

# OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

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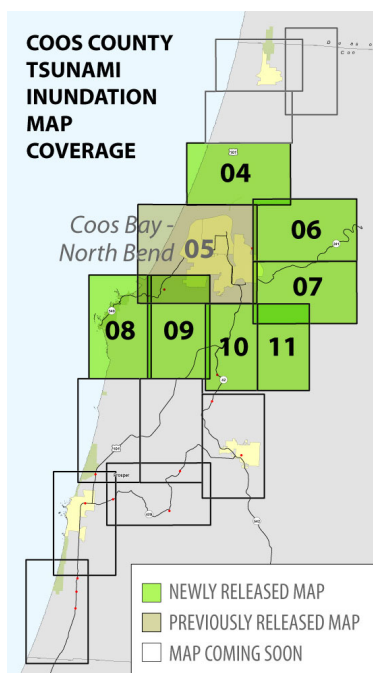
NEWS RELEASE: July 23, 2012

## Tsunami inundation maps for areas surrounding Coos Bay – North Bend in Coos County released

Portland, Oregon: The Oregon Department of Geology and Mineral Industries has released tsunami inundation maps for areas surrounding Coos Bay – North Bend in central Coos County. These maps show modeled extents for local-source (Cascadia Subduction Zone) and distant-source (Alaska) tsunami inundation scenarios.

These maps incorporate all the best tsunami science available today, including recent publications by colleagues studying the Cascadia Subduction Zone, updated computer simulation models using high-resolution lidar topographic data, and knowledge gained from the 2004 Sumatra, 2010 Chile, and 2011 Tōhoku earthquakes and tsunamis.

The maps provide a wealth of information, including estimated tsunami wave height time series charts and a measurement of the exposure each community has to the various tsunami scenarios: we count the number of buildings that are inundated by each scenario. We hope that the public, planners, emergency managers and first responders, elected officials, and other local decision makers will use these detailed and innovative TIM map products to mitigate risk and to reduce the loss of life and property.



*Current tsunami Inundation Map (TIM) series coverage for Coos County. Boxed, numbered areas are available as separate publications.*

*TIM-Coos-04, Haynes Inlet  
TIM-Coos-06, Coos River North  
TIM-Coos-07, Coos River South  
TIM-Coos-08, Charleston – Cape Arago  
TIM-Coos-09, Barview – South Slough  
TIM-Coos-10, Isthmus Slough  
TIM-Coos-11, Catching Slough*

*TIM-Coos-05, Coos Bay - North Bend was released earlier this year.*

Each publication includes two plates.

*DOGAMI's mission is to provide earth science information and regulation to make Oregon safe and prosperous.*

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Portions of DOGAMI TIM-Coos-08, Charleston – Cape Arago maps, showing modeled tsunami inundation in the Sunset Bay State Park area.

Plate 1 displays five scenarios, labeled as “T-shirt sizes” (S, M, L, XL, and XXL), of the impact of Cascadia Subduction Zone tsunamis that reflect the full range of what was experienced in the past and will be encountered in the future. The geologic record shows that the amount of time that has passed since the last great Cascadia earthquake (312 years since January 26, 1700) is not a reliable indicator of the size of the next one, so the size ranges are intended to fully bracket what might happen next.

Plate 2 shows tsunami inundation scenarios for two distant-source tsunamis that were modeled and originate in Alaska. These distant tsunamis are not nearly as dangerous as the local ones, as Oregonians will have several hours instead of only minutes to evacuate and the tsunamis themselves are much smaller. For these reasons DOGAMI’s focus is on the big Cascadia events. **If the ground shakes for an extended period of time, don’t wait for more warning, evacuate to high ground as fast as possible.**

To learn more about these publications, visit:

<http://www.oregongeology.org/pubs/tim/p-TIM-overview.htm>

DOGAMI TIM publications can be purchased on CD-ROM for \$10 each from the Nature of the Northwest Information Center (NNW), 800 NE Oregon Street, Suite 965, Portland, Oregon, 97232. You may also call NNW at (971) 673-2331 or order online at

<http://www.naturenw.org>. There is a \$4.95 shipping and handling charge for all mailed items.

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The Oregon Department of Geology and Mineral Industries is an independent agency of the State and has a broad responsibility in developing an understanding of the state’s geologic resources and natural hazards. The Department then makes this information available to communities and individuals to help inform and reduce the risks from natural hazards, such as earthquakes, tsunamis, landslides, floods and volcanic eruptions. The Department assists in the formulation of state policy where an understanding of geologic materials, geologic resources, processes, and hazards is key to decision-making. The Department is also the lead state regulatory agency for mining, oil, gas and geothermal exploration, production and reclamation.

Learn more about Oregon's geology online: <http://www.OregonGeology.org>

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