



## HB 3309, relating to statewide tsunami regulations

During the 2019 legislative session, [HB 3309](#) was passed and then signed into law by the Governor. Portions of this bill relate to development in the tsunami regulatory zone and affect coastal local governments in communities with tsunami risk. This informational brief was put together to help answer some of your questions about this bill and what it does and does not mean. ***The provisions of this bill will go into effect on January 1, 2020.***

### Background

The original statute, [ORS 455.446-447](#), went into effect in 1996. This Oregon statute limited and/or prohibited construction of certain types of new essential facilities, hazardous facilities, major structures and special occupancy structures in the regulated tsunami inundation zone. The official [regulatory tsunami inundation line](#) was adopted by the Oregon Department of Geology and Mineral Industries (DOGAMI) Governing Board and is sometimes referred to as the “SB 379 line.” (This line is NOT the same as the tsunami inundation maps [S, M, L, XL, XXL] that were developed by DOGAMI in 2013, see section on “Tsunami Inundation Maps” below for more about those maps). Some of the facilities listed in the statute were prohibited, including hospitals, schools, police and fire stations, emergency communication centers, and jails. Other uses were allowed after consultation with DOGAMI for input on the *voluntary* incorporation of special evacuation or other mitigation techniques. The DOGAMI Governing Board could also grant an exception to restrictions in the tsunami regulatory zone if the board determined that the safety of building occupants was ensured to the maximum reasonable extent. These regulations are housed in Oregon Building Codes and administered by the local building official.

### HB 3309 Changes

With the passage of HB 3309, all **prohibited** uses under ORS 455.446-447 become **consultation** uses. That means that all new essential facilities, hazardous facilities, major structures, and special occupancy structures (as defined in the statute) may now be permitted within the regulatory tsunami inundation line (the SB 379 line). These uses are still subject to consultation with DOGAMI for assistance in determining the impact of possible tsunamis on the proposed development and for assistance in preparing methods to mitigate risk at the site of a potential tsunami. Consultation must take place prior to submittal of design plans to the building official for final approval. There is no requirement to adhere to the mitigation that DOGAMI suggests.

### Tsunami Inundation Maps (TIMs) & Evacuation Zones

The regulatory tsunami inundation line used to regulate the uses in ORS 455.446-447 is **NOT** the same as the [DOGAMI Tsunami Inundation Maps](#) that were developed in 2013. The Tsunami Inundation Maps (TIMs) use updated and comprehensive tsunami modeling and represent the best available science of the Cascadia Subduction Zone (CSZ) and possible tsunami events. These maps are meant to assist residents and visitors along the coast to prepare for the next CSZ earthquake and tsunami. The TIMs display five scenarios, labeled as “T-shirt sizes” (i.e. S, M, L, XL, and XXL), showing the impact of a CSZ tsunami that reflects the full range of possible inundation.

Communities typically use the XXL tsunami inundation zone (AKA the “maximum-considered” event) to plan evacuation routes for life safety purposes. This zone is what is displayed (in yellow) on the [Tsunami Evacuation Brochures](#) that were produced by DOGAMI and are available online: [www.oregontsunami.org](http://www.oregontsunami.org).

Communities can choose voluntarily to adopt additional regulations or plan evacuation routes based on the other tsunami inundation scenarios according to each community’s acceptable level of risk. However, those decisions are discretionary and voluntary. Currently, there are no statewide regulations using these t-shirt sized tsunami zones.

### Local Government Role

- For those jurisdictions that have adopted Tsunami Hazard Overlay Zones, corresponding maps, and comprehensive plan policies, the change in the state statute language **does not** change anything. Those jurisdictions will still apply the land use provisions as outlined in their respective plans and development code. For example, if the Tsunami Hazard Overlay Zone prohibits certain uses from being allowed in the “Large” tsunami inundation zone, those provisions still prevail, regardless of the changes to the Oregon Building Codes regulations in HB 3309.
- For jurisdictions that **do not** have tsunami specific regulations in their land use programs, the changes in HB 3309 (as outlined above) will be administered through building codes.

Any and all coastal jurisdictions can move forward voluntarily with adopting their own tailored tsunami hazard land use regulations. The Oregon Department of Land Conservation & Development (DLCD) developed a [Tsunami Land Use Guide](#) that provides model code and comprehensive plan policy language as a starting point. Many jurisdictions have done this or are in the process of adopting these types of regulations. [DLCD can provide technical assistance and support on this topic](#). ***It is important to note that the provisions of the model code do not apply to single family homes on existing lots or parcels, nor does it apply to existing development.***

The provisions as suggested in the Land Use Guide focus on three main areas:

- 1) Prohibit the development of certain new critical and special occupancy facilities, such as hospitals, police and fire stations, schools, and large gathering facilities in a specified tsunami inundation zone (such as the “Large” or “Medium” tsunami inundation zones on the DOGAMI maps). This is to allow those facilities and services to function post-event.
- 2) Require new land divisions within the specified tsunami inundation zone to include evacuation improvements in their overall development design, such as route signs, educational materials, or pedestrian pathways. This is to help ensure evacuation success to the maximum possible extent.
- 3) Provide an optional flexible permit process which would allow a development proposal to modify underlying code standards (such as density requirements or setbacks) in order to achieve higher degrees of risk reduction than is required, similar in concept to a planned development.

There is also a “Use Exception” process to allow a prohibited use to be permitted based on specific criteria.

Current jurisdictions with adopted Tsunami Hazard Overlay Zones:

- Coos County
- Reedsport

- Florence
- North Bend
- Rockaway Beach
- Gearhart
- Port Orford

DLCD can share the code language and maps these communities adopted to anyone interested.

### **Related Building Code Update**

Oregon Building Codes Division is also considering adoption of a new building codes chapter: Tsunami Loads and Effects (ASCE 7-16, Chapter 6). This chapter would require certain design and construction standards (incorporating tsunami forces and flow depths) for Risk Category III and IV buildings and structures located in the Tsunami Design Zone. ([Risk III and IV buildings](#) generally refer to buildings and structures that pose a substantial hazard to human life in the event of failure or essential facilities.) The Tsunami Design Zone (TDZ) is a third category of tsunami inundation mapping that is NOT the same as the SB 379 line or the tsunami inundation maps (TIMs) produced by DOGAMI. The TDZ is a west coast wide zone that was created to be used to engineer buildings for tsunami forces. The TIMs were developed for life safety and evacuation purposes, and have been critical in assisting local governments in determining their acceptable level of risk for certain types of land uses.

The TDZ usually most closely matches the “Large” Tsunami Inundation Zone developed by DOGAMI. Unless explicitly defined (or otherwise regulated by the jurisdiction), Chapter 6 of ASCE 7-16 would not preclude the development of certain essential facilities from being built in the TDZ. For example, jails, schools, and child care centers would be allowed to be built under this chapter, but would require the structures to be designed to withstand tsunami forces and loads. It is important to note that [this chapter](#) has been adopted as **OPTIONAL** by the Building Codes Division, which means that local governments can adopt this standard but are not required to do so. The 2019 Oregon Structural Specialty Code went into effect on October 1, 2019 with this optional chapter (Appendix O).

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