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What is TsunamiReady™, TsunamiPrepared?

TsunamiReady™, TsunamiPrepared is a partnership led by the Oregon Department of Geology and Mineral Industries (DOGAMI) with the goal of reaching every resident and visitor at the Oregon coast with a message of how to prepare for and respond to an earthquake and tsunami generated by a rupture of the *Cascadia Subduction Zone (CSZ)*. This 600+ mile long earthquake fault sits about 75 miles offshore and has the capability of generating massive earthquakes up to magnitude 9. This is similar in size to the devastating earthquake that struck Japan in March 2011.

A CSZ earthquake of this size has not happened in recorded history, yet geologic evidence indicates they have occurred with alarming frequency in the past, with the last great CSZ earthquake happening just over 300 years ago. Scientific research looking back 10,000 years into the geologic past suggests we can expect another of these great earthquakes and devastating tsunamis at any time. Our coast is also vulnerable to distant tsunamis, as was seen in 1964, following a great subduction zone earthquake off the coast of Alaska, in which five Oregonians lost their lives.

Funded by a four-year grant from the National Tsunami Hazard Mitigation Program, and incorporating the National Weather Service *TsunamiReady™* program as one of its elements, the *TsunamiReady™, TsunamiPrepared* program will be working with coastal communities to help build on the hard work many of these communities have been pursuing for years, while offering financial and material resources, mentoring and guidance.

TsunamiReady™, TsunamiPrepared Program Components



Mapping and modeling

Advanced computer modeling of what will happen when a tsunami pushes inland will help DOGAMI and coastal communities create a new generation of tsunami evacuation brochures that are more detailed and accurate, plus this new information will go into *TsunamiPrepared* community action plans, grass-roots outreach, and an interactive web-site that can pinpoint individual homes and the routes needed to reach high ground.



TsunamiReady™ communities

Becoming *TsunamiReady™* certified is an important step for any vulnerable coastal community. The *TsunamiReady™* program, developed by the National Weather Service, helps community leaders and emergency managers strengthen their local operations, offers financial incentive for participating, and will help communities be better prepared to save lives through better planning, education, and awareness.



Grass-roots outreach and education

The *TsunamiPrepared* outreach and education program will help communities build on the work they've already accomplished, or work they are ready to begin, by providing much-needed resources and guidance. Helping to build a sustainable grass-roots effort, or supporting an existing volunteer based program, will be the job of our *TsunamiPrepared Community Organizers*.



What is required to be TsunamiReady™?

TsunamiReady™ is part of the NWS *StormReady™* program that helps community leaders and emergency managers strengthen their local operations by being better prepared to save lives through advanced planning, education, and awareness. It rewards local programs and encourages better tsunami preparedness programs in jurisdictions surrounding communities and counties.

A TsunamiReady™ community must:

- ▶ Establish a 24-hour warning point and emergency operations center with advanced communications capability
- ▶ Develop a formal tsunami plan, which includes promoting public readiness and holding emergency exercises



Oregon Grass-Roots Success Stories

Beginning in 2005, the City of Seaside and DOGAMI implemented an innovative, volunteer-based outreach and education campaign that proved to be a successful and cost effective way of reaching people in the community with a message of tsunami awareness and preparedness. Outreach efforts targeted local residents, businesses, visitors, and students and included a grass-roots Neighborhood Educator project, workshops, a school outreach program, and a city-wide tsunami evacuation drill. This 9-month outreach program reached almost 70% of local households.

“A grass-roots program of outreach and education that focuses all the way down to individual neighborhoods is the best way we know to make people tsunami prepared.”
— Vicki McConnell, State Geologist.

There are similar success stories in many, but not all, coastal communities. The *TsunamiReady™, TsunamiPrepared* outreach and education program wants to build on and expand those efforts, bringing a nationally funded, locally focused, sustainable, grass-roots effort to every coastal community in Oregon.



The *TsunamiReady™, TsunamiPrepared* team will work closely with interested coastal communities to help them join the many Oregon towns and counties that have already received *TsunamiReady™* certification.

What more is needed to be TsunamiPrepared?

Selected coastal communities will have the opportunity to work with a *TsunamiPrepared* Community Organizer, who will help recruit local volunteers and guide these communities in building a sustainable, volunteer-based program.

Community-based TsunamiPrepared activities will include:

- ▶ Surveys of residents to determine their level of tsunami awareness
- ▶ Volunteer-based neighborhood education campaigns
- ▶ Organizing and holding community-wide tsunami evacuation drills
- ▶ Local workshops targeting the business and lodging community, residents, and visitors
- ▶ Working with local schools on tsunami awareness and preparedness



For more information on the *TsunamiReady™, TsunamiPrepared* program, contact George Priest, Oregon Department of Geology and Mineral Industries, at (541) 574-6658, or Althea Turner, Oregon Emergency Management, at (503) 378-2911.

TsunamiReady™, TsunamiPrepared Program Partners

