

TILLAMOOK COUNTY PLANNING COMMISSION

To Be Held
February 10, 2022- Beginning at 6:30p.m.

VIRTUAL & TELECONFERENCE MEETING

*The Tillamook County Courthouse is closed to the public at this time and hearing proceedings are taking place in virtual meeting format only. The hearing can also be accessed via teleconference. For teleconference access the evening of the hearing, please call 971-254-3149. Conference ID: 887 242 77#. Virtual Meeting Access: <https://www.co.tillamook.or.us/commdev>. Click on Virtual Teams Link. *Microsoft Teams Meeting Format.*

I. CALL TO ORDER

II. ROLL CALL

III. OLD BUSINESS:

IV. NEW BUSINESS:

#851-21-000440-PLNG & #851-21-000441-PLNG & #851-21-000442-PLNG: The Tillamook County Department of Community Development is making efforts to update the coastal planning program and these efforts are now reflected in a series of proposed amendments to the Tillamook County Land Use Ordinance (TCLUO) and Tillamook County Comprehensive Plan. Updates include legislative text amendments to TCLUO Section 3.510: Flood Hazard Overlay (FH) Zone, TCLUO Section 3.530: Beach and Dune Overlay (BD) Zone, TCLUO Section 4.130: Development Requirements for Geologic Hazard Areas and TCLUO Article 11: Definitions. Updates also include incorporation of digital hazard mapping tools produced by the Oregon Department of Oregon Geology and Mineral Industries (DOGAMI) that if adopted, will become planning and comprehensive plan maps for areas of known geologic hazards, beaches and dunes. Amendments to Tillamook County Comprehensive Plan Goal element 7: Hazards and Goal element 18: Beaches and Dunes to reflect updates to the aforementioned Tillamook County Land Use Ordinance are also proposed as part of these planning update efforts.

V. AUTHORIZATION FOR CHAIR TO SIGN APPROPRIATE ORDERS, IF NECESSARY

VI. ADMINISTRATIVE DECISIONS: Administrative Decisions are available for public review on the Tillamook County Department of Community Development website: <https://www.co.tillamook.or.us/commdev/landuseapps>

VII. HOUSING COMMISSION UPDATE

VIII. DEPARTMENT OF COMMUNITY DEVELOPMENT REPORT

IX. ADJOURNMENT

The Courthouse is accessible to citizens with disabilities. If special accommodations are needed for persons with hearing, visual, or manual impairments that wish to participate in the meeting, please contact 1-800-488-8280 at least 24 hours prior to the meeting in order that appropriate communications assistance can be arranged.



1510 – B Third Street
Tillamook, Oregon 97141
www.tillamook.or.us

Building (503) 842-3407
Planning (503) 842-3408
On-Site Sanitation (503) 842-3409
FAX (503) 842-1819
Toll Free 1 (800) 488-8280

Land of Cheese, Trees and Ocean Breeze

TEXT AMENDMENT/ZONE CHANGE/MAP AMENDMENT REQUEST

#851-21-000442-PLNG: Beach & Dune Overlay Zone

#851-21-000441-PLNG: TCLUO Section 4.130

#851-21-000440-PLNG: TCLUO Section 3.530

STAFF REPORT DATE: February 3, 2022

TILLAMOOK COUNTY PLANNING COMMISSION HEARING DATE: February 10, 2022

BOARD OF COMMISSIONERS HEARING DATE: April 6, 2022 & April 27, 2022

PREPARED BY: Sarah Absher, CFM, Director

I. GENERAL INFORMATION & SUMMARY OF PROPOSED AMENDMENTS

Initiated By: Tillamook County Department of Community Development

Requested actions: A legislative amendment request and map amendment request to amend the Tillamook County Land Use Ordinance (TCLUO), Tillamook County Comprehensive Plan Map & Tillamook County Zoning Map and Tillamook County Comprehensive Plan as follows:

#851-21-000442-PLNG TCLUO Section 3.530: Beach and Dune Overlay (BD) Zone and Tillamook County Comprehensive Plan Goal 18: Beach and Dune Element: Open File Report O-20-04, Temporal and Spatial Changes in Coastal Morphology, Tillamook County, Oregon by the Oregon Department of Geology and Mineral Industries (DOGAMI) to replace 1975 USDA Beaches and Dunes of the Oregon Coast as Comprehensive Plan map to identify dune classifications and properties within the Beach and Dune Overlay (BD) Zone. Beach and Dune Hazard Report now referenced as Dune Area Development Permit. Clarification of activities exempt from a Dune Area Development Permit and update criteria for approval of a Dune Area Development Permit including specific standards that must be addressed in the accompanying geologic report (Engineering Geologic Report and Geotechnical Engineering Report). Adds section to address habitat restoration and enhancement projects for purposes of wildlife and plant habitat; codifies development requirements for remedial grading activities, removes language for sand mining activities; updates to requirements for beachfront protective structures; addition of certification compliance; add definition of "Geoprofessional" to TCLUO Article 11. Added requirement for

certification of compliance prior to final building inspection and issuance of Certificate of Occupancy. Permits will continue to be reviewed under a Type I land use review process.

#851-21-000441-PLNG TCLUO Section 4.130: Development Requirements for Geologic Hazard Areas and Tillamook County Comprehensive Plan Goal 7: Hazards Element: Applicability section updated to use best available data to identify areas considered to be potentially geologically hazardous including replacement of 1979 DOGAMI Bulletin with DOGAMI Open File Report O-20-13, Landslide hazard and risk study of Tillamook County, Oregon. Updated geologic assessment review and expanded list of activities exempt from geologic assessment review. Updated Geologic Report (Engineering Geologic Report and Geotechnical Engineering Report) standards. Added section for review of historical, cultural and archaeological resources. Added requirement for certification of compliance prior to final building inspection and issuance of Certificate of Occupancy. Definitions added to Article 11 of TCLUO to define “Geoprofessional”. Permits will continue to be reviewed under a Type I land use review process.

#851-21-000440-PLNG TCLUO Section 3.530: Flood Hazard Overlay (FH) Zone: Update definitions to reflect definition language in FEMA Code of Federal Regulations; reference for coordination with State of Oregon Specialty Codes; addition of compliance and penalties for non-compliance language; modification to variance criteria to reference “functionally-dependent use”; language for compliance measures when altering a watercourse; addition of language for installation of underground and above-ground tanks and clarification language for installation of utilities; specifications for construction of garages and accessory structures; clarification of development requirements for the placement of manufactured homes and recreational vehicles; specifications for construction of public restroom facilities.

II. BACKGROUND

The Tillamook County Department of Community Development is making efforts to update the coastal planning program and these efforts are now reflected in a series of proposed amendments to the Tillamook County Land Use Ordinance (TCLUO) and Tillamook County Comprehensive Plan. Updates include legislative text amendments to TCLUO Section 3.510: Flood Hazard Overlay (FH) Zone, TCLUO Section 3.530: Beach and Dune Overlay (BD) Zone, TCLUO Section 4.130: Development Requirements for Geologic Hazard Areas and TCLUO Article 11: Definitions. Updates also include incorporation of digital hazard mapping tools produced by the Oregon Department of Oregon Geology and Mineral Industries (DOGAMI) that if adopted, will become planning and comprehensive plan maps for areas of known geologic hazards, beaches and dunes. Amendments to Tillamook County Comprehensive Plan Goal element 7: Hazards and Goal element 18: Beaches and Dunes to reflect updates to the aforementioned Tillamook County Land Use Ordinance are also proposed as part of these planning update efforts.

These long-range planning efforts are ongoing county-wide efforts and are part of the County's overall efforts to mitigate risk and to reduce the loss of life and property in coastal communities. The public, planners, emergency managers and first responders, elected officials, and community partners benefit from these efforts to increase community resiliency from the presence of natural hazards in Tillamook County.

It is not the intent or purpose of proposed amendments to require relocation of or otherwise regulate existing development within the Beach and Dune Hazard Overlay Zone. Adoption of the proposed amendments will not have the effect of rendering any lawfully established use or structure nonconforming. All uses permitted pursuant to the provisions of the underlying zones may be permitted, subject to the additional requirements and limitations of this section, and all applicable supplemental standards of the Tillamook County Land Use Ordinance.

It should be noted that overall residential density cannot exceed what is allowed in the underlying zone and density shall be computed based on the total gross land area of the subject property. With the Flexible Design Option, development standards for setbacks, lot area, width and depth requirements, lot coverage

requirements, building height and similar dimensional requirements may be reduced, adjusted or otherwise modified as necessary to achieve the design objectives of the development and fulfill the purposes of the proposed amendments.

III. APPLICABLE STATE LAW, COUNTY ORDINANCE AND COMPREHENSIVE PLAN PROVISIONS

1. Tillamook County Comprehensive Plan
2. Tillamook County Land Use Ordinance, Article IX, Amendment Process

IV. ANALYSIS:

1. Statewide Planning Goal & Tillamook County Comprehensive Plan Discussion

Oregon's 19 statewide planning goals are adopted as Administrative Rule and express the state's policies on land use as well as land use related topics. Each county is required to have a comprehensive plan consistent with the statewide planning goals as well as zoning and land division ordinances for implementation of plan policies and objectives. The Tillamook County Comprehensive Plan contains 17 of the 19 Statewide Planning Goal Elements. A Goal 15 Element (Willamette Valley) and Goal 19 Element (Ocean Resources) are absent from the Tillamook County Comprehensive Plan as the goals and policies for the Willamette Valley do not apply to Tillamook County and the Ocean Resources Element was created after the adoption of the County's comprehensive plan.

The Comprehensive Plan provides the County with an important opportunity to make a detailed statement describing the needs and desires of its citizens for the future use of the County's land and water resources, and to guide future development of the County through agreed upon policy statements which give direction to County actions and programs. The policies provide a basis for coordination of the programs of other governmental entities and are also intended to assist the private sector in reaching development decisions which are beneficial to the citizens of the County generally as well as to the private property owner.

The plan must also be in conformance with the adopted statewide planning goals and policy statements are to be based upon required inventories of resource and other pertinent information and findings related to analysis of problems and opportunities existing in Tillamook County. In order that the plan will be used to guide actions for problem-solving, the state goals also require local adoption of implementation measures appropriate for dealing with the identified problems and needs.

The following Goal Summaries are a combination of excerpts from the Department of Land Conservation and Development's introductory information on Oregon's statewide planning goals which can be found on their website at <http://www.oregon.gov/LCD/docs/goals/goalsummary.PDF> and the [Tillamook County Comprehensive Plan](https://www.co.tillamook.or.us/gov/ComDev/Planning/compplan.htm) <https://www.co.tillamook.or.us/gov/ComDev/Planning/compplan.htm>. These summaries are intended to provide a general context for discussion of the general compatibility of this conditional use request with the goal elements of the Tillamook County Comprehensive Plan.

- Tillamook County Comprehensive Plan Goal 1 Element: The Planning Process
Summary: Goal 1 calls for "the opportunity for citizens to be involved in all phases of the planning process." It requires each city and county to have a citizen involvement program containing six components specified in the goal. It also requires local governments to have a committee for citizen involvement (CCI) to monitor and encourage public participation in planning.

A Measure 56 notice was required for the proposed amendments to the Beach and Dune Overlay Zone, including adoption of the Open File Report O-20-04, Temporal and Spatial Changes in Coastal Morphology, Tillamook County, Oregon by the Oregon Department of Geology and Mineral Industries (DOGAMI) to replace 1975 USDA Beaches and Dunes of the Oregon Coast as Comprehensive Plan map. Included with this Measure 56 notice were notice of the proposed amendments to TCLUO Section 4.130: Development Requirements for Geologic Hazard Areas, amendments to TCLUO Section 3.530: Flood Hazard Overlay Zone, TCLUO Article 11: Definitions as well as amendments to the Goal 7 and 18 elements of the Tillamook County Comprehensive Plan reflective of the proposed amendments to the various sections of the TCLUO.

Community meetings are scheduled to take place as follows:

Tierra Del Mar Community Association February 3, 2022
Oceanside Neighborhood Association (CAC) February 5, 2022
Neskowin CAC February 12, 2022
Pacific City/Woods CAC February 19, 2022

Along with the Measure 56 Notice, a FAQ Guide has been provided on the Department website for the public's review. A copy has been included with this report.

- Tillamook County Comprehensive Plan Goal 2 Element: THE LAND USE PLAN
Summary: Goal 2 outlines the basic procedures of Oregon's statewide planning program and describes the development of Tillamook County's Comprehensive Plan including justification for identifying exception areas.

The proposed amendments are consistent with the Goal 2 element and an exception is not required for this process.

- Tillamook County Comprehensive Plan Goal 3 Element: AGRICULTURAL LANDS
Summary: Goal 3 defines "agricultural lands." It then requires counties to inventory such lands and to "preserve and maintain" them through farm zoning. Details on the uses allowed in farm zones are found in ORS Chapter 215 and in Oregon Administrative Rules, Chapter 660, Division 33.
- Tillamook County Comprehensive Plan Goal 4 Element: FOREST LANDS
Summary: This goal defines forest lands and requires counties to inventory them and adopt policies and ordinances that will "conserve forest lands for forest uses."

The proposed amendments only apply to resource lands related to development within Areas of Special Flood Hazard where a Floodplain Development Permit is required or if development is occurring in an area of geologic hazard where a geotechnical investigation is required under TCLUO Section 4.130. These permitting requirements are existing requirements contained within the TCLUO.

- Tillamook County Comprehensive Plan Goal 5 Element: NATURAL RESOURCES
Summary: The purpose of Goal 5 is to protect natural resources, and conserve scenic and historic areas and open space. Goal 5 covers more than a dozen natural and cultural resources such as wildlife habitats and wetlands. It establishes a process for each resource to be inventoried and evaluated. If a resource or site is found to be significant, a local government has three policy choices: preserve the resource, allow proposed uses that conflict with it, or strike some sort of a balance between the resource and the uses that would conflict with it.

- Tillamook County Comprehensive Plan Goal 6 Element: AIR, WATER AND LAND RESOURCES QUALITY

Summary: This goal requires local comprehensive plans and implementing measures to be consistent with state and federal regulations on matters such as groundwater pollution and noise control in Tillamook County.

The proposed amendments are not in conflict with any of the policies outlined in the Goal 5 and Goal 6 elements. The proposed amendments will not result in the conversion of inventoried cultural or historical structures and uses non-conforming uses or structures.

- Tillamook County Comprehensive Plan Goal 7 Element: HAZARDS

Summary: Goal 7 deals with development in places subject to natural hazards such as floods or landslides. It requires that jurisdictions apply "appropriate safeguards" (floodplain zoning, for example) when planning for development there. In Tillamook County, the purpose of addressing hazards is not meant to restrict properties from development, but to institute policies concerning potential problems, so they can be considered before financial losses and possible injury which may be avoided by the application of the policies formulated in the Comprehensive Plan.

Hazards identified in the Goal 7 Hazards element of the Tillamook County Comprehensive Plan include: ocean and stream flooding, groundwater, erosion and deposition, landslides, earthquakes, weak foundation soils, and "other unique local hazards". The proposed amendments and comprehensive plan policies updates are consistent with the guidelines and policies of Goal 7.

The proposed amendments speak strongly to the policies contained within the Goal 7 element of the Tillamook County Comprehensive Plan. Specifically, the amendment efforts are largely focused on updating permitting review processes for development in these inventoried areas of hazard throughout Tillamook County.

- Tillamook County Comprehensive Plan Goal 8 Element: RECREATION

Summary: This goal calls for each community to evaluate its areas and facilities for recreation and develop plans to deal with the projected demand for them. It also sets forth detailed standards for expedited siting of destination resorts. In Tillamook County, the main issue surrounding recreation is that of quantity, location and orientation. This Goal element recognizes that the tourism sector of the County's economy is rapidly growing, and some feel tourism places too large a burden on local public facilities and services.

Development of recreational facilities within Areas of Special Flood Hazard where a Floodplain Development Permit is currently required (TCLUO Section 3.530 Flood Hazard Overlay Zone), development of recreational facilities within the Beach and Dune Overlay Zone where a beach and dune hazard report are required (TCLUO Section 3.510 Beach and Dune Overlay Zone), and compliance with development standards where development occurring in an area of geologic hazard continue to apply. It is not anticipated that the proposed amendments will result in additional limitations or prohibitions for recreational opportunities.

- Tillamook County Comprehensive Plan Goal 9 Element: POPULATION AND ECONOMY

Summary: Goal 9 calls for diversification and improvement of the economy. It asks communities to inventory commercial and industrial lands, project future needs for such lands, and plan and zone enough land to meet those needs. Projections in this Element of the Comprehensive Plan extend to year 2000. The importance of cottage industry, rural industry and light industry is recognized throughout this Element, stating that regulations be adopted to permit low-impact light manufacturing activity in suitable rural zones.

The Tillamook County Comprehensive Plan does not include updated population projections. The proposed amendments largely do not apply to lands zoned for industrial development and should not result in the prohibition of low-impact light manufacturing activities. The proposed amendments are not in conflict with policies related to long-range planning and zoning efforts to meet future needs of communities.

- Tillamook County Comprehensive Plan Goal 10 Element: HOUSING

Summary: This goal specifies that each city must plan for and accommodate needed housing types, such as multifamily and manufactured housing. It requires each city to inventory its buildable residential lands, project future needs for such lands, and plan and zone enough buildable land to meet those needs. It also prohibits local plans from discriminating against needed housing types. This Goal element within the Tillamook County Comprehensive Plan focuses on the separation of housing needs and opportunities in both rural and urban areas. There is a strong tie to the Goal 11: Public Facilities and Goal 14: Urbanization elements of the Comprehensive Plan in this section.

The proposed amendments do not prohibit or limit residential development and additional regulatory language has not been proposed that would further limit or impair existing residential development opportunities beyond the provisions contained within the Goal 18 element of the Tillamook County Comprehensive Plan. In recognition of Tillamook County's housing crisis and severe housing shortage, careful consideration has been made to ensure the proposed amendments do not conflict or create barriers to housing opportunities within unincorporated communities.

- Tillamook County Comprehensive Plan Goal 11 Element: PUBLIC FACILITIES

Summary: Goal 11 calls for efficient planning of public services such as sewers, water, law enforcement, and fire protection. The goal's central concept is that public services should be planned in accordance with a community's needs and capacities rather than be forced to respond to development as it occurs. This Element of the Comprehensive Plan outlines types and levels of urban and rural facilities and services, with guidance to ensure timely, orderly and efficient arrangement of public facilities and services in Tillamook County.

Continued planning to ensure adequate public services such as sewer, water, law enforcement and fire protection is critical to the public health, welfare and safety of Tillamook County communities and its residents. In recognition of Tillamook County's continued growth and need for new development of public facilities, careful consideration has been made to ensure the proposed amendments do not prevent future development of public facilities within unincorporated communities.

- Tillamook County Comprehensive Plan Goal 12 Element: TRANSPORTATION

Summary: The goal aims to provide "a safe, convenient and economic transportation system." It asks for communities to address the needs of the "transportation disadvantaged." Policies outlined in this Goal element of the Tillamook County Comprehensive Plan require the County to protect the function, operation and safety of existing and planned roadways as identified in the County's Transportation Plan, consider land use impacts on existing or planned transportation facilities in all land use decisions, plan for multi-modal networks, and coordinate transportation planning efforts with other jurisdictions to assure adequate connections to streets and transportation systems between incorporated and unincorporated areas.

Future construction needs or opportunities for transportation facilities are not limited or compromised by the proposed amendments.

- Tillamook County Comprehensive Plan Goal 13 Element: ENERGY CONSERVATION
Summary: Goal 13 declares that "land and uses developed on the land shall be managed and controlled so as to maximize the conservation of all forms of energy, based upon sound economic principles." Planning for energy conservation and opportunities to promote the installation of renewable energy systems are discussed in this Goal element of the Tillamook County Comprehensive Plan.

Existing opportunities for renewable energy conservation systems and efforts to maximize conservation of existing energy facilities are not affected by the proposed amendments.

- Tillamook County Comprehensive Plan Goal 14 Element: URBANIZATION
Summary: This goal requires cities to estimate future growth and needs for land and then plan and zone enough land to meet those needs. It calls for each city to establish an "urban growth boundary" (UGB) to "identify and separate urbanizable land from rural land." It specifies seven factors that must be considered in drawing up a UGB. It also lists four criteria to be applied when undeveloped land within a UGB is to be converted to urban uses. This Goal element of the Tillamook County Comprehensive Plan focuses largely on development within unincorporated communities, public facility limitations to rural areas, and impacts of urban sprawl on resource lands.

As stated in response to Goal 11 Comprehensive Plan policies, continued planning to ensure adequate public services such as sewer, water, law enforcement and fire protection is critical to the public health, welfare and safety of Tillamook County communities and its residents.

The proposed comprehensive plan policies recognize the need for future expansion of urban uses in unincorporated communities. A Goal Exception is currently required to expand a community growth boundary and criteria that consider impacts to adjacent resource activities on resource zoned properties is built into existing review procedures. The policies related to expansion and relocation of urbanized areas must also demonstrate that a proposal does not result in urban sprawl on resource lands through existing already established land use review processes.

- Tillamook County Comprehensive Plan Goal 16 Element: ESTUARINE RESOURCES
Summary: This goal requires local governments to classify Oregon's 22 major estuaries in four categories: natural, conservation, shallow-draft development, and deep-draft development. It then describes types of land uses and activities that are permissible in those "management units." Five estuaries are inventoried and described in this element of the Tillamook County Comprehensive Plan, the Nehalem Estuary, Tillamook Estuary, Netarts Estuary, Sandlake Estuary and Nestucca Estuary.
- Tillamook County Comprehensive Plan Goal 17 Element: COASTAL SHORELANDS
Summary: The goal defines a planning area bounded by the ocean beaches on the west and the coast highway (State Route 101) on the east. It specifies how certain types of land and resources there are to be managed: major marshes, for example, are to be protected. Sites best suited for unique coastal land uses (port facilities, for example) are reserved for "water-dependent" or "water related" uses. Coastal Shorelands inventoried in Tillamook County as described in this element are Nehalem Estuary Shorelands, Tillamook Estuary Shorelands, Netarts Estuary Shorelands, Sandlake Estuary Shorelands, and Nestucca Estuary Shorelands.
- Tillamook County Comprehensive Plan Goal 18 Element: BEACHES AND DUNES
Summary: Goal 18 sets planning standards for development on various types of dunes. It prohibits residential development on beaches and active foredunes but allows some other types of development if they meet key criteria. The goal also deals with dune grading, groundwater drawdown in dunal

aquifers, and the breaching of foredunes. Several categories of dunes are described and discussed in this element of the Tillamook County Comprehensive Plan, and includes discussion about where residential, commercial and industrial uses are prohibited. Goal 18 Exception areas are also inventoried within this element which allow for residential, industrial and commercial uses in dune areas that would otherwise be prohibited.

The proposed amendments are not in conflict with the goals and policies of the coastal elements and support Goal 18 policies related to where development is permitted to occur, promote maintenance and stabilization of dunes and add additional regulatory framework for dune management practices—specifically habitat restoration projects.

2. Tillamook County Land Use Ordinance, Article IX, Amendment Process

A. Section 9.020: Map Amendment Procedure and Criteria

1. Section 9.020(1): Map Amendment Notice Procedure:

Findings: Notice of hearing for this request was completed in accordance with the provisions outlined in Article 10 of the TCLUO and included a PAPA notice to DLCD within the required 35 days prior to the first evidentiary hearing, Measure 56 notification mailed to property owners within the affected areas of the Beach and Dune Overlay Zone, as well as publication of hearings within the Headlight Herald in accordance with the procedures outlined in Article 10 of the TCLUO. Comments received are included as “Exhibit E” of this report.

Tillamook County was required to provide Measure 56 Notice to all properties within the community boundaries of the 5 unincorporated boundaries as well as Cape Meares and Tierra Del Mar. An estimated 6,500 properties received a copy of the Measure 56 notice. Funds to cover mailing costs were secured through a DLCD grant.

2. Section 9.020(2): Map Amendment Analysis: The Department shall prepare an analysis of the site and the surrounding area in the form of a map and report, considering the following factors:

- (a) Size, shape and orientation of the subject parcel.
- (b) Surrounding parcel sizes.
- (c) Topography, drainage, hazards, and other physical site characteristics.
- (d) Parcel ownership and current use.
- (e) Economic and population data for the affected area that may be contained in the Comprehensive Plan.
- (f) Traffic circulation.
- (g) Zoning history of the subject parcel.
- (h) Compatibility of the proposed new zone with the surrounding zoning and land uses.
- (i) Availability and feasibility for development of nearby properties in the proposed zone.
- (j) Aesthetics.
- (k) Availability of public facilities and services.
- (l) Land use objectives of both the applicable and the proposed zoning.

Findings: Tillamook County was required to provide Measure 56 Notice to all properties within the community boundaries of the 5 unincorporated boundaries as well as Cape Meares

and Tierra Del Mar. An estimated 6,500 properties received a copy of the Measure 56 notice. Properties vary in size, shape, orientation and location within unincorporated Tillamook County. Topography, drainage, hazards and other physical site characteristics vary from property to property. Properties are designated for residential, commercial, industrial and resource uses, and zoning history of the potentially affected properties varies.

As mentioned throughout this report, it is not the intent or purpose of the proposed amendments to require the relocation of or otherwise regulate existing development within the Beach and Dune Overlay Zone.

The availability and feasibility for development of nearby properties remains unchanged. There is not adequate economic and population data for the affected areas. Traffic circulation is not affected by the adoption of the proposed amendments. Aesthetics are not substantially impacted as a result of the adoption of the proposed amendments. Availability of public facilities and services remains within these affected areas and does not compromise or limit future construction of needed utility infrastructure improvements. Land use objectives and purpose of the proposed amendments are discussed below in further detail:

Beach and Dune Overlay Zone Updates (TCLUO Section 3.530)

Type of dune classifications with accompanying policies contained within the Goal 18 Beaches and Dunes element of the Tillamook County Comprehensive Plan and Tillamook County Land Use Ordinance determine what type of use and development activity is allowed on beaches and dunes, and what is required for development.

The adopted beach and dune maps made part of the Beach and Dune Overlay Zone and Tillamook County Comprehensive Plan are the USDA maps of Oregon's beaches and dunes produced in 1975. The 1975 maps were adopted by Tillamook County and are part of administration of the land use program for properties within the Beach and Dune Overlay Zone.

Beach and dune environments are very dynamic. The Oregon Department of Geology and Mineral Industries (DOGAMI) recently completed a mapping project of Tillamook County's beaches and dunes. The Department of Community Development is proposing to adopt the new data produced by DOGAMI to update Tillamook County's Beach and Dune Overlay Zone and associated maps and policies. The goal of these efforts will result in new data, mapping and ordinance language to ensure future development protects coastal resources and lessens impacts to properties and communities from coastal hazards.

Included with this process are proposed updates to subsections of Section 3.530 that outline the required information to be contained within a beach and dune hazard report also known as a geotechnical investigation report for new development activities on properties within the Beach and Dune Overlay Zone. These reports are currently required for development of a property and must be reviewed by Community Development in conjunction with zoning and building permits or prior to the submittal of zoning and building permits. The proposed updates include additional standards or investigative findings a geotechnical professional is required to address when completing a hazard report for future development of a property.

It should be noted that proposed ordinance language includes a limitation on the number of years a hazard report is valid if not yet submitted to the Department for review in conjunction with a new development proposal. Proposed language limits validity of a hazard report for

up to 5 years. What this means is that if you have not yet developed your property but already have a hazard report for future development, you will want to make sure the hazard report was completed by a geotechnical professional within five years of the date of submittal of the report to the Department for review.

Other updates associated with development where a hazard report is required include a proposal to require the geotechnical professional to provide certification in writing that the development as constructed meets the recommendations and standards outlined in the report and that this certification be required prior to a final inspection or issuance of a certificate of occupancy by the Building Official and for dune areas that foredune stabilization measures have been implemented.

TCLUO Section 4.130: Development Requirements for Geologic Hazard Areas

It is important to understand that this section of the Tillamook County Land Use Ordinance is not a zoning district or an overlay zoning district, and therefore does not determine what uses are permitted on a property. This section of the Tillamook County Land Use Ordinance contains additional development standards that must be met when developing a property in a geologic hazard area. Allowable “use” of the property has already been determined by the underlying zone or an overlay zone.

As with updating mapping for Tillamook County’s beaches and dunes, one of the significant updates to Section 4.130 of the Tillamook County Land Use Ordinance is to include new maps and data for administration of the requirements of this section.

Existing maps identifying areas of geologic hazard in Tillamook County include 1974 and 1979 DOGAMI bulletins as well as the 1964 USDA Soil Conservation Service soil survey maps. The Department of Community Development is proposing to adopt current landside map (SLIDO maps) and data produced by DOGAMI to better identify areas of geologic hazard.

Updates to this section of the Tillamook County Land Use Ordinance also include updating report requirements and investigation information contained within a geologic hazard report for development of a property located in an area of geologic hazard. These reports are currently required for development of properties within geologic hazard areas and must be reviewed by Community Development in conjunction with zoning and building permits or prior to the submittal of zoning and building permits for development of a property. The proposed updates reflect what a geotechnical professional is required to address when completing one of these reports for development of properties within areas of geologic hazard.

It should be noted that proposed ordinance language includes a limitation on the number of years a geologic hazard report is valid if not yet submitted to the Department for review in conjunction with a new development proposal. Proposed language limits validity of a geologic hazard report for up to 5 years. What this means is that if you have not yet developed your property but already have a prepared geologic hazard report for future development, you will want to make sure the report was completed by a geotechnical professional within five years of the date of submittal of the report to the Department for review.

Updates also include a proposal to require the geotechnical professional to provide certification in writing that the development as constructed meets the recommendations and standards outlined in the report and that this certification be required prior to a final inspection or issuance of a certificate of occupancy by the Building Official.

Flood Hazard Overlay Zone Updates (TCLUO Section 3.510)

Tillamook County completed a series of updates and amendments to the Flood Hazard Overlay Zone in 2018 that included adoption of new FEMA Flood Insurance Rate Maps (FIRMS). These updates were required by FEMA for program consistency with the FEMA Code of Federal Regulations for development of properties within Areas of Special Flood Hazard (regulated flood zones) as part of our obligation as a participating community in the National Flood Insurance Program (NFIP).

New proposed amendments to the Flood Hazard Overlay Zone section of the Tillamook County Land Use Ordinance consist of a series of updates and housekeeping tasks required by FEMA. The updates include addition of definitions or refinement of existing definitions, clarification to development and construction code requirements, and addition of several sections at the end of the ordinance related to administration and enforcement. All updates proposed are required by FEMA and must be adopted to remain in good standing with the National Flood Insurance Program.

There are no map changes to the adopted 2018 FEMA FIRMs proposed or made part of this update process. The criteria for which a decision is made to approve a Floodplain Development Permit remain the same.

3. Section 9.020(3): Map Amendment Criteria:

- (a) The proposed new zone is consistent with applicable Comprehensive Plan policies.*
- (b) The proposed new zone shall not result in the conversion of resource lands to non-resource use without an approved exception to applicable state resource protection Goals.*
- (c) The site under consideration is better suited to the purposes of the proposed zone than it is to the purposes of the existing zone.*
- (d) Development anticipated to result from the proposed zone shall not impair the actual or the legally designated uses of surrounding properties.*
- (e) The amendment must conform to Section 9.040 Transportations Planning Rule Compliance.*

Findings: As stated previously, the proposed amendments are not in conflict with the applicable Comprehensive Plan policies and are consistent with the purpose and policies outlined in the Goal 7 Hazards Element and Goal 18 Beaches and Dunes Element of the Tillamook County Comprehensive Plan. The proposed comprehensive plan/zone map amendments will not result in the conversion of resource lands to non-resource lands. Future development of properties affected by these proposed amendments will be subject to the development standards and requirements outlined in TCLUO Section 3.530: Beach and Dune Overlay Zone, TCLUO Section 3.510: Flood Hazard Overlay Zone and TCLUO Section 4.130: Development Requirements for Geologic Hazard Areas. All of these sections and overlay zones currently exist, and the purpose of this long-range planning effort is to update these sections of the TCLUO as previously described.

The Beach and Dune Overlay Zone is not an underlying zone and does not adjust existing boundaries of existing underlying zones. Development anticipated to result from the proposed amendments shall not impair the actual or legally designated uses of surrounding properties outside of the Beach and Dune Overlay Zone. The proposed amendments do not conflict with Transportation Planning Rule Compliance.

B. Section 9.030: Text Amendment Procedure

If County initiated, Article 9 requires the Department to prepare an analysis of the proposed amendments addressing such issues as the intent of the applicable Comprehensive Plan policies; the intent of the provisions being amended; the effect on the land use patterns in the County; the effect on the productivity of resource lands in the County; administration and enforcement; and the benefits or costs to Departmental resources resulting from the proposed amendment.

Staff finds as follows:

- The purpose of the proposed amendments is to increase the resilience of communities by updating maps, standards, requirements, incentives, and other measures to be applied in the review and authorization of land use and development activities in areas subject geologic and flood hazards.
- Analysis of the proposed amendments in relation to existing Comprehensive Plan policies has been addressed previously in this report.
- The proposed amendments do impair legally designated uses permitted outright or conditionally in the established underlying zones.
- The Department does not anticipate a significant impact on County administration or enforcement of development of properties in relation to the proposed amendments. A fee structure already exists for required land use, zoning and building permit application(s) which will continue to apply to development requests of properties located within areas subject to the provisions of TCLUO Section 3.530; TCLUO Section 3.510 and TCLUO Section 4.130.

EXHIBITS:

- Exhibit A: Proposed Amendments to TCLUO Section 3.530: Beach and Dune Overlay Zone
Exhibit B: Proposed Amendments to TCLUO Section 3.510: Flood Hazard Overlay Zone
Exhibit C: Proposed Amendments to TCLUO Section 4.130: Development Requirements for Geologic Hazard Areas
Exhibit D: FAQ Guide
Exhibit E: Measure 56 Notice
Exhibit F: Public Comment

*Due to the size, the DOGAMI Open File Reports and Comprehensive Plan Goal Elements 7 and 18 can be reviewed here: <https://www.co.tillamook.or.us/commdev/project/851-21-000440-plng851-21-000441-plng851-21-000442-plng>

EXHIBIT A

SECTION 3.530: BEACH AND DUNE OVERLAY ZONE (BD)

- (1) **PURPOSE:** The purpose of the Beach and Dune Overlay Zone is to establish criteria and performance standards to direct and manage development and other activities in beach and dune areas in a manner that:
- (a) Conserves, protects and, where appropriate, restores the resources and benefits of coastal beach and dune areas;
 - (b) Reduces the risks to life and property from natural and man-induced actions on these inherently dynamic landforms; and
 - (c) Ensures that the siting and design of development in beach and dune areas is consistent with Statewide Planning Goals 7 and 18, and the Hazards Element and Beaches and Dunes Element of the Tillamook County Comprehensive Plan.

It is recognized that risk is ever present in identified beach and dune hazard areas. The provisions and requirements of this section are intended to provide for identification and assessment of risk from beach and dune natural hazards, and to establish standards that limit overall risk to the community from identified hazards to a level acceptable to the community. However, it must be recognized that all development in identified hazard areas is subject to increased levels of risk, and that these risks must be acknowledged and accepted by present and future property owners who proceed with development in these areas.

- (2) **AREAS INCLUDED:** All beach and dune areas categorized in the table below and as identified in Open File Report O-20-04, Temporal and Spatial Changes in Coastal Morphology, Tillamook County, Oregon by the Oregon Department of Geology and Mineral Industries (DOGAMI) are subject to the provisions of this section. Beach and dune landforms are identified and mapped in this DOGAMI report. The following table provides a crosswalk between the categories mapped in O-20-04 and the categories subject to the provisions of this Section 3.530 and the Beaches and Dunes Element of the Tillamook County Comprehensive Plan.

DOGAMI Inventory Classification	Goal 18, DLCD Classification	Mapping Code
Beach	Beach	B
Active Foredune	Foredune, Active	FDA
Active Dune Hummocks	Hummocks, Active	H
Recently Stabilized Foredune	Foredune, Conditionally Stable	FD

Dune Complex	Dune Complex	DC
Younger Stabilized Dunes	Dune, Younger Stabilized	DS
Older Stabilized Dunes	Dune, Older Stabilized	ODS
Open Dune Sand	Dune, Active/Dune, Parabolic	OS
Open Dune Sand Conditionally Stable	Dune, Conditionally Stable	OSC
Active Inland Dune	Dune, Active	AID
Wet Interdune	Interdune	W
Wet Deflation Plain	Deflation Plain	WDP

- (3) PERMITTED USES: Within the Beach and Dune Overlay Zone, all uses permitted pursuant to the provisions of the underlying zone may be permitted, subject to the additional requirements and limitations of this section.
- (4) HABITAT RESTORATION & ENHANCEMENT: Permits for the enhancement or restoration of beach and dune landforms for the purposes of wildlife and plant habitat are permitted in the Beach and Dune Overlay Zone subject to the following requirements:
- (a) Any proposed vegetation removal will be the minimum extent necessary to carry out the purpose of the habitat restoration or enhancement project.
 - (b) Must demonstrate compliance with the requirements of the Flood Hazard Overlay Zone, if applicable.
 - (c) Must be tied to an existing conservation plan, wildlife strategy, Endangered Species Act requirement, or other applicable document.
 - (d) The permit application must include a clear plan for what activities will be carried out, the timing of the activities, and include:
 - (A) Temporary and permanent stabilization programs, sand contouring, and the planned maintenance of new and existing vegetation over at least a five-year period from completion of work;
 - (B) Methods for protecting the surrounding area from any adverse effects of the restoration or enhancement activities; and
 - (C) Minimize to insignificant levels hazards to life, public and private property, and the natural environment which may be caused by the proposed activities.

(e) Application, review, decisions, and appeals for permits for habitat restoration or enhancement shall be a Type I procedure in accordance with Article 10.

(5) DUNE AREA DEVELOPMENT PERMIT:

(a) Except for activities identified in subsection (5)(b) as exempt, any new development, new construction, substantial improvement, shoreline alteration (including activities outside of OPRD's jurisdiction) or grading activity in an area subject to the provisions of this section shall require a Dune Area Development Permit. The Dune Area Development Permit may be applied for prior to or in conjunction with a building permit, grading permit, or any other permit or land use approval required by Tillamook County.

(b) The following activities are exempt from the requirement for a Dune Area Development Permit:

- (A) Maintenance, repair, or alterations to existing structures that do not alter the building footprint or foundation and do not constitute substantial improvement as defined in Article 11;
- (B) Exploratory excavations under the direction of a certified engineering geologist or registered geotechnical engineer;
- (C) Construction of structures for which a building permit is not required;
- (D) Yard area vegetation maintenance;
- (E) Forest operations subject to regulation under ORS 527 (the Oregon Forest Practices Act);
- (F) Maintenance and reconstruction of public and private roads, streets, parking lots, driveways, and utility lines, provided the work does not extend outside the existing right-of-way boundary;
- (G) Maintenance and repair of utility lines, and the installation of individual utility service connections;
- (H) Emergency response activities intended to reduce or eliminate an immediate danger to life, property, or flood or fire hazard;
- (I) Restoration, repair or replacement of a lawfully established structure damaged or destroyed by fire or other casualty in accordance with

- subsection (15) of this section;
- (J) Beachfront protective structures subject only to regulation by the Oregon Parks and Recreation Department under OAR Chapter 736, division 20;
 - (K) Remedial sand grading authorized by a Remedial Sand Grading Permit issued pursuant to subsection (11) of this section; and
 - (L) Foredune grading authorized by a Foredune Grading Permit issued pursuant to subsection (12) of this section.
- (d) Application, review, decisions, and appeals for Dune Area Development Permits shall be a Type I procedure in accordance with Article 10.
- (e) In addition to a completed application as prescribed in Article 10, an application for a Dune Area Development Permit shall include the following:
- (A) A site plan that illustrates areas of disturbance, ground topography (contours), roads and driveways, an outline of wooded or naturally vegetated areas, watercourses, erosion control measures, and trees with a diameter of at least 8-inches dbh (diameter breast height) proposed for removal;
 - (B) An estimate of depths and the extent of all proposed excavation and fill work;
 - (C) Identification of the coastal erosion hazard zone for the parcel or lot upon which development is to occur;
 - (D) Identification of all natural hazards potentially present and estimated sea level rise expected for the parcel or lot upon which development is to occur.
 - (E) A Geologic Report prepared by a qualified geoprofessional (as defined in Article 11) which meets the content requirements of subsection (6); and
 - (F) If engineering remediation is required to make the site suitable for the proposed development, an engineering report, prepared by a registered civil engineer (with experience relating to coastal processes), geotechnical engineer, or certified engineering geologist which provides design and construction specifications for the required remediation.

- (f) A decision to approve a Dune Area Development Permit shall be based upon findings of compliance with the following standards:
 - (A) The proposed development complies with the applicable requirements and standards of subsections (7), (8), (9) and (10) of this section;
 - (B) Any proposed foredune grading for site preparation cannot go below the Base Flood Elevation plus four feet; must be the minimum area necessary for the construction of a structure; must include plans for temporary and permanent stabilization of the site, including a re-vegetation plan of exposed sand areas; and must conform with the requirements of subsection (11)(b) of this section. Additionally, all graded sand must remain in the beach-foredune system;
 - (C) The Geologic Report conforms to the standards for such reports set forth in subsection (6) of this section; and
 - (D) The development plans for the application conform, or can be made to conform, with all recommendations and specifications contained in the Geologic Report.
- (g) In approving a Dune Area Development Permit, the decision maker may impose any conditions which are necessary to ensure compliance with the provisions of this section or with any other applicable provisions of the Tillamook County Land Use Ordinance.
- (h) In the event the decision maker determines that additional review of the Geologic Report by a qualified geoprofessional is necessary to determine compliance with this section, Tillamook County may retain the services of such a professional for this purpose. The applicant shall be responsible for all costs associated with the additional review. The results of that evaluation shall be considered in deciding on the Dune Area Development Permit.

(6) GEOLOGIC REPORT (Engineering Geologic Report and Geotechnical Engineering Report) STANDARDS

- (a) For the purposes of Section 3.530, a Geologic Report refers to both engineering geologic reports and geotechnical engineering reports.
- (b) Geologic Reports required by this section shall be prepared consistent with standard geologic practices employing generally accepted scientific and

engineering principles, and shall, at a minimum, contain the applicable provisions outlined in the Oregon State Board of Geologist Examiners publication "Guidelines for the Preparation of Engineering Geologic Reports", 2nd Edition, 5/30/2014 or other published best practice guidelines for engineering geologic or geotechnical engineering reports, consistent with current scientific and engineering principles. Reports shall reference the published guidelines upon which they are based.

- (c) Geologic Reports required by this section shall include the following from the preparer(s) of the report:
 - (A) A statement that all the applicable content requirements of this subsection have been addressed or are not applicable to the review. An explanation must be accompanied with any requirement identified as not applicable;
 - (B) A description of the qualifications of the professional(s) that prepared the report; and
 - (C) A statement by the preparer(s) that they have the appropriate qualifications to have completed the report and all its contents.
- (d) All Geologic Reports are valid for purposes of meeting the requirements of this section for a period of five (5) years from the date of preparation. Such reports are valid only for the development plan addressed in the report. Tillamook County assumes no responsibility for the quality or accuracy of such reports. Within that five-year period, the Planning Director can require at their discretion an addendum by a certified geoprofessional certifying that site conditions have not changed from the original report. If site conditions have changed, a new Geologic Report will be required.
- (e) For development activities that are subject both to this section and Section 4.130: Development Requirements for Geologic Hazard Areas, one complete Geologic Report can be used for meeting the requirements of both sections.
- (f) In addition to the requirements set forth in subsections (b) and (c), Geologic Reports for lots or parcels abutting the ocean shore shall, to the extent applicable and based on best available information, include the following information, analyses, and recommendations:
 - (A) Site description:

- (i) The history of the site and surrounding areas, such as previous riprap or dune grading permits, erosion events, exposed trees on the beach, or other relevant local knowledge of the site.
 - (ii) Topography, including elevations and slopes on the property itself.
 - (iii) Vegetation cover.
 - (iv) Subsurface materials – the nature of the rocks and soils.
 - (v) Conditions of the seaward front of the property, particularly for sites having a sea cliff.
 - (vi) Presence of drift logs or other flotsam on or within the property.
 - (vii) Description of streams or other drainage that might influence erosion or locally reduce the level of the beach.
 - (viii) Proximity of nearby headlands or jetties which might block the longshore movement of beach sediments, thereby affecting the level of the beach in front of the property.
 - (ix) Description of any shore protection structures that may exist on the property or on nearby properties.
 - (x) Presence of pathways or stairs from the property to the beach.
 - (xi) Existing human impacts on the site, particularly that might alter the resistance to wave attack.
 - (xii) Location and condition of nearby beach access sites.
- (B) Description of the fronting beach:
- (i) Average widths of the beach during the summer and winter.
 - (ii) Median grain size of beach sediment.
 - (iii) Average beach slopes during the summer and winter.
 - (iv) Elevations above mean sea level of the beach at the seaward edge of the property during summer and winter.

- (v) Presence of rip currents and rip embayments that can locally reduce the elevation of the fronting beach.
 - (vi) Presence of rock outcrops and sea stacks, both offshore or within the beach zone.
 - (vii) Information regarding the depth of beach sand down to bedrock at the seaward edge of the property.
- (C) Analyses of Erosion and Flooding Potential:
- (i) Analysis of DOGAMI beach monitoring data for the site or nearby area (if available).
 - (ii) Analysis of human activities affecting shoreline erosion.
 - (iii) Analysis of possible mass wasting, including weathering processes, land sliding or slumping.
 - (iv) Calculation of wave run-up beyond mean water elevation that might result in erosion of the sea cliff or foredune (see Stockdon, 1996).
 - (v) Evaluation of frequency that erosion-inducing processes could occur, considering the most extreme potential conditions of unusually high-water levels together with severe storm wave energy.
 - (vii) For dune-backed shoreline, use established geometric model to assess the potential distance of property erosion and compare the results with direct evidence obtained during site visit, aerial photo analysis, or analysis of DOGAMI beach monitoring data.
 - (viii) Description of expected local sea level rise over the next 50 years and impacts of that sea level change on the site, including during severe storm conditions.
- (D) Assessment of potential reactions to erosion episodes:
- (i) Determination of eligibility for beachfront protective structures as prescribed in subsection (13).

- (ii) Assessment of potential reactions to erosion events, under climate change conditions, addressing the need for future erosion control measures, building relocation, or building foundation and utility repairs.
- (g) Geologic Reports for land divisions as deemed needed by the Director and for development requiring building permits, except for activities listed as exempt in subsection (5)(b), shall also include the following recommendations:
 - (A) Use results from the above analyses to establish setbacks (beyond any minimums set by this section), building techniques, or other mitigation to ensure an acceptable level of safety and compliance with all local requirements.
 - (B) Recommend a foundation design, or designs, that render the proposed structures readily moveable.
 - (C) Recommend a plan for preservation of vegetation and existing grade within the setback area, if appropriate.
 - (D) Include a consideration of a local variance process to reduce the building setback on the side of the property opposite the ocean, if this reduction helps to lessen the risk of erosion, flooding, bluff failure or other hazard.
 - (E) Recommend methods to control and direct water drainage away from the ocean (e.g., to an approved storm water system), or if not possible, to direct water in such a way so as to not cause erosion or visual impacts.
- (h) Erosion Control Measures: All uses subject to a Dune Area Development Permit and Geologic Report shall address the following erosion control measure requirements, designed by a qualified geoprofessional within the Geologic Report:
 - (A) Stripping of vegetation, grading, or other soil disturbance shall be done in a manner which will minimize soil erosion, stabilize the soil as quickly as practicable, and expose the smallest practical area at any one time during construction;
 - (B) Development plans shall minimize cut or fill operations so as to prevent off-site impacts;

- (C) Temporary vegetation and/or mulching shall be used to protect exposed critical areas during development;
- (D) Permanent plantings and any required structural erosion control and drainage measures shall be installed as soon as practical;
- (E) Provisions shall be made to effectively accommodate increased runoff caused by altered soil and surface conditions during and after development. The rate of surface water runoff shall be structurally retarded where necessary;
- (F) Provisions shall be made to prevent surface water from damaging the cut face of excavations or the sloping surface of fills by installation of temporary or permanent drainage across or above such areas, or by other suitable stabilization measures such as mulching, seeding, planting, or armoring with rolled erosion control products, stone, or other similar methods;
- (G) All drainage provisions shall be designed to adequately carry existing and potential surface runoff from the twenty-year frequency storm to suitable drainageways such as storm drains, natural watercourses, or drainage swales. In no case shall runoff be directed in such a way that it significantly decreases the stability of known landslides or areas identified as unstable slopes prone to earth movement, either by erosion or increase of groundwater pressure;
- (H) Where drainage swales are used to divert surface waters, they shall be vegetated or protected as necessary to prevent offsite erosion and sediment transport;
- (I) Erosion and sediment control devices shall be required where necessary to prevent polluting discharges from occurring. Control devices and measures which may be required include, but are not limited to:
 - (i) Energy absorbing devices to reduce runoff water velocity;
 - (ii) Sedimentation controls such as sediment or debris basins. Any trapped materials shall be removed to an approved disposal site on an approved schedule;

- (iii) Dispersal of water runoff from developed areas over large undisturbed areas.
 - (J) Disposed spoil material or stockpiled topsoil shall be prevented from eroding into streams or drainageways by applying mulch or other protective covering; or by location at a sufficient distance from streams or drainageways; or by other sediment reduction measures; and
 - (K) Such non-erosion pollution associated with construction such as pesticides, fertilizers, petrochemicals, solid wastes, construction chemicals, or wastewaters shall be prevented from leaving the construction site through proper handling, disposal, site monitoring and clean-up activities.
 - (i) The Geologic Report shall include the required elements of this section and one of the following:
 - (A) A statement from a certified geoprofessional that the use and/or activity can be accomplished without measures to mitigate or control the risk of geologic or flood hazard to the subject property resulting from the proposed use and/or activity;
 - (B) A statement from a certified geoprofessional that there is an elevated risk posed to the subject property by geologic or flood hazards that requires mitigation measures in order for the use and/or activity to be undertaken safely sited on the property; or
- (7) **ADDITIONAL DEVELOPMENT LIMITATIONS IN DUNE HAZARD AREAS:** In addition to the conditions, requirements, and limitations imposed by any required Geologic Report, all development subject to a Dune Area Development Permit shall conform to the following requirements:
- (a) 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, interdune areas (deflation plains) that are subject to ocean flooding, and within an area identified by FEMA FIRM maps to be subject to ocean flooding, except on lands that are subject to an approved exception to Goal 18, Implementation Requirement 2, as set forth in Section 6.1 of the Beaches and Dunes Element of the Tillamook County Comprehensive Plan.

- (b) Other development in these beach and dune areas shall be permitted only if adequate findings are provided to the County which demonstrate that the proposed development is adequately protected from any geologic hazards, wind erosion, undercutting, ocean flooding and storm waves; and is designed to minimize adverse environmental effects. In addition, findings shall be provided to address the following:
 - (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.
- (d) Safest site requirement: All new construction or substantial improvements shall be located within the area most suitable for development based on the least exposure to risk from coastal hazards as determined by a qualified geoprofessional as part of a Geologic Report prepared in accordance with subsection (6). Notwithstanding the provisions of the underlying zone, as necessary to comply with this requirement any required yard or setback except for the Oceanfront Setback outlined in subsection (8) may be reduced by 10 feet or up to 50%, whichever is greater.
- (e) Building heights shall be measured from the existing (pre-construction) grade. Only in Foredune Management Areas shall additional fill be allowed on an oceanfront lot to achieve the required four feet plus Base Flood Elevation, consistent with the provisions of Section 3.510: Flood Hazard Overlay Zone. In this instance, building height shall be measured on the foredune grade from four feet plus Base Flood Elevation.
- (f) Accessory structures and on-site sewage disposal systems, which the Department determines are consistent with the purpose of this zone, may be permitted oceanward of the Oceanfront Setback Line, subject to the standards of this section and the following provisions:

- (A) The location of accessory structures and on-site sewage disposal systems will be determined in each case based on site-specific information provided by a Geologic Report, prepared in accordance with subsection (6).
- (B) Any accessory structure higher than three feet as measured from existing grade will be subject to the variance procedure and criteria set forth in Article 8 of the Tillamook County Land Use Ordinance.
- (C) Accessory structures for on-site subsurface sewage disposal systems may not be located oceanward of the primary structure on the subject property unless the following provisions are met:
 - (i) The primary structure on the subject property is an authorized residential, commercial, or industrial structure in existence as of October 28, 1992;
 - (ii) The accessory structure is required for repair of an existing disposal system, and there is no viable alternative system or location landward of the primary structure; and
 - (iii) The owner of the subject property submits an affidavit to the Department acknowledging that the property owner has been informed an oceanfront protective structure will not be authorized to protect the disposal system against erosion, and that the owner has sole responsibility for notifying any purchaser of this condition prior to sale of the property.
- (g) Beach Access:
 - (A) Non-structural, low-impact pedestrian footpaths to the beach, not to exceed four-feet in width, shall be permitted in all dune areas, except where restricted in Foredune Management Areas.
 - (B) Boardwalks and other structural pathways are subject to the requirements of 7(b) above.
 - (C) Off-road recreational vehicle use in dune areas shall be permitted in Sand Lake Recreational Area. Motor vehicles registered to operate on public highways and roads shall be allowed to travel on beaches where posted by the Oregon Parks and Recreation Department (ORS 390.678).

Operation of motor vehicles at other beach locations will require a permit from the Oregon Parks and Recreation Department.

- (D) In Foredune Management Areas, where heavy use of public easements or rights of way destabilizes dune areas on adjoining private property, signs may be placed at landward entrance points to encourage the use of alternative public access points. Signs shall be subject to review by the Foredune Management Authority, Tillamook County, and the Oregon Parks and Recreation Department.
 - (h) Land Grading Practices: No excavations for residential and commercial site development shall be done earlier than thirty (30) days prior to the start of construction. Following the completion of major construction, excavated areas shall be stabilized. At a minimum, the site shall be stabilized within nine (9) months of construction completion.
- (8) OCEANFRONT SETBACKS: As used in this section, "vegetation line" means the ocean shore state recreation area boundary as described in ORS 390.770 or the line of established upland shore vegetation, whichever is farther inland. In areas subject to the provisions of this section, all development, except for activities listed as exempt in subsection (5)(b), shall be set back from the vegetation line the greater of:
- (a) A distance specified in a required Geologic Report if it is more restrictive than the Oceanfront Setback Line; or
 - (b) A distance established through calculation of an Oceanfront Setback Line (OSL) as follows:
 - (A) On a lot or parcel where there are existing buildings located within 300 feet of the boundaries of subject lot or parcel on both the north and the south, the OSL is a line drawn between the nearest building to the north and the nearest building to the south. The line shall be drawn between the most oceanward points of the two building footprints closest to the vegetation line.
 - (B) On a lot or parcel where there are buildings within 300 feet of the boundaries of the subject lot or parcel on one side only (north or south), the OSL is the average distance from the vegetation line of all such buildings. The measurement for calculating the average shall be made from the most oceanward point of the building footprints closest to the

vegetation line.

- (C) On a lot or parcel where there are no buildings within 300 feet north or south of the boundaries of the subject lot or parcel, the OSL is the average distance from the vegetation line of the nearest two buildings. The measurement for calculating the average shall be made from the most oceanward point of the building footprints closest to the vegetation line.
 - (D) For purposes of calculating the OSL, "building" means a lawfully established, permanent residential, commercial, public, or industrial structure within 500 feet of the vegetation line and located on a lot or parcel that abuts the vegetation line. It does not include detached accessory structures.
 - (E) For purposes of calculating the OSL, "closest point of a building" means the point on an exterior wall of a building that is closest to the vegetation line. It does not include decks, second story decks, other structural improvements above finished grade, unroofed porches or landings, walkways, or building projections such as cornices, eaves, canopies, sunshades, gutters, or chimney chases.
- (c) In no case may any structure or other development be permitted west of the statutory vegetation line or line of actual vegetation, whichever is more landward, except as authorized by the Oregon Department of Parks and Recreation in accordance with OAR Chapter 736, division 20.
- (e) On lots or parcels created prior to the effective date of this section, where the application of the minimum oceanfront setback, together with any other required yards and/or setbacks, results in a building footprint area of less than 1,500 square feet, the required yard setback opposite the oceanfront may be reduced as follows:
- (A) The required yard setback opposite the oceanfront may be reduced by an amount necessary to provide a building footprint of not more than 1,500 square feet, or to a minimum of 10 feet, whichever is less.
 - (B) If the reduction in setback permitted in subsection (A) results in a permissible building footprint of less than 1,500 square feet, the

oceanfront setback may be reduced by an amount necessary to provide a building footprint of not more than 1,500 square feet.

- (f) Notwithstanding the above provisions, the Planning Director shall require a greater setback from the ocean where there is evidence of significant coastal, environmental, or geologic hazards as determined by a Geologic Report submitted pursuant to Section 3.530(6) or other information available to the Department. In making this determination, the Geologic Report and the Director shall consider evidence of recent and future beach erosion and whether the proposed development has been designed to adequately minimize and mitigate for any adverse environmental effects to the fullest extent required by law.
- (9) FOREDUNE BREACHING: When permitted, foredune breaching and restoration shall be conducted in a manner consistent with sound principles of conservation. Such breaching may be permitted only:
- (a) To replenish sand supply in interdune areas;
 - (b) On a temporary basis in an emergency, such as for fire control, hazard removal or clean up, draining farmlands, or alleviating flood hazards; or
 - (c) For other purposes only upon adoption of an exception to Statewide Planning Goal 18.
- (10) GROUNDWATER REQUIREMENTS: Applications for development which will utilize groundwater resources shall provide a hydrologic analysis which demonstrates that groundwater withdrawal will not:
- (a) Lead to the loss of stabilizing vegetation;
 - (b) Lead to a deterioration of water quality; and
 - (c) Result in the intrusion of salt water into water supplies.

- (11) **REMEDIAL SAND GRADING:** As used in this section "remedial sand grading" means the removal of accumulated sand which poses an immediate threat of damage or is preventing access to a structure. Remedial sand grading does not alter the crest of the foredune. Before remedial sand grading activities can occur, an approved Remedial Sand Grading Permit from Tillamook County is required. Application, review, and decisions for Remedial Sand Grading Permits shall be a Type I procedure in accordance with Article 10.
- (a) Remedial sand grading can be conducted on an individual lot or parcel on an as-needed basis and may be permitted in all areas subject to the BD Overlay Zone with or without a foredune management plan. Remedial sand removal may include:
- (A) Clearing of sand which poses an immediate threat of inundation to houses, commercial or industrial buildings, beach access points, or infrastructure such as streets and utility lines, or which is preventing access to a structure;
 - (B) Excavation necessary for the purpose of placing a beachfront protective structure;
 - (C) Minor reshaping of the forward portion of the foredune necessary to provide an even slope for planting stabilizing vegetation.
- (b) All remedial sand grading shall be conducted in compliance with the following standards:
- (A) Rear yard (Rear yard is the yard seaward of the structure): Sand may be removed to the level of the top sill of the foundation up to 40 feet from the building, provided the foredune crest is not altered. From the 20-foot line, where applicable, all grading shall slope upward to the crest of the dune at a ratio of 2:1 (horizontal: vertical).
 - (B) Side yards: Sand may be removed to the level of the top sill of the foundation within 10 feet of the building. From the 10-foot line, sand grading shall slope upward at a ratio of 2:1.
 - (C) Front yard: All sand that is landward of the building may be removed down to the sill level of the foundation, provided removal does not create slopes of more than 2:1 with adjacent properties. Grading may not lower the front yard below the level of adjacent streets or roads except to clear sidewalks or driveways.

- (D) All remedial grading shall be done in a manner that does not lower the existing height of the foredune and does not significantly damage existing vegetation. Any removal which exceeds standards must be promptly restored.
- (E) Permittees shall notify the Tillamook County Department of Community Development at least 48-hours prior to conducting authorized remedial grading to allow onsite inspection by the county and to provide for flagging by the county, if needed.
- (F) All graded sand that is moved up and over the foredune seaward of the building shall be moved and placed in a manner that does not reduce the height of the foredune, uses one pathway (no more than 12 feet in width), and that minimizes disturbance to vegetation and the beach.
- (G) All graded sand must remain in the beach-foredune system.

(12) FOREDUNE GRADING: Foredune grading may be performed only as authorized in a foredune management plan adopted and acknowledged in conformance with Statewide Planning Goal 18. As used in this section "foredune grading" means grading that lowers the height of the foredune for view restoration and/or maintenance, or other purposes, and does not include remedial grading authorized by subsection (11) of this section.

- (a) Foredune grading shall require a Foredune Grading Permit. Application, review, decisions, and appeals for Foredune Grading Permits shall be a Type II procedure in accordance with Article 10.
- (b) A decision to approve a Foredune Grading Permit shall require findings of compliance with the following requirements:
 - (A) The proposed foredune grading will be performed on a continuous portion of the foredune of not less than 500 feet in length;
 - (B) The application for the Foredune Grading Permit includes the written consent of all owners of property within the continuous portion of the foredune to be graded;
 - (C) The application for the Foredune Grading Permit must include elevation profiles of existing and proposed foredune conditions prepared by a registered surveyor; and
 - (D) The proposed foredune grading will conform to all the requirements and

specifications of the applicable foredune management plan, including requirements for height and width of the graded foredune, stabilization measures, redistribution of graded sand, and maintenance and monitoring.

- (c) Upon completion of foredune grading under an approved Foredune Grading Permit, final foredune elevations and conditions must be surveyed by a registered surveyor, showing compliance with permit conditions, and submitted to the Tillamook County Planning Department.

(13) REQUIREMENTS FOR BEACHFRONT PROTECTIVE STRUCTURES:

- (a) A Dune Area Development Permit is required for beachfront protective structures not subject to regulation by the Oregon Parks and Recreation Department under OAR Chapter 736, division 20.
- (b) In all cases, beachfront protective structures shall be permitted only where development existed on January 1, 1977, or where an exception to Goal 18, Implementation Requirement 2 or 5 has been adopted in the County's comprehensive plan.
- (b) For the purposes of this subsection, "development" means houses, commercial and industrial buildings, and vacant subdivision lots which are physically improved through construction of streets and provision of utilities to the lot.
- (c) All beachfront protective structures shall be subject to the following requirements:
 - (A) Visual impacts shall be minimized;
 - (B) Access to and along the beach shall be maintained;
 - (C) Negative impacts on adjacent property shall be minimized;
 - (D) Long-term or recurring costs to the public shall be avoided.
 - (E) Structures shall be designed to minimize adverse impacts on water currents, erosion, and accretion patterns;
 - (F) Land-use management practices and non-structural solutions to problems of erosion and flooding shall be preferred to structural solutions; structural solutions shall only be utilized when it is

determined that land-use management and non-structural solutions are not adequate; and

- (G) All applicable requirements of the Flood Hazard Overlay Ordinance as described in TCLUO Section 3.510.
- (d) In addition to the applicable requirements set forth in subsection 6, Geologic Reports for beachfront protective structures shall, to the extent applicable and based on best available information, include the following information, analyses and recommendations:
- (A) Project Need: Analysis of the types of hazards affecting the property; estimated rate of erosion based on visual observations, aerial photo analysis, published reports, such as DOGAMI hazard risk zone studies, and DOGAMI beach monitoring data; description of the type of property, improvements, or structures that are threatened, and description of the nature of the threat.
 - (B) Evaluation of Alternatives: Include a description of the preferred erosion mitigation technique, any practices that have been attempted previously, as well as an evaluation of the following options:
 - (i) Hazard avoidance options (siting or relocation);
 - (ii) Non-structural stabilization methods (e.g., foredune enhancement, beach nourishment, vegetation plantings, cobble berms);
 - (iii) Structural stabilization (e.g., riprap, seawalls); and
 - (iv) Bio-engineered structures (e.g., clay burritos and vegetated terraces); and
 - (v) Site modifications for the control of erosion such as vegetation management, drainage controls, slope regrading, and building reinforcements.
 - (C) Analysis of Impacts from Preferred Alternative, including:
 - (i) Potential for flank scour and toe scour;

- (ii) Shoreline alignment impacts to adjoining properties and non-armored neighbors, including impacts to properties not eligible for shoreline protective structures; potential for the preferred alternative to cause rip embayments or prolong existing embayment patterns;
- (iii) Reduction in sand supply caused by preferred alternative;
- (iv) Quantify narrowing or loss of beach area;
- (v) Impacts from expected maintenance of the project over the lifetime of the structure. Include history of maintenance of similar projects nearby, analysis of local sea level rise, and trends in littoral sand movement. Describe the expected maintenance methods that could occur;
- (vi) Impacts to existing public beach access routes, and provisions to keep access route in a useable condition; and
- (vii) Impacts to sites of geologic interest, such as fossil beds or ancient forest remnants.

(14) **CERTIFICATION OF COMPLIANCE:** Permitted development shall comply with the recommendations in the required Geologic Report. Certification of compliance shall be provided as follows:

- (a) **Plan Review Compliance:** Building, construction or other development plans shall be accompanied by a written statement from a certified engineering geologist or licensed geotechnical engineer stating that the plans comply with the recommendations contained in the Geologic Report for the approved Dune Area Development Permit.
- (b) **Inspection Compliance:** Upon the completion of any development activity for which the Geologic Report recommends an inspection or observation by a certified engineering geologist or licensed geotechnical engineer, the certified engineering geologist or licensed geotechnical engineer shall provide a written statement indicating that the development activity has been completed in accordance with the applicable Geologic Report recommendations.

- (c) Final Compliance: No development requiring a Geologic Report shall receive final approval (e.g., certificate of occupancy, final inspection, etc.) until the department receives:
 - (A) A written statement by a certified engineering geologist or licensed geotechnical engineer indicating that all performance, mitigation, and monitoring measures specified in the report have been satisfied, including confirmation of foredune restoration and implementation of temporary and permanent vegetation stabilization measures;
 - (B) If mitigation measures incorporate engineering solutions designed by a licensed professional engineer, a written statement of compliance by the design engineer.

- (15) RESTORATION AND REPLACEMENT OF EXISTING STRUCTURES:
 - (a) Notwithstanding any other provisions of this ordinance, a application of the provisions of this section to an existing use or structure shall not have the effect of rendering such use or structure nonconforming as defined in Article 7.
 - (b) Replacement, repair or restoration of a lawfully established building or structure subject to this section that is damaged or destroyed by fire, other casualty or natural disaster shall be permitted, subject to all other applicable provisions of this ordinance, and subject to the following limitations:
 - (A) Replacement authorized by this subsection is limited to a building or structure not larger than the damaged/destroyed building.
 - (B) Structures replaced pursuant to this subsection shall be located no further seaward than the damaged structure being replaced.
 - (C) Replacement or restoration authorized by this subsection shall commence within one year of the occurrence of the fire or other casualty which necessitates such replacement or restoration.
 - (D) Where the cost of restoration or replacement authorized by this subsection equals or exceeds 80 percent of the market value of the structure before the damage occurred, such restoration or replacement shall also comply with subsections (7) and (8) of this section.
 - (c) A building permit application for replacement, repair, or restoration of a

structure under the provisions of this subsection shall be accompanied by a Geologic Report prepared by a qualified geoprofessional that conforms to the standards set forth in subsection (6) and subsection (13) if applicable. All recommendations contained in the report shall be complied with in accordance with subsection (14).

- (d) A building permit application for replacement, repair, or restoration authorized by this subsection shall be processed and authorized as Type I review pursuant to Section 10.020.

DRAFT

EXHIBIT B

SECTION 3.510: FLOOD HAZARD OVERLAY ZONE (FH)

The State of Oregon has in ORS 203.035 (COUNTIES) OR ORS 197.175 (CITIES) delegated the responsibility to local governmental units to adopt floodplain management regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, Tillamook County, does ordain as follows:

- A. The flood hazard areas of Tillamook County are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
- B. These flood losses may be caused by the cumulative effect of obstructions in areas of special flood hazards that increase flood heights and velocities, and when inadvertently anchored, damage uses in other areas. Uses that are inadequately flood proofed, elevated, or otherwise protected from flood damage also contribute to the flood loss.

Pursuant to the requirement established in ORS 455 that Tillamook County administers and enforces the State of Oregon Specialty Codes, Tillamook County does hereby acknowledge that the Oregon Specialty Codes contain certain provisions that apply to the design and construction of buildings and structures located in special flood hazard areas. Therefore, this ordinance is intended to be administered and enforced in conjunction with the Oregon Specialty Codes.

Formatted: Font: (Default) Times New Roman, 12 pt,
Formatted: Font: Italic
Formatted: Font: (Default) Times New Roman, 12 pt,
Formatted: Font: Italic
Formatted: Font: (Default) Times New Roman, 12 pt,
Italic

- (1) PURPOSE: It is the purpose of the FH zone to promote the public health, safety and general welfare and to minimize public and private losses or damages due to flood conditions in specific areas of unincorporated Tillamook County by provisions designed to:
 - (a) Protect human life and health;
 - (b) Minimize expenditure of public money for costly flood control projects;
 - (c) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the public;
 - (d) Minimize prolonged business interruptions;
 - (e) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazards;
 - (f) Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;

- (g) Ensure that potential buyers are notified that property is in an area of special flood hazard; and
 - (h) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.
 - (i) Maintain the functions and values associated with Special Flood Hazard Areas which reduce the risk of flooding.
- (2) BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD: The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for Tillamook County" dated September 28, 2018, with an accompanying Flood Insurance Rate Maps (FIRMs), are hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study and the FIRM are on file at the Tillamook County Department of Community Development at 1510-B Third Street, Tillamook, OR 97141. The best available information for flood hazard area identification as outlined in this Section shall be the basis for regulation until a new FIRM is issued that incorporates data utilized under this Section.
- (3) CONTENT: In order to accomplish this purpose, this Section of the Land Use Ordinance includes methods and provisions for:
- (a) Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
 - (b) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
 - (c) Maintaining the natural and existing flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
 - (d) Minimizing and controlling filling, grading, dredging, and other development which may increase flood damage or may increase flood hazards in other areas;
 - (e) Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas;
 - (f) Encouraging mitigation and restoration programs in "exchange" (#in addition to) for alteration of Special Flood Hazard Areas, existing and natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters

- (4) DEFINITIONS: Unless specifically defined below or in Article XI of this ordinance, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

AREA OF SPECIAL FLOOD HAZARD: The land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as zone A, AO, AH, A1-30, AE, A99, AR (V, VO, V1-30, VE). "Special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Indent: Left: 0.5", First line: 0"

Formatted: Indent: Left: 0", First line: 0"

AREA OF SHALLOW FLOODING: A designated AO, AH, AR/AO, AR/AH, or VO zone on a community's Flood Insurance Rate Map (FIRM) with a 1 percent or greater annual chance of flooding to an average depth of 1 to 3 feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow. (Note: Flood Zones are included in this definition (NFIP definition CFR 59.1) that are not located in Tillamook County.)

ADDITION: An alteration to an existing structure that results in any increase in its ground floor area.

BASE FLOOD: Flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the "100-year flood". Designation on maps always includes the letters A, A1-A30, AE, AO, V, V1-V30 or VE.

BASE FLOOD ELEVATION (BFE): The elevation to which floodwater is anticipated to rise during the base flood.

Formatted: Font: (Default) Times New Roman, 12 pt

BASEMENT: Any area of a building having its floor subgrade (below ground level) on all sides.

BREAKAWAY WALL: A wall that is not a part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

COASTAL HIGH HAZARD AREA: An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The area is designated on the FIRM as Zone V1-V30, VE or V.

CONDITIONAL LETTER OF MAP REVISION (CLOMR): Letter from FEMA commenting on whether a proposed project, if built as proposed, would meet the minimum National Flood Insurance Program standards for proposed hydrology changes. If the project, built as proposed, revises the Flood Insurance Rate Map and/or Flood Insurance

Study, a Letter of Map Revision (LOMR) is required to be submitted no later than six months after project completion.

CRITICAL FACILITY: A facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.

DEVELOPMENT: Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations or the storage of equipment or materials located within the area of special flood hazard.

ENHANCEMENT: The process of improving upon the natural functions and/or values of an area or feature which has been degraded by human activity.

FILL: Any material such as, but not limited to, sand, gravel, soil, rock or gravel that is placed on land including existing and natural floodplains, or in waterways, for the purposes of development or redevelopment.

FLOOD OR FLOODING:

- (a) A general and temporary condition of partial or complete inundation of normally dry land areas from:
 - (1) The overflow of inland or tidal waters.
 - (2) The unusual and rapid accumulation or runoff of surface waters from any source.
 - (3) Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
- (b) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition.

FLOOD BOUNDARY & FLOODWAY MAP: Historical maps issued by the Federal Emergency Management Agency where the boundaries of the area of special flood hazards applicable to Tillamook County have been designated as Zones A, AE or A1-A30.

FLOOD ELEVATION STUDY: An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination,

Formatted: Font: (Default) Times New Roman, 12 pt

evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards. Also known as a Flood Insurance Study (FIS).

FLOOD INSURANCE RATE MAP (FIRM): An official map of a community, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

FLOOD INSURANCE STUDY: The official report provided by the Federal Insurance Administrator that includes flood profiles, the Flood Insurance Rate Map, Flood Boundary & Floodway Map, and the water surface elevation of the base flood.

FLOOD PLAIN: Any land area susceptible to being inundated by water from the sources specified in the flood(ing) definition.

FLOOD PLAIN MANAGEMENT REGULATIONS: The provisions of this ordinance in addition to the Land Division Ordinance, building codes, health regulations, and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

FLOODWAY: The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Also referred to as "Regulatory Floodway."

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font color: Black

FLOODWAY, REGULATORY: The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. The regulatory floodway is delineated by the Federal Emergency Management Agency on the Flood Insurance Study, Flood Insurance Rate Map and/or the Flood Boundary and Floodway Map.

FUNCTIONALLY DEPENDENT USE: A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long term storage or related manufacturing facilities.

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font color: Black

HIGHEST ADJACENT GRADE: The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

HIGHWAY READY: The status of a recreational vehicle that is on wheels or a jacking system, is attached to the site by quick disconnect type utilities and security devices only, and has no permanently attached additions. 'Highway Ready' includes having a plan and making provision to remove the unit in the event of flood.

HYDROSTATIC LOADS: Loads caused by water either above or below the ground surface, free or confined, which is either stagnant or moves at very low velocities, of up to five (5) feet per second. These loads are equal to the product of the water pressure times the surface area on which the water acts. The pressure at any point is equal to the product of the unit weight of water (62.5 pounds per cubic foot) multiplied by the height of water above that point or by the height to which confined water would rise if free to do so.

HYDRODYNAMIC LOADS: Loads induced on buildings or structures by the flow of flood water moving at moderate or high velocity around the buildings or structures or parts thereof, above ground level when openings or conduits exist which allow the free flow of flood waters. Hydrodynamic loads are basically of the lateral type and relate to direct impact loads by the moving mass of water, and to drag forces as the water flows around the obstruction.

IRREVOCABLY COMMITTED: Any platted area with improved streets, sewer, water, and fire districts, as well as established commercial and high density residential uses as of June 2, 1978.

LETTER OF MAP CHANGE (LOMC): An official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and/or Flood Insurance Studies. LOMC's are issued in the following categories:

- (a) Letter of Map Amendment (LOMA): An amendment to the Flood Insurance Rate Maps based on technical data showing that an existing structure, parcel of land or portion of a parcel of land that has not been elevated by fill (natural grade) was inadvertently included in the special flood hazard area because of an area of naturally high ground above the base flood.
- (b) Letter of Map Revision (LOMR):
 - (1) LOMR-F (Letter of Map Revision based on Fill) is a letter from FEMA stating that an existing structure or parcel of land that has been elevated by fill would not be inundated by the base flood.
 - (2) A LOMR revises the current Flood Insurance Rate Map and/or Flood Insurance Study to show changes to the floodplains, floodways or flood elevations. LOMRs are generally based on manmade alterations that affected the hydrologic or hydraulic characteristics of a flooding source and thus result in modification to the existing regulatory floodway, the effective base flood elevation, or the special flood hazard area. A Conditional Letter of Map Revision (CLOMR) may be approved by FEMA prior to issuing a permit to start a project if the project has a potential to affect the special flood hazard area.

LOWEST FLOOR: The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking or vehicles, building access or storage, in an area other than a basement area, is not considered a building's

lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

MANUFACTURED DWELLING: A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle" but does include the following;

Formatted: Indent: Left: 0.5"

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

~~Any of the following type of structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities:~~

Formatted: Strikethrough

Residential Trailer: a structure, greater than 400 square feet, constructed for movement on the public highways that was constructed before January 1, 1962.

Mobile Home: A structure having at least 400 square feet of floor area and which is transportable in one or more sections. A structure constructed for movement on the public highways that was constructed between January 1, 1962 and June 15, 1976, and met the construction requirements of Oregon mobile home law in effect at the time of construction.

Manufactured Dwelling: A structure constructed for movement on the public highways, after June 15, 1976, that was constructed in accordance with federal manufactured housing construction and safety standards and regulations in effect at the time of construction.

MANUFACTURED DWELLING PARK OR SUBDIVISION: A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

MANUFACTURED DWELLING PARK OR SUBDIVISION, EXISTING: A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufacture homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, an either final site grading or the pouring of concrete pads) is completed before August 1, 1978, the effective date of the floodplain management regulations.

MEAN SEA LEVEL: ~~Specific Datum NAVD 88~~ For purposes of the National Flood Insurance Program (NFIP), the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which Base Flood Elevations (BFE) shown on a community's Flood Insurance Rate Map (FIRM) are referenced.

MECHANICAL EQUIPMENT: Electrical, heating, ventilation, plumbing, and air conditioning equipment, storage tanks and other service facilities.

MITIGATION: The reduction of adverse effects of a proposed project by considering, in the following order:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action;

- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action by monitoring and taking appropriate measures; and
- (e) Mitigating for the impact by replacing or providing comparable substitute floodplain areas.

NEW CONSTRUCTION: For the purposes of determining insurance rates, structures for which the “start of construction” commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, *new construction* means structures for which the *start of construction* commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

PERMANENT FOUNDATION: A natural or manufactured support system to which a structure is anchored or attached. A ‘permanent foundation’ is capable of resisting flood forces and may include posts, piles, poured concrete or reinforced block walls, properly compacted fill, or other systems of comparable flood resistivity and strength.

REACH: A hydraulic engineering term used to describe longitudinal segments along a stream of water. A reach will generally include a segment of the flood hazard area where flood heights are primarily controlled by man-made or natural obstructions or constrictions. In an urban area an example of a reach would be the segment of a stream or river between two consecutive bridge crossings.

RECONSTRUCTION: The repair of a structure damaged by any cause (not limited to flooding) without increasing the floor area of the structure.

RECREATIONAL VEHICLE: A vehicle built on a single chassis; 400 square feet or less when measured at the largest horizontal projection; designed to be self-propelled or permanently towable by a light duty truck; designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use; and includes the following:

- (a) **CAMPER:** A structure containing a floor that is designed to be temporarily mounted upon a motor vehicle, and which is designed to provide facilities for temporary human habitation.

- (b) **MOTOR HOME:** A motor vehicle with a permanently attached camper, or that is originally designed, reconstructed or permanently altered to provide facilities for temporary human habitation.
- (c) **TRAVEL TRAILER:** A trailer that is capable of being used for temporary human habitation, which is not more than eight feet wide, and except in the case of a tent trailer, has four permanent walls when it is in the usual travel position.
- (d) **SELF-CONTAINED RECREATIONAL VEHICLE:** A vehicle that contains a factory-equipped, on-board system for the storage and disposal of gray water and sewage.

REHABILITATION: Any improvements and repairs made to the interior and exterior of an existing structure that do not result in an increase in the ground floor area of the structure. Examples include remodeling a kitchen, gutting a structure and redoing the interior, or adding a second story.

REINFORCED PIER: A pier with a footing adequate to support the weight of the manufactured dwelling under saturated soil conditions. Concrete blocks may be used if vertical steel reinforcing rods are placed in the hollows of the blocks and the hollows are filled with concrete or high strength mortar. Dry stacking concrete blocks does not constitute a 'reinforced pier'.

REPETITIVE LOSS: Flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before damage occurred.

RESTORATION: The process of returning a disturbed or altered area or feature to a previously existing natural condition. Restoration activities reestablish the ecological structure, function, and/or diversity to that which occurred prior to impacts caused by human activity.

SPECIAL FLOOD HAZARD AREA (SFHA): Zones on Flood Insurance Rate Maps that depict the land in the floodplain within a community that is subject to a one percent or greater chance of flooding in any given year. Special Flood Hazard Area is synonymous with "Area of Special Flood Hazard." Special Flood Hazard Areas on Flood Insurance Rate Maps are always designated as Zones A, A1-A30, AE, AO, V, V1-V30 or VE.

START OF CONSTRUCTION: Includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement occurred within 180 days of the permit date. The actual start means either the first placement of permanent construction of the structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the state of excavation; or the placement of a manufactured dwelling on a foundation. Permanent

construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of street and/or walkways; nor does it include excavation for a basement, footings, piers, or foundation or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

STRUCTURE: For the purposes of this Section, a walled and roofed building, a modular or temporary building, or a gas or liquid storage tank that is principally above ground.

SUBSTANTIAL DAMAGE: Damage of any origin sustained by a structure where the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

SUBSTANTIAL IMPROVEMENT: Any reconstruction, rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. The term includes structures which have incurred substantial damage regardless of the actual repair work performed. The market value of the structure is:

- (1) The real market value of the structure prior to the start of the initial repair or improvement. Substantial Improvements shall be calculated cumulatively over a five year period using the real market value in County Assessor records at the beginning of the five year period; or
- (2) In the case of damage, the real market value of the structure prior to the damage occurring.

The term substantial improvement does not, however, include either:

- (3) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by local code enforcement prior to substantial improvement or substantial damage and which are solely necessary to assure safe living conditions, or
- (4) Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places provided that the alteration will not preclude the structure's continued designation as a historic structure.

WATER SURFACE ELEVATION: Heights, in relation to mean sea level, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

- (5) GENERAL STANDARDS: In all areas of special flood hazards the following standards are required:

LETTER OF MAP REVISION

- (a) If hydrologic and hydraulic analysis indicates an increase in flood levels, the applicant shall obtain a Conditional Letter of Map Revision (CLOMR) from FEMA before any encroachment, including fill, new construction, substantial improvement, or other development is permitted. Upon completion of the project, but no later than six months after project completion, a Letter of Map Revision (LOMR) shall be submitted to FEMA to reflect the changes on the FIRM and/or Flood Insurance Study. A LOMR is required only when the CLOMR documents an increase in flood levels during the occurrence of the base flood or where post-development conditions do not reflect what was proposed on the CLOMR.

ALTERATION OF WATER COURSES

- (b) The flood carrying capacity within the altered or relocated portion of said watercourse shall be maintained. A maintenance plan for the altered or relocated portion of said watercourse shall be submitted to the Department to ensure that the flood carrying capacity is not diminished.

Formatted: Font: 12 pt
Formatted: Indent: Left: 0.5", Hanging: 0.44"
Formatted: Font: 12 pt, Font color: Black
Formatted: Font: 12 pt
Formatted: List Paragraph, Indent: Left: 1.13"
Formatted: Indent: Left: 0"

ANCHORING

- (bc) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
- (cd) All manufactured dwellings must likewise be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (See FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for techniques). A certificate signed by a registered architect or engineer which certifies that the anchoring system is in conformance with FEMA regulations shall be submitted prior to final inspection approval.

CONSTRUCTION MATERIALS AND METHODS

- (de) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- (ef) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

- (fg) Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be elevated to prevent water from entering or accumulating within the components during conditions of flooding. In Flood Zones A, A1-A30, AE, V, V1-V30 or VE, such facilities shall be elevated three feet above base flood elevation. In Flood Zone AO, such facilities shall be elevated above the highest grade adjacent to the building, a minimum of one foot above the depth number specified on the FIRM (at least two feet above the highest adjacent grade if no depth number is specified).

UTILITIES:

(h) Electrical, heating, ventilating, air-conditioning, plumbing, duct systems, and other equipment and service facilities shall be elevated at or above the base flood level or shall be designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during conditions of flooding. In addition, electrical, heating, ventilating, air-conditioning, plumbing, duct systems, and other equipment and service facilities shall:

Formatted: Font: (Default) Times New Roman, 12 pt
 Formatted: List Paragraph, Indent: Left: 0.5", Hanging: 0.5", Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 8 + Alignment: Left + Aligned at: 0.5" + Indent at: 0.75"

(1) If replaced as part of a substantial improvement shall meet all the requirements of this section.

Formatted: Font: 12 pt, Font color: Black
 Formatted: Font: (Default) Times New Roman, 12 pt

(2) Not be mounted on or penetrate through breakaway walls.

Formatted: Indent: Left: 1.25", No bullets or numbering
 Formatted: Font: (Default) Times New Roman, 12 pt
 Formatted: List Paragraph, Left, Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 1" + Indent at: 1.25"

(gi) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood water into the system.

(hj) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.

(ik) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding, consistent with Oregon Department of Environmental Quality (DEQ) standards.

TANKS

(l) Underground tanks shall be anchored to prevent flotation, collapse and lateral movement under conditions of the base flood.

Formatted: Font: (Default) Times New Roman, 12 pt

(m) Above-ground tanks shall be installed at or above the base flood level or shall be anchored to prevent flotation, collapse, and lateral movement under conditions of the base flood.

Formatted: Indent: Left: 0", First line: 0"
 Formatted: Font: (Default) Times New Roman, 12 pt
 Formatted: Font: (Default) Times New Roman, 12 pt

(n) In coastal flood zones (V Zones or coastal A Zones) when elevated on platforms, the platforms shall be cantilevered from or knee braced to the building or shall be supported on foundations that conform to the requirements of the State of Oregon Specialty Code.

Formatted: Font: (Default) Times New Roman, 12 pt
Formatted: Indent: Left: 0.5", Hanging: 0.5"

SUBDIVISION AND PARTITION PROPOSALS

- (j) All subdivision (including proposals for manufactured dwelling parks and subdivision) and partition proposals governed by the Land Division Ordinance shall be consistent with the need to minimize flood damage.
- (kp) All subdivision (including proposals for manufactured dwelling parks and subdivision) and partition proposals governed by the Land Division Ordinance shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
- (lq) All subdivisions (including proposals for manufactured dwelling parks and subdivision) and partition proposals governed by the Land Division Ordinance shall have adequate drainage provided to reduce exposure to flood ~~damage~~ hazards.
- (m) Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision and partition proposals governed by the Land Division Ordinance and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).

REVIEW OF BUILDING AND MANUFACTURED DWELLING PERMITS

- (ns) Where elevation data is not available either through the Flood Insurance Study or from another authoritative source, applications for building permits and/or manufactured dwelling permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past floodings, etc., where available. Failure to elevate at least three feet above grade in these zones may result in higher insurance rates.

GARAGES

(t) Attached garages may be constructed with the garage floor slab below the Base Flood Elevation (BFE) in riverine flood zones, if the following requirements are met:

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

(1) If located within a floodway the proposed garage must comply with the requirements of Section 3.510(9);

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Left, Indent: Left: 1"

(2) The floors are at or above grade on not less than one side;

Formatted: Font: (Default) Times New Roman, 12 pt

(3) The garage is used solely for parking, building access, and/or storage;

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

}
}

}
}

(4) The garage is constructed with flood openings to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater.

Formatted: Font: (Default) Times New Roman, 12 pt

5. The portions of the garage constructed below the BFE are constructed with materials resistant to flood damage;

Formatted: Font: (Default) Times New Roman, 12 pt

6. The garage is constructed in compliance with the applicable standards of this ordinance; and

Formatted: Font: (Default) Times New Roman, 12 pt

7. The garage is constructed with electrical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.

B. Detached garages must be constructed in compliance with the applicable standards of this ordinance.

Formatted: Font: (Default) Times New Roman, 12 pt

SMALL APPURTENANT (ACCESSORY) STRUCTURES

Formatted: Strikethrough

(ou) Relief from elevation or floodproofing requirements for residential and non-residential structures in Riverine (Non-Coastal) flood zones may be granted for appurtenant structures that meet the following requirements:

Formatted: Justified

(1) Appurtenant structures located partially or entirely within the floodway must comply with requirements for development within a floodway.

(2) Appurtenant structures must only be used for parking, access, and/or storage and shall not be used for human habitation;

(3) In compliance with State of Oregon Specialty Codes, appurtenant structures on properties that are zoned residential are limited to one-story structures less than 200 square feet, or 400 square feet if the property is greater than two (2) acres in area and the proposed appurtenant structure will be located a minimum of 20 feet from all property lines. Appurtenant structures on properties that are zoned as non-residential are limited in size to 120 square feet.

(4) The portions of the appurtenant structure located below the Base Flood Elevation must be built using flood resistant materials;

(5) The appurtenant structure must be adequately anchored to prevent flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood.

(6) The appurtenant structure must be designed and constructed to equalize hydrostatic flood forces on exterior walls and comply with the requirements for flood openings;

(7) Appurtenant structures shall be located and constructed to have low damage potential;

(8) Appurtenant structures shall not be used to store toxic material, oil, or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality unless confined in a tank installed in compliance with this ordinance.

Formatted: Justified, Indent: Hanging: 0.5"

(9) Appurtenant structures shall be constructed with electrical, mechanical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.

Relief from elevation or floodproofing as required for structures in A, AE or A1-A30 zones per Section 3.510(6) and AO zones per Section 3.510(11) may be granted for accessory structures that are:

Formatted: Strikethrough

- ~~(1) Less than 200 square feet and do not exceed 10 feet in height;~~
- ~~(2) Not temperature controlled;~~
- ~~(3) Not used for human habitation and are used solely for parking of vehicles or storage of items having low damage potential when submerged;~~
- ~~(4) Not used to store toxic material, oil or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality unless confined in a tank installed in compliance with this ordinance or stored at least one foot above base flood elevation;~~
- ~~(5) Constructed in accordance with anchoring and construction materials and methods standards in Section 3.510(5)(a) through (h); and~~
- ~~(6) If in an A, AE or A1-A30 zone, constructed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or must meet or exceed the following requirements:
 - ~~i. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;~~
 - ~~ii. The bottom of all openings shall be no higher than one foot above grade; and~~
 - ~~iii. Openings may be equipped with screens, louvers, or other coverings or devices provided they permit the automatic entry and exit of floodwaters.~~~~

- (7) ~~The cost of flood insurance for a structure permitted to be built with a lowest floor elevation below the base flood elevation will be commensurate with the increased risk resulting from the reduced lowest floor elevation.~~

USE OF OTHER FLOOD DATA

- (v) When Base Flood Elevation data has not been provided the local floodplain administrator shall obtain, review, and reasonably utilize any Base Flood Elevation data available from a federal, state, or other source, in order to administer the provisions of this ordinance. All new subdivision proposals and other proposed new developments (including proposals for manufactured dwelling parks and subdivisions) must meet the requirements for development as set forth in this ordinance.

Formatted: Font: (Default) Times New Roman, 12 pt

Base Flood Elevations shall be determined for development proposals that are 5 acres or more in size or are 50 lots or more, whichever is lesser in any A zone that does not have an established base flood elevation. Development proposals located within a riverine unnumbered A Zone shall be reasonably safe from flooding; the test of reasonableness includes use of historical data, high water marks, FEMA provided Base Level Engineering data, and photographs of past flooding, etc... where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

STRUCTURES LOCATED IN MULTIPLE OR PARTIAL FLOOD ZONES

- (w) In coordination with the State of Oregon Specialty Codes:

Formatted: Font: (Default) Times New Roman, 12 pt

(1) When a structure is located in multiple flood zones on the community's Flood Insurance Rate Maps (FIRM) the provisions for the more restrictive flood zone shall apply.

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

(2) When a structure is partially located in a special flood hazard area, the entire structure shall meet the requirements for new construction and substantial improvements.

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Left, Indent: Left: 0.5", Hanging: 0.5"

Formatted: Font: (Default) Times New Roman, 12 pt

- (6) SPECIFIC STANDARDS FOR A ZONES (A, AE or A1-A30): In all areas of special flood hazards where base flood data has been provided as set forth in Section 3.510(2) or other base flood data are utilized, the following provisions are required:

RESIDENTIAL CONSTRUCTION

- (a) New construction and substantial improvement of any residential structure, including manufactured dwellings, shall have the lowest floor, including basement, at a minimum of three feet above base flood elevation.

(b) Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or must meet or exceed the following minimum criteria:

- (1) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
- (2) The bottom of all openings shall be no higher than one foot above grade.
- (3) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

NONRESIDENTIAL CONSTRUCTION

(c) New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall have either the lowest floor including basement elevated to three feet above the level of the base flood elevation or higher; or, together with attendant utility and sanitary facilities, shall:

- (1) Be floodproofed so that the portion of the structure that lies below the portion that is three feet or more above the base flood level is watertight with walls substantially impermeable to the passage of water.
- (2) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
- (3) Be certified by a registered professional engineer or architect that the design and methods of construction are in compliance with accepted standards of practice for meeting provisions of this Subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the Community Development Director.
- (4) Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described for residential construction in Section 3.510(6)(a) and (b).
- (5) Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g. a building constructed to the base flood level will be rated as one foot below that level).

(7) MANUFACTURED DWELLINGS

(d) Any manufactured dwelling which incurs substantial damage as the result of a flood, must be elevated to the standards listed in (e) or (f) below.

(e) All manufactured dwellings to be placed or substantially improved within Zones A, AE or A1-30 shall be elevated on a permanent foundation such that the lowest floor of the manufactured dwelling is at or above three feet above the base flood elevation and shall be securely anchored to an adequately anchored foundation system in accordance with Section 3.510(5) and requirements of the Oregon Residential Specialty Code.

(1) ~~New or substantially improved manufactured dwellings supported on solid foundation walls shall be constructed with flood openings that comply with Section 3.510(6);~~

Formatted: Font: (Default) Times New Roman, 12 pt

(2) ~~The bottom of the longitudinal chassis frame beam shall be at or above Base Flood Elevation;~~

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: 12 pt, Font color: Black

Formatted: List Paragraph, Indent: Left: 1.27"

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: 12 pt, Font color: Black

Formatted: Normal, No bullets or numbering

Formatted: Font: (Default) Times New Roman, 12 pt

(3) ~~New or substantially improved manufactured dwellings shall be anchored to prevent flotation, collapse, and lateral movement during the base flood. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques), and;~~

Formatted: Font: 12 pt, Font color: Black

(4) ~~Electrical crossover connections shall be a minimum of twelve (12) inches above Base Flood Elevation (BFE).~~

Formatted: Indent: Left: 0.5", No bullets or numbering

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Indent: Left: 0", First line: 0"

(f) Manufactured dwellings to be placed or substantially improved on sites in a Velocity (V1-V30, VE and V or Coastal A) Zones shall meet the following requirements; that are not subject to the above manufactured dwelling provisions, shall be elevated so that:

(1) ~~(1) The lowest floor bottom of the longitudinal chassis frame beam of the manufactured dwelling home is elevated to a minimum of three feet above the base flood elevation, or and~~

Formatted: Font: 12 pt

Formatted: Strikethrough

Formatted: Font: 12 pt

Formatted: Strikethrough

(2) ~~Development complies with the standards outlined in Section 3.510(10) of this ordinance.~~

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Indent: Left: 1", First line: 0"

(23) ~~The manufactured dwelling chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and are securely anchored to an adequately designed foundation system to resist flotation, collapse and lateral~~

Formatted: List Paragraph, Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 1" + Indent at: 1.5"

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: 12 pt

~~movement in accordance with requirements of the Oregon Residential Specialty Code. Electrical crossover connections shall be a minimum of 12 inches above base flood elevation.~~

- (8) RECREATIONAL VEHICLES: Recreational vehicles may occupy a site in a Special Flood Hazard Area for periods of 180 consecutive days or less provided they are fully licensed and highway ready. Recreational vehicles are on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions. Recreational vehicles that do not meet these criteria become manufactured dwellings and must be anchored and elevated pursuant to this ordinance.
- (9) SPECIFIC STANDARDS FOR FLOODWAYS: Located within areas of special flood hazard established in Section 3.510(2) are areas designated as regulatory floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

(a) ~~Prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment shall not result in any increase in flood levels within the community during the occurrence of the base flood discharge.~~ Encroachments in the regulatory floodway including fill, new construction, substantial improvements and other development are prohibited unless certification is provided by a professional registered civil engineer demonstrating through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that such encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge.

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

(b) If Subsection 9(a) is satisfied, all new construction and substantial improvement shall comply with all applicable flood hazard reduction provisions of Section 3.510(5) and (6).

(c) ~~A community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that a Conditional Letter of Map Revision (CLOMR) is applied for and approved by the Federal Insurance Administrator, and the requirements for such revision as established under Volume 44 of the Code of Federal Regulations, section 65.12 are fulfilled. If hydrologic and hydraulic analysis indicates an increase in flood levels, the applicant shall obtain a Conditional Letter of Map Revision (CLOMR) from FEMA before any encroachment, including fill, new construction, substantial improvement, or other development, in the regulatory floodway is permitted. Upon completion of the project, but no later than six months after project completion, a Letter of Map Revision (LOMR) shall be submitted to FEMA to reflect the changes on the FIRM and/or Flood Insurance Study. A LOMR is required only when the CLOMR~~

Formatted: Font: (Default) Times New Roman, 12 pt

~~documents an increase in flood levels during the occurrence of the base flood or where post-development conditions do not reflect what was proposed on the CLOMR.~~

- (d) Projects for stream habitat restoration may be permitted in the floodway provided:
 - (1) The civil engineer shall, as a minimum, provide a feasibility analysis and certification that the project was designed to keep any rise in 100-year flood levels ~~as close to zero as practically possible~~ and that no structures will be impacted by a potential rise in flood elevation; and,
 - (2) An agreement to monitor the project, correct problems, and ensure that flood carrying capacity remains unchanged is included as part of the local approval.
- (e) Before a Regulatory Floodway is determined in an A1-A30 or AE Zone: In areas where a regulatory floodway has not been designated, no new construction, substantial improvements or other development (including fill) shall occur within an AE Zone designated on the community's Flood Insurance Rate Map, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.
- (f) As noted in "The Flood Insurance Study for Tillamook County" as revised on September 28, 2018, certain areas of Tillamook County are subject to heavy tidal influence and sheet flows. Floodways are not applicable in this type of flooding. Thus, the following areas are not subject to the requirement of Section (9)(e) above:
 - (1) Nehalem River downstream of cross-section A
 - (2) Nestucca River where it joins Nestucca Bay
 - (3) Tillamook River
 - (4) Wilson River from cross-sections A to Y
 - (5) Trask River from cross-sections A to AF
 - (6) Kilchis River downstream of cross-section C

(g) In areas where a regulatory floodway has not been designated, no new construction, substantial improvement, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's Flood Insurance Rate Map (FIRM), unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Justified, Indent: Left: 0.5", Hanging: 0.5"

- (10) SPECIFIC STANDARDS FOR COASTAL HIGH HAZARD AREAS (V, VE or V1-V30 ZONES): Located within areas of special flood hazard established in Section 3.510(2) are Coastal High Hazard Areas. These areas have special flood hazards associated with high

velocity waters from tidal surges and, therefore, in addition to meeting all provisions in this Section the following provisions shall apply to residential, non-residential, manufactured dwellings and other development in Coastal High Hazard Areas:

- (a) All new construction and substantial improvements in Zones V1-V30, VE and V and coastal A zones (where base flood elevation data is available) shall be elevated on pilings and columns so that:
 - (1) The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated ~~to or above a minimum of~~ one foot above the base flood level: and
 - (2) The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Water loading values used shall be those associated with the base flood. Wind loading values used shall be those specified by the State of Oregon Specialty Codes. ~~Wind and water loading values shall each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).~~
- (b) A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of (a)(1) and (a)(2) above. A certificate shall be submitted, signed by the registered professional engineer or architect that the requirements of this Section will be met.
- (c) Obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures in Zones V1-30, VE, and V and whether or not such structures contain a basement. The Community Development Director shall maintain a record of all such information.
- (d) All new construction shall be located landward of the reach of mean high tide.
- (e) Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purpose of this Section a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or state codes) may

Formatted: Strikethrough

Formatted: Font: (Default) Times New Roman, 12 pt

))
))

be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

- (1) Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and
 - (2) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Maximum wind and water loading values to be used in this determination shall each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).
- (f) If breakaway walls are utilized, such enclosed space shall be usable solely for parking of vehicles, building access, or storage. Such space shall not be used for human habitation.
- (g) Prohibit the use of fill for structural support of buildings.
- (h) Prohibit man-made alteration of sand dunes, including vegetation removal, which would increase potential flood damage.
- (11) SPECIFIC STANDARDS FOR AREAS OF SHALLOW FLOODING (AO ZONE): Shallow flooding areas appear on FIRM's as AO zones with depth designations. The base flood depths in these zones range from 1 to 3 feet where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. In these areas the following provisions apply:
- (a) Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

RESIDENTIAL

- (b) New construction and substantial improvements of residential structures (including manufactured dwellings) within AO zones shall have the lowest floor (including basement) elevated above the highest grade adjacent to the building, a minimum of one foot above the depth number specified on the FIRM (at least two feet above the highest adjacent grade if no depth number is specified). For manufactured dwellings the lowest floor is considered to be the bottom of the longitudinal chassis frame beam.

NON-RESIDENTIAL

(c) New construction and substantial improvements of nonresidential structures, including manufactured dwellings used for non-residential purposes, within AO zones shall either:

(1) Have the lowest floor (including basement) elevated above the highest adjacent grade adjacent to the building, a minimum of one foot above the depth number specified on the FIRM (at least two feet above the highest adjacent grade if no depth number is specified); or

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Font: 12 pt

Formatted: Indent: Left: 1"

(2) Together with attendant utility and sanitary facilities, be completely floodproofed to one foot above the depth number specified on the FIRM so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as in Subsection (6)(c)(3) of this Section.

(3) Recreational vehicles placed on sites within AO Zones on the community's Flood Insurance Rate Maps (FIRM) shall either:

Formatted: Font: (Default) Times New Roman, 12 pt

a. Be on the site for fewer than 180 consecutive days, and

Formatted: Font color: Auto

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font color: Auto

b. Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or

Formatted: Indent: Left: 1.75", No bullets or numbering

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font color: Auto

c. Meet the elevation requirements of this ordinance, and the anchoring and other requirements for manufactured dwellings.

Formatted: Normal, No bullets or numbering

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

d. In AO zones, new and substantially improved appurtenant structures must comply with the applicable requirements outlined in Section 3.510(5) and (6).

Formatted: Font color: Auto

Formatted: Normal, No bullets or numbering

Formatted: Font: (Default) Times New Roman, 12 pt

e. In AO zones, enclosed areas beneath elevated structures shall comply with the applicable requirements outlined in Section 3.510(5) and (6).

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font color: Auto

Formatted: Normal, No bullets or numbering

Formatted: Font: (Default) Times New Roman, 12 pt

~~(12) WARNING AND DISCLAIMER OF LIABILITY: The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of Tillamook County, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.~~

Formatted: List Paragraph, Outline numbered + Level: 2 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 1.5" + Indent at: 1.75"

Formatted: Font: 12 pt

Formatted: Strikethrough

(13) SPECIAL ADMINISTRATIVE PROVISIONS FOR FH ZONE:

- (a) Designation of the Local Administrator: The Community Development Director of Tillamook County is hereby appointed to administer and implement the provisions of this Flood Hazard Overlay Zone by granting or denying development permit applications in accordance with its provisions.
- (b) Duties of the Community Development Director shall include, but not be limited to:
 - (1) Review of all Floodplain Development Permits for construction and other development within an Area of Special Flood Hazard identified on the Flood Insurance Rate Map to assure that the requirements of this Section have been satisfied and that all other necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.
 - (2) Review all other permit applications to determine compliance with this Section.
 - (3) Notify adjacent communities and the Department of Land Conservation and Development prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
 - (4) Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capability is not diminished.
 - (5) Provide base flood elevation and structure elevation requirements to the Building Official.
 - (6) Determine if structures meet substantial improvement or substantial damage thresholds.
 - (7) Where base flood elevation data is provided through the Flood Insurance Study or required within this Section, obtain and record on an Elevation Certificate the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.
 - (8) For all new or substantially improved floodproofed structures:
 - (a) Verify and record the actual elevation (in relation to mean sea level), and

- (b) Maintain the floodproofing certifications required in this Section.
- (9) Maintain for inspection in perpetuity the affidavits of certification required in this Section. Affidavits of certification, such as elevation certificates, V zone certification, floodproofing, breakaway walls, floodway no-rise, etc., are required to be submitted by the permit applicant for elevations and structural requirements as specified in this Section, both pre- and post-construction, utilizing forms provided for this purpose by FEMA. Elevations may be certified by a licensed surveyor or a registered professional architect or engineer. Structural requirements may be certified by a registered professional architect or engineer.
- (10) Where interpretation is needed requiring the boundaries of the areas of special flood hazard, the Community Development Director will make the necessary interpretation. The person contesting the ruling of the Community Development Director shall be given a reasonable opportunity to appeal the ruling as provided in Section 3.510(15).
- (11) When base flood elevation has not been provided as set forth in Section 3.510(2), the Community Development Director shall obtain, review and reasonably utilize any base flood data and floodway available from federal, state, or other source in order to administer the provisions of Section 3.510.
- (12) All records pertaining to the provisions of this Section shall be maintained in the Tillamook County Community Development Department and shall be open for public inspection.
- (13) When a Variance is granted, the Community Development Director shall give written notice that the structure will be allowed to be built with the lowest floor elevation at or below base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the lowest floor elevation.
- (c) Restrict the location of structures placed on undeveloped parcels between Brooten Road and the Nestucca River, from the Woods Bridge downstream to map cross-section line F on the amended floodway map for the Nestucca River.

Such structures shall occupy no more than 62.5% of the lot width of the parcel to be built upon. This requirement does not apply if the structure is built upon pilings with the area beneath the structure open to permit passage of flood water.

Any such structure shall comply with all other requirements of this Section and shall provide a regulatory floodway analysis for structures in the floodway. The intent of this Subsection is to maintain a minimum of 1000 feet of open space on the east bank of the Nestucca River, between Brooten Road and the river, from the

Woods Bridge structure downstream to map cross-section line F on the amended floodway map for the Nestucca River.

- (d) Publicly owned open land recreation parks and accessory restroom facilities, where allowed in the underlying zone, shall be allowed in floodplain areas below the base flood elevation. The accessory restroom facilities shall be located outside of floodplain areas if possible. If it is not possible, the restroom structures shall be located:
 - (1) On the highest portion of the park grounds; and
 - (2) Be wet-floodproofed; and
 - (3) Maintain riparian setbacks; and
 - (4) Adequate backflow valves shall be installed;

If the structure is located in a designated floodway, it shall conform to 1 through 4 above and shall be small enough and positioned so that it will not divert floodwaters. Any structure located within the regulatory floodway must have a floodway analysis to assure there is no-rise in base flood elevation.

- (e) All residential and non-residential development and substantial improvements, within the Pacific City Airport Overlay Zone where the height is restricted by the PAO zone, below that allowed by the underlying zone, shall conform to the FH zone regulations except that the lowest floor elevation and the floodproofing shall be certified at the base flood elevation given on the FIRM maps instead of the required three foot above base flood elevation level. Any structure located within the regulatory floodway must have a floodway analysis to assure there is no-rise in base flood elevation.
- (14) DEVELOPMENT PERMIT PROCEDURES: A development permit shall be obtained before construction or development begins within any area of special flood hazard zone. The permit shall be for all structures including manufactured dwellings, and for all development including fill and other development activities, as set forth in the Definitions contained in this Section of the Land Use Ordinance.
- (a) Application for a development permit shall be made on forms furnished by the Community Development Director and shall include but not necessarily be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information in 3.510(14)(a)(1)–(4) is required and Development Permits required under this Section are subject to the Review Criteria put forth in Section 3.510(14)(b):

- (1) Elevation in relation to mean sea level of the lowest floor, including basement, of all structures as documented on an Elevation Certificate;
 - (2) Elevation in relation to mean sea level to which any proposed structure will be floodproofed as documented on an Elevation Certificate;
 - (3) If applicable, certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Subsection (6)(c)(3) of this Section; and
 - (4) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.
- (b) Development Permit Review Criteria
- (1) The fill is not within a Coastal High Hazard Area.
 - (2) Fill placed within the Regulatory Floodway shall not result in any increase in flood levels during the occurrence of the base flood discharge.
 - (3) The fill is necessary for an approved use on the property.
 - (4) The fill is the minimum amount necessary to achieve the approved use.
 - (5) No feasible alternative upland locations exist on the property.
 - (6) The fill does not impede or alter drainage or the flow of floodwaters.
 - (7) If the proposal is for a new critical facility, no feasible alternative site is available.
 - (8) For creation of new, and modification of, Flood Refuge Platforms, the following apply, in addition to (14)(a)(1-4) and (b)(1-5):
 - i. The fill is not within a floodway, wetland, riparian area or other sensitive area regulated by the Tillamook County Land Use Ordinance.
 - ii. The property is actively used for livestock and/or farm purposes,
 - iii. Maximum platform size = 10 sq ft of platform surface per acre of pasture in use, or 30 sq ft per animal, with a 10-ft wide buffer around the outside of the platform,
 - iv. Platform surface shall be at least 1 ft above base flood elevation,
 - v. Slope of fill shall be no steeper than 1.5 horizontal to 1 vertical,
 - vi. Slope shall be constructed and/or fenced in a manner so as to prevent and avoid erosion.

Conditions of approval may require that if the fill is found to not meet criterion (5), the fill shall be removed or, where reasonable and practical, appropriate mitigation measures shall be required of the property owner. Such measures shall be verified by a certified engineer or hydrologist that the mitigation measures will not result in a net rise in floodwaters and be in coordination with applicable state, federal and local agencies, including the Oregon Department of Fish and Wildlife.

- (c) Before approving a development permit application for other than a building, the Community Development Director may determine that a public hearing should be held on the application. Such hearing shall be held before the Planning Commission and a decision made by the Planning Commission in accordance with the provisions of Article X10.

(15) APPEALS, REDUCTIONS AND VARIANCES:

- (a) An appeal of the ruling of the Community Development Director regarding a requirement of this Section may be made to the Tillamook County Planning Commission pursuant to Section 10.100.
- (b) Reductions of the "3 feet above base flood elevation" standard may be granted by the Community Development Director, upon findings that:
 - (1) Strict application of the three-foot standard would produce an unreasonable or inequitable result; and
 - (2) A lesser elevation requirement will not result in an appreciable increase in flood damage.

Reductions to below 1 foot above base flood elevation require a Variance as described in (c), below.

The intent of this provision is to limit this application of the Director's discretion to those rare and unusual circumstances where the three-foot standard would result in unnecessary and burdensome development requirements.

- (c) Variances to the standards contained in Section 3.510 shall be issued only in accordance with the following criteria:
 - (1) Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the items in subsection (15)(c)(2) have been fully considered. As the lot size increases the technical justification required for issuing the variance increases.

- (2) The following items shall be considered in review of variance applications:
- (i) The danger that materials may be swept onto other lands to the injury of others;
 - (ii) The danger to life and property due to flooding or erosion damage;
 - (iii) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - (iv) The importance of the services provided by the proposed facility to the community;
 - (v) The necessity to the facility of a waterfront location, where applicable;
 - (vi) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 - (vii) The compatibility of the proposed use with existing and anticipated development;
 - (viii) The relationship of the proposed use to the comprehensive plan and flood plain management program for that area;
 - (ix) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (x) The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
 - (xi) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- (3) Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the Statewide Inventory of Historic Properties, without regard to the procedures set forth in this section.
- (4) Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
- (5) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- (6) Variances shall be issued only upon:
- (i) A showing of good and sufficient cause;
 - (ii) A determination that failure to grant the variance would result in exceptional hardship to the applicant;
 - (iii) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in subsection (15)(c)(2), or conflict with existing local laws or ordinances.

))
))

(6) (7) Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevations should be quite rare.

Formatted: Indent: Left: 0.5", No bullets or numbering

(7) (8) Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except subsection (15)(c)(1), and otherwise complies with general standards in Section 3.510(5).

Formatted: Indent: Left: 0.5", No bullets or numbering

(8) (9) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

Formatted: Indent: Left: 0.5", No bullets or numbering

(d) (e) The procedures for reviewing and taking action on a variance under the provisions of this Section shall be pursuant to the procedures for a Type II review in accordance with Article 10 of the TCLUO.

Formatted: Indent: Left: 2", No bullets or numbering

(16) REQUIREMENTS TO NOTIFY OTHER ENTITIES AND SUBMIT NEW TECHNICAL DATA:

Formatted: Font: 12 pt

Formatted: List Paragraph, Indent: Left: 2", First line: 0"

(A) COMMUNITY BOUNDARY ALTERATIONS: The Floodplain Administrator shall notify the Federal Insurance Administrator in writing whenever the boundaries of the community have been modified by annexation or the community has otherwise assumed authority or no longer has authority to adopt and enforce floodplain management regulations for a particular area, to ensure that all Flood Hazard Boundary Maps (FHBM) and Flood Insurance Rate Maps (FIRM) accurately represent the community's boundaries. Include within such notification a copy of a map of the community suitable for reproduction, clearly delineating the new corporate limits or new area for which the community has assumed or relinquished floodplain management regulatory authority.

Formatted: Font: 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

(B) WATERCOURSE ALTERATIONS: The Floodplain Administrator shall notify the Federal Insurance Administrator in writing whenever the boundaries of the community have been modified by annexation or the community has otherwise assumed authority or no longer has authority to adopt and enforce floodplain management regulations for a particular area, to ensure that all Flood Hazard Boundary Maps (FHBM) and Flood Insurance Rate Maps (FIRM) accurately represent the community's boundaries. Include within such notification a copy of a map of the community suitable for reproduction, clearly delineating the new

Formatted: Font: (Default) Calibri, 11 pt

Formatted: Indent: Left: 1", No bullets or numbering

Formatted: Font: 12 pt, Font color: Black

Formatted: Font: (Default) Times New Roman, 12 pt

corporate limits or new area for which the community has assumed or relinquished floodplain management regulatory authority.

Formatted: Font: (Default) Calibri, 11 pt

(C) REQUIREMENT TO SUBMIT NEW TECHNICAL DATA: A community's base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify the Federal Insurance Administrator of the changes by submitting technical or scientific data in accordance with Section 44 of the Code of Federal Regulations (CFR), Sub-Section 65.3. The community may require the applicant to submit such data and review fees required for compliance with this section through the applicable FEMA Letter of Map Change (LOMC) process.

Formatted: Font: 12 pt, Font color: Black

Formatted: Left, Indent: Left: 0.5", No bullets or numbering

Formatted: Font: (Default) Times New Roman, 12 pt

The Floodplain Administrator shall require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for:
A. Proposed floodway encroachments that increase the base flood elevation; and
B. Proposed development which increases the base flood elevation by more than one foot in areas where FEMA has provided base flood elevations but no floodway.

An applicant shall notify FEMA within six (6) months of project completion when an applicant has obtained a Conditional Letter of Map Revision (CLOMR) from FEMA. This notification to FEMA shall be provided as a Letter of Map Revision (LOMR).

Formatted: Font: (Default) Calibri, 11 pt

Formatted: Indent: Left: 1", No bullets or numbering

Formatted: Font: 12 pt, Font color: Black

SUBSTANTIAL IMPROVEMENT AND SUBSTANTIAL DAMAGE ASSESSMENTS AND DETERMINATION: Conduct Substantial Improvement (SI) reviews for all structural development proposal applications and maintain a record of SI calculations within permit files. Conduct Substantial Damage (SD) assessments when structures are damaged due to a natural hazard event or other causes. Make SD determinations whenever structures within the special flood hazard area are damaged to the extent that the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Formatted: List Paragraph, Indent: Left: 0.5", Hanging: 0.5", Outline numbered + Level: 2 + Numbering Style: A, B, C, ... + Start at: 1 + Alignment: Left + Aligned at: 0.63" + Indent at: 0.88", Tab stops: Not at -1"

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

(1716) COMPLIANCE: All development within special flood hazard areas is subject to the terms of this ordinance and other applicable regulations.

Formatted: Font: (Default) Times New Roman, 12 pt

(18) PENALTIES FOR NONCOMPLIANCE: No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. Violations of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall be subject to citation and fines in addition to and not in lieu of any other enforcement and penalties contained in this Ordinance or other County Ordinance or State law and be subject to a fine of not less than Five Hundred Dollars (\$500) and not more than One Thousand Dollars (\$1,000) per day. Nothing contained herein shall prevent Tillamook County from taking such other lawful action as is necessary to prevent or remedy any violation.

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

(19) ABROGATION: This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

Formatted: Font: (Default) Times New Roman, 12 pt

(20) SEVERABILITY: This ordinance and the various parts thereof are hereby declared to be severable. If any section clause, sentence, or phrase of the Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this Ordinance.

Formatted: Font: (Default) Times New Roman, 12 pt

(21) INTERPRETATION: In the interpretation and application of this ordinance, all provisions shall be:

Formatted: Font: (Default) Times New Roman, 12 pt

- 1) Considered as minimum requirements;
- 2) Liberally construed in favor of the governing body; and,
- 3) Deemed neither to limit nor repeal any other powers granted under state statutes.

(22) WARNING: The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages.

Formatted: Font: (Default) Times New Roman, 12 pt

(23) DISCLAIMER OF LIABILITY: This ordinance shall not create liability on the part of Tillamook County, any officer or employee thereof, or the Federal Insurance Administrator for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

Formatted: Indent: Left: 0", Hanging: 0.5"

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Font: (Default) Times New Roman, 12 pt

Formatted: Justified, Indent: Left: 0", Hanging: 0.5"

Formatted: Indent: Left: 0", First line: 0"

(24) PROVISIONS: The provisions of Section 3.510 shall take precedence over all prior resolutions or orders of the Board of County Commissioners relating to Floodplain Management.

EXHIBIT C

SECTION 4.130: DEVELOPMENT REQUIREMENTS FOR GEOLOGIC HAZARD AREAS

Sections

4.130(1)	Purpose
4.130(2)	Applicability
4.130(3)	Geologic Assessment Review
4.130(4)	Geologic Report Standards
4.130(5)	Decisions of Geologic Assessment Reviews
4.130(6)	Development Standards for Uses Subject to Review

4.130(1) Purpose

The purpose of these Development Requirements for Geologic Hazard Areas is to protect people, lands and development in areas that have been identified as being subject to geologic hazards by:

- a) Identifying areas subject to natural hazards;
- b) Assessing the risks to life and property posed by development in areas of known natural hazard susceptibility; and
- c) Applying standards to the siting and design of development on lands subject to natural hazards that will reduce the risk to life and property from these hazards.

The provisions and requirements of this section are intended to provide for identification and assessment of risk from geologic hazards, and to establish standards that limit overall risk to the community from identified hazards to a level acceptable to the community. However, it must be recognized that all development in identified hazard areas is subject to increased levels of risk, and that these risks must be acknowledged and accepted by present and future property owners who proceed with development in these areas.

4.130(2) Applicability

The following areas are considered potentially geologically hazardous and are therefore subject to the requirements of this section:

- a) All lands partially or completely within categories of "high" and "moderate" susceptibility to shallow landslides as mapped in Oregon Department of Geology and Mineral Industries (DOGAMI) Open File Report O-20-13, Landslide hazard and risk study of Tillamook County, Oregon;

- b) All lands partially or completely within categories of “high” and “moderate” susceptibility to deep landslides as mapped in DOGAMI Open File Report O-20-13, Landslide hazard and risk study of Tillamook County, Oregon;
- c) All lands partially or completely within a “debris flow fan” as mapped in DOGAMI Open File Report O-20-13, Landslide hazard and risk study of Tillamook County, Oregon;
- d) All lands partially or completely within a rapidly moving landslide as mapped in DOGAMI IMS-22, GIS Overview Map of Potential Rapidly Moving Landslide Hazards in Western Oregon, 2002. All lands along the oceanfront.
- e) Lots or parcels where the average existing slopes are equal to or greater than 19 percent within or adjacent (contiguous) to hazard risk zones described in (a) through (d) above for any lot or parcel less than 20,000 square feet in size or lots or parcels where the average existing slopes are equal to or greater than 29 percent within or adjacent (contiguous) to hazard risk zones described in (a) through (d) above for any lot or parcel greater than 20,000 square feet in size where development is proposed.
- f) Any other documented geologic hazard area on file, at the time of inquiry, in the office of the Tillamook County Community Development Department. A “documented geologic hazard area” means a unit of land that is shown by reasonable written evidence to contain geological characteristics or conditions which are hazardous or potentially hazardous for the improvement thereof.

The publications referenced above are not intended to be used as a site-specific analysis tool. The County will use these publications to identify when a Geologic Hazard Review is needed on a property prior to development.

4.130(3) Geologic Assessment Review

- a) Except for activities identified in Subsection 3(b) of this section as exempt, any new development or substantial improvement (as defined in Article 11) in an area subject to the provisions of this section shall require a Geologic Assessment Review.
- b) The following development activities are exempt from the requirement for a Geologic Assessment Review:
 1. Maintenance, repair, or alterations to existing structures that do not alter the building footprint or foundation and do not constitute substantial improvement as defined in Article 11.
 2. Exploratory excavations under the direction of a certified engineering geologist or registered geotechnical engineer;

3. Construction of structures for which a building permit is not required;
 4. Yard area vegetation maintenance and other vegetation removal on slopes less than 25%;
 5. Forest operations subject to regulation under ORS 527 (the Oregon Forest Practices Act);
 6. Maintenance and reconstruction of public and private roads, streets, parking lots, driveways, and utility lines, provided the work does not extend outside the existing right-of-way boundary;
 7. Maintenance and repair of utility lines, and the installation of individual utility service connections;
 8. Emergency response activities intended to reduce or eliminate an immediate danger to life, property, or flood or fire hazard; and
 9. Beachfront protective structures subject only to regulation by the Oregon Parks and Recreation Department under OAR Chapter 736, division 20.
- c) Application, review, decisions, and appeals for a Geologic Assessment Review shall be a Type I procedure in accordance with Article 10. Applications for a Geologic Assessment Review may be made prior to or concurrently with any other type of application required for the proposed use or activity. Except for exempt activities listed under Section 4.130(3)(b), Geologic Assessment Review shall be completed prior to any ground disturbance.
- d) All applications for Geologic Assessment Review shall be accompanied by a Geologic Report prepared by a qualified geoprofessional (as defined in Article 11) that meets the content requirements of Section 4.130(4), at the applicant/property owner's expense.
- e) For development activities that are subject both to this section and Section 3.530: Beach and Dune Overlay Zone, one complete Geologic Report can be used for meeting the requirements of this section and Section 3.530.

4.130(4) Geologic Report (Engineering Geologic Report and Geotechnical Engineering Report) Standards

- a) For the purposes of Section 4.130, a Geologic Report refers to both engineering geologic reports and geotechnical engineering reports.
- b) The Geologic Report shall include the required elements of this section and one of the following:
 1. A statement from a certified geoprofessional that the use and/or activity can be accomplished without measures to mitigate or control the risk of

geologic hazard to the subject property resulting from the proposed use and/or activity;

2. A statement from a certified geoprofessional that there is an elevated risk posed to the subject property by geologic hazards that requires mitigation measures in order for the use and/or activity to be undertaken safely sited on the property; or
- c) Geologic Reports required pursuant to this section shall be prepared consistent with standard geologic practices employing generally accepted scientific and engineering principles, and shall at a minimum contain the applicable provisions outlined in the Oregon State Board of Geologist Examiners publication "Guidelines for the Preparation of Engineering Geologic Reports", 2nd Edition, 5/30/2014 or other published best practice guidelines for engineering geologic or geotechnical engineering reports, consistent with current scientific and engineering principles. Reports shall reference the published guidelines upon which they are based.
- d) For oceanfront property, Geologic Reports shall also address all the requirements of Section 3.530 (6)(f) to the extent applicable and based on best available information.
- e) Geologic Reports required by this section shall include the following from the preparer(s) of the report:
 - a. A statement that all the applicable content requirements of this subsection have been addressed or are not applicable to the review. An explanation must be accompanied with any requirement identified as not applicable;
 - b. A description of the qualifications of the professional(s) that prepared the report; and
 - c. A statement by the preparer(s) that they have the appropriate qualifications to have completed the report and all its contents.
- f) All Geologic Reports are valid for purposes of meeting the requirements of this section for a period of five (5) years from the date of preparation. Such reports are valid only for the development plan addressed in the report. Tillamook County assumes no responsibility for the quality or accuracy of such reports. Within that five-year period, the Planning Director can require at their discretion an addendum by a certified geoprofessional certifying that site conditions have not changed from the original report.

4.130(5) Decisions of Geological Assessment Reviews

A decision on a Geologic Assessment Review shall be based on the following standards:

- a) The Geologic Report shall meet the content standards set forth in Section 4.130(4).
- b) In approving a Geologic Assessment Review, the decision maker may impose any conditions which are necessary to ensure compliance with the provisions of this section or with any other applicable provisions of the Tillamook County Land Use Ordinance.
- c) In the event the decision maker determines that additional review of the Geologic Report by a qualified geoprofessional is necessary to determine compliance with this section, Tillamook County may retain the services of such a professional for this purpose. The applicant shall be responsible for all costs associated with the additional review. The results of that evaluation shall be considered in deciding on the Geologic Assessment Review.

4.130(6) Development Standards for Uses Subject to Review

In addition to the conditions, requirements and limitations imposed by a required Geologic Report, all uses subject to a Geologic Assessment Review shall conform to the following requirements:

- a) Hazard Disclosure Statement: All applications for new development or substantial improvements subject to Geologic Assessment Review shall provide a Hazard Disclosure Statement recorded with the Tillamook County Clerk's Office and signed by the property owner that acknowledges:
 - 1. The property is subject to potential natural hazards and that development thereon is subject to risk of damage from such hazards;
 - 2. The property owner has commissioned an engineering geologic report for the subject property, a copy of which is on file with Tillamook County Planning Department, and that the property owner has reviewed the Geologic Report 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;
 - 3. The property owner accepts and assumes all risks of damage from natural hazards associated with the development of the subject property.
- b) Mitigation measures: If on-site structural mitigation measures are required as a condition of approval, the applicant shall, prior to the issuance of zoning compliance, record on the title to the subject property a notification that includes a description of the measures or improvements and that also specifies the obligation of the property owners to refrain from interfering with such measures or improvements and to maintain them.
- c) Safest site requirement: All new structures shall be limited to the recommendations, if any, contain in the Geologic Report; and

1. Property owners should consider use of construction techniques that will render new buildings readily moveable in the event they need to be relocated; and
 2. Properties shall possess access of sufficient width and grade to permit new buildings to be relocated or dismantled and removed from the site.
- d) Minimum Oceanfront Setbacks: In areas subject to the provisions of this section, the building footprint of all new development or substantial improvement subject to a Geologic Assessment Review shall comply with the requirements of Section 3.530(8) Oceanfront Setbacks.
- e) Erosion Control Measures: All uses subject to a Geologic Assessment Review shall address the following erosion control measure requirements, designed by a qualified geoprofessional:
1. Stripping of vegetation, grading, or other soil disturbance shall be done in a manner which will minimize soil erosion, stabilize the soil as quickly as practicable, and expose the smallest practical area at any one time during construction;
 2. Development plans shall minimize cut or fill operations so as to prevent off-site impacts;
 3. Temporary vegetation and/or mulching shall be used to protect exposed critical areas during development;
 4. Permanent plantings and any required structural erosion control and drainage measures shall be installed as soon as practical;
 5. Provisions shall be made to effectively accommodate increased runoff caused by altered soil and surface conditions during and after development. The rate of surface water runoff shall be structurally retarded where necessary;
 6. Provisions shall be made to prevent surface water from damaging the cut face of excavations or the sloping surface of fills by installation of temporary or permanent drainage across or above such areas, or by other suitable stabilization measures such as mulching, seeding, planting, or armoring with rolled erosion control products, stone, or other similar methods;
 7. All drainage provisions shall be designed to adequately carry existing and potential surface runoff from the twenty-year frequency storm to suitable drainageways such as storm drains, natural watercourses, or drainage swales. In no case shall runoff be directed in such a way that it significantly decreases the stability of known landslides or areas identified as unstable slopes prone to earth movement, either by erosion or increase of groundwater pressure;

8. Where drainage swales are used to divert surface waters, they shall be vegetated or protected as necessary to prevent offsite erosion and sediment transport;
 9. Erosion and sediment control devices shall be required where necessary to prevent polluting discharges from occurring. Control devices and measures which may be required include, but are not limited to:
 - i. Energy absorbing devices to reduce runoff water velocity;
 - ii. Sedimentation controls such as sediment or debris basins. Any trapped materials shall be removed to an approved disposal site on an approved schedule;
 - iii. Dispersal of water runoff from developed areas over large undisturbed areas.
 10. Disposed spoil material or stockpiled topsoil shall be prevented from eroding into streams or drainageways by applying mulch or other protective covering; or by location at a sufficient distance from streams or drainageways; or by other sediment reduction measures; and
 11. Such non-erosion pollution associated with construction such as pesticides, fertilizers, petrochemicals, solid wastes, construction chemicals, or wastewaters shall be prevented from leaving the construction site through proper handling, disposal, site monitoring and clean-up activities.
- f) Certification of compliance: Permitted development shall comply with the recommendations in the required Geologic Report. Certification of compliance shall be provided as follows:
- a. Plan Review Compliance: Building, construction or other development plans shall be accompanied by a written statement from a certified engineering geologist or licensed geotechnical engineer stating that the plans comply with the recommendations contained in the Geologic Report for the Geologic Assessment Review.
 - b. Inspection Compliance: Upon the completion of any development activity for which the Geologic Report recommends an inspection or observation by a certified engineering geologist or licensed geotechnical engineer, the certified engineering geologist or licensed geotechnical engineer shall provide a written statement indicating that the development activity has been completed in accordance with the applicable Geologic Report recommendations.
 - c. Final Compliance: No development requiring a Geologic Report shall receive final approval (e.g., certificate of occupancy, final inspection, etc.) until the department receives:

- i. A written statement from a certified engineering geologist or licensed geotechnical engineer indicating that all performance, mitigation, and monitoring measures specified in the Geologic Report have been satisfied;
- ii. If mitigation measures incorporate engineering solutions designed by a licensed professional engineer, a written statement of compliance by the design engineer;
- iii. A written statement by the qualified geoprofessional indicating that all erosion control measure requirements were met.

g) Restoration and replacement of existing structures:

- a. Notwithstanding any other provisions of this ordinance, application of the provisions of this section to an existing use or structure shall not have the effect of rendering such use or structure nonconforming as defined in Article 7.
- b. Replacement, repair or restoration of a lawfully established building or structure subject to this section that is damaged or destroyed by fire, other casualty or natural disaster shall be permitted, subject to all other applicable provisions of this ordinance, and subject to the following limitations:
 - i. Replacement authorized by this subsection is limited to a building or structure not larger than the damaged/destroyed building.
 - ii. Structures replaced pursuant to this subsection along the oceanfront shall be located no further seaward than the damaged structure being replaced.
 - iii. Replacement or restoration authorized by this subsection shall commence within one year of the occurrence of the fire or other casualty which necessitates such replacement or restoration.
- c. A building permit application for replacement, repair or restoration of a structure under the provisions of this subsection shall be accompanied by a Geologic Report prepared by a qualified geoprofessional that adheres to the Geologic Report Standards outlined in this section. All recommendations contained in the report shall be followed.
- d. A building permit application for replacement, repair, or restoration authorized by this subsection shall be processed and authorized as Type I review pursuant to Section 10.020.

) Add to:))

TCLUO Article 11 Amendments: Definitions proposed to be added to Article 11

Geoprofessional: refers to a Registered Geologist (RG), Certified Engineering Geologist (CEG), and Geotechnical Engineer (GE).

- Registered Geologists (RG) provide geologic maps and documents, can identify relative hazards, and are licensed by the Oregon State Board of Geologist Examiners (OSBGE). RGs cannot imply or provide recommendations for the siting, design, modification, or construction of structures, unless supervised by a CEG. RGs are defined in ORS 675.505 and ORS 672.525.
- Certified Engineering Geologists (CEG) provide engineering geologic reports and are licensed by the Oregon State Board of Geologist Examiners (OSBGE). They apply geologic data, principles and interpretation to naturally occurring materials so that geologic factors affecting planning, design, construction and maintenance of civil engineering works are properly recognized and utilized. They can conduct geologic work to provide recommendations for the siting, design, modification, or construction of a structure. CEGs are defined in ORS 672.505 and ORS 672.525.
- A Geotechnical Engineer (GE) is a Professional Engineer (PE) with the specific training, expertise, and experience to qualify as a Geotechnical Engineer (GE). GEs can provide geotechnical engineering reports and are licensed by the Oregon Board of Examiners for Engineering and Land Surveying (OSBEELS). A GE can investigate and evaluate physical and engineering properties of earth materials, and design mitigation measures to reduce risk from natural hazards. As defined in Oregon Statute, Professional Engineers can only perform services in the areas of their competence. ORS 672.005, OAR 820-020.

EXHIBIT D



Tillamook County Department of Community Development
BUILDING, PLANNING & ON-SITE SANITATION

1510-B Third Street
Tillamook, Oregon 97141
<http://co.tillamook.or.us>

Building (503)-842-3407
Planning (503)-842-3408
Sanitation (503)-842-3409
FAX (503)-842-1819
Toll Free 1-(800)-488-8280

Land of Cheese, Trees, and Ocean Breeze

GUIDE TO BETTER UNDERSTANDING 2022 HAZARD PLANNING UPDATES & OTHER INFORMATION

Dear Community Member,

Property owners who own property within our coastal communities or who own properties within close proximity to the ocean will be receiving a Measure 56 notice from Tillamook County regarding a series of updates to Tillamook County's land use program. The proposed updates reflected in the Measure 56 notice apply to specific areas within unincorporated Tillamook County and are a reflection of continued efforts to increase resiliency and mitigate risk of natural hazards to life and property in Tillamook County. Our hope is that this guide will help address questions you may have related to the proposed updates and how these updates might impact, if at all, future development opportunities for properties located within areas of unincorporated Tillamook County made part of this land use planning process.

Department staff contact information is included at the end of this guide. Amendment documents can be found here: <https://www.co.tillamook.or.us/commdev/landuseapps> at #851-21-000440-PLNG through #851-21-000442-PLNG.

What is a Measure 56 Notice?

Oregon voters passed a law in 1998 known as Ballot Measure 56. This law requires a jurisdiction (Tillamook County) to notify by mail every landowner whose property could be affected as a result of proposed ordinance changes, meaning that the proposed ordinance changes *may* limit property uses if adopted. The Department is required to send Measure 56 notices to property owners who own property currently within the Beach and Dune Overlay Zone or those who are within close proximity to a beach and dune landform, informing them of the proposed updates to the Beach and Dune Hazard Overlay Zone contained within Section 3.530 of the Tillamook County Land Use Ordinance. This notification action is primarily related to the proposal to adopt new maps and data produced by the Oregon Department of Geology and Mineral Industries (DOGAMI) that may alter the boundaries of the Beach and Dune Overlay zone (i.e. where the overlay zone is located and where implementing regulations apply).

Other updates included in the Measure 56 notice reflect our efforts to best inform the public and members within these coastal unincorporated communities of other proposed updates to Tillamook County's land use program.

Do the proposed updates apply to properties within Cities or Urban Growth Areas?

No. The proposed updates are to the Tillamook County Land Use Ordinance and Tillamook County Comprehensive Plan and only apply to properties within unincorporated areas of Tillamook County outside of cities and urban growth boundaries.

Will these updates impact existing development on a property?

If adopted by the Tillamook County Commissioners, the proposed updates will apply to new development on a property. If your property is already developed, the proposed updates may apply to future development activities including

proposals for additions/expansions or remodels of existing structures. A determination largely depends on what is proposed, the location of proposed development and the extent of work proposed.

Will these updates prohibit me from building a home on my property in the future?

Generally speaking, the updates should not prohibit the construction of a home on a property where the right to build a home already exists through zoning codes and policies contained within the Tillamook County Land Use Ordinance and Tillamook County Comprehensive Plan. If you would like to visit about potential allowable uses on your property in relation to the proposed updates, please contact Community Development planning staff. We are happy to visit with you about how these updates may relate specifically to your property.

Purpose of the Beach and Dune Overlay Zone Updates (TCLUO Section 3.530)

Type of dune classifications with accompanying policies contained within the Goal 18 Beaches and Dunes element of the Tillamook County Comprehensive Plan and Tillamook County Land Use Ordinance determine what type of use and development activity is allowed on beaches and dunes, and what is required for development.

The adopted beach and dune maps made part of the Beach and Dune Overlay Zone and Tillamook County Comprehensive Plan are the USDA maps of Oregon's beaches and dunes produced in 1975. The 1975 maps were adopted by Tillamook County and are part of administration of the land use program for properties within the Beach and Dune Overlay Zone.

Beach and dune environments are very dynamic. The Oregon Department of Geology and Mineral Industries (DOGAMI) recently completed a mapping project of Tillamook County's beaches and dunes. The Department of Community Development is proposing to adopt the new data produced by DOGAMI to update Tillamook County's Beach and Dune Overlay Zone and associated maps and policies. The goal of these efforts will result in new data, mapping and ordinance language to ensure future development protects coastal resources and lessens impacts to properties and communities from coastal hazards.

Included with this process are proposed updates to subsections of Section 3.530 that outline the required information to be contained within a beach and dune hazard report also known as a geotechnical investigation report for new development activities on properties within the Beach and Dune Overlay Zone. These reports are currently required for development of a property and must be reviewed by Community Development in conjunction with zoning and building permits or prior to the submittal of zoning and building permits. The proposed updates include additional standards or investigative findings a geotechnical professional is required to address when completing a hazard report for future development of a property.

It should be noted that proposed ordinance language includes a limitation on the number of years a hazard report is valid if not yet submitted to the Department for review in conjunction with a new development proposal. Proposed language limits validity of a hazard report for up to 5 years. What this means is that if you have not yet developed your property but already have a hazard report for future development, you will want to make sure the hazard report was completed by a geotechnical professional within five years of the date of submittal of the report to the Department for review.

Other updates associated with development where a hazard report is required include a proposal to require the geotechnical professional to provide certification in writing that the development as constructed meets the recommendations and standards outlined in the report and that this certification be required prior to a final inspection or issuance of a certificate of occupancy by the Building Official and for dune areas that foredune stabilization measures have been implemented.

Do these updates change the permit review process?

The permit review process will remain the same and reports will continue to be reviewed as a Type I application in accordance with the procedures outlined in Article 10 of the Tillamook County Land Use Ordinance. These reports can continue to be submitted in conjunction with zoning and building permits or prior to the submittal of zoning and building permits for development of a property. The current checklist for hazard report requirements will be updated upon adoption of any of the proposed updates. This will occur no sooner than the hearing scheduled for April 27, 2022.

If you are preparing to develop a property in the coming months or have a hazard report already prepared for future development, you will want to reach out to Community Development planning staff to make sure required updates as

adopted through this process are included in the hazard report prior to submitting the report for review. Planning staff will provide an updated list of required information for preparation of a hazard report that can be shared with your geotechnical professional.

While these hazard report standards and requirements are outlined in Section 3.530, we recognize property owners and contractors may need some assistance in relaying what is needed to a geotechnical professional. If you need assistance, it is recommended that staff be reached out to via email or by setting up an appointment utilizing the Department's online appointment scheduling tool at: <https://outlook.office365.com/owa/calendar/CommunityDevelopment1@co.tillamook.or.us/bookings/>.

Purpose of Updates to Section 4.130: Development Requirements for Geologic Hazard Areas

It is important to understand that this section of the Tillamook County Land Use Ordinance is not a zoning district or an overlay zoning district, and therefore does not determine what uses are permitted on a property. This section of the Tillamook County Land Use Ordinance contains additional development standards that must be met when developing a property in a geologic hazard area. Allowable "use" of the property has already been determined by the underlying zone or an overlay zone.

As with updating mapping for Tillamook County's beaches and dunes, one of the significant updates to Section 4.130 of the Tillamook County Land Use Ordinance is to include new maps and data for administration of the requirements of this section.

Existing maps identifying areas of geologic hazard in Tillamook County include 1974 and 1979 DOGAMI bulletins as well as the 1964 USDA Soil Conservation Service soil survey maps. The Department of Community Development is proposing to adopt current landside map (SLIDO maps) and data produced by DOGAMI to better identify areas of geologic hazard.

Updates to this section of the Tillamook County Land Use Ordinance also include updating report requirements and investigation information contained within a geologic hazard report for development of a property located in an area of geologic hazard. These reports are currently required for development of properties within geologic hazard areas and must be reviewed by Community Development in conjunction with zoning and building permits or prior to the submittal of zoning and building permits for development of a property. The proposed updates reflect what a geotechnical professional is required to address when completing one of these reports for development of properties within areas of geologic hazard.

It should be noted that proposed ordinance language includes a limitation on the number of years a geologic hazard report is valid if not yet submitted to the Department for review in conjunction with a new development proposal. Proposed language limits validity of a geologic hazard report for up to 5 years. What this means is that if you have not yet developed your property but already have a prepared geologic hazard report for future development, you will want to make sure the report was completed by a geotechnical professional within five years of the date of submittal of the report to the Department for review.

Updates also include a proposal to require the geotechnical professional to provide certification in writing that the development as constructed meets the recommendations and standards outlined in the report and that this certification be required prior to a final inspection or issuance of a certificate of occupancy by the Building Official.

Do these updates change the permit review process?

The permit review process will remain the same and reports will continue to be reviewed as a Type I application in accordance with the procedures outlined in Article 10 of the Tillamook County Land Use Ordinance. These reports can continue to be submitted in conjunction with zoning and building permits or prior to the submittal of zoning and building permits for development of a property. The current checklist for geologic hazard report requirements will be updated upon adoption of any of the proposed updates. (This will occur no sooner than the hearing scheduled for April 27, 2022.

If you are preparing to develop a property in the coming months or have a geologic hazard report already prepared for future development, you will want to reach out to Community Development planning staff to make sure required updates

as adopted through this process are included in the report prior to submitting the report for review. Planning staff will provide an updated list of required information for preparation of a geologic hazard report that can be shared with your geotechnical professional.

Purpose of the Flood Hazard Overlay Zone Updates (TCLUO Section 3.510)

Tillamook County completed a series of updates and amendments to the Flood Hazard Overlay Zone in 2018 that included adoption of new FEMA Flood Insurance Rate Maps (FIRMS). These updates were required by FEMA for program consistency with the FEMA Code of Federal Regulations for development of properties within Areas of Special Flood Hazard (regulated flood zones) as part of our obligation as a participating community in the National Flood Insurance Program (NFIP).

New proposed amendments to the Flood Hazard Overlay Zone section of the Tillamook County Land Use Ordinance consist of a series of updates and housekeeping tasks required by FEMA. The updates include addition of definitions or refinement of existing definitions, clarification to development and construction code requirements, and addition of several sections at the end of the ordinance related to administration and enforcement. All updates proposed are required by FEMA and must be adopted to remain in good standing with the National Flood Insurance Program.

There are no map changes to the adopted 2018 FEMA FIRMS proposed or made part of this update process. The criteria for which a decision is made to approve a Floodplain Development Permit remain the same.

Do these updates change the permit review process?

The permit review process will remain the same and Floodplain Development Permits will continue to be reviewed as a Type I or Type II application in accordance with the procedures outlined in Article 10 of the Tillamook County Land Use Ordinance.

What criteria apply to the proposed amendments?

The criteria decision makers will use as the basis in their decision-making process are contained within Article 9 of the Tillamook County Land Use Ordinance. There are two sets of criteria that apply to the proposed updates- text amendment criteria for all Tillamook County Land Use Ordinance text changes and the map amendment criteria specifically for the Beach and Dune Hazard Overlay Zone. The criteria for all amendment proposals can be found here: https://www.co.tillamook.or.us/sites/default/files/fileattachments/community_development/page/27173/article_9_amendment.pdf

What is the process and who makes the decision?

The process is a legislative map and text amendment process that requires public notice and public hearings following the provisions outlined in Article 10 of the Tillamook County Land Use Ordinance for a Type IV review process. There will be multiple hearings for consideration of these updates by the Tillamook County Planning Commission and the Tillamook County Board of Commissioners. The hearing process will begin with the Tillamook County Planning Commission who make a recommended action to the Board of County Commissioners to deny or approve the proposed updates (may include recommendation for amendment of some updates as well). The Board of County Commissioners will then take the proposed amendments with Planning Commission recommendations under consideration at more public hearings. The Board of County Commissioners will ultimately decide to approve or deny the proposed amendments which will occur no sooner than the hearing scheduled for April 27, 2022.

When are the public hearings and how do I participate?

A hearing schedule is provided below with additional details included in the Measure 56 notice also posted on the Department website. Citizen involvement is a critical component of this land use review process and the public is encouraged to participate. Community Development staff are here to help assist with your participation needs and best answer questions on how to participate. Here are some helpful tips:

- Decisions to approve or deny a land use request are based upon the criteria. You will want to review the criteria that are the basis for these decisions. Effective comments and testimony are those related to the criteria upon which the Planning Commission and Board of County Commissioners are using as the basis for their recommendations and decisions.
- Comments on the proposed updates can be provided in written form or through oral testimony at a hearing. If you wish to have your written comments considered by the Planning Commission and Board of County Commissioners, please email comments to Lynn Tone, DCD Office Specialist 2, at ltone@co.tillamook.or.us or mail written testimony to Community Development, Attn: Lynn Tone, 1510-B Third Street, Tillamook, OR 97141.
 - All written comments received in email and in writing will be shared with the Tillamook County Planning Commission and Board of County Commissioners. Written comments received after a hearing packet has been posted for decision maker review public inspection will still be presented by planning staff at the upcoming hearing.
- Oral testimony will be taken at the hearings, specifically those hearings scheduled for February 10th with the Tillamook County Planning Commission and April 6th with the Board of County Commissioners. If you wish to speak at either of these hearings, please email Lynn with your testimony request ahead of the hearing so that the Chair of the hearing can call on you to speak at the appropriate time during the hearing proceedings. If you decide during one of these hearings that you would like testify and did not previously make arrangements, an opportunity to speak will still be afforded. There is always a “last call” for oral testimony before the Chair closes the public comment portion of the hearing.
 - The public comment period of each hearing process with the Tillamook County Planning Commission and Board of County Commissioners will eventually close. To ensure you are able to testify, it is strongly recommended that you make arrangements to provide oral testimony at the February 10th and/or April 6th hearings.
- Due to the pandemic, opportunities for in-person participation continue to be limited. Please continue to check the Community Development website for any hearing proceeding updates.
- The hearings include virtual meeting and via teleconference access. Virtual meeting links are provided on the Community Development homepage for Planning Commission hearings and on the Board of County Commissioners webpage for Board of County Commissioner hearings. Teleconference participation information is also included on each webpage for hearings and meetings.

Virtual Hearing Information

Tillamook County uses Microsoft Teams. You will want to make sure you install the Microsoft Teams app on your electronic device if you wish to participate or appear virtually at upcoming hearings. Additional information and helpful tips can be found on the Tillamook Planning Commission webpage: <https://www.co.tillamook.or.us/bc-pc>

Tillamook County Planning Commission Hearing Dates

6:30pm on February 10, 2022, with staff recommendation for continuation of hearing to 6:30pm on March 10, 2022
Recommendation on updates will not occur before the March 10, 2022 hearing

Tillamook County Board of Commissioner Hearing Dates

10:30am on April 6, 2022 and 10:30am on April 27, 2022
Board action to approve or deny the proposed amendments will occur no sooner than the April 27, 2022 hearing

Community Development Department Staff Contact

Planning Application Line: 503-842-3408 x3412
 Sarah Absher, CFM, Director: sabsher@co.tillamook.or.us
 Lynn Tone, DCD Office Specialist 2: ltone@co.tillamook.or.us
 Melissa Jenck, CFM, Planner: mjenck@co.tillamook.or.us
 Chris Laws, Planner: claws@co.tillamook.or.us
 Sheila Shoemaker, Planner: sshoemak@co.tillamook.or.us

EXHIBIT E



Land of Cheese, Trees and Ocean Breeze

1510 – B Third Street
Tillamook, Oregon 97141
www.tillamook.or.us

Building (503)842-3407
Planning (503)842-3408
On-Site Sanitation (503)842-3409
FAX (503)842-1819
Toll Free 1 (800)488-8280

NOTICE TO MORTGAGEE LIENHOLDER, VENDOR OR SELLER: ORS 215 REQUIRES THAT IF YOU RECEIVE THIS NOTICE, IT MUST BE PROMPTLY FORWARDED TO THE PURCHASER.

Public Hearing Notice

<p>Tillamook County Planning Commission Thursday, February 10, 2022, at 6:30pm Tillamook County Courthouse, Room A & B, 201 Laurel Avenue Tillamook, OR 97141</p>	<p>Tillamook County Board of Commissioners Wednesday, April 6, 2022, at 10:30am & Wednesday, April 27, 2022, at 10:30am Tillamook County Courthouse, Room A & B, 201 Laurel Avenue Tillamook, OR 97141</p>
---	--

Dear Property Owner:

The Tillamook County Department of Community Development is making efforts to update the coastal planning program and these efforts are now reflected in a series of proposed amendments to the Tillamook County Land Use Ordinance (TCLUO) and Tillamook County Comprehensive Plan. Updates include legislative text amendments to TCLUO Section 3.510: Flood Hazard Overlay (FH) Zone, TCLUO Section 3.530: Beach and Dune Overlay (BD) Zone, TCLUO Section 4.130: Development Requirements for Geologic Hazard Areas and TCLUO Article 11: Definitions. Updates also include incorporation of digital hazard mapping tools produced by the Oregon Department of Oregon Geology and Mineral Industries (DOGAMI) that if adopted, will become planning and comprehensive plan maps for areas of known geologic hazards, beaches and dunes. Amendments to Tillamook County Comprehensive Plan Goal element 7: Hazards and Goal element 18: Beaches and Dunes to reflect updates to the aforementioned Tillamook County Land Use Ordinance are also proposed as part of these planning update efforts.

You have received a Measure 56 Notice because your property has been identified as one of the properties that may be affected by the adoption of these ordinance and comprehensive plan updates. The proposed amendments may affect the permissible uses of your property and other properties, and may change the value of your property. However, Tillamook County does not know how these amendments might affect the value of your property, if at all. Below is a summary of each of the proposed amendments and additional hearing information.

Hearing Information: The Planning Commission meeting will be held virtually. Instructions for attending the meeting online or by phone will be published on the Community Development Planning Commission webpage: <https://www.co.tillamook.or.us/bc-pc>. Instructions for attending are also available by contacting staff prior to the meeting at the email or phone number provided below. Those requiring special accommodations, and those with questions about how to participate can also contact staff prior to the meeting at the email or phone number provided below. The Planning Commission will hear public testimony and, based on the entire record in this matter, will determine whether to recommend approval of the ordinance amendments to the Tillamook County Board of Commissioners.

An opportunity for public comment will be provided at the February 10, 2022, Planning Commission hearing. Please contact Ms. Tone no later than 4:00pm on February 10, 2022, if you would like to register to provide public comment during the Planning Commission hearing (ltone@co.tillamook.or.us or 800-488-8280 x3423). Although registration is

preferred and recommended, it is not required. There will be an opportunity for all attendees of the virtual public hearing to provide public comment, even if a person did not register in advance. Any comments received by noon February 1, 2022 (submitted to ltone@co.tillamook.or.us) will be forwarded to the Planning Commission prior to the public hearing. Comments received after that time will be introduced into the record at the February 10, 2022, Planning Commission hearing.

Applicable criteria include but are not limited to: Tillamook County Land Use Ordinance Article IX (Map and Text Amendments) together with compliance with the applicable Statewide Planning Goals and Oregon Administrative Rules, 660-004, 660-012, 660-014, 660-015, 660-022, and Oregon Revised Statutes 197.732.

The proposed ordinance and comprehensive plan amendments can be viewed online beginning January 10, 2022, at <https://www.co.tillamook.or.us/commdev/landuseapps>. The proposed amendments are also available for inspection at the Department of Community Development. To make an appointment to inspect the proposed amendments, or request a copy, please contact staff at 503-842-3408 X3412 or email Lynn Tone, DCD Office Specialist 2, at ltone@co.tillamook.or.us. Copies can also be provided at a cost of \$0.25/page.

Summary of Proposed Amendments:

#851-21-000442-PLNG TCLUO Section 3.530: Beach and Dune Overlay (BD) Zone and Tillamook County Comprehensive Plan Goal 18: Beach and Dune Element: Open File Report O-20-04, Temporal and Spatial Changes in Coastal Morphology, Tillamook County, Oregon by the Oregon Department of Geology and Mineral Industries (DOGAMI) to replace 1975 USDA Beaches and Dunes of the Oregon Coast as Comprehensive Plan map to identify dune classifications and properties within the Beach and Dune Overlay (BD) Zone. Beach and Dune Hazard Report now referenced as Dune Area Development Permit. Clarification of activities exempt from a Dune Area Development Permit and update criteria for approval of a Dune Area Development Permit including specific standards that must be addressed in the accompanying geologic report (Engineering Geologic Report and Geotechnical Engineering Report). Adds section to address habitat restoration and enhancement projects for purposes of wildlife and plant habitat; codifies development requirements for remedial grading activities, removes language for sand mining activities; updates to requirements for beachfront protective structures; addition of certification compliance; add definition of "Geoprofessional" to TCLUO Article 11. Added requirement for certification of compliance prior to final building inspection and issuance of Certificate of Occupancy. Permits will continue to be reviewed under a Type I land use review process.

#851-21-000441-PLNG TCLUO Section 4.1430: Development Requirements for Geologic Hazard Areas and Tillamook County Comprehensive Plan Goal 7: Hazards Element: Applicability section updated to use best available data to identify areas considered to be potentially geologically hazardous including replacement of 1979 DOGAMI Bulletin with DOGAMI Open File Report O-20-13, Landslide hazard and risk study of Tillamook County, Oregon. Updated geologic assessment review and expanded list of activities exempt from geologic assessment review. Updated Geologic Report (Engineering Geologic Report and Geotechnical Engineering Report) standards. Added section for review of historical, cultural and archaeological resources. Added requirement for certification of compliance prior to final building inspection and issuance of Certificate of Occupancy. Definitions added to Article 11 of TCLUO to define "Geoprofessional". Permits will continue to be reviewed under a Type I land use review process.

#851-21-000440-PLNG TCLUO Section 3.530: Flood Hazard Overlay (FH) Zone: Update definitions to reflect definition language in FEMA Code of Federal Regulations; reference for coordination with State of Oregon Specialty Codes; addition of compliance and penalties for non-compliance language; modification to variance criteria to reference "functionally-dependent use"; language for compliance measures when altering a watercourse; addition of language for installation of underground and above-ground tanks and clarification language for installation of utilities; specifications for construction of garages and accessory structures; clarification of development requirements for the placement of manufactured homes and recreational vehicles; specifications for construction of public restroom facilities.

Sincerely,

Sarah Absher, CFM, Director
Tillamook County Department of Community Development
sabsher@co.tillamook.or.us or 503-842-3408 x3317

EXHIBIT F

Sarah Absher

From: Richard Hook <hook.richard@icloud.com>
Sent: Wednesday, January 19, 2022 11:51 AM
To: Lynn Tone
Cc: Sarah Absher
Subject: EXTERNAL: Comment on proposed updates to the TCLOU hearing to be held Feb 10

[NOTICE: This message originated outside of Tillamook County -- **DO NOT CLICK** on links or open attachments unless you are sure the content is safe.]

Dear Tillamook County Planning Commission,

I am writing in response to the notice I recently received for the proposed amendments to the Tillamook County Land Use Ordinance and Comprehensive Plans, specifically:

#851-21-000442-PLNG Section 3.530 (Beach and Dune Overlay)

As a resident of Neskowin, living in the beach and dune overlay zone, and as a retired geologist who is familiar with both the historic Beach/Dune mapping from the USDA (1975) and the much more recent and up to date DOGAMI open file mapping, I fully support the proposed change to use the more up to date data from DOGAMI. The DOGAMI mapping is both more current and more detailed - and it is what all of the professional geologists working in the area regard as the standard "starting point" for any site investigation.

#851-21-000441-PLNG Section 4.1430 (Geologic Hazard Areas)

As above, I fully support the proposed change to use the most relevant open file reports available from DOGAMI. DOGAMI has done an excellent job updating the hazard assessments using modern geophysical techniques, resulting in a much more complete assessments of hazards. Indeed, it would be foolish not to use the best available resources for these critical assessments.

#851-21-000440-PLNG Section 3.530 (Flood Hazard Overlay)

I have no professional opinion on this section, but it does seem to me to be common-sense housekeeping, and therefore I also support this change.

In summary these changes make sense technically, and will improve the efficiency and accuracy of the permitting process. They will ultimately save money and quite possibly lives in the future.

Sincerely,

Richard Hook
Neskowin

Hook.richard@icloud.com

