

10.25: Land under the Ocean

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

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

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

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

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

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

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

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

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

(2) Definitions.

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

Nearshore Areas of land under the ocean means that land extending from the mean low water line to the seaward limit of a municipality's jurisdiction, but in no case beyond the point where the land is 80 feet below the level of the ocean at mean low water. However, the nearshore area

¹ For regulations concerning land containing shellfish, see 310 CMR 10.34.

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shall extend seaward only to that point where the land is 30 feet below the level of the ocean at mean low water for municipalities bordering Buzzard's Bay and Vineyard Sound (west of a line between West Chop, Martha's Vineyard and Nobska Point, Falmouth), 40 feet below the level of the ocean at mean low water for Provincetown's land in Cape Cod Bay, and 50 feet below the level of the ocean at mean low water for Truro's and Wellfleet's land in Cape Cod Bay.

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

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- (3) Improvement dredging for navigational purposes affecting land under the ocean shall be designed and carried out using the best available measures so as to minimize adverse effects on such interests caused by changes in:
- (a) bottom topography which will result in increased flooding or erosion caused by an increase in the height or velocity of waves impacting the shore;
 - (b) sediment transport processes which will increase flood or erosion hazards by affecting the natural replenishment of beaches;
 - (c) water circulation which will result in an adverse change in flushing rate, temperature, or turbidity levels; or
 - (d) marine productivity which will result from the suspension or transport of pollutants, the smothering of bottom organisms, the accumulation of pollutants by organisms, or the destruction of marine fisheries habitat or wildlife habitat.
- (4) Maintenance dredging for navigational purposes affecting land under the ocean shall be designed and carried out using the best available measures so as to minimize adverse effects on such interests caused by changes in marine productivity which will result from the suspension or transport of pollutants, increases in turbidity, the smothering of bottom organisms, the accumulation of pollutants by organisms, or the destruction of marine fisheries habitat or wildlife habitat.
- (5) Projects not included in 310 CMR 10.25(3) or (4) which affect nearshore areas of land under the ocean shall not cause adverse effects by altering the bottom topography so as to increase storm damage or erosion of coastal beaches, coastal banks, coastal dunes, or salt marshes.
- (6) Projects not included in 310 CMR 10.25(3) which affect land under the ocean shall if water-dependent be designed and constructed, using best available measures, so as to minimize adverse effects, and if non-water-dependent, have no adverse effects, on marine fisheries habitat or wildlife habitat caused by:
- (a) alterations in water circulation;
 - (b) destruction of eelgrass (*Zostera marina*) or widgeon grass (*Ruppia maritima*) beds;
 - (c) alterations in the distribution of sediment grain size;
 - (d) changes in water quality, including, but not limited to, other than natural fluctuations in the level of dissolved oxygen, temperature or turbidity, or the addition of pollutants; or
 - (e) alterations of shallow submerged lands with high densities of polychaetes, mollusks or macrophytic algae.
- (7) Notwithstanding the provisions of 310 CMR 10.25(3) through (6), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.