
Chronic Coastal Natural Hazards Model Overlay Zone

Section 0-0.010 PURPOSE

The purpose of this ordinance is to:

- identify areas that may be subject to chronic coastal natural hazards including ocean flooding, beach and dune erosion, dune accretion, bluff recession, land sliding, and inlet migration;
- assess the potential risks to life and property posed by chronic coastal natural hazards; and
- reduce potential risks to life and property through hazard avoidance.

Section 0-0.020 APPLICABILITY

The requirements of this ordinance apply to new construction, renovation and expansion of permanent structures, readily movable structures, accessory structures, and vegetation removal, excavation, and fill subject to Section 0-0.325, within coastal hazard areas. Coastal hazard areas are Active, High, Moderate and Low relative risk zones as identified in Oregon Department of Geology and Mineral Industries Open File Report #_____. All development within coastal hazard areas shall be subject to the requirements of the highest relative risk zone within which any portion of a structure is located.

Section 0-0.050 DEFINITIONS

• **accessory structures** are appurtenant structures, either attached or detached from the primary structure, that are not suitable for human habitation, that are not essential to the continued existence or use of the primary structure, that have less than 250 square feet of total floor area, and that are constructed in a manner that renders them readily movable. Accessory structures include but are not limited to:

- decks, porches, and gazebos;
- single-story storage sheds or greenhouses; and
- wooden walkways.

• **building footprint** is the greatest exterior dimensions of a structure, including cantilevered floor areas when extended to ground level. Attached decks, porches and gazebos are excluded from these calculations.

• **crest of the bluff** is the junction separating the bluff face and upland. This feature typically lies at the landward edge of the steeply-sloping bluff face and at the seaward edge of the gently-sloping upland.

• **crest of the dune** is the point at which the primary dune reaches its highest elevation.

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- **erosion scarp** is the near-vertical cut in the dune produced by wave action.

 - **expansion** encompasses alterations to permanent structures or readily movable structures that **exceed** the building footprint or usable floor area.

 - **headscarp crest** is the landward edge of the near-vertical cut in the bluff face produced by slope failure.

 - **imminent peril** is the condition that exists when damage to structures is expected to take place in the immediate future (i.e. days to weeks).

 - **lot - constrained** is a lot or parcel created prior to the effective date of this ordinance and which, through the application of the provisions of this ordinance, and other yard and setback requirements, has a permissible building footprint of 1000 square feet or less outside of the area of active relative risk.

 - **permanent structures** are substantial structures including but not limited to residential, commercial, industrial, public, and other buildings. Septic systems, tile fields, and other waste handling facilities are also included in this category. For the purpose of this ordinance two classes of permanent structures are identified:
 - **small structures** are residential buildings which have three (3) or less dwelling units, less than 5000 square feet of total floor area, and a building footprint of less than 2,500 square feet; and
 - **large structures** are all permanent structures not otherwise classified as small.

 - **primary dune** is the first mound of sand landward of the beach with sufficient bulk to withstand significant wave attack. It is typically well vegetated and is the highest in the series of dunes landward of the beach. It may lie directly landward of the beach. However it is common for secondary, smaller dunes to lie between it and the beach.

 - **qualified professionals** include Oregon registered geologists, certified engineering geologists and registered geotechnical engineers trained and experienced in the study of coastal processes, sediment transport, and slope stability.

 - **readily movable structures** are structures that are designed, sited and constructed so as to be readily movable and do not include commercial or industrial structures. Readily movable structures include:
 1. Manufactured homes that:
 - a) Have a dimensional width of 24 feet or less; and
 - b) Have access to and from the site of sufficient width and acceptable grade to permit the structure to be relocated.
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2. Single family dwellings that:

- a) Are single unit, single story residential structures with less than 1,500 square feet of total floor area; and
- b) Have a dimensional width of 24 feet or less; and
- c) Are placed on perimeter footing, piling, or other type of foundation that will render them readily movable. Slab-on-grade foundations do not meet this criterion; and
- d) Are composed of stud wall or similar frame type of construction that will render them readily movable. Walls that are constructed of masonry, including stone walls, concrete poured or concrete block walls, and brick veneer walls do not meet this criterion; and
- e) Have access to and from the site of sufficient width and acceptable grade to permit the structure to be relocated; and
- f) Can be relocated at a reasonable cost relative to other structures of the same size and construction.

A detached garage with less than 500 square feet of total floor area, which is bolted to a slab foundation, which does not have living space within or above the structure, and which does not have plumbing or interior walls shall be considered a readily movable structure.

Existing permanent structures shall be considered readily movable structures if the cost of relocation is not more than 25% of the replacement cost.

● **risk** is the threat to life and property posed by a hazard.

● **risk zone** is that zone measured as a linear distance landward from a reference feature to a line on the ground which is subject to hazards, and which, on the balance of evidence and in light of scientific knowledge of the moment, it would be prudent to restrict development. Risk zones identified in this ordinance are as set forth in the Oregon Department of Geology and Mineral Industries Open File Report #_____.

● **structure, non-complying** is a permanent structure, readily movable structure, and accessory structure that existed prior to the effective date of this ordinance and which is determined to not comply with the provisions of this ordinance, and was lawfully sited at the time of placement or construction..

Section 0-0.100 COASTAL HAZARD AREA PERMIT

In areas subject to the provisions of this ordinance as set forth in Section 0-0.020, any new construction or expansion of permanent structures, readily moveable structures, accessory structures, land, divisions, and

vegetation removal, excavation, and fill subject to Section 0-0.325, shall require the issuance of a Coastal Hazard Area Permit. Application, review and action on Coastal Hazard Area Permits shall be in accordance with the requirements for a Type II procedure as set forth in Section (**reference administrative procedures section of local code**). Decisions on coastal Hazard Area Permits shall be based on written findings addressing all applicable provisions of this ordinance.

Section 0-0.200 COASTAL HAZARD ASSESSMENT.

In designated coastal hazard areas a coastal hazard permit is required to expand or construct permanent structures, readily movable structures, accessory structures, and land division. A coastal hazard assessment prepared by a qualified professional shall be submitted in conjunction with an application for a coastal hazard permit in any coastal hazard area (active, high, moderate, and low relative risk zones) subject to this ordinance. The general purpose of the coastal assessment is to verify DOGAMI hazard risk zone information, identify any coastal hazards not captured by risk zone mapping, and identify how and where uses allowed in applicable hazard zones may be sited. A coastal hazard assessment shall include, at minimum, the following:

- A.** Examine the full range of geologic and oceanographic factors affecting chronic shoreline stability including short term events and long term trends attributable to processes of wave attack (overtopping/undercutting), mass wasting (sloughing/landsliding), wind-driven dune erosion or accretion, inlet migration, and human activities, as well as relative sea level rise and the sediment budget (sources/sinks);
- B.** Locate and verify areas of active, high, moderate, and low relative risk, or 'risk zones';
- C.** Describe the proposed development, including plan maps and cross-sections showing the location of proposed structures on the property and the structures relation to property lines and identified risk zones;
- D.** Describe potential adverse impacts to adjacent development and measures to avoid or minimize such impacts; and
- E.** Identify appropriate hazard mitigation, including siting, design, construction methods, potential limits on excavation, fill, or vegetation removal, or other measures to reduce risk of damage from identified coastal hazards.

Option: Jurisdictions may want to identify a process to insure that activities in coastal hazard areas are consistent with the required Coastal Hazard Assessment. One method for this is to require a sign off from the "Qualified Professional" who completed the Coastal Hazard Assessment as follows:

- 1. Prior to issuing the permit a sign off would be required indicating that the site/development plans are consistent with the assessment.*
- 2. Once development or site work is completed a sign off would be required indicating that site/development work was completed consistent with the assessment.*

Section 0-0.301 DEVELOPMENT STANDARDS IN ACTIVE HAZARD ZONES

Except as provided for in Sections 0-0.321 and 0-0.322, new construction, expansion of permanent, readily moveable, and accessory structures is not permitted. Structures are limited to improvements for beach access, or shore front protective structures as otherwise permitted by Oregon Parks and Recreation Department (OPRD). Existing structures may be maintained with ordinary maintenance and repair.

Section 0-0.302 DEVELOPMENT STANDARDS IN HIGH RELATIVE RISK ZONES

A. In high risk zones the following uses are permitted subject to the standards of Section 0-0.310 and subject to applicable development limitations in Section 0-0.323:

1. New readily movable structures, and accessory structures;
2. Expansion of existing readily movable structures where structure remains consistent with that definition, accessory and structures.

B. In high risk zones the following uses are not permitted:

1. New large permanent structures;
2. Expansion of existing large permanent structures;
3. New small permanent structures, except as authorized under Section 0-0.320: and
4. Expansion of existing small permanent structures, except as authorized under Section 0-0.330.

C. Recognizing the limited suitability of these areas for development, readily moveable structures allowed in areas of high relative risk will be located as far landward as practicable, and in no case on the beach, seaward of the crest of the primary dune, bluff, active headscarp, or within development limitation areas set forth in Section 0-0.324:

Section 0-0.303 DEVELOPMENT STANDARDS IN MODERATE RELATIVE RISK ZONES

A. In moderate risk zones the following uses are permitted subject to applicable development limitations in Section 0-0.324:

1. New small permanent structures;
2. Expansion of existing small permanent structures where structure remains consistent with that definition;
3. New readily movable structures, and accessory structures; and
4. Expansion of existing readily movable structures where structure remains consistent with that definition, and accessory structures.

B. In moderate risk zones the following uses are not permitted:

1. New large permanent structures, except as authorized under Section 0-0.320;
2. Expansion of existing large permanent structures, except as authorized under

Section 0-0.330.

C. Recognizing the limited suitability of these areas for development, readily moveable structures and small permanent structures allowed in areas of moderate relative risk will be located as far landward as practicable, and in no case on the beach, seaward of the crest of the primary dune, bluff, active headscarp, or within development limitation areas set forth in Section 0-0.324:

Section 0-0.304 DEVELOPMENT STANDARDS IN LOW RELATIVE RISK ZONES

All uses within the underlying zone may be permitted in low risk zones subject to the development limitations of Section 0-0.324 and any mitigation measures specified in the Coastal Hazard Assessment provided in accordance with Section 0-0.200, .

Section 0-0.321 LOTS, CONSTRAINED

Notwithstanding the provisions of Section 0-0.301, and recognizing the limited suitability of these areas for development, a readily movable structure and accessory structure may be permitted on lots or parcels defined as constrained in Section 0-0.050, provided:

- A. The structure shall be located as far landward as possible, after allowable variances to street and side yard setback requirements have been taken to increase the buildable area;
- B. The total building footprint shall not exceed 1000 square feet excluding accessory structures;
- C. Residential structures shall be limited to manufactured homes; and
- D. In no cases shall a structure be located on the beach, or seaward of the crest of the bluff, crest of the headscarp or crest of the primary dune.
- E. In no case shall residential developments or commercial or industrial buildings be allowed in development limitation areas set forth in Section 0-0.323:

Section 0-0.322 STRUCTURES, NON-COMPLYING

Notwithstanding the provisions of Sections 0-0.301, 0-0.302 and 0-0.303, and recognizing the limited development suitability of these areas for development, a one time expansion is permitted for structures defined as non-complying in Section 0-0.050, provided:

- A. Expansion is limited to no more than a 10% increase in the total square footage of the existing building footprint, and
- B. Expansion will result in the new structure being no further seaward than the existing structure.

Section 0-0.323 Hazard Disclosure and Liability Waiver:

Prior to the issuance of required permits for development permitted in active, high, moderate, or low relative risk zones, the applicant shall provide a copy of a Hazard Disclosure and Liability Waiver which has been executed by the subject property owner and recorded in the deed records of _____ County and which sets forth the following:

(A) A statement that the property is subject to chronic natural hazards and that development thereon is subject to risk of damage from such hazards;

(B) A statement that the property owner has commissioned a Coastal Hazard Assessment of the subject property, a copy of which is on file with the jurisdiction, has reviewed the Coastal Hazard Assessment and has thus been informed and is aware of the type and extent of hazards present and the risks associated with development on the subject property;

(C) A statement acknowledging that the property owner assumes all risks of damage from natural hazards associated with the development of the subject property; and

(D) A statement releasing the jurisdiction, its agents and employees from any and all claims which may arise as a result of damages, losses or injuries sustained by the property owner and his/her heirs, successors and assigns, from natural hazards.

Section 0-0.324 Land Divisions

A. New land divisions subject to the provisions of this ordinance shall:

1. Include within each lot or parcel a minimum 1500 square feet building footprint which is located landward of the high hazard risk zone; and
2. Locate all water and sewer lines and infrastructure, roads, and bridges landward of the high hazard risk zone.

Section 0-0.325 Vegetation Removal, Excavation, and Fill within Active, High, Moderate, and Low Hazard Risk Areas

A. Recognizing the limited suitability for development and significant potential for landform destabilization in identified coastal hazard areas, all proposed vegetation removal, excavation, or fill, not exempt in sub section B below, must:

1. first be addressed within a Coastal Hazards Assessment outlined in Section 0-0.200; and
2. be consistent with any applicable requirements set forth in the Coastal Hazard Assessment.

B. Exempt Vegetation Removal, Excavation, and Fill includes:

1. Yard area maintenance related to existing structures. This exemption does not include:

- a) excavation or fill of more than 5 cubic yards; or
- b) vegetation removal on slopes of greater than 25 percent.

Section 0-0.326 Prohibited Development on Beaches and Dunes.

Construction of residential, commercial, or industrial buildings is prohibited on beaches, active foredunes, other foredunes that are conditionally stable and subject to ocean undercutting or wave overtopping, and interdune areas (deflation plains) that are subject to ocean flooding. Other development in these areas shall be permitted only if a qualified professional determines that it is adequately protected from any geologic hazards, wind erosion, undercutting, ocean flooding and storm waves; and is designed to minimize adverse environmental effects. Such a determination shall consider:

- A. The type of use proposed and the adverse effects it might have on the site and adjacent areas;
- B. Temporary and permanent stabilization programs and the planned maintenance of new and existing vegetation;
- C. Methods for protecting the surrounding area from any adverse effects of the development; and
- D. Hazards to life, public and private property, and the natural environment that may be caused by the proposed use.

Suggested Provisions to Identify Section 0-0.323 Prohibition Areas Using DOGAMI HAZARD Maps:

The department believes that the following may be used to satisfactorily identify beach and dune development prohibition areas:

- 1) *All dune backed shoreline areas within active and high hazard areas identified within the DOGAMI Coastal Erosion Hazard zone maps shall be included within the development prohibition area, and*
- 2) *All dune backed shoreline areas within an area identified by FEMA FIRM maps to be subject to ocean flooding shall be included within the development prohibition area, and*
- 3) *All dune backed shoreline areas within moderate hazard areas identified within the DOGAMI Coastal Erosion Hazard zone maps shall be included within the development prohibition area if it is determined by a qualified professional that the site is within areas including beaches, active foredunes, other foredunes that are conditionally stable and subject to ocean undercutting or wave overtopping, and interdune areas (deflation plains) that are subject to ocean flooding. Any application for development within a designated moderate hazard area as indicated above shall include this determination.*