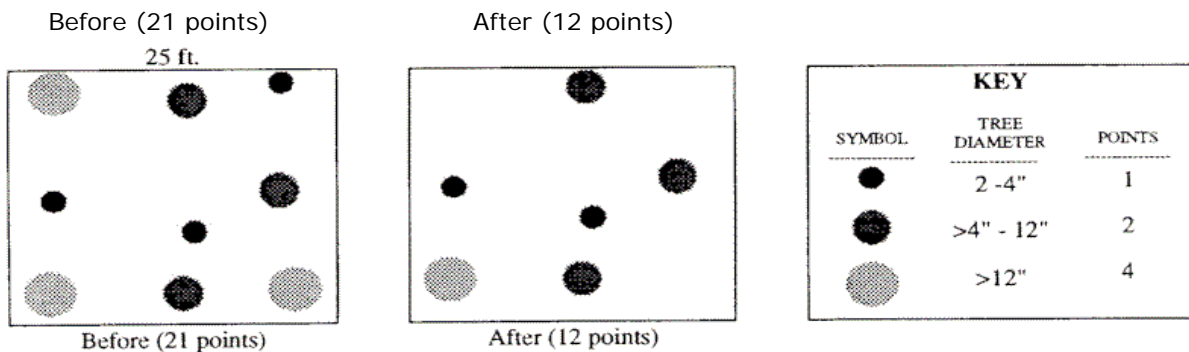
Adjacent to great ponds, and rivers and streams flowing to great ponds, a rating score of 12 or more points must be maintained. Adjacent to other water bodies, tributary streams, and wetlands, a "well-distributed stand of trees and other vegetation" is defined as maintaining a minimum rating score of 8 per 25-foot square area. The point system was created to provide a more enforceable standard for tree cutting activities within the buffer strip.

As an example of the above rating system, adjacent to a great pond, if a 25-foot X 25-foot plot contains two (2) trees between 2 and 4 inches in diameter, three trees between 4 and 12 inches in diameter, and two (2) trees over 12 inches in diameter, the rating score is:

$$(2 \times 1) + (3 \times 2) + (2 \times 4) = 16 \text{ points}$$

Thus, the 25-foot by 25-foot plot contains trees totaling 16 points. Trees totaling 4 points (16 – 12 = 4) may be removed from the plot provided that no cleared opening is created. The figure below is just one example of allowable cutting under the point system.

25 feet



**Is the cutting of vegetation less than 2 inches in diameter limited?**

Yes. State law prohibits new cleared openings from being created within the buffer area. If removal of vegetation less than two inches in diameter will create cleared openings, enough vegetation must be

retained to prevent the creation of such openings. Furthermore, adjacent to great ponds, and rivers and streams flowing to great ponds, in order to protect water quality vegetation less than three (3) feet in height must be maintained within the buffer strip.

**Are there areas where the cutting of vegetation is prohibited?**

Yes. Vegetative cutting is prohibited abutting a great pond zoned Resource Protection for a distance of 75 feet inland of the normal high-water line, except to remove safety hazards.

**May I cut within the buffer strip for shoreline access?**

Yes. A footpath not to exceed (10) feet in width as measured between tree trunks is permitted provided that a cleared line of sight to the water through the buffer strip is not created. In other words, the footpath must meander, rather than being a straight line to the water. The purpose of this limitation is to prevent runoff from funneling directly along the pathway to the water. By meandering the pathway, runoff is more likely to be trapped by vegetation and natural depressions within the buffer strip.

Adjacent to great ponds, and rivers and streams flowing to great ponds, the width of the footpath is limited to six (6) feet.

**May I prune trees within the buffer strip?**

Yes. Pruning of tree branches, on the bottom 1/3 of the tree is permitted. Dead branches are permitted to be pruned without restriction.

**What if a cleared opening is created within the buffer area due to storm damage, disease, or the removal of an unsafe tree?**



## Maine Department of Environmental Protection

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### Non-Conforming Structures in the Shoreland Zone Issue Profile

October 2003 (207)-287-2111

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The information presented in this Issue Profile is based on standards in the State of Maine Guidelines for Municipal Shoreland Zoning Ordinances. *If your community's locally adopted shoreland zoning ordinance has more restrictive standards those more restrictive provisions apply.*

#### **What is a non-conforming structure?**

A non-conforming structure is one which does not meet one or more of the following dimensional requirements: shoreline setback, height, or lot coverage. It is allowed to remain solely because it was in lawful existence at the time the ordinance or subsequent amendments took effect.

Non-conforming structures can be maintained and improved, without a permit, as part of *normal* upkeep. However, additions, expansions, or relocations require a permit from the municipal officials before work can begin.

#### **Are there limitations on expansions of non-conforming structures?**

**Yes.** Since January 1, 1989 the State's Mandatory Shoreland Zoning Act (Section 439-A(4)) had prohibited any portion of a structure which does not meet the shoreline setback requirement (typically 75 or 100 feet) from being expanded by more than 30% in floor area and volume. In addition, such structures cannot be expanded closer to the shoreline.

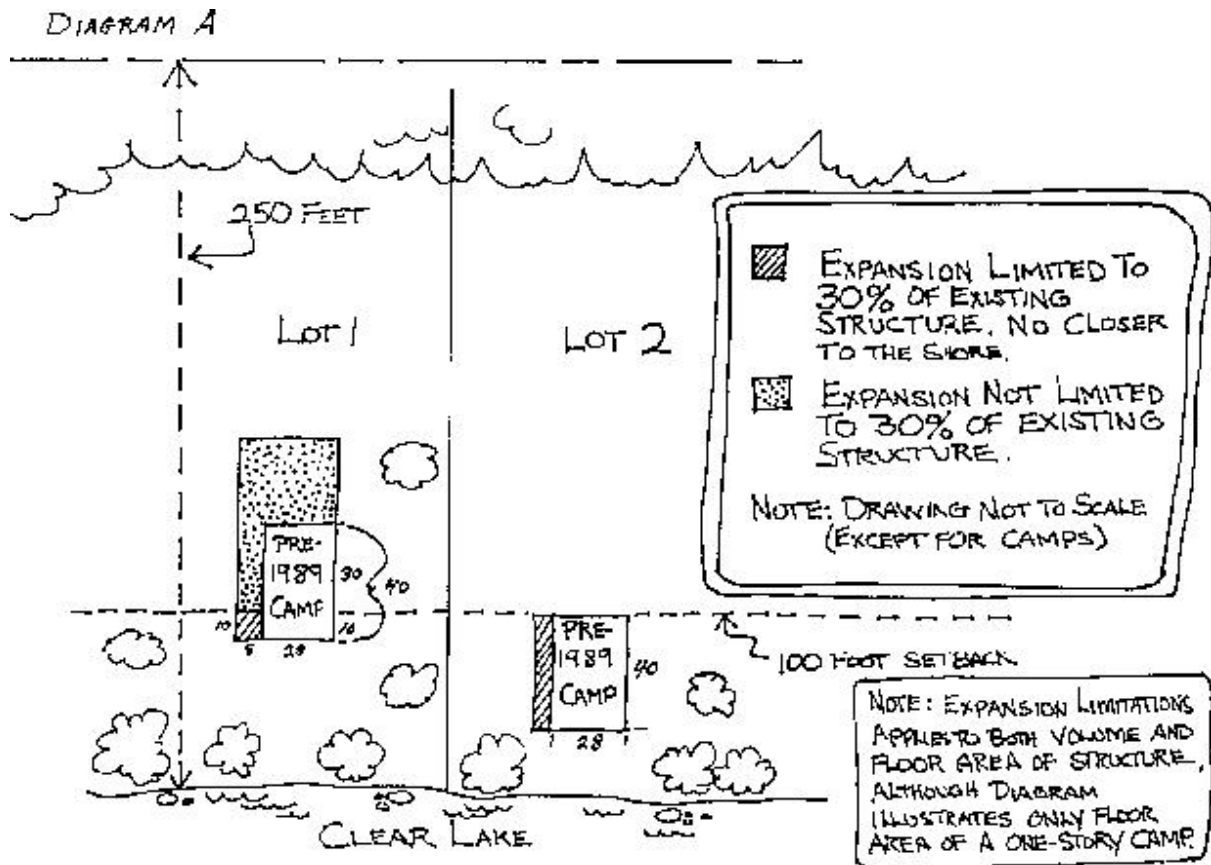
Effective July 9, 1998 the Shoreland Zoning Act was further amended to provide municipalities with an optional alternative for regulating expansions of structures that do not meet the waterbody or wetland setback standard. This new option enables a municipality to limit expansion of such nonconforming structures based on total floor area and structure height, taking into consideration the structure's distance from the shoreline. A municipality can only administer this alternative, rather than the long-standing 30% expansion limitation rule, if it is specifically incorporated into the local ordinance. Otherwise, the 30% expansion limitation rule is in effect.



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### The 30% Expansion Rule

The expansion limitation noted in the above paragraph applies only to that part of the structure which is non-conforming. It does not apply to that part of the structure which meets the setback requirement. For example, if only a 10' x 28' section of a 40' x 28' building is non-conforming as to setback, only the 10' x 28' section is subject to the floor area and volume limitation. The remainder of the building can be expanded in compliance with other applicable standards, including lot coverage limitations. (see diagram "A")



#### How are "volume" and "floor area" calculated?

Under the State Guidelines, floor area is the total square footage of all floors plus any porches and deck areas. Volume is defined as the cubic footage of all spaces enclosed within the exterior walls and roof of a structure.

IMPORTANT NOTE: Some town ordinances define volume and floor area to exclude certain areas such as unfinished attics, basements and certain storage areas. It is important to check the town ordinance before developing your plans.

#### Can I expand both the floor area and volume of my fully non-conforming structure up to the 30% limitation?

**Yes.** Both the volume and floor area can be expanded up to the 30% limitation. However, neither the floor area nor volume expansions can exceed the limitation. For example, if a proposal is made to expand the floor area by only 10%, but the proposed volume expansion is 35%, the project cannot be approved until the volume expansion is reduced below 30%.

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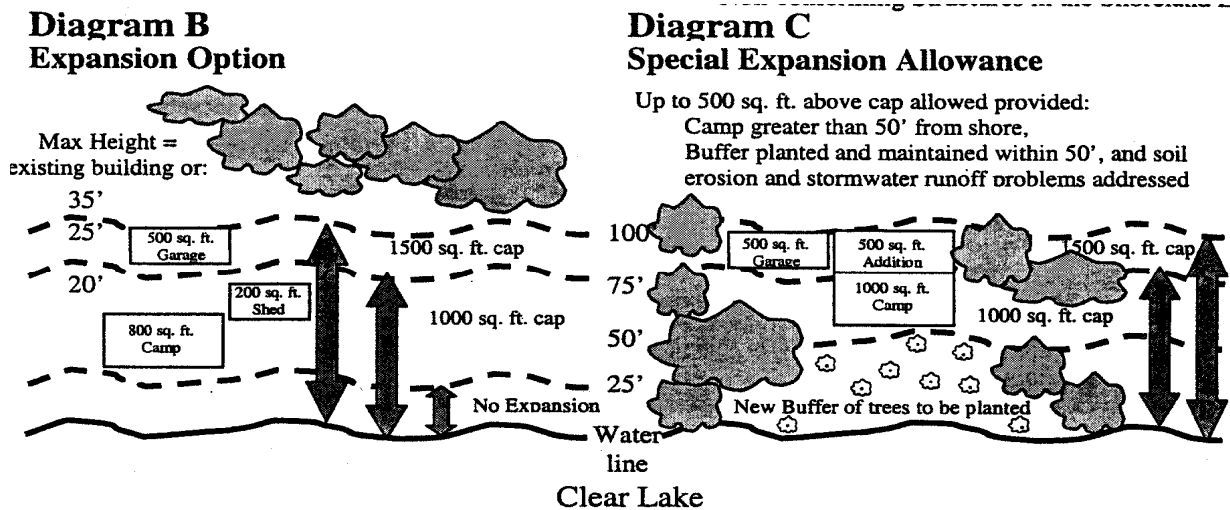
**Basic Provisions of the Optional Alternative to the 30% Expansion Rule**

A municipality may, but is not required to adopt an alternative to the 30% expansion limitation rule, consistent with provisions enacted by the legislature in 1998. This optional method of limiting expansions of non-conforming structures is based on the following criteria:

1. No portion of a structure located within 25 feet of the shoreline can be expanded.
2. Expansion of an accessory structure that is located closer to the shoreline than the principal structure is prohibited.
3. For structures located less than 75 feet from the shoreline, the maximum combined total floor area of all structures is 1000 square feet, and the maximum height of any structure is 20 feet or the height of the existing structure, whichever is greater.
4. For structures located less than 100 feet from a great pond or river flowing to a great pond, the combined maximum total floor area for all structures is 1500 square feet, and the maximum height of any structure is 25 feet or the height of the existing structure, whichever is greater, except that any portion of those structures located less than 75 feet from the shoreline must meet the floor area and height limits of criterion 3 above.

For the purposes of the alternative expansion limitation, an existing basement is not calculated toward floor area.

(See diagram B for a visual display of the basic alternative method of limiting expansions.)



**The Special Expansion Allowance Pursuant to the Alternative Method of Limiting Expansions.**

Under the alternative method of limiting expansions of nonconforming structures, a municipality may permit up to 500 additional square feet of floor area than that allowed above if: the structure is located at least 50 feet from the shoreline; an adequate 50-foot vegetated buffer exists or the owner agrees to plant a suitable buffer; and the owner agrees to implement a plan addressing erosion and stormwater runoff problems on the property. Other requirements may also apply. (See diagram C for a visual display of special expansion allowance)

**If a municipality adopts the basic 1000/1500 square foot limits of the alternative to the 30% rule, does it also have to adopt the special expansion allowance?**

No. The special expansion allowance (extra 500 square feet) is an optional provision. Whether to adopt the provision is for the municipality to decide.

**Does the floor area cap apply to just the principal structure?**

No. The cap applies to the total floor area of all principal and accessory structures located within the shoreline setback area, including the upper floors of multi-story buildings. As with the 30% expansion limitation rule, decks, porches, and patios also count as floor area.

**Can a municipality adopt both the 30% expansion limitation and the alternative method of limiting expansions of nonconforming structures?**

No. The expansion option, if adopted, replaces the 30% rule. The option can not be used in conjunction with the 30% rule to maximize expansions of nonconforming building expansions. The intent of the option is to provide a comparable, and equitable, amount of expansion in a format that is also easier to administer.

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**Additional Standard Issues Pertaining to Nonconforming Structures**

**Why does the Mandatory Shoreland Zoning Act Establish a Cap on Expansions of Nonconforming Structures?**

There are several reasons for the 30% expansion limitation. However, the primary goal is to balance the need to maintain vegetated areas near the shoreline in order to protect water quality and control stormwater runoff, and to preserve the natural character of Maine’s Shoreland areas, while providing some expansion potential for structures which are closer to the shoreline than current standards allow.

**Can a non-conforming structure be expanded in all directions?**

**No.** Expansions which reduce the already non-conforming setback are not permitted. For example, regarding water and wetland setback requirements, no structure which is less than the required setback from the water or wetland, can be expanded toward the water or wetland. Similarly, a structure which exceeds the height limitation cannot be expanded upward. The same

is true for the lot coverage limitation. If the buildings, driveways, and other non-vegetated areas already exceed the total lot coverage limitation, these areas cannot be expanded to further increase the lot coverage.

Although the Department's Guidelines do not require structures to be set back a minimum distance from roads and side lot lines, many local ordinances do contain such limitations and must be considered.

**Can a foundation be added to a non-conforming structure?**

**Yes.** Construction or enlargement of a foundation beneath an existing non-conforming structure is permitted. However, that addition will count toward the 30% expansion limitation unless: the structure and new foundation are placed such that the setback requirement is met to the greatest practical extent (may require movement of structure away from a waterbody or wetland); the foundation does not extend beyond the exterior dimensions of the structure; and the foundation does not cause the structure to be elevated by more than three (3) additional feet.

The State Guidelines do not require a structure to be moved away from the water or wetland when the replacement foundation is simply new posts, footings, slab, or similar foundation.

In most cases, applications for new or enlarged foundations are reviewed by the planning board.

**Can a non-conforming structure be relocated on the same parcel provided that the setback is not further reduced?**

**Yes.** However, if the structure is relocated it must meet the shoreline setback requirement to the greatest practical extent. If the lot has enough depth to relocate the structure beyond the setback requirement, the owner will be required to move the structure to that location. If the structure cannot be moved to the setback line, the owner will be required to move the building to the furthest practical distance from the waterbody or wetland.

**If a non-conforming structure is damaged or destroyed can it be reconstructed or replaced?**

**Yes.** If a structure is damaged or destroyed by less than 50% of the market value before such damage or destruction, it may be reconstructed in place after obtaining a permit from the local code enforcement officer. However, if the structure is damaged or destroyed by more than 50% of the market value of the structure before such damage or destruction occurred, it can only be reconstructed or replaced if the new structure is placed such that the setback requirement is met to the greatest practical extent, as determined by the planning board. The planning board must consider several factors when determining the appropriate setback, including the type and condition of any foundation which may have been part of the original structure.

The words "damaged" and "destroyed" include voluntary removal by the owners, as well as "Acts of God" such as fire, flood, wind or other causes.

**Can the use of a non-conforming structure be changed to another use?**

**Perhaps.** The use of a non-conforming structure can be changed provided that the new use will have no greater adverse impact on the water body or wetland, on the property itself, or on adjacent properties. The planning board makes that determination.

**If I have a non-conforming structure and wish to modify it, whom should I contact?**

You should first contact the local code enforcement officer for information on permitting requirements. In most cases the code officer can provide appropriate application forms and will direct you to the planning board. Most significant modifications to non-conforming structures must go through planning board review.



# DEP INFORMATION SHEET

## Guidelines for Restoration Plan for Shoreland Clearing Violations

issued: revised December 2007 contact:(800) 287-3901

See back page for other office numbers

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Pursuant to the Mandatory Shoreland Zoning Act (Title 38 MRSA sections 435-449) and enforcement provisions of Title 30-A MRSA section 4452(3)(C-2), correction or mitigation of a violation that involves the cutting of a tree or trees must include but is not limited to replacement of each tree cut with a tree of substantially similar size and species to the extent available and feasible. Understory vegetation that is cut in violation of the shoreland zoning standards must also be replaced. The violator must submit a reforestation plan prepared by and signed by a forester licensed pursuant to 32 MRSA, Chapter 76 or other qualified professional that considers specified site conditions and addresses habitat and other riparian restoration, visual screening, understory vegetation and erosion and sedimentation control.

This information sheet is written to provide guidance in drafting the reforestation plan. The goal of the plan is to reestablish a forested buffer where the trees have been illegally cut. A landscaped buffer of shrubs and non-native species is not an acceptable alternative. However, where shrubs, saplings and ground cover have been significantly altered the plan must also address the restoration of this buffer component.

The purposes of the Mandatory Shoreland Zoning Act are varied. Of high importance is the protection of water quality. A buffer of trees, saplings, shrubs and the organic duff layer serves to filter rain and stormwater before it flows to surface waters, and also acts as a sponge to reduce overland flow. The buffer also provides habitat for many animal species, including small mammals and many song birds. A wooded buffer also maintains the natural beauty of our larger water bodies and keeps water temperatures down in our smaller streams.

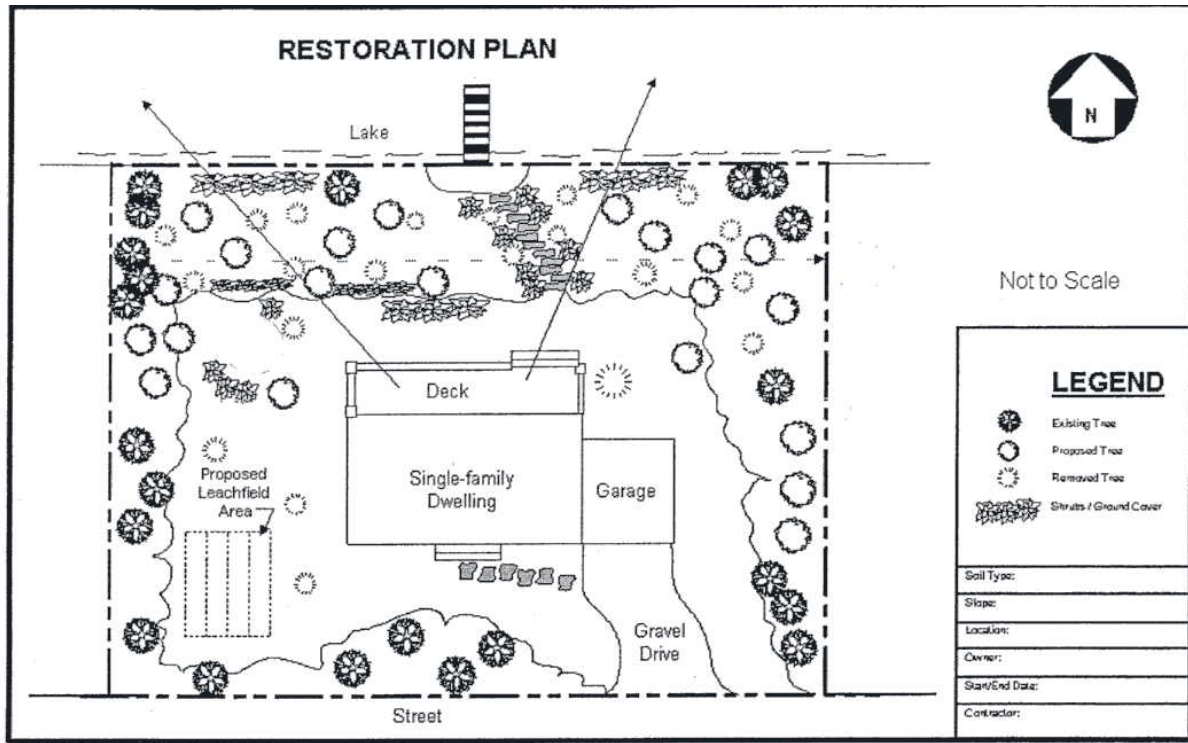
In designing a planting plan the qualified professional, at a minimum, must address the following:

- The number of trees removed in violation of the Ordinance – at least one tree must be planted for each tree cut in violation. The location of the replanted trees shall be as near as feasible to the trees they are replacing.
- The size of the trees removed – The replanted trees must be as close in diameter and height to those that were removed as practical, taking into consideration the size available at nurseries, the type and depth of the soils, depth to the water table, slope of the land, exposure to sun and wind, and other factors that may affect the short and long-term survival of the trees. Regardless of the size of the tree when it is planted, it must be a species that will grow to a similar size as would the original tree.
- Tree species removed – Planted trees shall be native to the area where the planting will occur, and must be suited to the soil conditions at the planting site. Specific species planted may depend on the availability of nursery stock. However, deciduous and coniferous trees should be planted at essentially the same ratios as were cut, unless site conditions are prohibitive.

- Saplings and shrubs removed – Saplings and shrubs that were removed in violation of the Ordinance must be replaced with native species that will be effective in preventing erosion and maintaining water quality, will complement the visual screening provided by the replanted trees, and will provide habitat for riparian species. Preference should be given to shrub and sapling species that will provide food and shelter for animal species that frequent the riparian zone.
- Site conditions – Soil conditions are important to the establishment of planted trees. Each tree species has its own growing needs, and a particular tree may grow well on a dry site, but do poorly in moist soils. Site conditions can also be a factor in developing a planting plan if large trees are to be planted. For example, in wetland areas it may not be feasible to use heavy equipment without subjecting the area to significant soil disturbance. In those cases it may be necessary to plant smaller trees than desirable.
- Planting time – The planting should be done at a time of the year when there is the greatest potential for survival of the plantings.
- Survival – The plan must address the replanting of trees that do not survive during the first three years after planting. An 80% survival rate should be guaranteed during the first three years following the planting.

The plan must also include, at least, the:

- Site location and a drawing of the planting locations (see drawing below);
- Waterbody;
- Tax map and lot number;
- Owner's name;
- Mailing address of owner; and
- Phone number of contact person.



Include setbacks and dimensions of existing and proposed structures. Stumps and their root systems must remain intact within 75 feet of the water, as the extent of soil disturbance must be minimized. An erosion control plan shall be included if soil disturbance or fill activities are conducted within the setback area.

**Where can I get additional information?**

For additional information, contact the DEP office closest to you and ask to speak with a staff person in the Shoreland Zoning program.

Augusta	17 State House Station, Augusta, ME 04333	(207) 287-2111; (800) 452-1942
Bangor	106 Hogan Road, Bangor, ME 04401	(207) 941-4570; (888) 769-1137
Portland	312 Canco Road, Portland, ME 04103	(207) 822-6300; (888) 769-1036
Presque Isle	1235 Central Drive, Presque Isle, ME 04769	(207) 764-0477; (888) 769-1053



## ***Appendix B***

DUE DATE: MARCH 1, 2008

**CODE ENFORCEMENT OFFICER REPORT ON ACTIVITIES IN SHORELAND ZONE  
FOR YEARS 2006 and 2007**

**NAME OF MUNICIPALITY:** \_\_\_\_\_

**Instructions:**

Please complete table below based on the permitting, appeals, and enforcement records maintained by your community. Include permits issued by both the Planning Board and Code Enforcement Officer. If no permits were issued for a particular activity, enter zero. If there were no permitting or enforcement actions, please explain in the comment section below. Please, return the completed form to the DEP office address indicated on the reverse side before March 1, 2008.

**PERMIT ACTIVITIES (IN THE SHORELAND ZONE ONLY)**

ACTIVITY	NUMBER OF APPLICATIONS SUBMITTED	NUMBER OF PERMITS APPROVED	NUMBER OF PERMITS DENIED	NUMBER OF APPLICATIONS PENDING
New Principal Structures				
Existing Structures:				
Replacement (>50%)				
Relocations				
Expansions				
New Accessory Structures				
Piers, Docks, Wharves				
Timber Harvesting				
Gravel Mining				
Others: (please identify)				
<b>TOTAL</b>				

Total Permit Fees Collected \$ \_\_\_\_\_

\_\_\_\_\_ Number of permits revoked (please explain circumstances) \_\_\_\_\_

APPEALS:

\_\_\_\_\_ Number of variance applications to Board of Appeals  
\_\_\_\_\_ Number of variances granted

**ENFORCEMENT:**

\_\_\_\_\_ Number of complaints investigated  
\_\_\_\_\_ Number of confirmed violations  
\_\_\_\_\_ Informal resolutions \_\_\_\_\_ Consent agreements \_\_\_\_\_ Court actions

If any court actions, please describe outcome \_\_\_\_\_ over  
\_\_\_\_\_  
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**COMMENTS:**

Provide any additional comments you wish regarding shoreland zoning administration and enforcement.

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Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_ Town of: \_\_\_\_\_

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\_\_\_\_\_  
\_\_\_\_\_

Submit to:

SHORELAND ZONING COORDINATOR  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF LAND AND WATER QUALITY  
17 STATE HOUSE STATION  
AUGUSTA, MAINE 04333

## ***Appendix C***

CHAPTER 21  
REGULATORY PROGRAM - PROTECTION OF THE PUBLIC INTEREST  
IN THE WATERS OF THE UNITED STATES

21-1. Background.

a. Regulatory Approach of the Corps of Engineers.

(1) The U.S. Army Corps of Engineers has been involved in regulating certain activities in the Nation's waters since 1890. Until 1968, the primary thrust of the Corps' regulatory program was to protect navigation. As a result of new laws and judicial decisions, the Corps' 1968 permit regulations required for the first time a full public interest review involving a balancing of the favorable impacts against the detrimental impacts as the primary basis of permit decisions.

(2) Most of the authority for administering the regulatory program has been given to the 36 district commanders and 8 division commanders. There is no administrative appeal of a district or division commander's decision, except as provided for Federal agencies under agreements pursuant to Section 404(q) of the Clean Water Act (CWA).

(3) The Corps seeks to avoid unnecessary regulatory controls. The general permit program is the primary method of reducing the intensity of Federal regulation of minor activities.

(4) Applicants are not necessarily due a favorable decision but they are due a timely one. Reducing unnecessary paperwork and delays is a continuing Corps goal.

(5) State and Federal regulatory programs should complement rather than duplicate one another. Use of general permits, joint-processing procedures, interagency review coordination and authority transfers (where authorized by law) is encouraged to reduce duplications.

b. Types of Activities Regulated

- (1) Dams and dikes in navigable waters of the United States;
- (2) Other structures or work including excavation, dredging and/or disposal activities, in navigable waters of the United States;
- (3) Activities that alter or modify the course, condition, location, or physical capacity of a navigable water of the United States;
- (4) Construction of fixed structures, artificial islands, and other devices on the outer continental shelf;
- (5) Discharges of dredged or fill material into the waters of the United States, including incidental discharges associated with

mechanized land clearing, channelization, dredging and other excavation activities;

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(6) The transportation of dredged material for the purpose of dumping it in ocean waters.

#### 21-2. Authorities to Issue Permits.

a. Section 7 of the River and Harbor Act approved 8 August 1917 authorizes the Secretary of the Army to promulgate regulations for the use, administration, and navigation of the navigable waters of the United States as public necessity may require for the protection of life and property or for operations of the United States in providing channel improvements. Procedures followed for promulgation of such regulations, although they do not involve issuance of permits, are similar to those for the permit program. (33 CFR Part 324)

(1) Danger Zones. Regulations can be prescribed for the use and navigation of any area likely to be endangered by Department of Defense (DoD) operations. The authority to prescribe danger zone regulations is exercised so as not to interfere with or restrict unreasonably the commercial fishing industry. (33 CFR Part 324)

(2) Restricted Areas. When required for the protection of life and property at DoD installations, certain areas maybe set aside and reserved, such as naval restricted areas. Reasonable regulations may be prescribed, after public notice, restricting or prohibiting the use of such areas by vessels. The Coast Guard is authorized to establish restricted areas for safety but not restricted areas for DoD facilities. (33 CFR Part 324)

b. Section 9 of the River and Harbor Act approved March 3, 1899 (33 U.S.C. 401) prohibits the construction of any dam or dike across any navigable water of the United States in the absence of congressional consent and approval of the plans by the Chief of Engineers and the Secretary of the Army. Where the navigable portions of the waterbody lie wholly within the limits of a single state, the structure may be built under authority of the legislature of that state, if the location and plans or any modification thereof are approved by the Chief of Engineers and by the Secretary of the Army. Section 9 also pertains to bridges and causeways but the authority of the Secretary of the Army and Chief of Engineers with respect to bridges and causeways was transferred to the Secretary of Transportation under the Department of Transportation Act of October 15, 1966.

c. Section 10 of the River and Harbor Act of 1899 prohibits the unauthorized obstruction or alteration of any navigable water of the United States. This section provides that the construction of any structure in or over any navigable water of the United States, or the accomplishment of any other work affecting the course, location, condition, or physical capacity of such waters is unlawful unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of the Army. The

Secretary's approval authority has since been delegated to the Chief of Engineers.

d. Section 13 of the River and Harbor Act of 1899 (33 U.S.C. 407) provides that the Secretary of the Army, whenever the Chief of Engineers determines that anchorage and navigation will not be injured thereby, may permit the discharge of refuse into navigable waters. In the absence of a permit, such discharge of refuse is prohibited. While the prohibition of this section, known as the Refuse Act, is still in effect, the permit authority of the Secretary of the Army has been superseded by the permit authority provided the Administrator, Environmental Protection Agency (EPA), and the states under Sections 402 and 405 of the CWA, respectively.

e. Section 404 of the CWA authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for discharges of dredged or fill materials into the waters of the United States, provided that such discharges are found to be in compliance with the guidelines published by EPA to implement Section 404(b)(1) of the CWA. Section 404(c) of the CWA authorizes the Administrator of EPA to prohibit or restrict the use of a disposal site whenever he determines that the discharge of such materials will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas, wildlife, or recreational areas.

f. Section 103 of the Marine Protection, Research and Sanctuaries Act (MPRSA) of 1972, as amended, authorizes the Secretary of the Army to issue permits for the transportation of dredged material for ocean disposal when the dumping will not unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological system, or economic potentialities. The selection of disposal sites will be in accordance with criteria developed by the Administrator of EPA in consultation with the Secretary of the Army. The Administrator can prevent the issuance of a permit if he finds that the dumping of the material will result in an unacceptable adverse impact on municipal water supplies, shellfish beds, wildlife, fisheries or recreational areas.

21-3. General Policies for Evaluating Permit Applications. The following policies are applicable to the review of all applications for Department of the Army permits.

a. Public Interest Review.

(1) The decision whether to issue a permit is based on an evaluation of the probable impacts (including cumulative impacts) of the proposed activity on the public interest. Evaluation of the probable impacts which the proposed activity may have on the public interest requires a careful weighing of all those factors which become relevant in each specific case. The benefits which may reasonably accrue from the proposal must be balanced against its reasonable foreseeable detrimental impacts. The decision whether to authorize a proposed activity, and if authorized, the conditions under which it will be allowed to occur, are therefore determined by the outcome of the general public interest balancing process. That decision should reflect the national concern for both protection and utilization of important



resources. All factors which may be relevant to the proposal must be considered, as must their cumulative effects. Considered are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs and, in general, the needs and welfare of the people. No permit will be granted if issuance is found to be contrary to the public interest.

(2) The following general criteria will be considered in the evaluation of every application:

(a) The relative public and private need for the proposed structure or work;

(b) Where there are unresolved conflicts respecting resource use, the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work;

(c) The extent and permanence of the beneficial and/or detrimental affects which the proposed structure or work may have on public and private uses to which the area is suited.

b. Effect on Wetlands.

(1) Some wetlands are vital areas that constitute a productive and valuable public resource. The unnecessary alteration or destruction of those areas should be discouraged as contrary to the public interest.

(2) Wetlands considered to perform functions important to the public interest are listed in Chapter 20, paragraph 20-3.

(3) Although a particular alteration of wetlands may constitute a minor change, the cumulative effect of numerous such piecemeal changes often results in a major impairment of the wetland resources. Thus, the wetland site to which a particular application relates will be evaluated with the recognition that it is part of a complete and interrelated wetland area.

(4) No permit will be granted which involves the alteration of wetlands identified as important unless the district commander concludes, based on the public interest review, that the benefits of the proposed alteration outweigh the damage to the wetlands resource and the proposed alteration is necessary to realize those benefits. In evaluating whether a particular alteration is necessary, the district commander shall consider whether the proposed activity is primarily dependent on being located in, or in close proximity to the aquatic environment or whether practicable alternative sites are available. The applicant must provide sufficient information on the need to locate the proposed activity in the wetland and must provide data to evaluate the availability of practicable alternative sites.

(5) The congressional policy expressed in the Estuary Protection Act, Public Law 90-454, and state regulatory laws or

programs for classification and protection of wetlands will also be given great weight.

c. Fish and Wildlife. In accordance with the Fish and Wildlife Coordination Act, the Corps of Engineers will consult with the Regional Director, U.S. Fish and Wildlife Service, the Regional Director, National Marine Fisheries Service, and the head of the agency responsible for fish and wildlife for the state in which the work is to be performed, with a view to the conservation of wildlife resources by prevention of their direct or indirect loss and damage due to the activity proposed in a permit application. The district commander will give full consideration to these views in evaluating the application.

d. Water Quality. Applications for permits for activities which may affect water quality will be evaluated for compliance with applicable effluent limitations, water quality standards, and best management practices. Certification by the state under provisions of Section 401 of the CWA will be considered conclusive with respect to water quality considerations unless the Regional Administrator, EPA, advises of other water quality aspects to be taken into consideration. Any permit issued may be conditioned to implement water quality protection measures.

e. Historic, Cultural, Scenic, and Recreational Values. Application for permits may involve areas which possess recognized historic, cultural, scenic, conservation, recreational, or similar values. Full evaluation of the general public interest requires that due consideration be given to the effect the proposed structure or activity may have on values such as those associated with wild and scenic rivers, registered historic places and natural landmarks, National Rivers, National Wilderness Areas, National Seashores, National Recreation Areas, National Lakeshores, National Parks, National Monuments, estuarine and marine sanctuaries, archeological resources, including Indian religious or cultural sites, and such other areas as may be established under Federal or state law for similar and related functions.

f. Interference with Adjacent Properties or Water Resource Projects. Authorization of work or structures by the Department of the Army does not convey a property right, nor authorize any injury to property or invasion of other rights.

(1) Because a landowner has the general right to protect his or her property from erosion, application to erect protective structures will usually receive favorable consideration. However, if the protective structure may cause damage to the property of others, adversely affect public health and safety, adversely impact flood plain or wetland values, or otherwise appear not to be in the public interest, the district commander will so advise the applicant and inform him or her of possible alternative methods of protecting his or her property. Such advice will be given in terms of general guidance only so as not to compete with private engineering firms nor require undue use of Government resources.

(2) A riparian landowner's general right of access to navigable waters of the United States is subject to the similar

rights of access held by nearby riparian landowners and to the general Public's right of navigation on the water surface. In the case of proposals which create undue interference with access to, or use of, navigable waters, the authorization will generally be denied.

(3) Where it is found that the work for which a permit is desired is in navigable waters of the United States and may interfere with an authorized Federal project, the applicant should be apprised in writing of the fact and of the possibility that a Federal project which may be constructed in the vicinity of the proposed work might necessitate its removal or reconstruction.

(4) Proposed activities which are in the area of a Federal project which exists or is under construction will be evaluated to insure that they are compatible with the purposes of the project.

g. Activities Affecting Coastal Zones. Applications for Department of the Army permits for activities affecting the coastal zones of those states having a coastal zone management program approved by the Secretary of Commerce will be evaluated with respect to compliance with that program. No permit will be issued to a non-Federal applicant until certification has been provided that the proposed activity complies with the Coastal Zone Management Program, and the appropriate state agency has concurred with the certification or has waived its right to do so. However, a permit may be issued to a non-Federal applicant if the Secretary of Commerce, on his or her own initiative or upon appeal by the applicant, finds that the proposed activity is consistent with the objectives of the Coastal Zone Management Act or is otherwise necessary in the interest of National security. Federal agency and Indian tribe applicants for Department of the Army permits are responsible for complying with the Coastal Zone Management Act's directives for assuring that their activities which directly affect the coastal zone are consistent, to the maximum extent practicable, with approved state coastal zone management programs.

h. Activities in Marine Sanctuaries. Applications for permits in a marine sanctuary established by the Secretary of Commerce will be evaluated for impact on the marine sanctuary. No permit will be issued until the applicant provides a certification from the Secretary of Commerce that the proposed activity is consistent with the purposes of the MPRSA of 1972, as amended, and implementing regulations.

i. Other Federal, State, or Local Requirements.

(1) Processing of an application for a Department of the Army permit normally will proceed concurrently with the processing of other required Federal, state, and/or local authorizations or certifications. Final action on the Department of the Army permit will normally not be delayed pending action by other Federal, state or local agencies. Where a required Federal, state or local permit or certification has been denied before final action on the Army permit, a Corps permit will be denied without prejudice. The applicant can reinstate processing of his

or her application if subsequent approval is received from the Federal, state or local agency originally denying authorization.

(2) Where officially adopted Federal, state, regional, local or tribal land-use classifications, determinations or policies are applicable to areas under consideration, they shall be presumed to reflect local factors of the public interest and shall be considered in addition to the other National factors of the public interest.

(3) A proposed activity may result in conflicting comments from several agencies within the same state. The district commander will elicit from the governor an expression of his or her view concerning the application or an expression as to which state agency represents the official state position.

(4) In the absence of overriding National interest factors, a permit will generally be issued following receipt of a favorable state determination provided the concerns, policies, goals and requirements expressed in applicable statutes and 33 CFR 320-330 have been followed and considered. Similarly, a permit will generally be issued for Federal and Federally authorized activities; another Federal agency's determination to proceed is entitled to substantial consideration in the Corps public interest review.

(5) The district commanders are encouraged to develop joint procedures with those states and other Federal agencies with ongoing permit programs for activities also regulated by the Department of the Army. In such cases, applications for Department of the Army permits may be processed jointly with the state or with the other Federal entities, but with conclusion and decision by the district commander independent of the Federal or state agency determinations. Alternatively, the Corps may issue a general permit to eliminate regulatory duplication.

j. Safety of Impoundment Structures. To insure that all impoundment structures are designed for safety, non-Federal applicants may be required to demonstrate that the structure has been designed by qualified persons or independently reviewed (and modified as the review would indicate) by similarly qualified persons. (See 33 CFR 325).

k. Flood Plain Management. Although a particular alteration to a flood plain may constitute a minor change, the cumulative impact of such changes often results in a degradation of flood plain values and functions and results in increased potential for harm to upstream and downstream activities. In accordance with the requirements of Executive Order (EO) 11988, district commanders, as part of their public interest review, will consider alternatives that will avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains.

l. Water Supply and Conservation. Full consideration will be given to water conservation as a factor in the public interest review, including opportunities to reduce demand and improve efficiency in order to minimize new supply requirements. This

policy is subject to Congressional policy stated in 101(g) of the CWA--that the authority of states to allocate water quantities shall not be superseded, abrogated or otherwise impaired.

m. Energy Conservation and Development. District commanders will give great weight to energy needs as a factor in the public interest review and will give high priority to permit actions involving energy projects.

n. Navigation. Navigation in all navigable waters of the United States continues to be a primary concern of the Federal Government and will be given great weight in the public interest balancing process.

#### 21-4. Jurisdictional Limits:

a. The River and Harbor Act of 1899. With respect to this Act ("Navigable Waters of the United States"): (1) Rivers and Lakes. Federal regulatory jurisdiction extends laterally to the entire water surface and bed of a navigable waterbody, which includes all the land and waters below the ordinary high water mark. (33 CFR 329.11(a)) At some point along its length, a navigable waterbody will change its character and lose its real or potential physical ability to support commerce. That upper limit point where the waterbody ceases to be a navigable water of the United States is usually termed the "head of navigation". (33 CFR 329.11(b)) (2) Ocean and Tidal Waters. The Corps regulatory jurisdiction includes all ocean and coastal waters generally within a zone three nautical miles seaward from the coastline. For bays and estuaries, jurisdiction extends to the entire surface and bed of all waterbodies subject to tidal action. This includes marshlands and similar areas insofar as those areas are subject to inundation by the mean high tidal waters. The base line (ordinary low tide line) from which the territorial sea is measured is specified in the Convention on the Territorial Sea and the Contiguous Zone. (15 UST 1606; TIAS 5639; 33 CFR 329.12)

b. The Clean Water Act of 1977. With respect to this Act ("waters of the United States") jurisdiction is more extensive than under the River and Harbor Act of 1899. (33 CFR 328)

c. Marine Protection, Research and Sanctuaries Act of 1972. This Act defines a regulatory jurisdiction with respect to "Ocean Waters." (33 CFR 324.2)



US ARMY CORPS OF ENGINEERS  
CENAE-CO-R  
NEW ENGLAND DISTRICT  
696 VIRGINIA ROAD  
CONCORD, MA 01742-2751  
METER CODE 450

**GUIDANCE FOR PERMIT APPLICANTS, WETLAND DELINEATION, VALUES  
ASSESSMENT AND ALTERNATIVE ANALYSIS**

Applicants should contact Corps early in the project planning stage for permit requirements. Work your local, State and Federal permit applications concurrently to avoid duplication and time delays. We do not need final design information.

Applicant's consultant should check with Corps if any of the procedures described are not understood from recent meetings with Corps staff. Guidance should also be sought for those projects where a less vigorous approach may be sufficient.

Prepare a surveyed site plan of property with existing contours.

Stake out a field delineation of waters and wetlands subject to Corps jurisdiction as defined in Corps permit regulations published in the November 13, 1986 Federal Register and the mandatory technical criteria of the 1987 Corps of Engineers Wetland Delineation Manual for Identifying and Delineating Jurisdictional Wetlands (Technical Report Y-87-1)

Plot the limits of these waters and wetlands on surveyed site plan.

Have Corps staff field check these jurisdictional limits as necessary.

On the site plan, which now shows the limits of waters and wetlands, draw the footprint of the entire project - buildings, roadways, parking areas, etc., and limits of all fill to be placed in waters and wetlands.

During the field delineation gather data to assess the functional values of waters and wetlands to be impacted by the project. For each affected wetland, an assessment should be prepared addressing at least the wetland listed below<sup>1</sup>. While several methods for estimating wetlands functions and values are presently in use, no particular method is prescribed. Instead, an estimate of the probability for each function will be stated in terms of low, moderate or high and will include a brief rationale for the rating. An estimate of the magnitude for each function will include a brief summary of any available quantifiable

data. Based upon the strength and accuracy of the information supporting these estimates, the Corps will determine a level of confidence in each rating and estimate the potential for individual and cumulative impacts to each wetland function.

- Groundwater recharge/discharge
- Flood storage and desynchronization
- Sediment and shoreline stabilization
- Sediment/toxicant retention
- Nutrient retention/transformation
- Nutrient export
- Aquatic diversity/abundance
- Fish and Shellfish habitat
- Wildlife habitat
- Endangered species
- Consumptive recreation (e.g. hunting, fishing)
- Nonconsumptive recreation (e.g. boating, aesthetics)
- Uniqueness/heritage

Analyze practicable alternatives to avoid filling waters and wetlands. Note that for non-water dependent projects there is a presumption that practicable alternatives are available that do not involve filling wetlands and other special aquatic sites. Unless the applicant clearly demonstrates otherwise, the permit must be denied. Project modification to avoid unnecessary wetland filling may result in qualifying for a nationwide permit, in which case no further permit processing would be necessary.

If further processing is still required, to include a public notice, permit application drawings should show limits of waters, wetlands, fill, and footprint of all project elements in clear schematic fashion. These application drawings must be 8 ½ x 11 inches in size and be clearly reproducible. Reductions of the engineering drawings are usually not acceptable as they become cluttered and unreadable when reduces. However, tracing some of the information from the engineering drawings and then reducing usually works well.

<sup>1</sup> Adapted by Dr. James S. Wakeley, U.S. Corps of Engineers, Waterways Experiment Station from Sather and Smith (1984), and Adamus et al (1987)



**USDA NRCS**  
**Field Offices Employee Directory**

**AUGUSTA FIELD OFFICE** (Kennebec County)

Central Maine Commerce Center, 21 Enterprise Drive, Suite 1, Augusta, ME 04330

Telephone: 207-622-7847 ext. 3, FAX: 207-626-8196

Name	Position	Email
Amanda Burton	Soil Conservationist	<a href="mailto:amanda.burton@me.usda.gov">amanda.burton@me.usda.gov</a>
Peter Abello	Soil Conservation Technician	<a href="mailto:peter.abello@me.usda.gov">peter.abello@me.usda.gov</a>

**BANGOR FIELD OFFICE** (Penobscot County)

1423 Broadway, Suite #2, Bangor, ME 04401

Telephone: 207-947-6622, FAX: 207-942-1782

Name	Position	Email
Daniel G. Schmidt	District Conservationist	<a href="mailto:dan.schmidt@me.usda.gov">dan.schmidt@me.usda.gov</a>
Kenneth R. Blazej	Soil Conservationist	<a href="mailto:ken.blazej@me.usda.gov">ken.blazej@me.usda.gov</a>
Eric Giberson	Soil Conservationist	<a href="mailto:eric.giberson@me.usda.gov">eric.giberson@me.usda.gov</a>
Vacant	Soil Conservation Technician (also serves Piscataquis County)	
Seth Jones	Soil Conservation Technician	<a href="mailto:seth.jones@me.usda.gov">seth.jones@me.usda.gov</a>
Heidi Bunn	Agricultural Engineer	<a href="mailto:heidi.bunn@me.usda.gov">heidi.bunn@me.usda.gov</a>

**BELFAST FIELD OFFICE** (Waldo County)

266 Waterville Road, Belfast, ME 04915-1224

Telephone: 207-338-1964, FAX: 207-338-4972

Name	Position	Email
Autumn Birt	District Conservationist	<a href="mailto:autumn.birt@me.usda.gov">autumn.birt@me.usda.gov</a>
Blaine B. Woodbury	Soil Conservationist	<a href="mailto:brian.woodbury@usda.gov">brian.woodbury@usda.gov</a>

**DOVER-FOXCROFT FIELD OFFICE** (Piscataquis County)  
 42 Pine Crest Drive, Dover-Foxcroft, ME 04426-3717  
 Telephone: 207-564-2321, FAX: 207-564-2570

Name	Position	Email
David Power	District Conservationist	<a href="mailto:david.power@me.usda.gov">david.power@me.usda.gov</a>
Leslie Nelson	Soil Conservationist	<a href="mailto:leslie.b.nelson@me.usda.gov">leslie.b.nelson@me.usda.gov</a>
Gregory Granger	Soil Resource Specialist (also serves Aroostook, Hancock, Kennebec, Penobscot, Somerset, Waldo and Washington counties)	<a href="mailto:greg.granger@me.usda.gov">greg.granger@me.usda.gov</a>

**ELLSWORTH FIELD OFFICE** (Hancock County)  
 190 Bangor Road, Ellsworth, ME 04605-9806  
 Telephone: 207-667-8663, FAX: 207-667-3585

Name	Position	Email
Roland Dupuis	District Conservationist	<a href="mailto:roland.dupuis@me.usda.gov">roland.dupuis@me.usda.gov</a>
Vacant	Soil Conservationist (also serves Washington County)	

**FARMINGTON FIELD OFFICE** (Franklin County)  
 107 Park Street, Farmington, ME 04938-1915  
 Telephone: 207-778-4767, FAX: 207-778-5785

Name	Position	Email
Paul D. Hersey	District Conservationist	<a href="mailto:paul.hersey@me.usda.gov">paul.hersey@me.usda.gov</a>
Vacant	Soil Conservationist	
Sally Butler	State Staff Forester	<a href="mailto:sally.butler@me.usda.gov">sally.butler@me.usda.gov</a>

**FORT KENT FIELD OFFICE** (Aroostook County - St. John Valley)  
 139 Market Street, Suite 106, Fort Kent, ME 04743-1425  
 Telephone: 207-834-3311, FAX: 207-834-6435

Name	Position	Email
David A. Tingley	District Conservationist	<a href="mailto:dave.tingley@me.usda.gov">dave.tingley@me.usda.gov</a>
Stephen L. Cashman	Soil Conservationist	<a href="mailto:steve.cashman@me.usda.gov">steve.cashman@me.usda.gov</a>

Michael A. Pelletier	Soil Conservation Technician	<a href="mailto:mike.pelletier@me.usda.gov">mike.pelletier@me.usda.gov</a>
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**HOULTON FIELD OFFICE** (Aroostook County - Southern Aroostook)  
 304 North Street, Houlton, ME 04730-9527  
 Telephone: 207-532-2087, FAX: 207-532-4379

Name	Position	Email
Timothy Yarab	District Conservationist	<a href="mailto:tim.yarab@me.usda.gov">tim.yarab@me.usda.gov</a>
Helena Swiatek	Soil Conservationist	<a href="mailto:helena.swiatek@me.usda.gov">helena.swiatek@me.usda.gov</a>

**LEWISTON FIELD OFFICE** (Androscoggin and Sagadahoc Counties)  
 254 Goddard Road, PO Box 1938, Lewiston, ME 04241-1938  
 Telephone: 207-753-9400, FAX: 207-783-4101

Name	Position	Email
Vacant	District Conservationist	
Paul Carmichael	Soil Conservation Technician	<a href="mailto:paul.carmichael@me.usda.gov">paul.carmichael@me.usda.gov</a>
Candace (Benwitz) Gilpatric	Agricultural Engineer (also serves York, Cumberland, Kennebec, Knox, Lincoln, Oxford, Franklin, Waldo, and Somerset Counties)	<a href="mailto:candi.gilpatric@me.usda.gov">candi.gilpatric@me.usda.gov</a>
Brian E. Stuart	Civil Engineering Technician (also serves Cumberland, Knox, Lincoln, Oxford and Cumberland Counties)	<a href="mailto:brian.stuart@me.usda.gov">brian.stuart@me.usda.gov</a>
Adam Cattrell	Agricultural Engineer - Career Intern Program	<a href="mailto:adam.cattrell@me.usda.gov">adam.cattrell@me.usda.gov</a>

**MACHIAS FIELD OFFICE** (Washington County)  
 Federal Building & Post Office, 51 Court Street, P.O. Box 121, Machias, ME 04654-0121  
 Telephone: 207-255-3995, FAX: 207-255-0936

Name	Position	Email
David W. Garcelon	District Conservationist	<a href="mailto:dave.garcelon@me.usda.gov">dave.garcelon@me.usda.gov</a>

Grace Edwards	Soil Conservationist - Career Intern Program	<a href="mailto:grace.edwards@me.usda.gov">grace.edwards@me.usda.gov</a>
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**OXFORD FIELD OFFICE** (Oxford County)  
1570 Main Street, Suite 10, Oxford, ME 04270-3390  
Telephone: 207-743-5789, FAX: 207-743-6256

Name	Position	Email
Peter Marcinuk	District Conservationist	<a href="mailto:peter.marcinuk@me.usda.gov">peter.marcinuk@me.usda.gov</a>
Bernadette Luncsford	Soil Conservationist - Career Intern Program (also serves Franklin County)	<a href="mailto:bernadette.luncsford@me.usda.gov">bernadette.luncsford@me.usda.gov</a>
David E. Wilkinson	Soil Resource Specialist (also serves Androscoggin, Sagadahoc, York, Cumberland, Franklin, Knox and Lincoln Counties)	<a href="mailto:david.wilkinson@me.usda.gov">david.wilkinson@me.usda.gov</a>

**PRESQUE ISLE FIELD OFFICE** (Aroostook County - Central Aroostook)  
735 Main Street, Suite #3, Presque Isle, ME 04769  
Telephone: 207-764-4153/4, FAX: 207-768-3407

Name	Position	Email
Joe Weber	District Conservationist	<a href="mailto:joe.weber@me.usda.gov">joe.weber@me.usda.gov</a>
Kenneth M. Hill	Soil Conservation Technician	<a href="mailto:ken.hill@me.usda.gov">ken.hill@me.usda.gov</a>
Vacant	Agricultural Engineer (serves Aroostook County)	
Robert Cullins	Civil Engineering Technician	<a href="mailto:robert.cullins@me.usda.gov">robert.cullins@me.usda.gov</a>
Scott Englund	Soil Conservation Technician	<a href="mailto:scott.englund@me.usda.gov">scott.englund@me.usda.gov</a>

**SCARBOROUGH FIELD OFFICE** (Cumberland and York Counties)  
 306 U.S. Route 1, Suite A1, Scarborough, ME 04074-9774  
 Telephone: 207-883-0159, FAX: 207-883-1139

Name	Position	Email
Wayne P. Munroe	District Conservationist	<a href="mailto:wayne.munroe@me.usda.gov">wayne.munroe@me.usda.gov</a>
David L. Chiappetta	Soil Conservationist	<a href="mailto:david.chiappetta@me.usda.gov">david.chiappetta@me.usda.gov</a>
Geoffrey W. Coombs	Resource Conservationist	<a href="mailto:geoff.coombs@me.usda.gov">geoff.coombs@me.usda.gov</a>

**SKOWHEGAN FIELD OFFICE** (Somerset County)  
 12 High Street, Suite #3, Skowhegan, ME 04976-1998  
 Telephone: 207-474-8324, FAX: 207-474-0638

Name	Position	Email
Kevin D. White	District Conservationist	<a href="mailto:kevin.white@me.usda.gov">kevin.white@me.usda.gov</a>
Bianca Soto	Soil Conservationist (also serves Franklin County)	<a href="mailto:bianca.soto@me.usda.gov">bianca.soto@me.usda.gov</a>
Charles Penney	Soil Conservation Technician	<a href="mailto:charles.penney@me.usda.gov">charles.penney@me.usda.gov</a>
Mark Roskos	Agricultural Engineer (also serves Franklin and Kennebec Counties)	<a href="mailto:mark.roskos@me.usda.gov">mark.roskos@me.usda.gov</a>
Alice Goodwin	Civil Engineering Technician	<a href="mailto:alice.goodwin@me.usda.gov">alice.goodwin@me.usda.gov</a>

**WARREN FIELD OFFICE** (Knox County)  
 191 Camden Road, Warren, ME 04864-4207  
 Telephone: 207-273-2005, FAX: 207-273-2228

Name	Position	Email
Mary E. Thompson	District Conservationist	<a href="mailto:mary.thompson@me.usda.gov">mary.thompson@me.usda.gov</a>
Vacant	Soil Conservationist	

Last Modified: 05/30/2008

## INFORMATION BULLETIN

### US ARMY CORPS OF ENGINEERS

#### MAINE PROJECT OFFICE

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The Corps of Engineers, working in conjunction with State and Federal regulatory and resource agencies has issued a programmatic general permit (PGP) that expedites Corps review of minimal impact work in coastal and inland waters and wetlands within the State of Maine.

For projects regulated by the Maine Dept. of Environmental Protection (DEP) under their Permit-by-Rule (PBR) program, the Corps has determined that, with certain exceptions identified below, PBR activities qualify for Category I of the PGP. As such they require no application or notification to the Corps and no further action from the Corps.

The following PBR activities **DO NOT** qualify for Category I (non-reporting) and must be submitted to the Corps for Category II screening (**REFER TO NOTE BELOW**) :

a. **Any PBR activity performed in/over navigable waters of the United States.**

Navigable waters in Maine have been identified by the Corps as those subject to the ebb and flow of the tide, the Kennebec River inland to Moosehead Lake, Lake Umbagog in Maine, and the Penobscot River to the confluence of its east and west branches at Medway.

b. **Intake Pipes & Water Monitoring Devices.** Temporary or permanent intake pipes where a discharge of dredged or fill material in waters of the United States will occur. Waters of the United States are defined by the Corps to include not only navigable waters but also all other rivers, streams, lakes, ponds and wetlands. Please note that any permanent or temporary disturbance of the soil, e.g. grubbing, filling, excavation, etc. is considered filling.

c. **Riprap.** Any bank stabilization activity where the length of the project exceeds 500 linear feet; and the fill below the ordinary high water line exceeds 1 cubic yard per linear foot of stabilization.

d. **Utility Crossings.** Any submerged crossing as defined in the PBR where work in waterways or wetlands will be performed from Oct. 2 to July 14. In addition, wetland crossings where impacts (direct & secondary) exceed 4300 square feet.

e. **Stream Crossings.** Any stream crossing as defined in the PBR where work in waterways or wetlands will be performed from Oct. 2 to July 14. In addition, wetland crossings where impacts (direct & secondary) exceed 4300 square feet.

f. **General Permit for State Transportation Facilities.** Any project where impacts to freshwater wetlands exceed 4300 square feet.

g. **Restoration of Natural Areas.** All such projects as defined in the PBR.

h. **Fisheries & Wildlife Habitat Creation or Enhancement and Water Quality Improvement Projects.** All such projects as defined in the PBR.

i. **Piers, Wharves & Pilings.** Any temporary or permanent structure or work as defined in the PBR placed seaward of the mean high water line in navigable waters.

j. **General Permit for Maintenance Dredging.** All such projects as defined in the PBR.

PLEASE SEE BELOW FOR ADDITIONAL INFORMATION REQUIRED FOR CORPS PERMIT APPLICATIONS

**Note: Because the above projects require Category II screening, the Corps will provide a decision within 60 days of receipt of the application, not the normal 14 days for PBR.**

&127;

**FOR FILLING OR EXCAVATION PROJECTS, THE FOLLOWING ADDITIONAL  
INFORMATION IS REQUIRED FOR DEPARTMENT OF THE ARMY PERMIT  
APPLICATIONS. RESPOND TO EACH ITEM AS APPLICABLE.**

Please submit a copy of your PBR application along with the applicable information listed below by certified mail to the following address:

- **US ARMY CORPS OF ENGINEERS**
- **RR2, BOX 1855**
- **MANCHESTER, MAINE 04351**
- **(TEL) 207-623-8367/8124**

1. Provide a brief description of the purpose of and need for the project.
2. Provide a vicinity map indicating the project location within the community. This is best shown on an 8-1/2 x 11 copy of the US Geological Survey topographic map for your project area. These are available in most town offices and in camping and sporting goods stores.
3. Provide a drawing that clearly shows the proposed work. Drawings should be on 8-1/2 x 11 paper and they should include, but not be limited to, a scale or dimensions, a north arrow, the location of any wetlands or waterways, property lines, major natural or man-made features and the amount of alteration (square feet). Please note that drawings do not have to be produced by an engineer but they should be as accurate as possible.
4. Describe the project area. The following checklist is provided for your assistance. Check each block as applicable.

Area is.....

Wooded Open (field) Mixed Hilly Flat Ledge Developed Undeveloped  
Residential Commercial Other

(please describe as fully as possible)

5. Provide a recent photo(s) of the project area taken without snow cover and at low tide if on the coast.
6. Provide a copy of the applicable portion of the National Wetlands Inventory Map and/or Soil Conservation Service Soil Survey for your site if available. (May be available at your local County Soil Conservation Service office.)
7. If the project will impact waterways or wetlands, are there any alternatives available to avoid or minimize impacts? For example, if the project involves a road crossing, was alternative access or crossing at a narrower point considered?
8. Has a wetland delineation been done for the project area? If so, please provide a copy of the delineation report.
9. Has soils mapping or a site evaluation been performed for the project area? If so, please provide a copy of this information.
10. Is this proposal part of a larger project now or in the future? If so, please describe the entire project and provide the necessary drawings. For example, if the project is a subdivision access road you must show the entire subdivision plan.

11. Are there any known Federally listed threatened or endangered species or critical habitat in the project area? You may contact the US Fish & Wildlife Service at 207-827-5938 for more information.

12. Are there any known historic properties in the project area? You may contact the State Historic Preservation office at 207-287-2132 for more information.

13. If area supports seasonal streams or drainage ways or pools. Are there any fish, frogs or salamanders?

**PENALTIES:** Discharges of dredged or fill material into waterways or wetlands without the necessary Federal permits is subject to civil and criminal fines of up to \$50,000 per day of violation or possible imprisonment. **Grading, clearing/grubbing, excavation and similar activities in wetlands constitutes filling by Corps definition.** Unauthorized work in navigable waters of the United States is subject to civil and criminal fines of up to \$2,500 per day of violation.



**FOR FILLING OR EXCAVATION PROJECTS, THE FOLLOWING ADDITIONAL INFORMATION IS REQUIRED FOR DEPARTMENT OF THE ARMY PERMIT APPLICATIONS. RESPOND TO EACH ITEM AS APPLICABLE.**

Please submit a copy of your PBR application along with the applicable information listed below by certified mail to the following address:

**US ARMY CORPS OF ENGINEERS  
675 WESTERN AVE #3  
MANCHESTER, MAINE 04351  
(TEL) 207-623-8367/8124**

1. Provide a brief description of the purpose of and need for the project.
2. Provide a vicinity map indicating the project location within the community. This is best shown on an 8 ½ x 11 copy of the US Geological Survey topographic map for your project area. These are available in most town offices and in camping and sporting goods stores.
3. Provide a drawing that clearly shows the proposed work. Drawings should be on 8 ½ x 11 paper and they should include, but not be limited to, a scale or dimensions, a north arrow, the location of any wetlands or waterways, property lines and major natural or man-made features. Please note that drawings do not have to be produced by an engineer but they should be as accurate as possible.
4. Describe the project area. The following checklist is provided for your assistance. Check each block as applicable.

Area is.....

Wooded     Open (field)     Mixed     Hilly  
 Flat     Ledge  
 Developed     Undeveloped     Residential  
 Commercial     Other

(please describe as fully as possible)

5. Provide a recent photo(s) of the project area taken without snow cover and at low tide if on the coast.
6. Provide a copy of the applicable portion of the National Wetlands Inventory Map and/or Soil Conservation Service Soil Survey for your site if available. (May be obtained at your local County Soil Conservation Service Office).
7. If the project will impact waterways or wetlands, are there any other alternative available to avoid or minimize impacts? For example, if the project involves a road crossing, was alternative access or crossing at a narrower point considered?
8. Has a wetland delineation been done for the project area? If so, please provide a copy of the delineated report.
9. Has soil mapping or a site evaluation been performed for the project area? If so, please provide a copy of this information.
10. Is this proposal part of a larger project now or in the future? If so, please describe the entire project and provide the necessary drawings. For example, if the project is a subdivision access road you must show the entire subdivision plan.
11. Are there any know Federally listed threatened or endangered species or critical habitat in the project area? You may contact the US Fish & Wildlife Service at 603-225-1411 for more information.
12. Does the area support seasonal streams or drainages ways or pools? Are there any fish, frogs or salamanders present?

**13. Historic Properties. Confirm that the Maine Historic Preservation Commission and the Maine's Indian tribes have been provided a copy of the application materials (Refer to list below for addresses and**

phone numbers). The application cannot be processed without this particular information

**Maine Historic Preservation Commission**

55 Capitol Street  
65 State House Station  
Augusta, Maine 04333  
207-287-2132  
Fax 207-287-2335

**Aroostook Band of Micmacs**

ATTN: Tribal Historic Preservation Officer  
7 Northern Road  
Presque Isle, Maine 04769  
207-764-1972  
Fax: 207-764-7667

**Passamaquoddy Tribe of Indians**

Pleasant Point Reservation  
ATTN: Tribal Historic Preservation Officer  
P.O. Box 343  
Perry, Maine 04667  
207-853-2600  
Fax 207-853-6039

**Houlton Band of Maliseet Indians**

ATTN: Tribal Historic Preservation Officer  
88 Bell Road  
Littleton, Maine 04730  
207-532-4273  
Fax 207-532-2660

**Passamaquoddy Tribe of Indians**

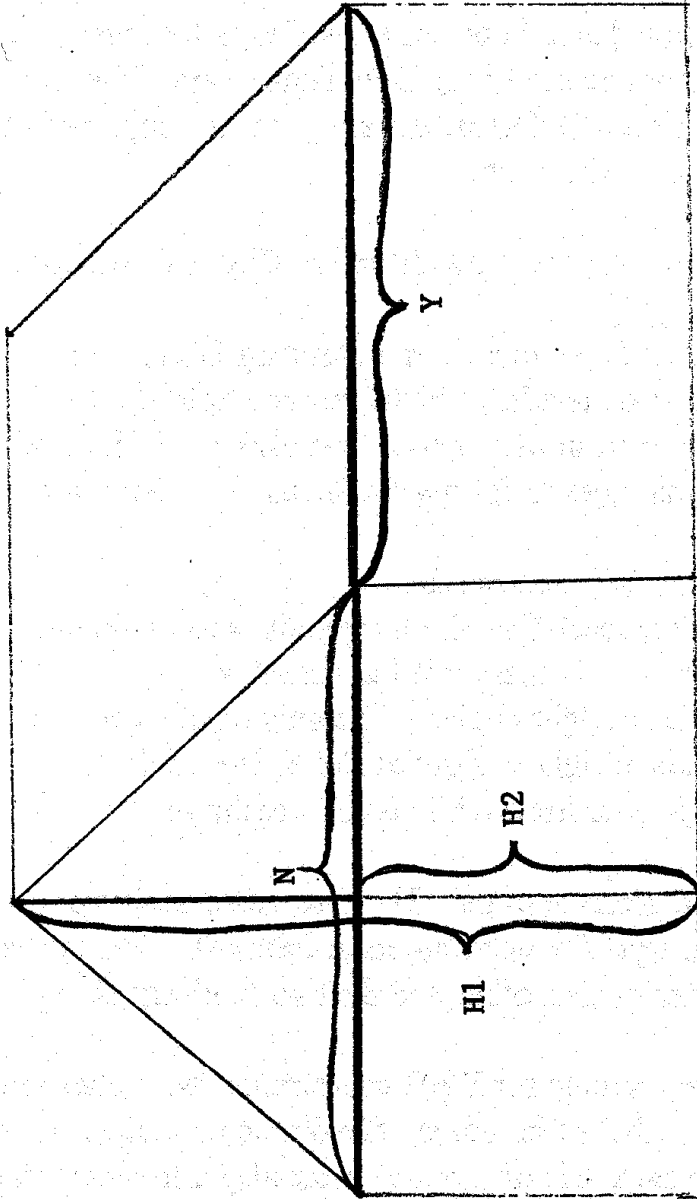
Indian Township Reservation  
ATTN: Tribal Historic Preservation Officer  
P.O. Box 301  
Princeton, Maine 04668  
207-796-2301  
Fax 207-796-5256

**Penobscot Indian Nation**

ATTN: Tribal Historic Preservation Officer

Indian Island Reservation 6 River Road  
Old Town, Maine 04468

## ***Appendix D***



$$\frac{1}{2}(N \times (H1 - H2)) \times Y$$

Calculate the volume of the triangles (attic space and other significant three sided areas)

## Tree Diameter Measurement

**Tree diameter** is the most important tree measurement in forest mensuration. It is taken at 4 1/2 feet from the average ground level, and called diameter breast height (DBH). Generally, this measurement is taken too low on the bole of the tree, on bear ground. To assist in becoming consistent at the DBH mark, a common practice is to pin a piece of flagging on your shirt at 4 1/2 feet. When taking DBH measurements on snow covered ground, the measurement is often taken too high. You need to compensate for the depth of snow under your snow shoes. Variations in height at which DBH is taken can result in a 20% over or under estimation of volume. Also if a prism is used to determine basal area and you have a border line tree, the diameter is important for the determination of the limiting distance.

**Diameter measurements** should avoid abnormal swellings like branch whorls. In forked trees, if the fork is below 4 1/2 feet measure each fork individually and if the fork is above 4 1/2 feet the tree will be measured as a single tree. Diameters are generally reported in one inch classes, ie. a 5.6 - 6.5 inch tree is tallied as a 6 inch tree.

Tree diameters are usually measured using a Biltmore stick, calipers, or diameter tape.

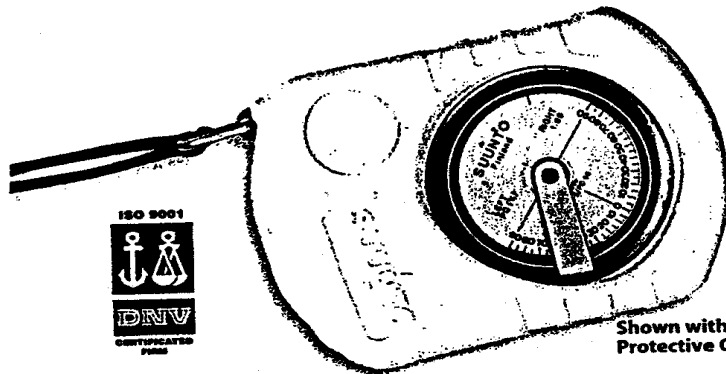
**Biltmore sticks** are the least accurate means of measuring DBH, therefore much care must be exercised in its use to obtain good results. **The biltmore stick can be used when initially determining if a potential violation may exist (first look).** Biltmore sticks have the capacity to measure large diameters. Some rules to follow for the use of a Biltmore stick;

1. hold the stick at breast height
2. use the proper reach for which the stick was calibrated
3. have the eye on the same level as the stick
4. hold the stick at right angles to the axis of the tree
5. have the axis of sight at right angles to the stick
6. do not move your head while taking readings

**Tree calipers** are simple and accurate to use. They are more accurate than Biltmore sticks but less accurate than a diameter tape. For accurate measurements with calipers two measurements should be taken at right angles to each other and the two readings should be averaged.

**Diameter tapes** are the most accurate for DBH measurements. Inches in circumference are divided by 3.1416 to obtain inches of diameter. The diameter values can be read directly off of the diameter tape. Note, the back side of the tape is usually a measure in tenths of feet. The diameter tape is slower than the biltmore stick and calipers but is more accurate. Diameters taken with the diameter tape can be read to the nearest tenth of an inch. **Diameter tapes must be used when collecting data on an investigation.**





Shown with 37002 Protective Cover

## Suunto Clinometers

Height, slope and vertical angle measurements made easy! These versatile instruments can be used to measure heights of trees, poles, towers, buildings; measure slopes for preliminary surveying, grade work, site drainage; measure vertical angles for engineering and surveying projects, satellite and microwave dish installation and more.

Each Suunto Clinometer has two scales which may be purchased in the following combinations: Percent and Degrees, Percent and Topographic, Degree and Topographic, 15m and 20m, Percent and Secant, or Degree and Secant. Scales are graduated from 0-90° in 1° units; from 0 to 150% in 1% units (0 to 70%) then in 2% units (70% to 150%). Graduations in the topo scale are 0 to ±200' with a 66' baseline. Scale readings can be estimated to 10 minutes or 1/5%, when readings are made around the zero level.

### Which Scale to Use:

Clinometer Scale Used	Required Baseline Distance	Clinometer Reads In
Topo	66 feet	feet
15m	15 meters	meters
20m	20 meters	meters
Percent	Any distance in feet, yards, or meters	% of baseline distance you select

### How to hold and read a clinometer.

Keep both eyes open when using a clinometer. Use one eye to look through the lens at the scales while the other sights alongside the clinometer housing. An optical illusion is created and the horizontal sighting line will appear to project to the side of the clinometer housing. Place this sighting line on your target and read the scale.



### Measuring slopes.

To measure slope, sight parallel with the ground (upslope or downslope) to a target, aiming at a point on the target that is equal to the height of your eye above the ground.





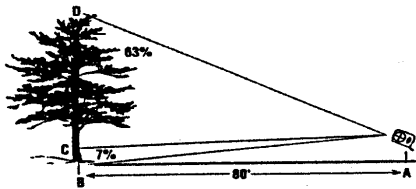
### THE CLINOMETER

The SILVA Ranger Type 15CL is a practical instrument for measuring angles of inclination.

The long side of the compass coincides with the slope of the terrain. Measure an angle of inclination in the following way:

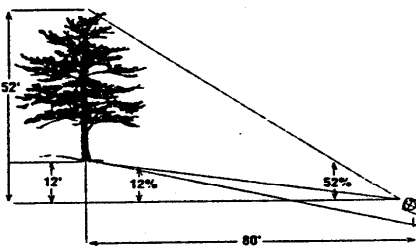
1. Open the lid completely.
2. Turn the dial so that the cardinal point "W" on the dial is set at the index pointer.
3. Hold the compass at eye level with arms out-stretched so that the clinometer needle is hanging vertically and follows the scale in the bottom of the compass housing. "S" on the compass should point down.
4. Let one long side of the compass coincide with the slope of the terrain—the inclination you wish to measure.
5. Read the angle of inclination at the point of the clinometer needle.

**USING PERCENT SCALE CLINOMETERS TO DETERMINE:  
Height measurements on level ground.**



Using the percent scale and 80' baseline (or other baseline convenient to you), follow these simple procedures. For this example, use the % scale. Back away from the tree the proper baseline distance. In this case, 80'. Sight the top of the tree (D) and read the % scale (63% = C to D distance). Sight the bottom of the tree (B) and read the % scale (7% = C to B distance). The total reading is 70%. To obtain tree height, simply multiply this percentage times your baseline distance.  $70\% \times 80' = 56'$  (tree height). It's a simple formula that makes your work easier!

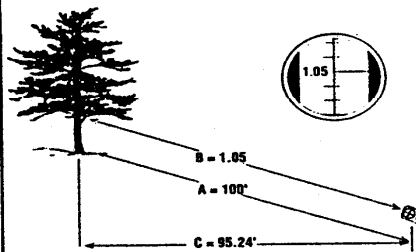
**Height measurements on sloping ground.**



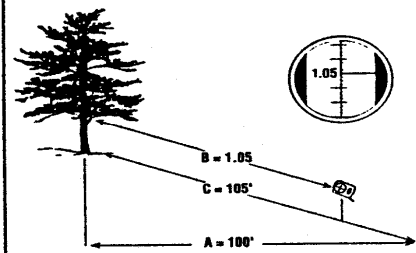
Using the percent scale and 80' baseline (or other baseline convenient to you), follow these simple procedures. When the base of the tree is ABOVE eye level, sight the top then sight the base. Subtract the two readings. This example:  $52\% - 12\% = 40\%$ . Then multiply  $40\% \times 80' = 32'$  (tree height). When the base of the tree is BELOW eye level, sight the top then sight the base. Add the two readings. Then multiply by 80' (baseline).

**USING SECANT SCALE CLINOMETERS TO DETERMINE:**

**Horizontal distance on sloping ground.**



To find an unknown horizontal distance (C), simply divide the measured slope distance (A) by the secant value of the slope (B). This example:  $100 \text{ ft.} \div 1.05 = 95.24 \text{ ft.}$  (horizontal distance). Use the percent scale to figure height.

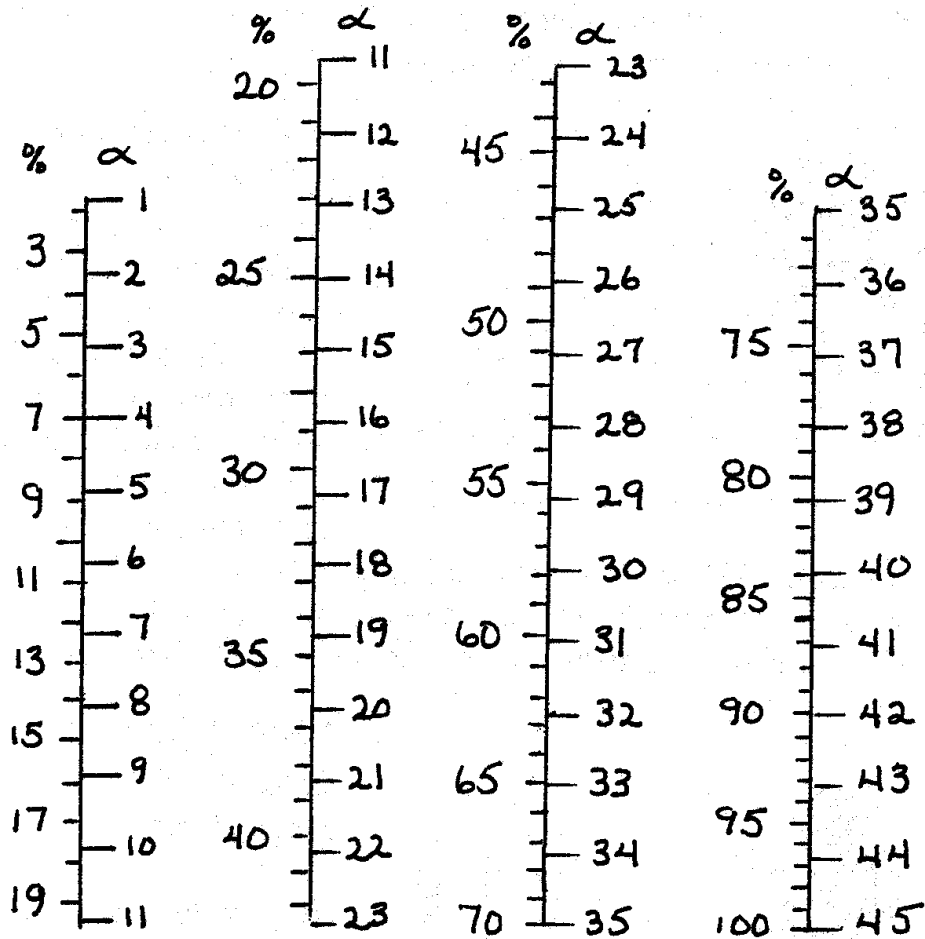


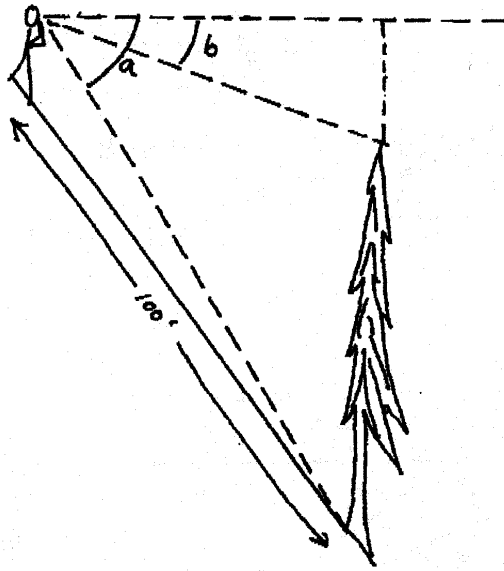
**Correct slope distance for a desired horizontal distance.**

Correct slope distance (C) is determined by multiplying the required horizontal baseline distance (A) times the secant value of the slope (B). This example:  $100 \text{ ft.} \times 1.05 = 105 \text{ ft.}$  (correct slope distance).

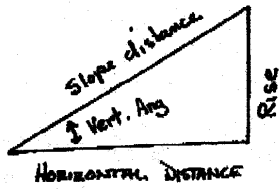
# Conversion of percent to degrees slope

% ↔ α





∴ if  $a = 94\%$   
 $b = 24\%$   
 $a - b = \%$   
 $94\% - 24\% = 70\%$   
 $70\% \times 100' = 70'$

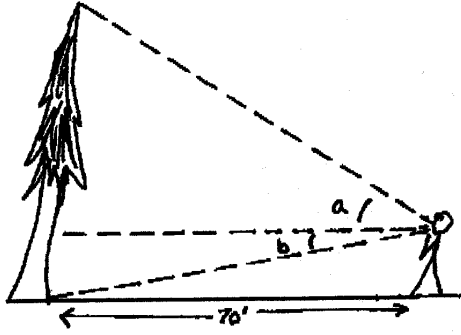


HORIZONTAL DISTANCE = SLOPE DISTANCE (COS VERT. ANGLE)

ALSO

HORIZONTAL DISTANCE = SLOPE DISTANCE - (SLOPE DIST X (1 - COS VERT L))

**Measuring height of an object**

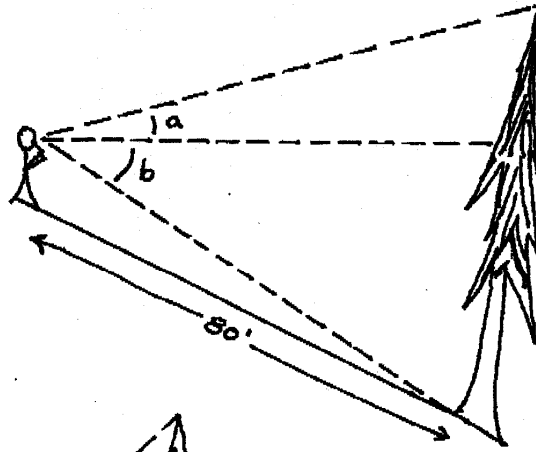


∴ if  $a = 40\%$  slope  
 $b = 6\%$  slope  
46%

$46\% \times 70' = 32.2'$

∴ if  $a = 23\%$   
 $b = 50\%$   
73%

$73\% \times 80' = 58.4'$

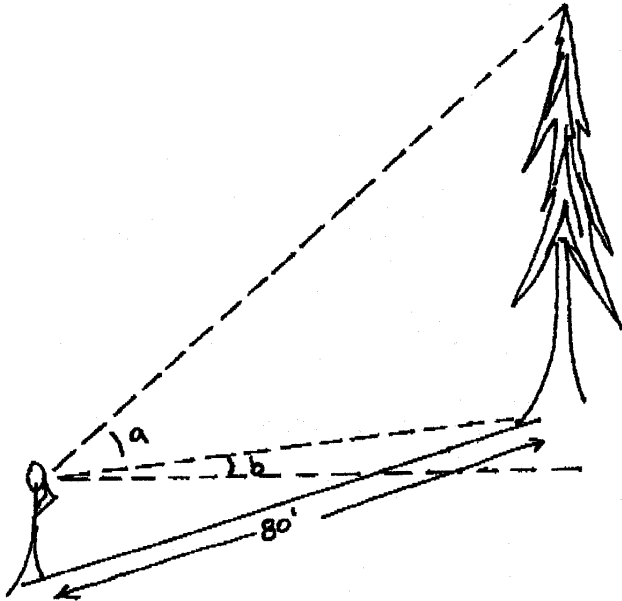


∴ if  $a = 84\%$   
 $b = 8\%$

$a - b = \%$

$84\% - 8\% = 76\%$

$76\% \times 80' = 60.8'$



Measuring height of an object

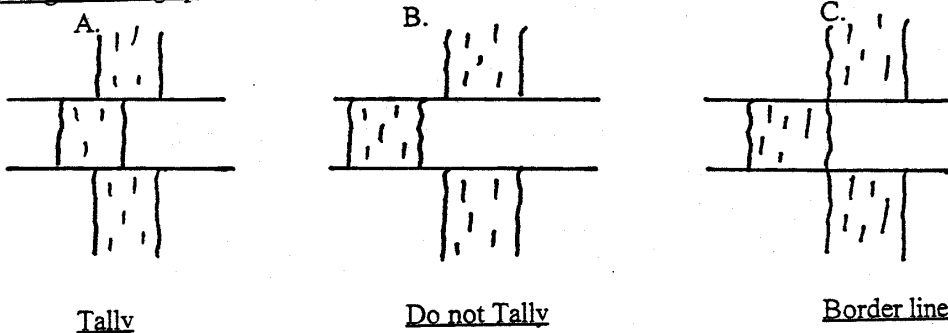
### Basal Area Measurements

**Basal area** is the square feet of exposed stem area if trees are cut off at 4 1/2 feet above the ground (simply the area of a circle for each tree). This is usually expressed on a per acre basis and is a good measure of stand density. Using a 10 factor wedge prism, each tree counted represents 10 square feet of basal area per acre. To determine the basal area of a plot you count the trees that are "in" then multiply by the basal area factor (if 6 trees are "in" and a 10 factor prism is used then there is 60 square feet of basal area per acre on that plot).

To measure basal area of a single tree, you calculate the area of the bole at DBH. This is the same as calculating the area of a circle.  $A = \pi r^2 / 144$  or  $A = 0.005454 d^2$ . Note this is area-not basal area per acre at this point. Basal area measurement, of individual trees, is used when you are determining the percentage volume cut from a stand (ie. 40% rule).

A= area in square feet  
 r= radius in inches  
 d= diameter in inches

### Using the wedge prism



- Tally                      Do not Tally                      Border line
- A. If the displaced image through the prism is less than the diameter of the tree, tally the tree.
- B. If the displacement is greater than the diameter of the tree, do not tally.
- C. If the displacement is equal to the diameter, use the limiting distance to measure to the center of the tree at DBH.

### Limiting distance

The maximum distance in feet from the plot center to a point tangent to the circumference of the variable plot for the given diameter of a tree and a given wedge prism factor. ie. For a 10 factor prism and a 10 inch DBH tree the limiting distance is (prism wedge factor X diameter in inches = maximum distance in feet at which a tree is considered "in" from the plot center)  $(2.75 \times 10 = 27.5 \text{ feet})$ . Therefore the limiting distance is the distance from the plot center to the center of the border line tree at DBH. In the preceding example, a 10 inch diameter tree and

using a 10 factor prism the maximum distance from the plot center the tree can be and remain "in" is 27.5 feet. See appendix E for a list of limiting distances for a 10 factor prism and diameter classes.

**Common errors in prism cruising:**

1. not counting all in trees at a point. It is permissible to move off the plot center to view a hidden tree. Move on an arc equidistant from the tree to hold the distance from the prism constant or use limiting distances for the tree.
2. not measuring the limiting distance, to the center of the tree at breast height, for border line trees. This may alter the basal area per acre on the plot by improperly counting the number of "in" trees..
3. revolving the prism around the cruiser instead of the cruiser revolving around the prism. This will increase the radius of the plot. It is best to use a stake for the plot center to avoid plot radius variations.
4. Observing a tree through the prism other than at DBH. Measurements below breast height would place a tree "in" when the tree is actually "out".
5. not correcting for leaners, front to back. May have to use limiting distance.
6. leaners left and right. May have to twist prism. Remember maximum lean for acceptable growing stock is  $30^{\circ}$ .
7. blowdowns count only if they have blown down since the harvest. Will have to use limiting distance to center of stump based on DBH of blowdown tree.

## Hazard tree assessment tatum guide

### HAZARD POTENTIAL

Defect	Moderate	High
Crack	Hardwood stem has single crack with cavity or decay inside	Crack goes completely through stem. May be able to detect movement of section of stem
		Stem has 2 cracks on the same segment with cavity or extensive decay inside
		Stem has crack in contact with another defect or at base of leaning tree
		Branch (4" or larger) has any crack Conifer has a single crack with inrolled bark and cavity or decay are inside
Weak unions	A weak union with inrolled bark	A weak union that is also cracked, cankered or decayed
		A weak union in the tree's hot spot
Decay	Canker-rot infection	Canker-rot infection in tree's hot spot
		Cavity or decay (fruiting body) associated with an open crack or a weak branch union Any branch with decay
Canker	Canker affects > 1/2 of tree's circumference	Canker in tree's hot spot and affects > 1/2 of tree's circumference
	Canker at base of leaning tree	Canker-rot infection in tree's hot spot Canker physically connected to crack, decay or weak union
Dead	Branch more than 2/3rds dead (remove branch)	Any dead tree
		Any dead branch or top
		Any lodged branch
Poor tree architecture	Branch unbalanced with respect to rest of crown mass	Tree leaning over target with > 45 degree angle to the lean
	Branches with sharp bend or twist	Tree leaning over target with another defect in the hot spot
Root problems	Root problems associated with stem decay, crack or canker	Freshly leaning tree with recent root-lifting, soil movement or mounding near base of tree
		Inadequate root support > 1/2 of roots severed inside dripline

From "How to Detect, Assess and correct Hazard Trees in Recreational Areas", 1993, Minnesota Department of Natural Resources—Forestry.



## ***Appendix E***



## DURING/AFTER CONSTRUCTION CHECKLIST

<u>Activity</u>	<u>Completed</u>	
	Yes	No
Comment		

Soil stockpile is stabilized or being actively used:

Mulch covers the soil:

Grass catch is well on its way; 95% cover needed:

Silt fences, hay bales are functioning and installed properly; should they be repaired or replaced:

Slopes are stabilized with mulch, or mulch and netting if over 15% (8% in winter after first killing frost):

Culvert inlets/outlets protected with riprap:

Rip rap is properly sized and graded:

Culvert discharge aprons and plunge pools in place:

Geotextile used under riprap, if specified. If not, specified, then a 6" clean gravel layer is present:

Where erosion control netting is used in ditches, the bottom of the ditch is not eroding beneath it:

Where roadside ditching is present, the road shoulders are stable (not eroding due to weak ditch side slopes):

### SITE SPECIFIC ACTIVITIES NEEDING INSPECTION:

- 1.
- 2.
- 3.

### ADDITIONAL COMMENTS AND NOTATIONS:

## **EROSION & SEDIMENT CONTROL**

### **CHECKLIST FOR SUBMISSIONS FOR EROSION AND SEDIMENT PLANS** Cumberland County Soil and Water Conservation District

#### **MAP SUBMISSIONS**

- Location map with boundaries of site clearly marked
- USGS Topographic map with boundaries of site clearly marked and drainage areas used for Stormwater management calculations noted:  
*NOTE: Total watershed above and below project area must be shown!*
- Topographic map specifically for project (as required by town) with:
  - Pre-development contours noted
  - Post-development contours noted
  - Limits of sediment and erosion control practices
  - Post development drainage patterns noted
  - Flow lengths used in [Tc] calculations noted
  - Post development drainage areas used in determining ditch and culvert sizes noted
- SCS medium intensity soils map with boundaries of site clearly marked and drainage areas noted
- High Intensity Soil Survey for the site (if required by town)  
*Note: This should be superimposed on a lot map for use in the soil properties evaluation*

#### ***NARRATIVE SUBMISSIONS***

- Description of the project
  - Briefly describe nature of project
  - Describe present and post-development land use cover
  - Describe which areas will be disturbed by construction
  - Describe adjacent areas which will be disturbed by construction
  - Describe areas on-site especially vulnerable to erosion
  - Describe soils found on-site, their erosivity, their construction limitations and how these limitations will be overcome
  - Describe present stability of receiving streams and channels below the project site

- Description of surface and subsurface runoff management
  - Analysis of post-development surface and subsurface runoff management
  - Note method of calculation of peak discharge and soil stability analysis of water conveyance structures (i.e. culverts, ditches, pipeline systems, sediment traps, sediment basins, and outlets associated with each)
  - Description of erosion and sedimentation control using:
    - a] agronomic and non-structural practices
    - b] structural practices
  - Indicate how accelerated erosion will be minimized
  - Indicate how off-site sedimentation will be minimized
- Schedule of construction (including schedule of installation/implementation of temporary and permanent sediment and erosion control structures and management practices)
- General description of inspection and maintenance (i.e. frequency of cleanout of sediment traps) for sediment and erosion control measures

### ***DESIGN DRAWINGS AND CALCULATIONS***

- Detail drawings of any structural practices used that are not referenced in the Environmental Quality Handbook
- Calculations of hydrology, hydraulics and soil stability for:
  - Culverts and/or conduit systems
  - Outlet structures
  - Sediment basins
  - Diversions
  - Ditches and waterways (grassed, stone lined, paved, etc.)
  - Plunge tools
  - Tile drainage
  - Worksheets (show assumptions used)
  - Worksheets used the USLE
  - Other: \_\_\_\_\_

**Erosion and Sediment Control Plans which are to be reviewed by the Cumberland County Soil and water Conservation District should be submitted to the District Office a minimum of one month prior to the date when a letter of approval or review comments are needed by the municipality.**

### THIRD PARTY INSPECTION/MONITORING AGREEMENT

WHEREAS, \_\_\_\_\_, a corporation/business/individual duly organized and existing under the laws of the State of Maine, and having a place of business/residence at the town of \_\_\_\_\_, in the County of \_\_\_\_\_ in the State of Maine, (herein after referred to as "Builder") is the representative of the owner of a certain lot or parcel of land consisting of the \_\_\_\_\_ Subdivision site situated in \_\_\_\_\_, Maine located on \_\_\_\_\_ Road; and

WHEREAS, the Builder has obtained approval from the Town of \_\_\_\_\_. (herein after referred to as "Town") pursuant to the provisions of Site Plan and Subdivision Ordinances of the Town, to erect and build a house, leach field, and associated Stormwater management systems as depicted in the plans and calculations submitted to the Town of \_\_\_\_\_.

WHEREAS, as a condition of the approval the Town and the Builder have required that the \_\_\_\_\_ a corporation, duly organized and existing under the laws of the State of Maine, and having a place of business at \_\_\_\_\_, County of \_\_\_\_\_, and State of Maine, (hereinafter referred to as "Inspector"), monitor the installation and execution of the erosion and sedimentation control plan and portions of the Stormwater management system as designed, shown and approved on said plans submitted to the Town; and

WHEREAS, Inspector and the Builder have reached an agreement regarding the work to be performed by the Inspector under the terms of the aforesaid; and

WHEREAS, the parties wish to reduce this agreement to writing.

NOW THEREFORE, in consideration of One Dollar (\$1.00) and other valuable considerations, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree as follows:

1. Inspector hereby covenants and agrees to inspect/monitor the construction of the access road, selected portions of the associated drainage systems, and the implementation of the erosion and sedimentation control plan once a week or more often as deemed necessary by the Inspector, the Town or Builder, or after any significant rainfall event. Inspections shall be regular and continuous from the beginning of construction to the completion of the site worked. The Builder shall notify the Inspector two working days prior to the onset of construction.
2. The Builder shall pay for these services at a rate of \$\_\_\_\_\_ per hour for the Professional Engineer who will conduct the inspections. Chargeable time shall be measured from office to office. The parties estimate that the total expenses for these services shall be \$\_\_\_\_\_. The hourly rate is set current

with existing policy, should this standard rate change both parties agree to honor the increases without interruption to said services.

- 3. Inspector shall prepare a written report on a monthly basis as to whether the conditions are in compliance with the Town approved plans. The report shall include documentation and findings of each site visit. Deficiencies found during a routine inspection shall be reported in writing to the Builder within 48 hours and shall be made available to the parties involved and copied accordingly when prepared.
  
- 4. Nothing contained herein shall impose any liability of any kind upon Inspector. Inspector shall have no liability whatsoever to the Builder, Town of \_\_\_\_\_, or any other entity in connection with its obligations hereunder. In addition, Inspector is not responsible for any work performed while on the site or not, or for any subsurface or unforeseen construction conditions.
  
- 5. In the event that Inspector is dissolved, its responsibilities under this Agreement shall be transferred to the Town of \_\_\_\_\_ or another suitable party as designated by such.

**ADDRESS:**

**PHONE:**

**BY:** \_\_\_\_\_

**Its:** \_\_\_\_\_

**INSPECTING NAME:**

**BY:** \_\_\_\_\_

**Its:** \_\_\_\_\_

## ***Appendix F***



## **Subchapter 3: ENDANGERED SPECIES**

**(replaces Title 12 M.R.S.A. §§ 7751-7760)**

### **Title 12 MRSA § 12801. Declaration of purpose**

The Legislature finds that various species of fish or wildlife have been and are in danger of being rendered extinct within the State of Maine, and that these species are of esthetic, ecological, educational, historical, recreational and scientific value to the people of the State. The Legislature, therefore, declares that it is the policy of the State to conserve, by according such protection as is necessary to maintain and enhance their numbers, all species of fish or wildlife found in the State, as well as the ecosystems upon which they depend.

This subchapter and chapter 631 are established to carry out the purposes of this section.

### **12 §12802. Commissioner's authority, investigations and programs**

**1. Investigations.** The commissioner may conduct investigations in order to develop information relating to population size, distribution, habitat needs, limiting factors and other biological and ecological data relating to the status and requirements for survival of any species of fish or wildlife occurring in the State, whether endangered or not.

**2. Programs.** The commissioner may develop programs to enhance or maintain the populations described in subsection 1.

### **12 §12803. Designation of endangered species**

**1. Standards.** The commissioner shall recommend a species to be listed as endangered or threatened whenever the commissioner finds one of the following to exist:

- A. The present or threatened destruction, modification or curtailment of its habitat or range;
- B. Overutilization for commercial, sporting, scientific, educational or other purposes;
- C. Disease or predation;
- D. Inadequacy of existing regulatory mechanisms; or
- E. Other natural or manmade factors affecting its continued existence within the State.

**2. Commissioner's duties.** In recommending a species to be listed as endangered or threatened, the commissioner shall:

- A. Make use of the best scientific, commercial and other data available;
- B. Consult, as appropriate, with federal agencies, other interested state agencies, other states having a common interest in the species and interested persons and organizations; and
- C. Maintain a list of all species that the Legislature has designated to be endangered or threatened, naming each species by both its scientific and common name, if any, and specifying over what portion of its range each species so designated is endangered or threatened.

**3. Legislative authority.** The Legislature, as sole authority, shall designate a species as a state

endangered or state threatened species. The list of state endangered or state threatened species by common name, scientific name and status is as follows:

- A. Least tern, *Sterna antillarum*, endangered;
- B. Golden eagle, *Aquila chrysaetos*, endangered;
- C. Piping plover, *Charadrius melodus*, endangered;
- D. Sedge wren, *Cistothorus platensis*, endangered;
- E. Grasshopper sparrow, *Ammodramus savannarum*, endangered;
- F. Box turtle, *Terrapene carolina*, endangered;
- G. Black racer, *Coluber constrictor*, endangered;
- H. Roseate tern, *Sterna dougallii*, endangered;
- I. Northern bog lemming, *Synaptomys borealis*, threatened;
- J. Blanding's turtle, *Emydoidea blandingii*, endangered;
- K. Black tern, *Chlidonias niger*, endangered;
- L. American pipit, *Anthus rubescens* (breeding population only), endangered;
- M. Peregrine falcon, *Falco peregrinus* (breeding population only), endangered;
- N. Roaring Brook mayfly, *Epeorus frisoni*, endangered;
- O. Ringed boghaunter, *Williamsonia lintneri*, threatened;
- P. Clayton's copper, *Lycaena dorcas claytoni*, endangered;
- Q. Edwards' hairstreak, *Satyrium edwardsii*, endangered;
- R. Hessel's hairstreak, *Callophrys hesseli*, endangered;
- S. Katahdin arctic, *Oenis polixenes katahdin*, endangered;
- T. Spotted turtle, *Clemmys guttata*, threatened;
- U. Bald eagle, *Haliaeetus leucocephalus*, threatened;
- V. Razorbill, *Alca torda*, threatened;
- W. Atlantic puffin, *Fratercula arctica*, threatened;
- X. Harlequin duck, *Histrionicus histrionicus*, threatened;
- Y. Arctic tern, *Sterna paradisaea*, threatened;
- Z. Upland sandpiper, *Bartramia longicauda*, threatened;
- AA. Swamp darter, *Etheostoma fusiforme*, threatened;
- BB. Tidewater mucket, *Leptodea ochracea*, threatened;
- CC. Yellow lampmussel, *Lampsilis cariosa*, threatened;
- DD. Tomah mayfly, *Siphonisca aerodromia*, threatened;
- EE.
- FF. Twilight moth, *Lycia rachelae*, threatened;
- GG. Pine barrens zanclognatha, *Zanclognatha martha*, threatened;
- HH. Redfin pickerel, *Esox americanus americanus*, endangered;
- II. Juniper hairstreak, *Callophrys gryneus*, endangered;
- JJ. Rapids clubtail, *Gomphus quadricolor*, endangered;
- KK. New England cottontail, *Sylvilagus transitionalis*, endangered;
- LL. Black-crowned night heron, *Nycticorax nycticorax*, threatened;

MM. Common moorhen, *Gallinula chloropus*, threatened;  
NN. Great cormorant, *Phalacrocorax carbo* (breeding population only), threatened;  
OO. Short-eared owl, *Asio flammeus* (breeding population only), threatened;  
PP. Purple lesser fritillary, *Boloria chariclea grandis*, threatened;  
QQ. Sleepy duskywing, *Erynnis brizo*, threatened;  
RR. Boreal snaketail, *Ophiogomphus colubrinus*, threatened;  
SS. Brook floater, *Alasmidonta varicosa*, threatened;  
TT. Barrow's goldeneye, *Bucephala islandica*, threatened; and  
UU. Least bittern, *Ixobrychus exilis*, endangered.

**4. Process for recommendation; notice and hearings.** Prior to recommending an addition, deletion or other change to the endangered and threatened species listed in subsection 3, the commissioner shall provide for public notice and public hearings on that proposed recommendation in accordance with the provisions of Title 5, chapter 375, subchapter 2.

**5. Designation by Legislature.** The Legislature may not amend the list of endangered or threatened species in subsection 3 except upon the recommendation of the commissioner.

## **12 §12804. Conservation of endangered species**

**1. Conservation of nongame and endangered species.** The commissioner may establish such programs as are necessary to bring any endangered or threatened species to the point where it is no longer endangered or threatened, including:

- A. Acquisition of land or aquatic habitat or interests in land or aquatic habitat;
- B. Propagation;
- C. Live trapping;
- D. Transplantation. Prior to the transplantation, introduction or reintroduction of an endangered or threatened species in the State, the commissioner shall, in conjunction with the Atlantic Salmon Commission, when appropriate, develop a recovery plan for that species, conduct a public hearing on that recovery plan pursuant to Title 5, Part 18 and submit that plan to the joint standing committee of the Legislature having jurisdiction over inland fisheries and wildlife matters. The introduction or reintroduction of that species must be conducted in accordance with the recovery plan developed under this paragraph and may not begin sooner than 90 days after all conditions of this paragraph have been met; and
- E. In the extraordinary case where population pressures within a given group ecosystem can not be otherwise relieved, regulated taking.

**2. Habitat.** For species designated as endangered or threatened under this subchapter the commissioner may by rule identify areas currently or historically providing physical or biological features essential to the conservation of the species and that may require special management considerations. Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

**3. Protection guidelines.** The commissioner may by rule develop guidelines for the protection of species designated as endangered or threatened under this subchapter. Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

**4. Annual report.** The commissioner shall submit a written report by January 1st of each year to the joint standing committee of the Legislature having jurisdiction over inland fisheries and wildlife matters

and the joint standing committee of the Legislature having jurisdiction over marine resources matters describing the status of all current and planned programs, activities and rules of the department pertaining to the conservation or management of endangered or threatened species. When appropriate, this report may be combined with any transplantation report required under subsection 1, paragraph D. The commissioner shall notify the Legislature by January 1st of each year that the report has been delivered.

## **12 §12805. Cooperative agreements**

The commissioner may enter into agreements with federal agencies, other states, political subdivisions of this State or private persons for the establishment and maintenance of programs for the conservation of endangered or threatened species and may receive all federal funds allocated for obligations to the State pursuant to these agreements.

## **12 §12806. State and local cooperation**

**1. Review.** A state agency or municipal government may not permit, license, fund or carry out projects that will:

- A. Significantly alter the habitat identified under section 12804, subsection 2 of any species designated as threatened or endangered under this subchapter; or
- B. Violate protection guidelines set forth in section 12804, subsection 3.

The commissioner shall make information under section 12804 available to all other state agencies and municipal governments for the purposes of review.

**2. Variance.** Notwithstanding subsection 1, state agencies and municipal governments may grant a variance from this section provided that:

- A. The commissioner certifies that the proposed action would not pose a significant risk to any population of endangered or threatened species within the State; and]
- B. A public hearing is held on the proposed action.

**3. Pending applications.** Notwithstanding Title 1, section 302, applications pending at the time of adoption of habitats and guidelines under section 12804, subsections 2 and 3 are governed by this section.

## **12 §12807. Introduction of wolves to State; approval**

A person may not release a wolf in the State for the purpose of reintroducing that species into the State without the prior approval of both Houses of the Legislature and the commissioner.

A person who violates this section commits a Class E crime.

## **12 §12808. Misuse of endangered or threatened species**

For the purposes of this section, "to take," "take" and "taking" mean the act or omission that results in the death of any endangered or threatened species.

**1. Prohibited acts regarding endangered or threatened species; negligence.** Except as provided in subsections 2 and 3, a person may not negligently:

- A. Import into the State or export out of the State any endangered or threatened species. A person who violates this paragraph commits a Class E crime;
- B. Hunt, take, trap or possess any endangered or threatened species within the State. A person who violates this paragraph commits a Class E crime;

C. Possess, process, sell, offer for sale, deliver, carry, transport or ship, by any means whatsoever, any endangered or threatened species or any part of an endangered or threatened species. A person who violates this paragraph commits a Class E crime; or

D. Feed, set bait for or harass any endangered or threatened species. A law enforcement officer, as defined in Title 25, section 2801-A, subsection 5, must issue a warning to a person who violates this paragraph for the first time. A person who violates this paragraph after having previously been given a warning under this paragraph commits a Class E crime.

**1-A. Prohibited acts regarding endangered or threatened species; intentional.** Except as provided in subsections 2 and 3, a person may not intentionally:

A. Import into the State or export out of the State any endangered or threatened species. A person who violates this paragraph commits a Class D crime;

B. Hunt, take, trap or possess any endangered or threatened species within the State. A person who violates this paragraph commits a Class D crime;

C. Possess, process, sell, offer for sale, deliver, carry, transport or ship, by any means whatsoever, any endangered or threatened species or any part of an endangered or threatened species. A person who violates this paragraph commits a Class D crime; or

D. Feed, set bait for or harass any endangered or threatened species. A law enforcement officer, as defined in Title 25, section 2801-A, subsection 5, must issue a warning to a person who violates this paragraph for the first time. A person who violates this paragraph after having previously been given a warning under this paragraph commits a Class D crime.

**2. Exceptions for certain purposes.** Notwithstanding subsections 1 and 1-A or section 10650 as it applies to rules adopted in accordance with this subchapter, the commissioner may:

A. Under such terms and conditions as the commissioner may prescribe, permit any act prohibited by this section or by rule for educational or scientific purposes or to enhance the propagation or survival of an endangered or threatened species; and

B. Under such terms and conditions as the commissioner may prescribe, permit any endangered or threatened species that enters the State and is being transported to a point outside the State to be so entered and transported without restriction in accordance with the terms of any federal or state permit.

**3. Exceptions; incidental take plan.** Notwithstanding subsection 1, the commissioner may:

A. Permit the taking of any endangered species or threatened species if:

- (1) Such taking is incidental to, and not the purpose of, carrying out an otherwise lawful activity;
- (2) The taking will not impair the recovery of any endangered species or threatened species; and
- (3) The person develops and implements an incidental take plan approved by the commissioner to take an endangered species or threatened species pursuant to paragraph B; and

B. Allow a plan that minimizes the incidental taking of an endangered species or threatened species that specifies the following:

- (1) A description of the specific activities sought to be authorized by the incidental take permit and an analysis of potential alternatives;
- (2) The individual and cumulative effects that may reasonably be anticipated to result from the proposed actions covered by the plan;
- (3) The recovery measures the applicant will implement to prevent, minimize and mitigate the individual and cumulative effects and any provisions that are necessary to prevent, minimize and mitigate circumstances that are likely to impair the recovery of any endangered or threatened species covered by the plan;
- (4) The procedures for monitoring the effectiveness of the recovery measures in the plan;
- (5) The anticipated costs of implementing the plan and the availability of necessary funding for

the applicant to implement the plan; and

(6) Other modifications to the plan or other additional measures, if any, that the department may require and such other matters as the department determines to be necessary for the recovery of species consistent with this section.

The department shall seek input from knowledgeable individuals or groups on each incidental take plan for endangered or threatened species.

If any person fails to abide by the terms of any permit authorizing the incidental taking of an endangered or threatened species, the permit must be immediately suspended or revoked.

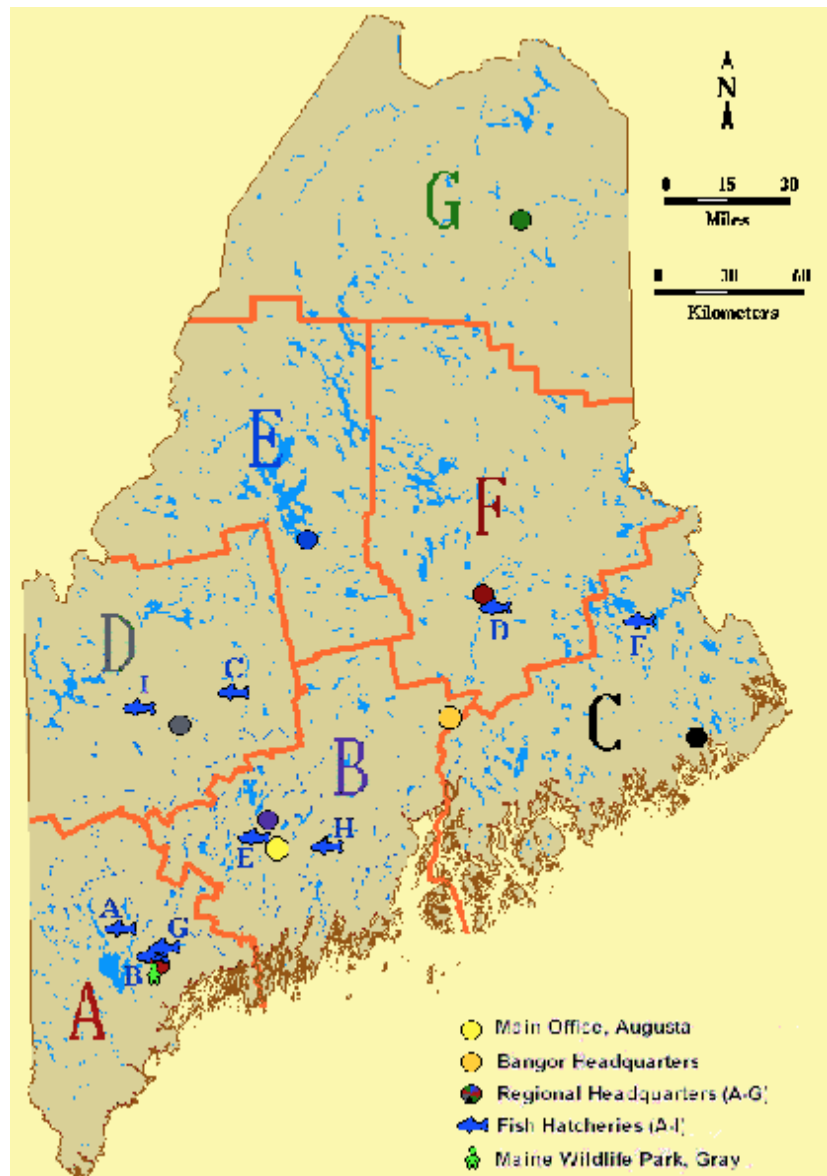
## **12 §12809. Judicial enforcement**

**1. General.** In the event of a violation of this subchapter, any rule adopted pursuant to this subchapter or any license or permit granted under this subchapter, the Attorney General may institute injunctive proceedings to enjoin any further violation, a civil or criminal action, or any appropriate combination of those proceedings without recourse to any other provision of law administered by the department.

**2. Restoration.** The court may order restoration of any area affected by any activity found to be in violation of this subchapter, any rule adopted pursuant to this subchapter or any license or permit granted under this subchapter, to its condition prior to the violation or as near to that condition as possible. When the court finds that the violation was willful, the court shall order restoration under this subchapter, unless the restoration would result in:

- A. A threat to public health and safety;
- B. Environmental damage; or
- C. A substantial injustice.

Maine Department of Inland Fisheries and Wildlife  
Regional Office Directory



**Region A:** 358 Shaker Road, Gray, Maine 04039 (207) 657-2345

**Region B:** 270 Lyons Road, Sidney, Maine 04330 (207) 547-5318

**Region C:** PO Box 220, Jonesboro, Maine 04648-0220 (207) 434-5927

**Region D:** 689 Farmington Road, Strong, Maine 04983 (207) 778-3324

**Region E:** PO Box 551, Greenville, Maine 04441-0551 (207) 695-3756

**Region F:** HC 67, Box 1066, Enfield, Maine 04493 (207) 732-4132

**Region G:** PO Box 447, Ashland, Maine 04732-0447 (207) 435-3231

**Chapter 8: ENDANGERED SPECIES**

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**8.01 Agency Jurisdiction**

- A. The Commissioner has the authority to recommend to the Legislature the designation of any species of fish or wildlife found in the State (12 MRSA §7751) as endangered [12 MRSA §7001(7)] or threatened [12 MRSA §7001 (36)] in accordance with the provisions of the Maine Endangered Species Act (12 MRSA §7753). The Legislature has sole authority to designate a species as endangered or threatened.
- B. When IF&W has overlapping jurisdiction with another state agency for a species (i.e. the Atlantic Salmon Authority and Atlantic salmon or the Department of Marine Resources and marine mammals, marine turtles, marine fish, marine invertebrates, and anadromous and catadromous species other than Atlantic salmon when in tidal waters), or another state agency has primary responsibility for a species (i.e. marine fish), IF&W will not recommend that species as threatened or endangered until the agency with overlapping or primary jurisdiction has reviewed the listing request.

**8.02 Designation of Endangered and Threatened Species**

- A. In determining whether a species meets one or more of the standards for designating a species as endangered or threatened as listed in 12 M.R.S.A. §7753(1), qualifications for consideration for listing, population guidelines for risk of extinction, and other factors will be considered. For the purposes of this chapter, "species" will mean "species" or "subspecies" and "populations" will mean all individuals of the species, statewide.

**1. Qualifications for Consideration for Listing**

A species may only be recommended for listing as a state endangered or threatened species if it meets all of the following qualifications:

- a. it is a species of mammal, bird, fish, amphibian, reptile, or invertebrate wild by nature as distinguished from domestic species;
- b. it is an indigenous species to Maine, meaning it is not an exotic deliberately or accidentally introduced into Maine, the United States, or North America;
- c. it is a species that spends some portion of its annual cycle in Maine, including breeding, migration, or wintering, but is not a vagrant or accidental visitor;



- d. it is a species that has not expanded into Maine within the past 50 years as part of a general range expansion, unless it historically occurred in Maine or is threatened or declining throughout a significant portion of its total range;
- e. it is a species that has not been reintroduced into Maine as part of an experimental wildlife management program, unless listing is part of the reintroduction plan; and
- f. it is taxonomically classified no finer than a subspecies, unless federally Endangered or Threatened.

2. **Population Guidelines for Risk of Extinction**

The following population characteristics, when available, will be considered by the Commissioner when recommending whether a species meets the definition of Endangered or Threatened as provided in 12 M.R.S.A. §7001 (7 and 36);

- a. population viability,
- b. population size,
- c. population trend,
- d. population distribution,
- e. population fragmentation, and
- f. endemism, meaning the species only occurs in Maine.

3. **Other Factors**

In addition to population guidelines (2) above, other factors, including range or habitat loss, disease, predation, over-utilization, inadequacy of regulations, and other natural or human-related factors as measured through observation, inference, or projection, will be considered when determining whether to recommend a species for listing as Endangered or Threatened as provided in 12 M.R.S.A. §7001 (7 and 36).

B. **Review of List**

- 1. At least every 5 years, the Department shall initiate a review of the designation of species as Endangered or Threatened to determine if any species should be recommended to be added to, deleted from, or changed between the lists.
- 2. Requests to add, change, or remove species on the lists may be submitted to the Commissioner for review and recommendation at any time.

C. Prior to recommending an addition, deletion or other change to the endangered and threatened species list, the Commissioner shall provide for public notice and

public hearings on the proposed recommendation in accordance with the provisions of Title 5, chapter 375, subchapter II.

**8.03 Federally Listed Species (*Repealed*)**

**8.04** The following species have been designated by the Legislature to be endangered or threatened species within the State of Maine:

<b>Common Name Distribution</b>	<b>Scientific Name</b>	<b>Status</b>	
Least Tern	<i>Sterna albifrons</i>	Endangered	Statewide
Golden Eagle	<i>Aquila chrysaetos</i>	Endangered	Statewide
Piping Plover	<i>Charadrius Melodus</i>	Endangered	Statewide
Sedge Wren	<i>Cistothorus platensis</i>	Endangered	Statewide
Grasshopper sparrows	<i>Ammodramus avannarum</i>	Endangered	Statewide
Box Turtle	<i>Terrapene carolina</i>	Endangered	Statewide
Black Racer	<i>Coluber constrictor</i>	Endangered	Statewide
Roseate Tern	<i>Sterna dougallii</i>	Threatened	Statewide
Northern Bog Lemming	<i>Synaptomys borealis</i>	Threatened	Statewide
Loggerhead Turtle	<i>Caretta caretta</i>	Threatened	Statewide
Blanding's Turtle	<i>Emydoidea Blandingii</i>	Threatened	Statewide
Spotted Turtle	<i>Clemmys guttata</i>	Threatened	Statewide
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Threatened	Statewide

**8.05 Essential Habitat for Species Designated as Endangered or Threatened**

Maps identifying essential habitat entitled “Essential Habitat for Endangered and Threatened Species” will be submitted upon adoption.

The following areas, identified as currently or historically providing physical or biological features essential to the conservation of an endangered or threatened species and requiring special management considerations, and the management guidelines for the protection of these areas are adopted in accordance with the provisions of Title 12, Sections 7754. (2, 3,) and 7755-A (1,2,3,). The Commissioner has identified and mapped such habitats as depicted on the maps entitled "Essential Habitat For Endangered and Threatened Species," which incorporated herein.

*(APA Office Note: the maps are available from the Department of Inland Fisheries and Wildlife, 284 State Street, 41 State House Station, Augusta, ME 04330-0041, phone (207) 287-5252. The latest index is at the end of this file.)*

A. **Bald Eagle Nest Site**

1. **Purpose**

To provide special protection to maintain breeding habitat and to prevent disturbance which may cause nesting failure of bald eagles. Protection is focused on the nest site.

2. **Definitions**

When used in this section, the following words and terms shall have the following meaning:

- a. **Nesting area.** "Nesting area" means a locality containing one or more nest sites and that has been used by a pair of nesting bald eagles.
- b. **Occupied.** "Occupied" means the presence of one or a pair of adult eagles, eagle eggs, or eagle chicks any time between March 1 and July 15.
- c. **Project.** "Project" means a planned undertaking, newly initiated or reinitiated.

\* 2. **Description**

**A bald eagle nesting area is a locality containing one or more nest sites used by breeding pair of bald eagles. A nesting area is occupied if one or a pair of adult eagles is present any time between March 1 and July 15. Protection is focused on the nest site.**

*\* (APA Office Note: Bolded language above was filed with amendment of 12-22-89 (89-578), however, it was not included in the amendment of 3-19-93 (93-69) and was not included in 94-118. If it no longer in effect, it should be repealed in accordance with the A.P.A.)*

3. **Designation Criteria**

Bald eagle nest sites identified and mapped by the Commissioner of Inland Fisheries and Wildlife as essential habitat must be within a nesting area occupied in at least one of the three most recent years and have either a nest that has existed for two consecutive years; or the only existing nest in that nesting area.

Bald eagle nest sites designated as essential habitat will be deleted as follows:

- a. All nest sites in the nesting area will be deleted if a nesting area has not been occupied, as defined, at any time during the most recent five years.

- b. An individual nest site within an active nesting area will be deleted if a nest structure has not existed at any time during the most recent five years or the Commissioner determines that the site is no longer suitable nesting habitat.

4. **Protection Guidelines**

a. **Projects Prohibited Without the Commissioner's Approval**

Any project requiring a permit or license from, or to be funded or carried out by, a state agency or municipal government partly or wholly within a bald eagle nest site designated as essential habitat shall not be permitted, licensed, funded or carried out unless the Commissioner determines that the activity will not significantly alter or unreasonably harm the essential nesting habitat. Projects that may be affected include, but are not limited to: Subdivision of land or buildings, construction, installation, expansion, alteration or repair of permanent structures; agricultural management; mineral exploration and extraction; forest management; road projects and construction; shoreland alteration; utility construction; water crossing; water impoundment; aquaculture; conversion of seasonal dwelling; installation of subsurface wastewater disposal system; and issuance of an exemption of the minimum lot size requirement.

b. **Exemptions**

The following activities are exempted from the requirements of this paragraph.

- (1) Projects limited to repairs, maintenance and alterations to the interior of an existing structure.
- (2) Emergency repairs to existing structures and utilities which due to unforeseen circumstances require immediate action.
- (3) Emergency activities which due to unforeseen circumstances require immediate action for public health or safety.
- (4) Licenses and permits to operate or occupy a completed project.
- (5) Projects that address the protection of the essential habitat and the endangered and threatened species and are conducted as part of a Department Wildlife Management Area Plan or Species Management Plan, or a Land Use Regulation Commission Resource Protection Plan (P-RP) to which the Department is a party, provided that the parties of the agreement perform according to its terms.

5. **Significant Alteration of Habitat**

In determining whether a project significantly alters or unreasonably harms essential nesting habitat, the following factors will be considered:

- a. Magnitude and time of year of noise and human activity generated by the project.
- b. Physical alteration to the landscape.
- c. Destruction of or alteration to key habitat components such as perch trees, roost trees, and foraging areas.
- d. Reduction in the seclusion of the nest site and adjacent shoreland area.
- e. Demonstrated tolerance of the particular eagles to human activity and disturbance.
- f. Reduction in the future suitability of the nest site to bald eagles.

B. **Roseate Tern Nesting Area**

1. **Purpose**

To provide special protection to maintain breeding habitat and to prevent disturbance which may cause nesting failure of roseate terns. Protection is focused on the nesting area.

2. **Definitions**

- a. **Nesting area.** "Nesting area" means a locality encompassing an island or portion of an island used by at least one pair of nesting roseate terns.
- b. **Nesting.** "Nesting" means the presence of one or more nests, eggs, chicks, or pairs of territorial adult terns between May 15 and August 15.
- c. **Project.** "Project" means a planned undertaking, newly initiated or reinitiated.

3. **Designation Criteria**

Roseate tern nesting areas identified and mapped by the Commissioner of Inland Fisheries and Wildlife as Essential Habitat must:

- a. Have a record of at least one pair of nesting roseate terns since 1930,

- b. Have suitable habitat as indicated by the presence of nesting common, arctic, or roseate terns in at least any 3 years since 1976, and
- c. Be considered essential to the achievement of the Department's management goals and objectives for roseate terns.

Roseate tern nesting areas designated as Essential Habitat will be deleted if:

- a. The nesting area has not been occupied by any nesting pairs of common terns, arctic terns, or roseate terns during the most recent 10 years, and the lack of occupancy is not related to predation or competition from other species, or to any human-related activity, or
- b. The nesting area is no longer considered essential to the achievement of the Department's management goals and objectives for roseate terns.

#### 4. **Protection Guidelines**

- a. **Projects Prohibited Without the Commissioner's Approval**

Any project requiring a permit or license from, or to be funded or carried out by, a state agency or municipal government partly or wholly within a bald eagle nest side designated as essential habitat shall not be permitted, licensed, funded, or carried out unless the Commissioner determines that the activity will not significantly alter or unreasonably harm the Essential habitat. Projects that may be affected include, but are not limited to: Subdivision of land or buildings, construction, installation, expansion, alteration or repair of permanent structures; agricultural management; mineral exploration and extraction; forest management; road projects and construction; shoreland alteration, utility construction; water crossing; water impoundment; dredging; aquaculture; conversion of seasonal dwelling; installation of subsurface wastewater disposal system; and issuance of an exemption of the minimum lot size requirement.

- b. **Exemptions**

The following activities are exempted from the requirements of this paragraph.

- (1) Projects limited to repairs, maintenance and alterations to the interior of an existing structure.
- (2) Emergency repairs to existing structures and utilities which due to unforeseen circumstances require immediate action.

- (3) Emergency activities which due to unforeseen circumstances require immediate action for public health or safety.
- (4) Licenses and permits to operate or occupy a completed project.
- (5) Projects that address the protection of the essential habitat and the endangered and threatened species and are conducted as part of a Department Wildlife Management Area Plan or Species Management Plan, or a Land Use Regulation Commission Resource Protection Plan (P-RP) to which the Department is a party, provided that the parties of the agreement perform according to its terms.

#### 5. **Significant Alteration of Habitat**

In determining whether a project significantly alters or unreasonably harms essential nesting habitat, the following factors will be considered:

- a. Magnitude and time of year of noise and human activity generated by the project.
- b. Physical alteration to the landscape of the uplands, waters, and submerged lands.
- c. Destruction of or alteration to key habitat components such as island vegetation, nesting and roosting substrate, and foraging areas.
- d. Increase in disturbance by humans, and in predation or competition by other species.
- e. Demonstrated tolerance of terns at the site to human activity and disturbance.
- f. Reduction in the future suitability of the nesting area to nesting roseate terns.

#### C. **Piping Plover and Least Tern Nesting, Feeding, and Brood-Rearing Areas**

##### 1. **Purpose**

The purpose of Essential Habitat designation for Piping Plovers and Least Terns is to: 1) provide special protection to maintain nesting, feeding, and brood-rearing habitats essential to the conservation of these species; and 2) minimize human-related disturbance that can cause nesting failure of these species. Protection is focused on the coastal wetlands and coastal sand dune systems used by nesting Piping Plovers or Least Terns.

This rule is not intended to, and shall not be interpreted to: 1) preclude rebuilding of existing structures in accordance with implementation of the coastal sand dune regulations (38 M.R.S.A., Sec. 480-A (Q) and Chapter 355 of Department of Environmental Protection Rules), nor 2) preclude recreational uses in practice at the time an area was designated as Essential Habitat and that are otherwise allowed by law.

2. **Definitions**

When used in this section, the following words and terms shall have the following meaning:

- a. **Nesting.** "Nesting" means the presence of one or more nests, eggs or chicks of Piping Plovers or Least Terns.
- b. **Nesting, feeding, and brood-rearing area.** "Nesting, feeding, and brood-rearing area" means a locality encompassing portions of coastal wetlands and coastal sand dune systems (including subtidal, intertidal and beach and associated salt marshes and wetlands) used by at least one pair of nesting Piping Plovers or Least Terns.
- c. **Project.** "Project" means a planned undertaking, newly initiated or reinitiated.

3. **Designation Criteria**

Piping Plover and Least Tern nesting, feeding, and brood-rearing areas identified and mapped by the Commissioner of Inland Fisheries and Wildlife (IF&W) as Essential Habitat must:

- a. Have a record of nesting by at least one pair of Piping Plovers or Least Terns since 1986, and
- b. Be considered essential to the achievement of the Department's management goals and objectives for Piping Plovers or Least Terns.

Piping Plover and Least Tern nesting, feeding, and brood-rearing areas designated as Essential Habitat will be deleted if:

- a. The area has not been occupied by any nesting pairs of Piping Plovers or Least Terns during the most recent 10 years and the lack of occupancy is not related to predation or competition from other species, or to any human-related activity; or
- b. The area is no longer considered essential to the achievement of the Department's management goals and objectives for Piping Plovers or Least Terns.

4. **Interpretation of Essential Habitat Area Boundaries**



The following guidelines shall be used to interpret mapped Essential Habitat boundaries:

- a. In shaded areas, boundary lines are delineated in greater detail on composite aerial photographs (see "Boundary Line Detail Photos For Piping Plover and Least Tern Essential Habitat", prepared in November, 1994). Copies of these photographs are available for viewing at town offices in affected municipalities; Maine Department of Inland Fisheries and Wildlife offices in Gray, Augusta, and Bangor; and Maine Department of Environmental Protection offices in Portland and Augusta, or they may be purchased from: Essential Habitat Maps, Wildlife Assessment Section, 650 State Street, Bangor, Maine 04401-5654.

Outside of shaded areas, the lines on the maps indicate the boundaries. Where a line is solid, the line on the map determines the boundary, and the inside of the line is the edge of the boundary. Where a line is dashed, the boundary is determined by the edge of the coastal wetlands as defined by 38 M.R.S.A., Sect. 480-B. Cross-hatched areas are not part of the Essential Habitat.

- b. Where a boundary line follows a seawall or similar protective structure, only the beach area on the seaward side is intended to be included within the Essential Habitat: neither the seawall itself nor the property behind it are part of the Essential Habitat.

## 5. **Protection Guidelines**

### a. **Projects Prohibited Without the Commissioner's Approval**

Any project requiring a permit or license from, or to be funded or carried out by, a state agency or municipal government partly or wholly within a Piping Plover and Least Tern nesting, feeding, and brood-rearing area designated as Essential Habitat shall not be permitted, licensed, funded or carried out unless the Commissioner determines that the project will not significantly alter the Essential Habitat.

Examples of projects that may be affected include, but are not limited to: subdivision of land or buildings; construction, installation, expansion, alteration or repair of permanent structures; mineral exploration and extraction; road projects and construction; dredging; bulldozing; removing or displacing soil, sand, vegetation, or other materials; draining or otherwise dewatering; filling, including adding sand or other material to a coastal sand dune; beach nourishment projects; dune restoration projects; utility construction; water crossing; water impoundment; aquaculture; installing of subsurface wastewater disposal system; and issuance of an exemption to the minimum lot size requirement.

Projects located wholly outside an area designated as Essential Habitat, regardless of whether some other portion of the lot or parcel of land is within the Essential Habitat, are not affected by this rule.

Licensed activities which are not considered projects and therefore is not affected by this rule include, but are not limited to: recreational hunting and fishing, shellfish harvesting, sulky driving, dog ownership, and motor vehicle and boat operation.

b. **Exemptions**

Within areas designated as Essential Habitat, the following projects are exempted from the requirements of this paragraph:

- (1) Emergency repairs to existing utilities and structures, including roads and seawalls that, due to unforeseen circumstances, require immediate action and do not require a coastal sand dune permit under 38 M.R.S.A., Section 480-A, §Q.
- (2) Emergency activities that, due to unforeseen circumstances, require immediate action for public health or safety.
- (3) Licenses and permits to operate or occupy a completed project.
- (4) Projects limited to repairs, maintenance, and alterations to the interior of an existing structure.
- (5) Projects that address the protection of the Essential Habitat and the Endangered or Threatened Species and are conducted as part of a Department Management Area Plan or Species Management Plan, or a Land Use Regulation Commission Resource Protection Plan (P-RP) to which the Department is a party, provided that the parties of the agreement perform according to its terms.
- (6) Municipal licenses or permits for a project for which the Department, through another permitting process, has already found no significant alteration of the habitat or violation of protection guidelines for the essential habitat as currently mapped.

c. **Review Process**

For projects located partly or wholly within Essential Habitat as defined by 12 M.R.S.A. §7754 and this chapter, it is the responsibility of the state agency or municipality considering the permit or license application, or funding or carrying out the

project, to obtain the Department's review. Forms entitled Request for Project Evaluation will be provided by the Department. Upon receiving a Request for Project Evaluation, the Department will provide an evaluation of whether the project would significantly alter the essential habitat or violate the Department protection guidelines as set forth in 12 M.R.S.A. §7755-A(1). If the proposed project will significantly alter Essential Habitat or violate the protection guidelines, and if a variance is sought, the Commissioner will determine whether a certification of no significant risk to the population, as described in 12 M.R.S.A. §7755-A(2) can be issued.

6. **Significant Alteration of Habitat**

In determining whether a project significantly alters essential nesting, feeding, and brood-rearing habitat for Piping Plovers and Least Terns, the following factors will be considered:

- a. Magnitude and time of year of noise and human activity generated by the project;
  - b. Within the area designated as Essential Habitat, destruction, alteration, or degradation of a portion of a coastal wetlands or coastal sand dune system (including subtidal, intertidal and beach and associated salt marshes and wetlands) which will adversely affect the Essential Habitat;
  - c. Increase in disturbance by humans and their pets, or increased predation (or attraction of predators) or competition from other species; and
  - d. Reduction in the future suitability of the nesting, feeding, and brood-rearing habitat for Piping Plovers and Least Terns.
-

STATUTORY AUTHORITY: 12 M.R.S.A. §§ 10104, 12804

EFFECTIVE DATE:

January 4, 1984 - Sec. 1

AMENDED:

January 17, 1987 - Sec. 1

March 1, 1990 - Sec. 3

March 11, 1991 - maps only

March 1, 1992 - maps only

March 24, 1993

March 29, 1994 - added new Sec. 1, 2 & renumber previous sec. 1, 2 & 3

May 23, 1994 - Sec. 3, 4 & 5

March 28, 1995 - maps only

May 31, 1995 - Sec. 5 (C)

February 23, 1998 - Sec. 5 - added first sentence; 5(A)(3); converted to M.S. Word 2.0.

October 29, 1998 - amended maps for existing Essential Habitat Site #PPLT 04 (Pine Point and Western Beach, Scarborough and Old Orchard Beach); added PPLT #11 (Fortunes Rocks Beach, Biddeford) and PPLT #12 (Scarborough Beach, Scarborough); added "List of Essential Habitat Maps and Their Current Effective Dates" as Appendix I. Maps are available from the Department.

October 1, 1999 - replaced Appendix I, added Appendix II

June 17, 2002 - maps only. added APA Office Note in Section 8.05

April 19, 2003 - maps only, for bald eagles -- filing 2003-102

August 15, 2004 - index only; APA Office Note refers users to Department for Index and maps. - filing 2004-315

June 18, 2005 - index and maps; APA Office Note refers users to Department for Index and maps - filing 2005-315

September 17, 2007 - index only - filing 2007-399

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## **REVIEW PROCESS FOR PROJECTS THAT MAY BE AFFECTED BY ESSENTIAL HABITAT RULE**

These are the steps a municipality or state agency must take to address **Essential Habitat** concerns when reviewing or proposing projects within their jurisdiction.

### **1. DETERMINE IF THE PROPOSED PROJECT IS IN OR NEAR AN ESSENTIAL HABITAT.**

Consult the official Essential Habitat maps. Reduced copies of these maps and an index by town name are included in this Atlas. Please contact the DIFW Regional Wildlife Biologist (Figure 1) if you need assistance verifying a project location relative to an Essential Habitat. If the proposed project is located partly or wholly within an Essential Habitat, go on to Steps 2-3. If the proposed project is clearly outside an Essential Habitat, these regulations and review procedures do **not** apply.

### **2. CONSULT WITH THE DIFW REGIONAL WILDLIFE BIOLOGIST.**

Encourage the applicant to obtain DIFW guidance during project planning and design. Municipalities and state agencies should request assistance from the Regional Wildlife Biologist during initial project reviews and **before** seeking final DIFW evaluation. Early involvement of the DIFW will minimize conflicts, delays, frustrations, and hardships for all parties.

### **3. SUBMIT A “REQUEST FOR PROJECT EVALUATION” TO THE DIFW.**

If the project meets municipal or state review standards and is recommended for approval by the town or state, an evaluation of the **final** proposal must be obtained from the DIFW before a decision can be issued. Town or state officials request an evaluation by submitting a “Request for Project Evaluation” (DIFW Form HER5/95) with the required attachments. A copy of this form and instructions for completing it are included in this Atlas.

The DIFW will evaluate the final project proposal according to review standards established for Essential Habitats, and determine if the project would significantly alter the habitat or violate protection guideline. Site visits and discussions with the project applicant will be necessary if they have not previously occurred.

The DIFW will notify the town or state agency of the results of its evaluation. The town or state agency issues a decision based on the Department’s evaluation and notifies the project applicant.

## **INSTRUCTIONS FOR COMPLETING**

## **A “REQUEST FOR PROJECT EVALUATION” (ESSENTIAL HABITATS OF ENDANGERED AND THREATENED SPECIES)**

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Formal MDIFW review of projects proposed within Essential Habitats is initiated upon submission of a **“Request For Project Evaluation”** by a state agency or municipality. Both the project applicant and the agency or municipal official reviewing the project must provide information on the form.

Please read the following instructions carefully before completing a request form. Contact the DIFW Regional Wildlife Biologist if you have questions or require assistance.

1. **Please type or print.** Illegible or incomplete forms will be returned.
2. The **project applicant**<sup>1</sup> must complete **Section A** and provide the reviewing agency or municipality with **3 copies** of the following items:
  - a. a photocopy of a portion of the official DIFW map that denotes the affected Essential Habitat and clearly shows project boundaries; and
  - b. a copy of the **final** project application, permit, and/or license as recommended for approval by the town or state. If none of these items exist for the project, a site map must be provided (scale: 1” = 200’). **Conditions agreed to as safeguards for the Essential Habitat** must be itemized in the permit application, site plan, or other project documentation.

Additional project documentation is generally not required but, if included, may enable a more rapid review by the Department.

3. An appropriate **representative of the state agency or municipality** reviewing or proposing the project must complete **Section B** and ensure that all information and attachments required from the applicant are provided.

<sup>1</sup>In cases where a state agency or municipality is proposing to fund or carry out a project within an Essential Habitat, the agency or municipality is considered the project applicant.

4. The completed form and all attachments should be sent to:

**ATTN: ESSENTIAL HABITAT REVIEW  
Maine Department of Inland Fisheries and Wildlife  
C/o Environmental Coordinator  
284 State Street, 41 State House Station  
Augusta, Maine 04333-0041**

5. The reviewing agency or municipality and the project applicant should each retain a copy of the completed form and all attachments. This will facilitate response to any additional inquiries from DIFW staff during the project evaluation.

The completed "Request For Project Evaluation" and all attachments will be retained on file by the DIFW and referenced to ensure that approved projects are carried out as described. **Projects that deviate from information provided on the form may be referred to the State Attorney General's Office as possible violations of the Maine Endangered Species Act.**

**ADDITIONAL COPIES OF THE "REQUEST FOR PROJECT EVALUATION"  
(FORM EHR5/95) ARE AVAILABLE FROM ALL DIFW OFFICES**



## REQUEST FOR PROJECT EVALUATION ESSENTIAL HABITATS OF ENDANGERED AND THREATENED SPECIES

**DIRECTIONS:** Please read and follow the instructions for filling out a "Request For Project Evaluation". Send this request and attachments to:

**ATTN: ESSENTIAL HABITAT REVIEW**  
**Maine Department of Inland Fisheries and Wildlife**  
**C/o Environmental Coordinator**  
**284 State Street, State House Station #41**  
**Augusta, Maine 04333-0041**

**SECTION A** (to be completed by project applicant)

1. Name of project applicant: \_\_\_\_\_  
Mailing address: \_\_\_\_\_ Telephone: \_\_\_\_\_
2. Name of property owner: \_\_\_\_\_  
Mailing address: \_\_\_\_\_ Telephone: \_\_\_\_\_
3. Project location: Town Tax Map# \_\_\_\_\_ Lot# \_\_\_\_\_  
Township: \_\_\_\_\_ County: \_\_\_\_\_
4. Are permit(s) or license(s) required for this project? \_\_\_\_ Yes \_\_\_\_ No  
If Yes, please list: \_\_\_\_\_
5. Attachments. The following items must be sent **in triplicate** with this form:
  - a) a photocopy of that portion of the official MDIFW map that denotes the affected Essential Habitat and clearly shows project boundaries (hardcopies are available in all MDIFW and affected town offices; digital copies are available at [www.mefishwildlife.com](http://www.mefishwildlife.com)); **and**
  - b) a copy of the **final** project application, permit, and/or license as recommended for approval; if none of these items exist for the project, the applicant must provide a site map (scale: 1" = 200')  
Additional project documentation is generally not required but, if included, may enable a more rapid review by MDIFW.
6. Are any of the following activities associated with this project?
  - a) subdivision plan or residential development? \_\_\_\_ No \_\_\_\_ Yes
  - b) exterior construction or repair of buildings? \_\_\_\_ No \_\_\_\_ Yes
  - c) road or trail construction or maintenance? \_\_\_\_ No \_\_\_\_ Yes
  - d) recreational activities? \_\_\_\_ No \_\_\_\_ Yes
  - e) alteration of soils or vegetation? \_\_\_\_ No \_\_\_\_ Yes
  - f) timber harvests or forest management? \_\_\_\_ No \_\_\_\_ Yes
  - g) agriculture or agricultural management? \_\_\_\_ No \_\_\_\_ Yes
  - h) alterations to wetlands, open waters, submerged lands, dunes, islands, or alpine areas? No Yes
  - i) modifications to shoreland zones (uplands within 250 feet of any wetland or water body)? \_\_\_\_ No \_\_\_\_ Yes

**\*SEE REVERSE: APPLICANT MUST COMPLETE SECTION A\***  
**Form EHR5/95 (Maine Dept. of Inland Fisheries and Wildlife)**



**Section A** (continued)

7. Briefly describe the nature and extent of project activities. Address each item answered by a "yes" in the previous question and provide details of those activities proposed within the Essential Habitat. (If additional space is needed, complete on a separate page and attach to this form.):

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8. What are the starting and ending dates of the project? If applicable, give dates for on-site planning, construction, and operational phases.

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9. Please summarize and attach any additional facts regarding this project you wish to bring to the attention of MDIFW.

10. I certify that the information described within this form is complete and accurate to the best of my knowledge and belief.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Section B** (to be completed by agency or municipal representative)

1. Name of agency/municipality: \_\_\_\_\_  
Mailing address: \_\_\_\_\_

Contact Individual: \_\_\_\_\_  
Title: \_\_\_\_\_ Telephone: \_\_\_\_\_

2. This agency/municipality finds the project described herein meets our criteria for approval, but is partly or wholly within a designated Essential Habitat. I hereby request evaluation by MDIFW to determine if the project would significantly alter the Essential Habitat or violate protection guidelines adopted for the habitat.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Section C** (for use by MDIFW only)

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

EHR#: \_\_\_\_\_ EH#: \_\_\_\_\_ Region: \_\_\_\_\_ CD: \_\_\_\_\_

EO#: \_\_\_\_\_ Town: \_\_\_\_\_ Agency: \_\_\_\_\_

Type: \_\_\_\_\_

## ***Appendix G***

**(SAMPLE) STATEMENT OF EVIDENCE OF VIOLATION**

**Alleged Violation** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Where did the violation take place?** \_\_\_\_\_  
\_\_\_\_\_

**Date(s) violation took place: From** \_\_\_\_\_ **to** \_\_\_\_\_.

**Owner or occupant of the premises where the violation took place:** \_\_\_\_\_  
\_\_\_\_\_

**Name and address of person(s) who did the work:** \_\_\_\_\_  
\_\_\_\_\_

**Describe the violation:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**CEO's personal observation of violation:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Witnesses to violation:**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Previous notification to violator:**

(a) oral Yes \_\_\_ date(s) \_\_\_\_\_  
No \_\_\_

(b) written Yes \_\_\_\_\_ date(s) \_\_\_\_\_ Copy Yes \_\_\_  
No \_\_\_\_\_ No \_\_\_

**Other available evidence:** Checks \_\_\_  
Receipts \_\_\_  
Contracts \_\_\_  
Photographs \_\_\_  
Receipt from registered mail \_\_\_  
Other \_\_\_

## CITIZEN COMPLAINT FORM

Reported to: \_\_\_\_\_

Date Received: \_\_\_\_\_

Sent to: \_\_\_\_\_

Date: \_\_\_\_\_

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Town: \_\_\_\_\_

Water Body: \_\_\_\_\_

Alleged Violator: \_\_\_\_\_

Reported by: \_\_\_\_\_

Address: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

Phone: \_\_\_\_\_

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DESCRIPTION OF VIOLATION:

DIRECTIONS TO AREA:

FIELD ACTION:



MAP \_\_\_\_\_

LOT \_\_\_\_\_

**(Town/City Name)**

NOTICE OF VIOLATION/ORDER FOR CORRECTIVE ACTION

TO: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

You are hereby notified that you are in violation of \_\_\_\_\_

\_\_\_\_\_

Violation observed: \_\_\_\_\_

Description of Violation: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

You are hereby ordered to take the following corrective action or measures no later than: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

You may be requested by the Code Enforcement Officer to sign a consent agreement and to pay a fine. Title 30-A M.R. S.A. Subsection 4452 establishes a fine of \$100 - \$2,500 for each violation of Ordinance. (A separate fine will be assessed for each day a violation continues). If you refuse to enter into a consent agreement and to pay the requested fine, or if the Code Enforcement Officer believes a court action is warranted, court action may be brought against you. The Town/City will seek an order for corrective action, a substantial fine, plus its Attorneys' fees and costs in such an action.

As permitted by Article VII of the (Town/City) Zoning Ordinance, an appeal of this enforcement action may be taken to the Ellsworth Zoning Board of Appeals within thirty (30) days of the date of this order, by submitting to the Clerk of the Zoning Board of Appeals a written statement and

application of the relief requested and why it should be granted. Failure to exercise this administrative procedure will jeopardize your right of appeal.

Please contact the Code Enforcement Officer if you have any questions concerning this violation and to make arrangements to satisfy the penalty. You must notify the Code Enforcement Officer when corrective action is taken.

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Date

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Code Enforcement Officer

**SAMPLE: Notice of Violation, Letter 1**

April 6, 2008

Town of Smalltown  
Office of Code Enforcement  
Smalltown, ME 01234  
Tel: (207) 123-4567

Mr. John Doe  
Green Street  
Smalltown, ME 01234

Dear Mr. Doe:

On April 1, 2008, I notified you verbally that you were in violation of Section 8 of the Smalltown Shoreland Zoning Ordinance for failing to apply for a permit to locate a structure in the shoreland zone on your property on Green Street.

The Town of Smalltown seeks your voluntary compliance with the Shoreland Zoning Ordinance. Enclosed are application forms for the required permit. Please complete these forms and submit them to this office by April 14, 2008. I will be happy to assist you if you have any questions.

If I do not receive your application by April 14, 2008, I will be forced to order you to remove the illegal structure, pursuant to section 10 (D)(2) of the Shoreland Zoning Ordinance.

Section 10(D)(4) of the Shoreland Zoning Ordinance states that any person who violates any provision of the ordinance is guilty of a civil violation and is subject to a fine of up to \$2,500 for each offense. In order to minimize the amount of the fine which a court could award against you if you the Selectmen decided to collect a fine, I encourage you to contact me about this as soon as possible.

Sincerely,

Joseph Jones  
Code Enforcement Officer

JJ:akd  
Enclosure



**SAMPLE: Notice of Violation, Letter 2**

April 15, 2008

Town of Smalltown  
Office of Code Enforcement  
Smalltown, ME 01234  
Tel: (207) 123-4567

Mr. John Doe  
Green Street  
Smalltown, ME 01234

Dear Mr. Doe:

You have received prior notice on April 1, 2008 of activities conducted by you in violation of Section 8 of the Smalltown Shoreland Zoning Ordinance. The notice requested your voluntary compliance with Section 8 of the Ordinance by asking that you submit an application to this office for a permit by April 14, 2008.

Because you have failed to submit an application by April 14, 2008 as requested, I hereby order you to remove the structure which you illegally placed in the shoreland zone on your property on Green Street, pursuant to Section 10(D)(2) of the Ordinance. If you have not removed the illegal structure within 10 days of receiving this notice, I will be forced to recommend that the Board of Selectmen initiate legal proceedings against you.

I would like to remind you that Section 10(D)(4) of the Shoreland Zoning Ordinance states that any person who continues to violate any provisions of the ordinance after receiving notice of the violation is guilty of a civil violation and subject to a fine of up to \$2,500 for each violation. If the Town is forced to take you to court and wins, the judge may order you to pay all of the Town's attorneys' fees and court costs, in addition to fining you and ordering you to remove your building.

Clearly, it is in your best interest to resolve this matter out of court. Please contact me immediately to discuss your intentions regarding this violation.

Sincerely,

Joseph Jones  
Code Enforcement Officer

JJ:akd

(Note: If the ordinance provides for a CEO's enforcement order to be appealed to the local appeals board, this violation letter should describe the appeals procedure and the effect of failing to appeal. In addition to a violation letter, it is recommended that a standard Notice of Violation form be used. See sample Notice of Violation/Order for Corrective Action form.)

**SAMPLE: Notice of Violation, Letter 3**

April 27, 2008

Town of Smalltown  
Office of Code Enforcement  
Smalltown, ME 01234  
Tel: (207) 123-4567

Mr. John Doe  
Green Street  
Smalltown, ME 01234

Dear Mr. Doe:

This to notify you that the board of Selectmen has voted to initiate legal proceedings against you to enforce the provisions of the Smalltown Shoreland Zoning Ordinance, pursuant to section 10 (D)(3). The Board was forced to take this action as a result of your failure to comply with my previous requests for voluntary compliance with the provisions of the Shoreland Zoning Ordinance, dated April 1, 2008 and April 15, 2008.

If you wish to enter a consent agreement with the Town to resolve this matter out of court, please contact me immediately.

Sincerely,

Joseph Jones  
Code Enforcement Officer

JJ:akd

ENFORCEMENT CHECKLIST

1. Name of Landowner \_\_\_\_\_  
Address \_\_\_\_\_

2. Description of violation

Ordinance/section \_\_\_\_\_

Brief description \_\_\_\_\_

3. Source of knowledge of violation:

\_\_\_\_ CEO

\_\_\_\_ Other Official - \_\_\_\_\_ (name)

\_\_\_\_ Citizen - \_\_\_\_\_ (name/address)

4. Investigation:

\_\_\_\_ Violation detected      \_\_\_\_ No violation found

5. Verbal notice given on \_\_\_\_\_ (date)

\_\_\_\_ Violation terminated      \_\_\_\_ Violation continues

6. 1<sup>st</sup> written warning given on \_\_\_\_\_ (date)

\_\_\_\_ Violation terminated      \_\_\_\_ Violation continues

7. 2<sup>nd</sup> written notice given on \_\_\_\_\_ (date)

\_\_\_\_ Violation terminated      \_\_\_\_ Violation continues

8. Temporary Restraining Order necessary

\_\_\_\_ Yes      \_\_\_\_ No

9. Administrative consent agreement signed

\_\_\_\_ Yes on \_\_\_\_\_ (date)      \_\_\_\_ No

10. Referred to municipal officers for prosecution/violator notified

\_\_\_\_\_ Yes on     (date)                          \_\_\_\_\_ No

11. Rule 80K complaint filed

\_\_\_\_\_ Yes on     (date)                          \_\_\_\_\_ No

12. Decision by court

Town won on     (date)                          Town lost on     (date)

### **Notice of Code Violations**

Municipal code enforcement officers should be aware of a recent Maine Supreme Judicial Court decision, *Town of Freeport v. Greenlaw*, 602 A.2d 1156 (Me. 1992). The case offers some guidance on the content required for a notice of a code violation in order to satisfy constitutional due process requirements.

In the *Greenlaw* case, the Freeport CEO sent a letter to the landowner informing him about the approval process for a proposed deck. In that same letter, he also noted that some picnic tables on the property were in violation of the town’s ordinance and must be removed immediately. The ordinance sections being violated were not cited. The last line of the letter instructed the owner to “(please remove the tables and seats upon receipt of this letter.” The owner failed to remove the tables and failed to appeal the CEO’s request to the board of appeals, even though such an appeal was authorized by the ordinance. The owner apparently believed that the tables were a legally protected nonconforming use but never raised this issue until the Town prosecuted him for a zoning violation. The Town argued to the Superior Court that it was too late for the landowner to raise this defense to the CEO’s enforcement order and the court agreed.

On appeal, the Maine Supreme Court found that the landowner was entitled to raise the grandfathering issue despite his failure to appeal to the board of appeals. The court held that the CEO’s letter did not constitute an “order” which could have been appealed to the zoning board because it was worded merely as a request and was not detailed enough to satisfy minimum due process requirements. In the words of the court: “Minimally, to be effective in triggering the running of an appeal period, an order to refrain from taking or continuing certain action because it violates a zoning ordinance should refer to the provisions of the ordinance allegedly being violated, inform the violator of the right to dispute the order and how that right is exercised by appeal and specify the consequences of failure to appeal...”

CEO’s should compare the content of their violation notices with the holding in *Greenlaw* and make any necessary changes to avoid the problems faced by the Town of Freeport in its enforcement action. (By R.W.S.)

## CONSENT AGREEMENT AND COMPLIANCE ORDER

This document constitutes an agreement between Joe Smith of 123 West Street, Northville, Maine (hereafter referred to as “Smith”) and the Town of Northville, Maine by and through its certified Code Enforcement Officer (hereafter referred to as “Town”) for the purposes of enforcing and resolving violations of the Town’s Shoreland Zoning Ordinance and the State of Maine Subsurface Wastewater Disposal Rules.

Both Smith and the Town agree as follows:

- 1) Smith is a resident of the town of Northville. He resides and operates a construction business at 123 West Street, Northville.
- 2) The Town’s Shoreland Zoning Ordinance and map were adopted March 2, 1993. Section 8(b) of the ordinance requires a shoreland zoning permit from the Planning Board in order to expand a nonconforming use. Section 10(22) of the ordinance requires a shoreland zoning permit from the Code Enforcement Officer to install a subsurface disposal system. Permits are required when these activities are conducted in areas shown as limited Residential-Recreation Districts on the zoning map.
- 3) Section 3 of the Maine Subsurface Wastewater Disposal Rules requires a permit from the plumbing inspector to install a new subsurface wastewater disposal system.
- 4) On or about May 19, 2005, Smith and his employees constructed an attached wooden deck on the south side of a residential structure owned by Jane Wealthy located at 184 Lake Road in Northville (recorded at the Somerset County Registry of Deeds, Book \_\_\_\_, Page \_\_\_\_). Smith and his employees also constructed a new subsurface wastewater disposal system on this property on or about May 19, 2005.
- 5) Smith constructed the wastewater disposal system without the permit required by the Wastewater Disposal Rules.
- 6) The lot at 184 Lake Road is located in the Limited Residential-Recreation District as shown on the Town’s Shoreland Zoning Map. The lot is one half acre and was recorded prior to the effective date of the ordinance. The residence on this lot sets back 42 feet from normal high water mark and was constructed prior to the effective date of the ordinance. Section 11 of the Town’s ordinance currently requires a lot size of 1 acre and a setback of 75 feet. Therefore, the structure is a nonconforming use.

- 7) Smith constructed the deck and the subsurface disposal system without the permits required by the Town's Shoreland Zoning Ordinance.
- 8) The Town's Code Enforcement Officer provided proper notice of these violations to Smith and the landowner (Wealthy). Notice of the violation included a right to appeal to the Town's Board of Appeals. No appeal of the Code Enforcement Officer's order to correct the violation was filed.
- 9) In consideration for the release by the Town of the causes of action which the Town has against Smith resulting from the violations enumerated in this agreement, Smith agrees to:
  - A. File applications with the Planning Board and the Plumbing Inspector for permits to construct the deck and the subsurface wastewater disposal system and to pay the required application fee of \$\_\_\_\_\_ for the shoreland zoning permits and \$\_\_\_\_\_ for the disposal system permit. Complete applications shall be filed on or before July 13, 2005. The Planning Board and the Plumbing Inspector shall approve or deny the applications within 10 days of receipt. On or before October 1, 2005 the deck and the disposal system shall either be in compliance with the requirements of the Town's Shoreland Zoning Ordinance and the State's Subsurface Wastewater Disposal Rules, including acquisition of the necessary permits, or they shall be removed by Smith.
  - B. Pay to the Town the sum of \$200 as a penalty for failing to apply for the necessary permits.
10. In consideration for and upon the completion of the undertaking set forth in the preceding paragraph, the Town releases the causes of action which it has against Smith arising from the violations and activities described in this agreement. In the event that all aspects of this agreement are complied with by Smith, the Town will take no further enforcement action against Smith for this cause of action.

ORDER

Based on the above agreement, the Code Enforcement Officer for the Town of \_\_\_\_\_ orders Smith to comply with this agreement as outlined.

Dated: \_\_\_\_\_ /s/ \_\_\_\_\_  
Joe Smith

Dated: \_\_\_\_\_ /s/ \_\_\_\_\_  
Town of \_\_\_\_\_, by John E.  
Begood, Certified Code Enforcement  
Officer/Plumbing Inspector



Consent Agreement

WHEREAS, John Doe (“The Landowner”) has conducted a clear-cutting operation without a permit within 250 feet of Trout Stream on land he owns (described in Book 6, page 58 at the Kennebec County Registry of Deeds), in a designated Resource Protection District, which has resulted in slash being deposited in the stream and which has increased the chances of soil erosion in that area;

WHEREAS, such activity constitutes a violation of Sections 10 and 11(N) of the Shoreland Zoning Ordinance of the Town of \_\_\_\_\_, (“the Ordinance”); and,

WHEREAS, the Code Enforcement Officer for the Town has duly notified the Landowner of the violation; and,

WHEREAS, Section 12 of the Ordinance authorizes the Municipal Officers to initiate legal action to enforce the Ordinance by obtaining a court order requiring the Landowner to pay a fine, clean up the slash deposits in the Stream, and take appropriate precautions against erosion; and,

WHEREAS, the Town and Landowner have been cooperating with each other in an attempt to reach an out-of-court settlement;

NOW, THEREFORE, the Town and Landowner agree as follows:

1. The Landowner agrees voluntarily to pay a \$100 fine to the municipality by (state deadline) and to clean up the slash and replant the area in accordance with an erosion control plan agreed upon by the Town and the Landowner and which conforms to the Environmental Quality Handbook Erosion Control (1972), published by the Soil and Water Conservation Commission, by (state deadline); and
2. The Town agrees to relinquish its right to prosecute the Landowner for violating the Ordinance in consideration of the Landowner’s promise to pay a fine, remove the slash, and implement the agreed-upon erosion control plan; EXCEPT THAT, if the Landowner breaches the terms of this Agreement by failing to pay the \$100 fine, clean up the slash, and implement the agreed-upon erosion control plan by the agreed-upon deadlines, the Town then may institute appropriate court proceedings to enforce the provisions of the Ordinance.

Done and dated at \_\_\_\_\_, Maine  
this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

Accepted and dated at \_\_\_\_\_, Maine  
this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

By: /s/ \_\_\_\_\_  
Selectman  
/s/ \_\_\_\_\_  
Selectman  
/s/ \_\_\_\_\_  
Selectman

/s/ \_\_\_\_\_  
Landowner

**SAMPLE “NO ACTION” LETTER #1**

June 1, 2006

John Doe  
Country Title Company  
Post Office Box 000  
Smallville, Maine 04212-0867

Dear John,

I have reviewed the Mortgage Loan Inspection performed by Survey Inc. for property located at 123 River Drive and have determined that the encroachment of the porch into the front yard setback area is insignificant and will not cause the City/Town to take action against the current or future property owner to have it removed. This determination was reached by understanding that the encroachment is minor, the violating structure is an open porch and that establishing the setback on a curved cul-de-sac is difficult and subject to greater tolerance than usually applied to a straight property line.

I trust that this information addresses your concern. If more information is needed, please do not hesitate to contact me.

Sincerely,

James P. McPhee, Director  
Land Use Planning and Enforcement

**SAMPLE “NO ACTION” LETTER #2**

February 2, 2006

John Doe  
Country Title Company  
Post Office Box 000  
Smallville, Maine 04212-0867

Dear John:

At your request, I have reviewed the Mortgage Loan Inspection by Survey Inc. for property owned by Jane Smith located at 2 Park Avenue. The plan indicates that a minor front yard setback violation may exist along the Park Avenue frontage. Given the accuracy of non-instrument survey, the minor violation ( $\pm$ 1 foot) and the fact that the City/Town permitted construction of the home, inspected it and has never recognized or had a complaint regarding any apparent setback violation, I herein state that the City/Town will not take any action against the property owner to cause the setback violation, if one exists, to be corrected.

If I can be of further assistance in this matter, please do not hesitate to contact me.

Sincerely,

James P. McPhee, Director  
Land Use Planning and Enforcement

**SAMPLE “NO ACTION” LETTER #3**

April 24, 2006

John Doe  
Country Title Company  
Post Office Box 000  
Smallville, Maine 04212-0867

Dear John,

At your request, I have reviewed the Mortgage Loan Inspection prepared by Survey Inc. for property owned by Joan A. Public located at 15 Maine Avenue. The inspection shows that there is a violation of the northwesterly side property line of approximately 5 feet. The result is a 0 setback along that boundary. The required setback would be 5 feet.

In researching the issue, I have searched Board of Appeals files and other municipal files and can find no answer as to how this setback may have been officially allowed. Our records indicate that the structure, including the violation portion, as constructed in approximately 1953. Knowing how permits were issued in that era – generally without a plot plan or much other detail being submitted for a building permit – it appears that the violation was not apparent at the time of permit issuance. Because the structure was built in reliance on a municipally issued building permit and there have been no known actions by the City/Town to discover and/or correct this violation, the City/Town will not now cause the owner to demolish the violating portion of the building to bring it into compliance with the required setback.

I trust that the foregoing answers your questions. If further assistance is needed, please do not hesitate to contact me.

Sincerely,

James P. McPhee, Director  
Land Use Planning and Enforcement

## ***Appendix H***

*All copyrights and other rights to statutory text are reserved by the State of Maine. The text included in this publication is current to the end of the Second Special Session of the 122nd Legislature, which adjourned July 30, 2005, but is subject to change without notice. It is a version that has not been officially certified by the Secretary of State. Refer to the Maine Revised Statutes Annotated and supplements for certified text.*

## **Title 38 § 437. Significant river segments identified**

For purposes of this chapter, significant river segments include the following:

**1. Aroostook River.** The Aroostook River from St. Croix Stream in Masardis to the Masardis and T.10, R.6, W.E.L.S. townline, excluding segments in T.9, R.5, W.E.L.S.; including its tributary the Big Machias River from the Aroostook River in Ashland to the Ashland and Garfield Plantation townlines;

**2. Dennys River.** The Dennys River from the railroad bridge in Dennysville Station to the dam at Meddybemps Lake, excluding the western shore in Edmunds Township and No. 14 Plantation;

**3. East Machias River.** The East Machias River from 1/4 of a mile above the Route 1 bridge in East Machias to the East Machias and T.18, E.D., B.P.P. townline, and from the T.19, E.D., B.P.P. and Wesley townline to the outlet of Crawford Lake in Crawford, excluding Hadley Lake;

**4. Fish River.** The Fish River from the bridge in Fort Kent Mills to the outlet of Eagle Lake in Wallagrass, and from the Portage Lake and T.14, R.6, townline to the Portage Lake and T.13, R.7, W.E.L.S. townline, excluding Portage Lake;

**5. Machias River.** The Machias River from the Whitneyville and Machias townline to the Northfield T.19, M.D., B.P.P. townline;

**6. Mattawamkeag River.** The Mattawamkeag River from the outlet of Mattakeunk Stream in Winn to the Mattawamkeag and Kingman Township townline, and from the Reed Plantation and Bancroft townline to the East Branch, including its tributaries the West Branch from the Mattawamkeag River to the Haynesville T.3, R.3, W.E.L.S. townline and from its inlet into Upper Mattawamkeag Lake to the Route 2 bridge; the East Branch from the Mattawamkeag River to the Haynesville and Forkstown Township townline and from the T.4, R.3, W.E.L.S. and Oakfield townline to Red Bridge in Oakfield; the Fish Stream from the Route 95 bridge in Island Falls to the Crystal-Patten townline; and the Baskehegan Stream from its inlet into Crooked Brook Flowage in Danforth to the Danforth and Brookton Township townline;

**7. Narraguagus River.** The Narraguagus River from the ice dam above the railroad bridge in Cherryfield to the Beddington and Devereaux Township townline, excluding Beddington Lake;

**8. East Branch of Penobscot.** The East Branch of the Penobscot from the Route 157 bridge in Medway to the East Millinocket and Grindstone Township townline;

**9. Pleasant River.** The Pleasant River from the railroad bridge in Columbia Falls to the Columbia and T.18, M.D., B.P.P. townline, and from the T.24, M.D., B.P.P. and Beddington townline to the outlet of Pleasant River Lake;

**10. Rapid River.** The Rapid River from the Magalloway Plantation and Upton townline to the outlet of Pond in the River;

**11. West Branch Pleasant River.** The West Branch Pleasant River from the East Branch to the Brownville and Williamsburg Township townline; and

**12. West Branch of Union River.** The West Branch of the Union River from the Route 9 bridge in Amherst to the outlet of Great Pond in the Town of Great Pond.

### **38 § 480-P. Special protection for outstanding river segments**

In accordance with Title 12, section 402, outstanding river segments shall include:

**1. Aroostook River.** The Aroostook River from the Canadian border to the Masardis and T.10, R.6, W.E.L.S. town line, excluding the segment in T.9, R.5, W.E.L.S., including its tributaries the Big Machias River from the Aroostook River to the Ashland and Garfield Plantation town line and the St. Croix Stream from the Aroostook River in Masardis to the Masardis and T.9, R.5, W.E.L.S. town line;

**2. Carrabassett River.** The Carrabassett River from the Kennebec River to the Carrabassett Valley and Mt. Abram Township town line;

**3. Crooked River.** The Crooked River, including the Songo River, from its inlet into Sebago Lake in Casco to the Waterford and Albany Township town lines;

**4. Dennys River.** The Dennys River from the railroad bridge in Dennysville Station to the outlet of Meddybemps Lake, excluding the western shore in Edmunds Township and No. 14 Plantation;

**5. East Machias River.** The East Machias River, including the Maine River, from the old powerhouse in East Machias to the East Machias and T.18, E.D., B.P.P. town line, from the T. 19, E.D., B.P.P. and Wesley town line to the outlet of Crawford Lake and from the No. 21 Plantation and Alexander town line to the outlet of Pocomoonshine Lake, excluding Hadley Lake, Lower Mud Pond and Upper Mud Pond;

**6. Fish River.** The Fish River from the bridge in Fort Kent Mills to the Fort Kent and Wallagrass Plantation town line, from the T.16, R.6, W.E.L.S. and Eagle Lake town line to the Eagle Lake and Winterville Plantation town line and from the T.14, R.6, W.E.L.S. and Portage Lake town line to the Portage Lake and T.13, R.7, W.E.L.S. town line, excluding Portage Lake;

**7. Kennebago River.** The Kennebago River from its inlet into Cupsuptic Lake to the Rangeley and Lower Cupsuptic Township town line;

**8. Kennebec River.** The Kennebec River from the Route 148 bridge in Madison to the Caratunk and The Forks Plantation town line, excluding the western shore in Concord Township, Pleasant Ridge Plantation and Carrying Place Township and excluding Wyman Lake;

**9. Machias River.** The Machias River from the Route 1 bridge to the Northfield and T.19, M.D., B.P.P. town line, including its tributaries the Old Stream from the Machias River to the northern most crossing of the Wesley and T.31, M.D., B.P.P. town line, excluding the segments in T.25, M.D., B.P.P. and T.31, M.D., B.P.P.;

**10. Mattawamkeag River.** The Mattawamkeag River from the Penobscot River to the Mattawamkeag and Kingman Township town line and from the Reed Plantation and Bancroft town line to the East Branch, including its tributaries the West Branch from the Mattawamkeag River to the Haynesville and T.3, R.3, W.E.L.S. town line and from its inlet into Upper Mattawamkeag Lake in Island Falls to the Hersey and Moro Plantation town line; the East Branch from the Mattawamkeag River to the Haynesville and Forkstown Township town line and from the T.4, R.3, W.E.L.S. and Oakfield town line to the Smyrna and Dudley Township town line; the Fish Stream from the West Branch of the Mattawamkeag River to the Crystal and Patten town line; the Molunkus Stream from the Silver Ridge Township and Benedicta town line to the East Branch Molunkus Stream; the Macwahoc Stream from the Silver Ridge Township and Sherman town line to the outlet of Macwahoc Lake; and the Baskehegan Stream from the Mattawamkeag River to the Danforth and Brookton Township town line, and from the Brookton Township and Topsfield town line to the Topsfield and Kossuth Township town line, excluding Baskehegan Lake and Crooked Brook Flowage;

**11. Narraguagus River.** The Narraguagus River from the ice dam above the railroad bridge in Cherryfield to the Beddington and Devereaux Township town line, excluding Beddington Lake;

**12. Penobscot River.** The Penobscot River from the Bangor Dam in Bangor to the Veazie Dam and its

tributary the East Branch of the Penobscot from the Penobscot River to the East Millinocket and Grindstone Township town line;

**13. Piscataquis River.** The Piscataquis River from the Penobscot River to the Monson and Blanchard Plantation town line, including its tributaries the East and West Branches of the Piscataquis River from the Blanchard Plantation and Shirley town line to the Shirley and Little Squaw Township town line; the Seboeis Stream from its confluence with the Piscataquis River in Howland to the Howland and Mattamiscontis Township town line and from the Mattamiscontis and Maxfield town line to the Maxfield and Seboeis Plantation town line, excluding Shirley Pond and West Shirley Bog;

**14. Pleasant River.** The Pleasant River from the dam in Columbia Falls, formerly the Hathaway Dam, to the Columbia and T.18, M.D., B.P.P. town line and from the T.24, M.D., B.P.P. and Beddington town line to the outlet of Pleasant River Lake in Beddington;

**15. Rapid River.** The Rapid River from the Magalloway Plantation and Upton town line to the outlet of Pond in the River;

**16. Saco River.** The Saco River from the Little Ossipee River to the New Hampshire border;

**17. St. Croix River.** The St. Croix River from the cotton mill dam in Milltown to the Calais and Baring Plantation town line, from the Baring Plantation and Baileyville town line to the Baileyville and Fowler Township town line and from the Lambert Lake Township and Vanceboro town line to the outlet of Spednik Lake, excluding Woodland Lake and Grand Falls Flowage;

**18. St. George River.** The St. George River from the Route 90 bridge in Warren to the outlet of Lake St. George in Liberty, excluding White Oak Pond, Seven Tree Pond, Round Pond, Sennebec Pond, Trues Pond, Stevens Pond and Little Pond;

**19. St. John River.** The St. John River from the Hamlin Plantation and Van Buren town line to the Fort Kent and St. John Plantation town line and from the St. John Plantation and St. Francis town line to the Allagash and St. Francis town line;

**20. Sandy River.** The Sandy River from the Kennebec River to the Madrid and Township E town line;

**21. Sheepscot River.** The Sheepscot River from the Head Tide Dam in Alna to the Halldale Road in Montville, excluding Long Pond and Sheepscot Pond, including its tributary the West Branch of the Sheepscot River from its confluence with the Sheepscot River in Whitefield to the outlet of Branch Pond in China;

**22. West Branch Pleasant River.** The West Branch Pleasant River from the East Branch to the Brownville and Williamsburg Township town line; and

**23. West Branch Union River.** The West Branch Union River from the Route 181 bridge in Mariaville to the outlet of Great Pond in the Town of Great Pond.

For the purpose of receiving a permit for a transmission line or a pipeline under this article, outstanding river segments also include any other outstanding river and stream segments described in Title 12, section 403.



***Appendix I***

# Model Shoreland Zoning Permit Forms

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State Planning Office  
Office of Comprehensive Planning

November 1997

## MODEL SHORELAND ZONING PERMIT FORMS

The attached **model** Shoreland Zoning permit forms have been developed by the Office of Comprehensive Planning (OCP) in coordination with the Department of Environmental Protection (DEP) to assist municipalities with the administration and enforcement of local ordinances adopted pursuant to the Mandatory Shoreland Zoning Act. Municipalities are encouraged to modify these forms to fit the specific requirements of local ordinance provisions and administrative procedures.

In addition, although these forms have been designed for the Shoreland Zoning permitting process, they can be modified to serve as the general building permit application forms for a municipality. To modify the forms in this way, a municipality would need to add sections requesting applicants to provide information related to locally adopted building codes (e.g. information on structural specifications; electrical, plumbing, heating systems; chimneys; etc.). Assistance in tailoring these forms to meet local needs may be obtained from your Regional Council or the Office of Comprehensive Planning.

The role of local planning boards and code enforcement officers in the review of Shoreland Zoning permit applications varies from town to town. For instance, in some municipalities the planning board is responsible for reviewing and approving certain types of land use activities in the Shoreland Zone, such as a commercial development project or construction of a permanent dock, while the code enforcement officer is responsible for residential structures and other uses. In other municipalities, it may be the code enforcement officer and not the planning board that reviews and approves all shoreland development projects. **Municipalities should note that these model forms have been designed based on the assumption that the local code enforcement officer will be responsible for issuing all Shoreland Zoning permits. If necessary, the forms should be modified to meet the requirements for issuing permits specified in the local Shoreland Zoning Ordinance.**

The following discussion describes each section of the model permit forms. The forms are divided into four parts: the Model Shoreland Zoning Permit Application (white pages); Appendix 1 - Shoreland Zoning Permit Checklist (yellow page); Appendix 2 - Special Permit Form (blue page); and Appendix 3 - Shoreland Zoning Permit (red page).

### **Model Shoreland Zoning Permit Application (white pages)**

**General Information (page 1)** - This section requests basic information about the location and type of project proposed. Included here is a brief written description of the project. Note that site plans and other sketches are required in subsequent sections of the application form.

If a project is approved, a small box at the top right hand corner of page 1 provides space for the code enforcement officer or other appropriate municipal official to fill in the permit number, the date of issue, and the fee amount.

**Shoreland and Property Information (page 2)** - This section requests more specific information about the proposed project. In particular, the applicant is asked to provide information that will assist the code enforcement officer and planning board in determining whether the project meets Shoreland Zoning requirements. For example, the applicant must provide information on the size of the lot, the amount of the lot to be covered by nonvegetated surfaces (e.g. buildings, driveways, etc.), and the frontage along the waterbody.

Questions 24 and 25 are intended to help the code enforcement officer and the applicant calculate whether a proposed expansion of a portion of a structure which is less than the required setback meets the requirement in the Mandatory Shoreland Zoning Act that limits such expansions to 30% (in floor volume). The 30% limitation is applicable to any proposed construction since January 1, 1989 and applies over the lifetime of a structure.

Determining whether an expansion meets the 30% limitation is a four-step process:

A. First, the floor area (sq. ft.) and volume (cu. ft.) of that portion of the structure which is less than the required setback as of January 1, 1989 must be determined (this is "baseline" information);

B. Second, the floor area and volume of any expansions of that portion of the structure which is less than the required setback constructed between January 1, 1989 and time the pending application is submitted must be determined;

C. Third, the floor area and volume of the expansion of that portion of the structure which is less than the required setback proposed in the pending application must be determined; and

D. Fourth, the percent increase in floor area and volume of all expansions of that portion of the structure which is less than the required setback since January 1, 1989 must be calculated. This is done by -

1. Adding the numbers calculated for B. and C. above;

2. Dividing that number by the number calculated for A. above;

and

3. Multiplying the final figure by 100.

**To ensure that the 30% limitation is applied properly, municipalities must clearly define the terms "structure," " floor area," and "volume" and apply these definitions uniformly when calculating the size of existing structures and proposed expansions. Moreover, municipalities must also take care to establish a record-keeping system so that records of expansions of structures in the shoreland zone are kept over the lifetime of a structure.**

[Note: Municipalities have the option of prohibiting any expansions of structures or portions of structures within the required setback, thereby eliminating the need to keep expansion records over the lifetime of a structure and calculate whether a proposed expansion meets the 30% limitation. Alternatively, municipalities can specify that only a one-time expansion of portions of structures within the required setback be allowed (consistent with the 30% limitation).]

**Site Plan (page 3)** - To assist the code enforcement officer and planning board in reviewing a proposed project, the applicant is asked to sketch a site plan, including the position of any structures with setback distances from the shoreland, all property lines, areas to be cleared of trees and other vegetation, areas and amounts to be filled or graded, and the location of proposed wells, septic systems, and driveways. Applicants are also requested to provide a scale for the site plan and distinguish the proposed expansion from the existing structure.

**Front and Side Elevations (page 4)** - Like the site plan, these simple sketches of the front (or rear) and side elevations of existing and proposed structures are intended to give the code enforcement officer and planning board a clear picture of the proposed project.

**Additional Permits, Approvals. and/or Reviews Required (page 5)** - This section advises applicants to consult with the code enforcement officer and other appropriate state and federal agencies to determine whether additional permits (local, state, and/or federal) are needed. All required permits, approvals, and/or reviews should be checked in the boxes provided.

**Applicant's Signature (page 5)** - The applicant must sign and date the completed application form before it is submitted to the code enforcement officer. Note that the applicant's statement includes an agreement to allow future inspections by the code enforcement officer.

**Approval or Denial of Application (page 6)** - This page is completed by the code enforcement officer indicating whether the Shoreland Zoning Permit is approved (with or without conditions) or denied. A copy of this page should be provided to the applicant along with the actual Shoreland Zoning Permit (See Appendix 3). In approving a permit, the code enforcement officer (and planning board as appropriate) must find that the proposed use complies with the purposes and requirements of the local Shoreland Zoning Ordinance. If a permit is either denied or approved with conditions, the reasons or conditions must be stated in writing. The box at the bottom of the page contains a checklist for the Code Enforcement Officer and space to note the permit number and fee amount.

### **Appendix 1 - Shoreland Zoning Permit Checklist (yellow page)**

This checklist is intended as a tool to assist the code enforcement officer in tracking a Shoreland Zoning permit application through the review process. Like the permit application form, this checklist may be modified to meet any additional local requirements or procedures.

### **Appendix 2 - Special Permit Form (blue page)**

Upon initial review of the Shoreland Zoning permit application, the code enforcement officer will determine whether a variance, conditional use approval or special exception is required. If such a special permit is required for a project in the Shoreland Zone, the applicant must first apply to the appropriate local board for a special permit. If the request for a variance, conditional use, or special exception is approved, then this form should be completed by the appropriate local board and submitted to the code enforcement officer along with the Shoreland Zoning permit application.

Note that the Board of Appeals is the only local body with statutory authority to grant zoning variances. In reviewing a request for a variance, Boards of Appeal must apply the "undue hardship" criteria set forth in Title 30-A M.R.S.A. Section 4353(4). Generally, the Planning Board is responsible for granting conditional uses or special exceptions. In some instances, however, the Board of Appeals may be the designated body. In reviewing such requests, Planning Boards or Boards of Appeal must apply the standards of review provided in the applicable local ordinance.

### **Appendix 3 - Shoreland Zoning Permit (red page)**

Once a project in the Shoreland Zone is approved, the code enforcement officer should provide this permit to the party responsible for the project and request that it be posted in a conspicuous location at the construction site. The site inspection schedule printed on the permit is for use by the code enforcement officer. Although this model form indicates four key inspection points in the construction process, code enforcement officers may modify and add to these times as appropriate. Modifications will be needed if a municipality has a building code that it enforces in addition to the Shoreland Zoning Ordinance.

## **ACKNOWLEDGEMENTS**

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DECD/OCP 1/91

**FOR OFFICE USE ONLY:**

NOTE: THIS SAMPLE PERMIT APPLICATION FORM \_\_\_\_\_

**PERMIT NO.:**

SHOULD BE MODIFIED TO COMPLIMENT YOUR \_\_\_\_\_

**ISSUE DATE:**

LOCAL SHORELAND ZONING ORDINANCE \_\_\_\_\_

**FEE AMOUNT:**

**TOWN OF \_\_\_\_\_  
SHORELAND ZONING PERMIT APPLICATION**

**GENERAL INFORMATION**

1. APPLICANT	2. APPLICANT'S ADDRESS	3. APPLICANT'S TEL. #
4. PROPERTY OWNER	5. OWNER'S ADDRESS	6. OWNER'S TEL. #
7. CONTRACTOR	8. CONTRACTOR'S ADDRESS	9. CONTRACTOR'S TEL. #
10. LOCATION/ADDRESS OF PROPERTY	11. TAX MAP/PAGE & LOT #	12. ZONING DISTRICT
13. DESCRIPTION OF PROPERTY INCLUDING A DESCRIPTION OF ALL PROPOSED CONSTRUCTION, (E.G. LAND CLEARING, ROAD BUILDING, SEPTIC SYSTEMS, AND WELLS - PLEASE NOTE THAT A SITE PLAN SKETCH IS REQUIRED ON PAGE 3).		
14. PROPOSED USE OF PROJECT	15. ESTIMATED COST OF CONSTRUCTION	



**SHORELAND AND PROPERTY INFORMATION**

16. LOT AREA	17. FRONTAGE ON ROAD (FT.)
18. SO. FT. OF LOT TO BE COVERED BY NON-VEGETATED SURFACES	19. ELEVATION ABOVE 100 YR. FLOOD
20. FRONTAGE ON WATERBODY (FT.)	21. HEIGHT OF PROPOSED STRUCTURE
22. EXISTING USE OF PROPERTY	23. PROPOSED USE OF PROPERTY

Note: Questions 24 & 25 apply only to expansions of portions of existing structures which are less than the required setback.

<p>24. A) SO. FT. OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK AS OF 1/1/89:</p> <p>_____</p> <p>B) SQ.FT. OF EXPANSIONS OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK FROM 11/11/89 TO PRESENT:</p> <p>_____</p> <p>C) SQ. FT. OF PROPOSED EXPANSION OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK:</p> <p>_____</p> <p>D) % INCREASE OF SO. FT. OF ACTUAL AND PROPOSED EXPANSIONS OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK SINCE 1/11/89:</p> <p align="center">(% INCREASE = <math>\frac{B+C}{A} \times 100</math>)</p> <p>_____</p>	<p>25. A) CU. FT. OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK AS OF 1/1/89:</p> <p>_____</p> <p>B) CU.FT. OF EXPANSIONS OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK FROM 1/11/89 TO PRESENT:</p> <p>_____</p> <p>C) CU. FT. OF PROPOSED EXPANSION OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK:</p> <p>_____</p> <p>D) % INCREASE OF CU. FT. OF ACTUAL AND PROPOSED EXPANSIONS OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK SINCE 11/11/89:</p> <p align="center">(%INCREASE = <math>\frac{R+C}{A} \times 100</math>)</p> <p>_____</p>
---	--

NOTE: IT IS IMPERATIVE THAT EACH MUNICIPALITY DEFINE WHAT CONSTITUTES A STRUCTURE, FLOOR AREA, AND VOLUME AND APPLY THOSE DEFINITIONS UNIFORMLY WHEN CALCULATING EXISTING AND PROPOSED SO. FT. AND CU. FT.

## SITE PLAN

PLEASE INCLUDE: LOT LINES; AREA TO BE CLEARED OF TREES AND OTHER VEGETATION; THE EXACT POSITION OF PROPOSED STRUCTURES, INCLUDING DECKS, PORCHES, AND OUT BUILDINGS WITH ACCURATE SETBACK DISTANCES FROM THE SHORELINE, SIDE AND REAR PROPERTY LINES; THE LOCATION OF PROPOSED WELLS, SEPTIC SYSTEMS, AND DRIVEWAYS; AND AREAS AND AMOUNTS TO BE FILLED OR GRADED. IF THE PROPOSAL IS FOR THE EXPANSION OF AN EXISTING STRUCTURE, PLEASE DISTINGUISH BETWEEN THE EXISTING STRUCTURE AND THE PROPOSED EXPANSION.

NOTE: FOR ALL PROJECTS INVOLVING FILLING, GRADING, OR OTHER SOIL DISTURBANCE YOU MUST PROVIDE A SOIL EROSION CONTROL PLAN DESCRIBING THE MEASURES TO BE TAKEN TO STABILIZE DISTURBED AREAS BEFORE, DURING AND AFTER CONSTRUCTION (See attached guidelines)

SCALE: \_\_\_\_\_ = \_\_\_\_\_ FT.

**FRONT OR REAR ELEVATION**

**SIDE ELEVATION**

DRAW A SIMPLE SKETCH SHOWING BOTH THE EXISTING  
AND PROPOSED STRUCTURES WITH DIMENSIONS

**ADDITIONAL PERMITS, APPROVALS, AND/OR REVIEWS REQUIRED**

CHECK IF REQUIRED:

- .. PLANNING BOARD REVIEW APPROVAL  
(e.g. Subdivision, Site Plan Review)
- .. BOARD OF-APPEALS REVIEW APPROVAL
- .. FLOOD HAZARD DEVELOPMENT PERMIT
- .. EXTERIOR PLUMBING PERMIT  
(Approved THE 200 Application Form)
- .. INTERIOR PLUMBING PERMIT
- .. DEP PERMIT (Site Location,  
Natural Resources Protection Act)
- .. ARMY CORPS OF ENGINEERS PERMIT  
(e.g. Sec. 404 of Clean Waters Act)

OTHERS:

.. \_\_\_\_\_

.. \_\_\_\_\_

.. \_\_\_\_\_

.. \_\_\_\_\_

NOTE: APPLICANT IS ADVISED TO CONSULT WITH THE CODE ENFORCEMENT OFFICER AND APPROPRIATE STATE AND FEDERAL AGENCIES TO DETERMINE WHETHER ADDITIONAL PERMITS, APPROVALS, AND REVIEWS ARE REQUIRED

I CERTIFY THAT ALL INFORMATION GIVEN IN THIS APPLICATION IS ACCURATE. ALL PROPOSED USES SHALL BE IN CONFORMANCE WITH THIS APPLICATION AND THE \_\_\_\_\_ SHORELAND ZONING ORDINANCE. I AGREE TO FUTURE INSPECTIONS BY THE CODE ENFORCEMENT OFFICER AT REASONABLE HOURS.

\_\_\_\_\_

APPLICANT'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

\_\_\_\_\_

AGENTS SIGNATURE (if applicable) \_\_\_\_\_ DATE \_\_\_\_\_

**APPROVAL OR DENIAL OF APPLICATION** MAP \_\_\_\_\_ LOT # \_\_\_\_\_  
(For Office Use Only)

THIS APPLICATION IS: \_\_\_\_\_ APPROVED \_\_\_\_\_ DENIED

IF DENIED, REASON FOR DENIAL:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

IF APPROVED, THE FOLLOWING CONDITIONS ARE PRESCRIBED:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NOTE: IN APPROVING A SHORELAND ZONING PERMIT, THE PROPOSED USE SHALL COMPLY WITH THE PURPOSES AND REQUIREMENTS OF THE SHORELAND ZONING ORDINANCE FOR THE TOWN OF \_\_\_\_\_.

\_\_\_\_\_  
CODE ENFORCEMENT OFFICER

\_\_\_\_\_  
DATE

INSPECTION CHECK LIST
.. Prior to Clearing and Excavation
.. Prior to Foundation Pour
.. Prior to Final Landscaping
.. Prior to Occupancy

PERMIT #
FEE AMOUNT

NOTE: THIS CHECKLIST IS INTENDED TO ASSIST THE CEO IN TRACKING A SHORELAND ZONING PERMIT THROUGH THE REVIEW PROCESS

Appendix 1

## **SHORELAND ZONING PERMIT CHECKLIST**

### **CHECKOFF FOR ALL STRUCTURES:**

- .. COMPLETE SHORELAND ZONING PERMIT APPLICATION
- .. PAY APPROPRIATE FEE
- .. LOT AREA
- .. % OF LOT COVERED BY NON-VEGETATED SURFACES
- .. HEIGHT OF STRUCTURE
- .. SETBACK FROM HIGH WATER MARK
- .. ELEVATION SETBACK FROM SIDE AND REAR LOT LINES
- .. % INCREASE OF EXPANSIONS OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK
- .. COPY OF INTERIOR AND EXTERIOR PLUMBING PERMITS
- .. COPY OF DEED
- .. ELEVATION OF LOWEST FLOOR TO 100 YEAR FLOOD ELEVATION
- .. COPY OF ADDITIONAL PERMIT(S) AS REQUIRED  
(See Page 5 of Application Form)
- .. SOIL EROSION CONTROL PLAN PROVIDED

### **CHECKOFF FOR FURTHER REVIEW:**

- .. COPY OF FILE TO BOARD OF APPEALS IF VARIANCE OR SPECIAL EXCEPTION IS REQUIRED
- .. COPY OF FILE TO PLANNING BOARD IF PLANNING BOARD REVIEW IS REQUIRED

### **CHECK OFF FOR SITE VISITS BY CEO:**

- .. PRIOR TO CLEARING AND EXCAVATION
- .. PRIOR TO FOUNDATION POUR
- .. PRIOR TO FINAL LANDSCAPING
- .. PRIOR TO OCCUPANCY

NOTE: WHERE THE SHORELAND ZONING ORDINANCE REQUIRES A VARIANCE, A CONDITIONAL USE, OR SPECIAL EXCEPTION BY THE BOARD OF APPEALS OR THE PLANNING BOARD, THEN THIS SPECIAL PERMIT SHALL BE COMPLETED BY THE APPROPRIATE BOARD AND ATTACHED TO THE SHORELAND PERMIT APPLICATION.

Appendix 2

**SPECIAL PERMIT**

PROPERTY OWNER	SHORELAND DISTRICT
ADDRESS OF PROPERTY	

**FINDINGS OF FACT AND  
CONDITIONS OF APPROVAL**

BD. OF APPEALS \_\_\_\_\_  
 PLANNING BOARD \_\_\_\_\_

**CONDITIONS:**

1. See standard conditions (attached)
- 2.
- 3.

**NOTE:**

The Findings of Fact and the Conditions of Approval should include the reasons why the special permit was granted and specific conditions which clearly define the scope of the use. In reviewing a request for a variance, Boards of Appeal shall apply the "Undue Hardship" criteria printed on the back of this page. In reviewing a request for a conditional use or a special exception, Planning boards shall apply the standards of review provided in the local ordinance.

APPROVED BY: \_\_\_\_\_ DATE \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**NOTICE TO APPLICANT:**

I HAVE READ AND ACCEPT THE CONDITIONS OF THIS SPECIAL PERMIT

APPLICANT \_\_\_\_\_ DATE \_\_\_\_\_

## **"Undue Hardship" Criteria for Granting Variances**

Under Title 30-A, M.R.S.A. Section 4353(4), a Board of Appeals may grant a variance only when strict application of the ordinance to the petitioner and the petitioner's property would cause "undue hardship." The term "undue hardship" is defined as:

- .. A. The land in question cannot yield a reasonable return unless a variance is granted;
- .. B. The need for a variance is due to the unique circumstances of the property and not the general condition in the neighborhood;
- .. C. The granting of a variance will not alter the essential character of the locality; and
- .. D. The hardship is not the result of action taken by the applicant or a prior owner.



Appendix 3

NOTE: THIS INSPECTION SCHEDULE IS NOT DESIGNED TO	PERMIT NO. _____
ENSURE COMPLIANCE WITH BOCA OR OTHER BUILDER CODES,	DATE OF ISSUE _____
BUT RATHER TO ENSURE COMPLIANCE WITH THE LAND USE	RECIPIENT _____
STANDARDS CONTAINED IN THE _____	MAP & LOT # _____
SHORELAND ZONING ORDINANCE.	

**SHORELAND ZONING PERMIT**

**SITE INSPECTION SCHEDULE**

PRIOR TO CLEARING AND EXCAVATION                      DATE \_\_\_\_\_ CEO \_\_\_\_\_

PRIOR TO FOUNDATION POUR                              DATE \_\_\_\_\_ CEO \_\_\_\_\_

PRIOR TO FINAL LANDSCAPING                         DATE \_\_\_\_\_ CEO \_\_\_\_\_

PRIOR TO OCCUPANCY                                     DATE \_\_\_\_\_ CEO \_\_\_\_\_

## STANDARD CONDITIONS OF APPROVAL FOR ALL PROJECTS

1. A copy of this permit must be posted in a visible location on your property during development of the site, including construction of the structures approved by this permit.
2. This permit is limited to the proposal as set forth in the application and supporting documents, except as modified by specific conditions adopted by the Planning Board or Code Enforcement Officer in granting this permit. Any variations from the application or conditions of approval are subject to prior review and approval by the Planning Board or Code Enforcement Officer. Failure to obtain prior approval for variations shall constitute a violation of the ordinance.
3. A substantial start (30% of project based on estimated cost) of construction activities approved by this permit must be completed within one (1) year of the date of issue. If not, this permit shall lapse, and no activities shall occur unless and until a new permit is issued.
4. The water body and wetland setbacks for all principal and accessory structures, driveways, and parking areas must be as specified in the application, or as modified by the conditions of approval.
5. In the event the permittee should sell or lease this property, the buyer or leasee shall be provided with a copy of the approved permit and advised of the conditions of approval.
6. Once construction is complete, the permittee shall notify the Code Enforcement Officer that all requirements and conditions of approval have been met. Following notification, the Code Enforcement Officer may arrange and conduct a compliance inspection.

## STANDARD CLEARING CONDITIONS

**The following shall apply to vegetation clearing for all activities within the shoreland zone.**

1. A vegetative buffer strip shall be retained within 100 feet of a great pond or river flowing to a great pond, and within 75 feet of other water bodies, wetlands, and tributary streams.
2. Within the buffer strip(s) there shall be no cleared opening greater than 250 square feet in the forest canopy as measured from the outer limits of the tree crown. A winding footpath is permitted, provided it does not exceed ten (10) feet in width as measured between tree trunks, and does not provide a cleared line of sight to the water. Adjacent to great ponds and rivers flowing to great ponds, the width of the footpath is limited to six (6) feet.
3. Selective cutting of trees within the buffer strip(s) is permitted provided that a well-distributed stand of trees and other vegetation is maintained. Not more than 40% of the total volume of trees four (4) inches or more in diameter, measured at 4 1/2 feet above ground level, may be removed in any ten (10) year period.
4. Within the buffer strip(s) adjacent to great ponds, and rivers and streams flowing to great ponds, existing vegetation under three (3) feet in height and other ground cover shall not be removed, and the soil shall not be disturbed, except to provide for a footpath or other permitted use.
5. Within the buffer strip(s) pruning of tree branches is prohibited, except on the bottom 1/3 of the tree provided that tree vitality will not be adversely affected.
6. Within the buffer strip(s), in order to maintain a buffer strip of vegetation, when the removal of storm-damaged, diseased, unsafe, or dead trees results in the creation of cleared openings in excess of 250 square feet, these openings shall be replanted with native tree species. When removal of such trees appears necessary, the permittee is advised to consult with the Code Enforcement Officer, prior to tree removal.
7. Within the shoreland zone, but outside the 75 feet or 100 foot buffer strip(s) described in Standard #1 above, not more than 40% of the total volume of trees four (4) inches or more in diameter, measured 4 1/2 feet above ground level, may be removed in any ten (10) year period, except to allow for development of permittees uses. In no instance shall cleared openings exceed, in the aggregate, 10,000 square feet or 25% of the lot area, whichever is greater, including land previously cleared.
8. Legally existing clearing openings which exceed the above standards, may be maintained, but shall not be enlarged except as permitted by the ordinance.
9. Where natural vegetation is removed it shall be replaced by other vegetation (except for areas to be built upon) that is effective in preventing erosion and retaining natural beauty.

## GUIDELINES FOR SOIL STABILIZATION

Areas of disturbed soil, including but not limited to areas that are filled, graded, or otherwise disturbed during construction, must be stabilized according to the approved erosion control plan provided as part of the permit application, or as modified by specific conditions of approval. The following guidelines provide guidance for the landowner to consider in preparing and executing the soil stabilization portion of the erosion control plan. The goals to be achieved by proper stabilization are the avoidance of accelerated soil erosion and sedimentation of water bodies.

In General:

1. Sterile soils such as sands and gravels should be covered with a minimum of 4 inches of compacted topsoil to provide a growth medium for vegetation.
2. Disturbed areas which can be seeded between May 1 and September 15 should be prepared and seeded during that period. The best seeding dates are from May 1 to June 15. Mid-summer seeding will usually require significant watering.
3. Disturbed areas which can not be seeded between May 1 and September 15 should be heavily mulched with hay, straw, or some other suitable material to keep them as stable as possible over the winter, and particularly during the spring runoff the following year. Generally, one bale of hay for each 500 square feet of disturbed area provides a stabilizing mulch. For over-wintering, mulch must be tied down, as it is easily blown around on frozen ground, leaving areas of exposed soils. Mulched over-winter areas should be prepared and seeded the following spring as soon as conditions allow.
4. Seeding preparation, in addition to providing topsoil or loam if the site is sterile, includes the application of lime and fertilizer, which should be lightly raked into the soil prior to seeding. After the area is seeded, it should be lightly watered and then mulched to protect the seed, keep the site stable and moist, and allow the seed to germinate and grow.
5. Lime should be applied at a rate of approximately 138 pounds per 1000 square feet of area. This rate may vary depending on soil conditions, and it is recommended that soil be analyzed to determine specifically what additional nutrients are needed.
6. Fertilizers should be a "quick release" low Phosphorus mixture. They should be applied at a rate of approximately 18.4 pounds per 1000 square feet. However, no more fertilizer than necessary should be added since any excess may be washed into the adjacent water body and contribute to lower water quality. Fertilizers should never be applied before thunderstorms or before spring runoff.
7. Minimize the areas of exposed soil during construction, and temporarily or permanently stabilize disturbed areas within one week of the time the area is actively worked. Runoff control features such as hay bales, silt fencing, and diversion ditching must be in place and functioning prior to the start of construction.