



## Exhibit B

City of Portland  
Code of Ordinances  
Sec. 14-446

Land Use  
Chapter 14  
Rev. 6-15-1992

### **Sec. 14-449. Land use standards.**

All land uses and land use activities subject to this division shall conform to the following standards and regulations, as applicable:

(a) *Principal and accessory structures:*

1. All principal and accessory structures shall be set back at least seventy-five (75) feet horizontal distance, from the normal high water line of water bodies, the upland edge of a wetland or associated tributary streams within a shoreland zone, except that in the following zones the setback shall be as indicated below:
  - a. B-3, B-5, B-5b, I-L (south and east of I-295), and I-M (south and east of I-295): Twenty-five (25) feet.
  - b. W-C, W-PD, I-B, EWP: No setback required. Pier edge setbacks apply in EWP (Sec. 14-303(c)(4), W-C (Sec. 14-310(d)(4), and W-PD (Sec. 320.2(c)).

For the principle structures, setback measurements shall be taken from the top of a costal bluff that has been identified on Coastal Bluff maps as being "highly unstable" or "unstable" by the Maine Geological Survey pursuant "Classification of Coastal Bluffs", and published in the most recent Coastal Bluff Map as further referenced on the Zoning Map.

Notwithstanding this requirement, when a lot is a lot of record as defined in section 14-433 or cannot otherwise meet the setback requirement of this section due to physical limitations of the site, the Planning Board may approve a reduction of the setback requirement for a principal structure to the least amount necessary to achieve a building dimension of twenty-eight (28) feet, provided that the setback is not reduced to less than forty (40) feet. Structures in existence on June 15, 1992, may be expanded once during the lifetime of the structure up to twenty-five (25) feet toward a

freshwater wetland, stream or tributary stream, provided that the setback is not reduced to less than forty (40) feet and the floor area or volume is not increased by more than thirty (30) percent. In no event shall the setback from a coastal wetland be reduced to less than seventy-five (75) feet, except in the B-3, B-5, B-5b, EWP, W-C, W-PD, W-SU, I-B, I-L and I-M zones, where setbacks shall be as set forth above in this subsection.

In all cases, accessory detached structures of less than one hundred (100) square feet of floor area shall be permitted with no setback, provided that such structures shall be used only for the storage of fish, bait, and related equipment. No setback shall be required for piers, docks, retaining walls, or any other structures which require direct access to the water as an operational necessity.

2. Development activities within the shoreland zone are reviewed by the Zoning Administrator for compliance with required setbacks of this Division. Submission of plans for such development activity shall be prepared by competent professionals, based upon a boundary survey.
3. The lowest floor elevation or openings of all buildings and structures including basements shall be elevated at least one (1) foot above the elevation of the one hundred (100) year flood, the flood of record, or in the absence of these, the flood as defined by soil types identified as recent flood plain soils.
4. Notwithstanding the requirements of this section, stairways or similar structures may be allowed with a permit from the building authority to provide shoreline access in areas of steep slopes or unstable soils, provided that:
  - a. The structure is limited to a maximum of four (4) feet in width;
  - b. The structure does not extend below or over the normal high water line of a water body or upland edge of a wetland, unless permitted by the department of environmental protection

pursuant to 38 M.R.S.A. Section 480-C; and

c. The applicant demonstrates that no reasonable access alternative exists on the property.

(b) *Piers, docks, wharves, bridges and other structures and uses extending over or below 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;
2. The location shall not interfere with existing developed or natural beach areas;
3. The facility shall be located so as to minimize adverse effects on fisheries;
4. The facility shall be no larger in dimension than necessary to carry on the activity and shall be consistent with surrounding character and uses;
5. New permanent structures, and expansions thereof, projecting into or over water bodies shall require a permit from the Department of Environmental Protection pursuant to the national Resources Protection Act, 38 M.R.S.A. § 480-C. Permits may also be required from the Army Corps of Engineers if located in navigable waters.
6. Except in the W-C, EWP, W-PD, and I-B zones, no new structure shall be built on, over or abutting a pier, wharf, dock or other structure extending beyond the normal high water line of a water body or within a wetland unless the structure requires direct access to the water as an operational necessity;
7. No existing structures built on, over or abutting a pier, dock, wharf or other structure extending beyond the normal high water line of a water body or within a wetland shall be converted to residential dwelling units in any zone.

(c) *Clearing or removal of vegetation:*

1. In all shoreland areas in resource protection zones, the cutting or removal of vegetation shall be limited to that which is necessary for uses expressly authorized in that zone.
2. The clearing or removal of vegetation standards of this section shall not apply to the following zones: EWP, WCZ, WPD, B-3, B-5, B-5b, B-6, B-7, I-L (south and east of I-295) and I-M zones (south and east of I-295).
3. Other than cutting or removal of vegetation as provided for in this section, timber harvesting shall not be permitted. For purposes of this section, timber harvesting is defined as the cutting and removal of timber for the primary purpose of selling or processing forest products. The cutting or removal of trees in the shoreland zone on a lot that has less than (2) acres within the shoreland zone shall not be considered timber harvesting. Cutting or removal of such trees shall be regulated pursuant to this section.
4. For purposes of this section, vegetation is defined as all live trees, shrubs and other plants including without limitation, trees both over and under 4 inches in diameter, measured at 4 ½ feet above ground level.
  - a. In all areas other than resource protection zones, a buffer strip of vegetation shall be preserved, except where clearance is required for development of permitted uses, within a strip of land extending seventy-five (75) feet, horizontal distance, from the normal high-water or upland edge of a coastal wetland, river, stream or tributary stream within a shoreland zone, in accordance with the following:
    - i. There shall be no cleared opening greater than two hundred fifty (250) square feet in the forest canopy or other existing vegetation if a forested canopy is not presented as measured from the outer limits of the tree or shrub crown. Notwithstanding this limitation, a

footpath not to exceed six (6) feet in width as measured between tree trunks and/or shrub stems is allowed provided that a cleared line of sight to the water through the buffer strip is not created.

- ii. Selective cutting of trees within the buffer strip is allowed provided that a well-distributed stand of trees and other vegetation is maintained. For the purposes of this section, a "well-distributed stand of trees" adjacent to a water body, tributary stream or wetland shall be defined as maintaining a minimum rating score of sixteen (16) or more in any twenty-five-foot by fifty-foot rectangle area as determined by the following rating system:

*Diameter of tree at four and one-half (4 ½ ) feet above ground level*

<i>(Inches)</i>	<i>Points</i>
2 ≤ 4 . . . . .	1
4 ≤ 8 . . . . .	2
8 - 12 . . . . .	4
12 in. or greater . . . . .	8

The following shall govern in applying this point system:

- a. The 25-foot by 50-foot rectangular plots must be established where the landowner or lessee proposes clearing within the required buffer;
- b. Each successive plot must be adjacent to, but not overlap a previous plot;
- c. Any plot not containing the required points must have no vegetation

removed except as otherwise allowed  
by this ordinance;

- d. Any plot containing the required points may have vegetation removed down to the minimum points required or as otherwise allowed by this ordinance;
- e. Where conditions permit, no more than 50% of the points on any 25-foot by 50-foot rectangular area may consist of trees greater than 12 inches in diameter.

For the purposes of this section, "other natural vegetation" is defined as retaining existing vegetation under three (3) feet in height and other ground cover and retaining at least five (5) saplings less than two (2) inches in diameter at four and one-half (4 ½) feet above ground level for each 25-foot by 50-foot rectangular area. If five samplings do not exist, no woody stems less than two (2) inches in diameter can be removed until 5 samplings have been recruited into the plot.

Notwithstanding the above provisions, no more than forty (40%) percent of the total volume of trees four (4) inches or more in diameter, measured at four and one-half (4 ½) feet above ground level may be removed in any ten-year period.

- iii. In order to protect water quality and wildlife habitat, existing vegetation under three (3) feet in height and other groundcover, including leaf litter and the forest duff layer, shall not be cut, covered, or removed, except to provide a footpath or other permitted uses as described in this section.
- iv. Pruning of tree branches on the bottom one-third of the tree is allowed.
- v. 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.

The provisions contained in subsection b. of this section shall not apply to those portions of public recreational facilities adjacent to public swimming areas. Cleared areas in these locations shall be limited to the minimum amount necessary.

2. Selective cutting of not more than forty (40%) percent of the volume of trees four (4) inches or more in diameter, measured four and one-half (4 1/2) feet above ground level, shall be allowed within any ten-year period at distances greater than seventy-five (75) feet, horizontal distance, from the normal high water line of any other water body, tributary stream, or the upland edge of a wetland, except to allow for the development of permitted uses. Tree removal in conjunction with the development of permitted uses shall be included in the forty (40) percent calculation. For the purposes of these standards, volume may be considered to be equivalent to basal area. In no event shall cleared openings for any purpose, including but not limited to, principal and accessory structures, driveways, lawns and sewage disposal areas, exceed in the aggregate twenty-five (25%) percent of the lot area within the shoreland zone, including land previously cleared.
3. Legally existing nonconforming cleared openings may be maintained but shall not be enlarged, except as allowed by this division.
4. Fields and other cleared openings which have reverted to primarily shrubs, trees, or other woody vegetation shall be regulated under the provisions of this section.

(d) *Erosion and sedimentation control:*

1. All activities which involve filling, grading, excavation or other similar activities which result





## DEP ISSUE PROFILE

### Clearing Vegetation in the Shoreland Zone

issued: October 18, 2007

contact: Augusta office (207) 287-3901  
Portland office (207) 822-63006300  
Bangor office (207) 841-4570

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, 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, although no "clear-cut openings" (openings in the forest canopy greater than 250 square feet) are permitted. 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 each 25-foot by 50-foot square rectangular (1250 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-<8 inches	2
8-<12 inches	4
12 inches or greater	8

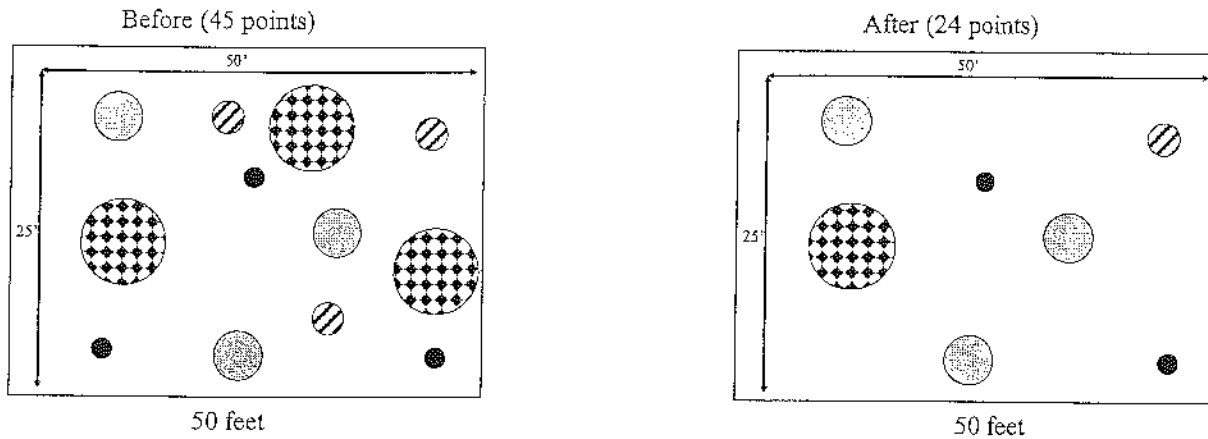
Adjacent to great ponds, and rivers and streams flowing to great ponds, a rating score of 24 or more points must be maintained. Adjacent to other water bodies, tributary streams, and wetlands, a "well-distributed stand of trees and other vegetation" is defined as maintaining a minimum rating score of 16 per 25-foot by 50-foot rectangular 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 50-foot plot contains three (3) trees between 2 and 4 inches in diameter, three (3) trees between 4 and 8

inches in diameter, three (3) trees between 8 and 12 inches in diameter, and here (3) trees over 12 inches in diameter, the rating score is:

$$(3 \times 1) + (3 \times 2) + (3 \times 4) + (3 \times 8) = 45 \text{ points}$$

Thus, the 25-foot by 50-foot plot contains trees totaling 45 points. Trees totaling 21 points (45 – 21 = 24) 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.



KEY		
Symbol	Tree Dia.	Points
	2 - <4 inches	1
	4 - <8 inches	2
	8 - <12 inches	4
	12 inches or greater	8

NOTE: Some municipalities have a “point system” based on 25-foot by 25-foot plots, rather than 25-foot by 50-foot plots. In those cases the required number of “points” that must be retained is half that required for the larger plots.

**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. Also, if five saplings less than 2 inches in diameter do not exist in a 25-foot by 50-foot plot, no woody stems less than two (2) inches in diameter can be removed until five saplings are recruited into the plot. Furthermore, in order to protect water quality, vegetation less than three (3) feet in height and other groundcover 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 six (6) 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.

**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?**

When the removal of storm-damaged, diseased, unsafe, or dead trees results in the creation of a cleared opening, the opening must be replanted with native tree species, unless existing new tree growth is present.

**Can existing cleared openings to the water be maintained?**

Yes. Cleared openings legally in existence on the effective date of the ordinance may be maintained. However, areas that were once fields or cleared openings, but have reverted to primarily shrubs, trees, or other woody vegetation are regulated as any other buffer area under the ordinance.

**If I adhere to the "Clearing of Vegetation For Development" Standards in the Department's Guidelines will I be sure that I am in compliance with all clearing limitations?**

No. Local ordinances may be more restrictive. You should always consult with you local code enforcement officer before your begin clearing of vegetation in the shoreland zone.



# 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

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:

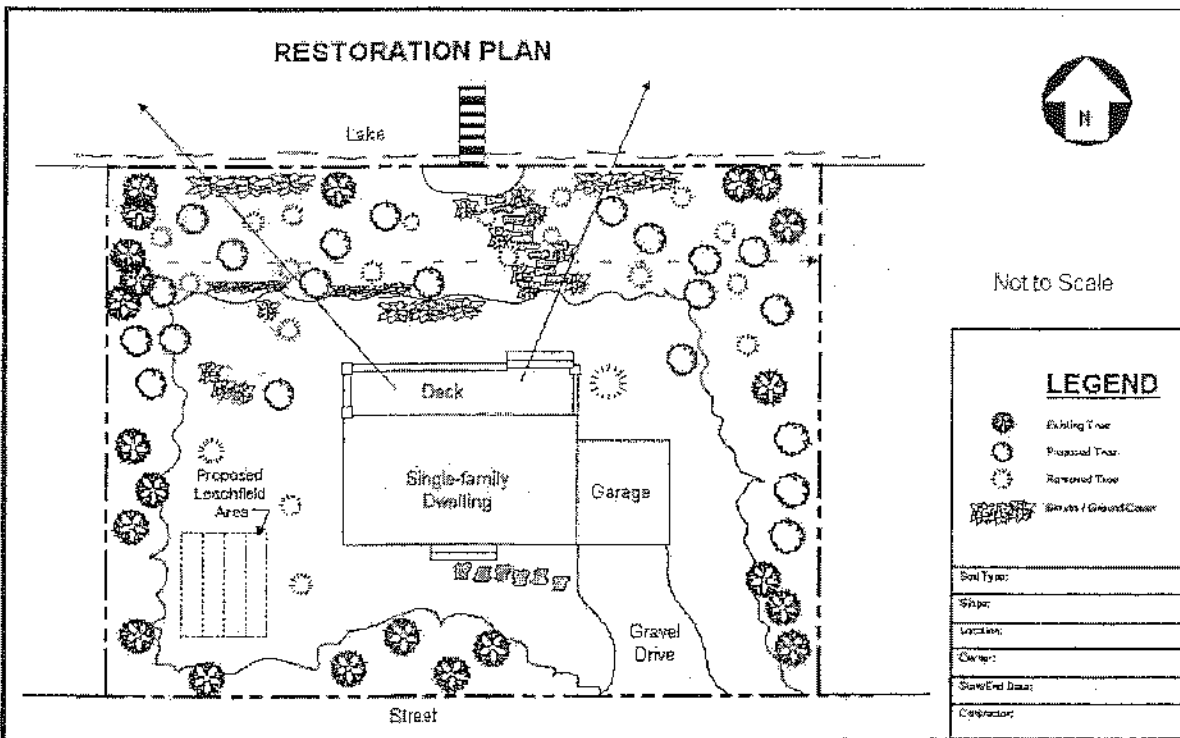
- The number of trees removed in violation of the Ordinance -- at least one tree must be planted for each tree cut in violation. The location of the replanted trees shall be as near as feasible to the trees they are replacing.
- The size of the trees removed -- The replanted trees must be as close in 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