

# Washington State Report to National Tsunami Hazard Mitigation Program

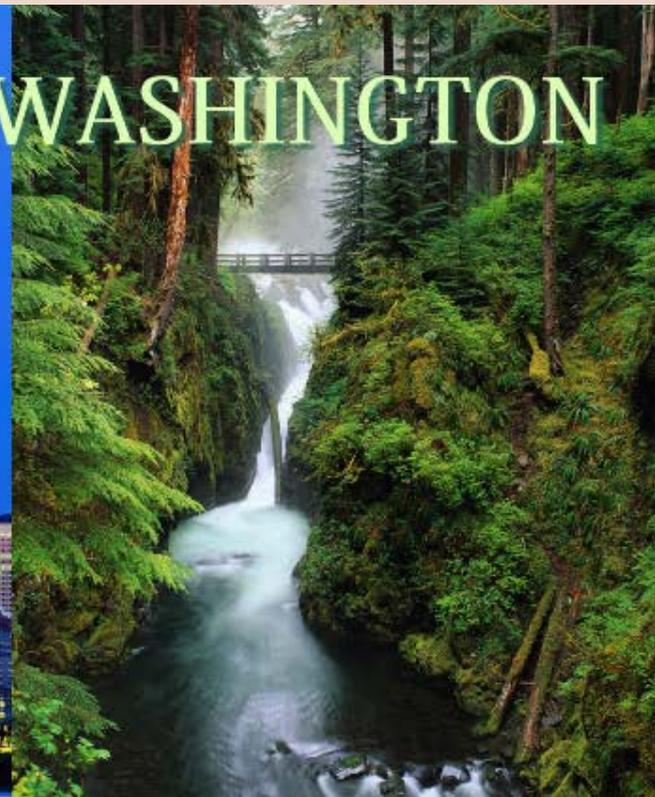


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STATE of WASHINGTON

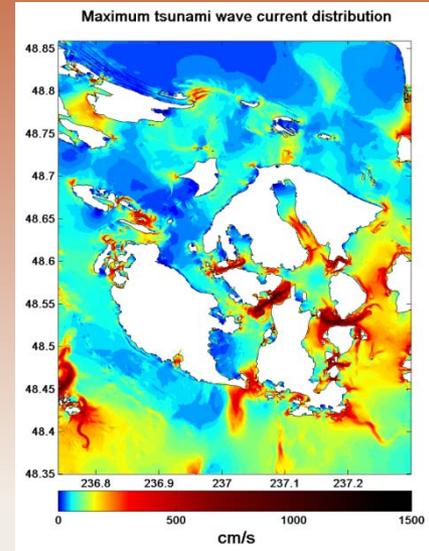


# 2009-10 Accomplishments

## Washington State Emergency Management & Department of Natural Resources

(2012-14 Extended Performance Period)

- Inundation modeling for the San Juan Islands has been completed by PMEL in January 2014.
  - Focus groups are being scheduled and an official inundation map is in preparation for publication by Washington DNR.
  - An update to the 2010-11 remodeling of the SW Washington Coast is currently underway by PMEL due to issues with an NGDC-created DEM. These results are highly anticipated by local communities.
- The Washington State-Local Tsunami Workgroup met quarterly to coordinate education & outreach efforts, assess siren testing protocols, and evaluated exercise response procedures through the PACIFEX series.
- In partnership with WA DNR and local jurisdictions, WA EMD continued to provide training on the Disaster Response Guidebook for Hotels and Motels on the Washington Coast.
  - Lodging establishments in Jefferson , Clallam, Pacific & Grays Harbor counties participated in the training.
- The “*Media Guide to Natural Hazards in Washington*” was updated and revised. Due to a change in personnel, the media outreach and training component will be completed before the end of the award period in July 2014.

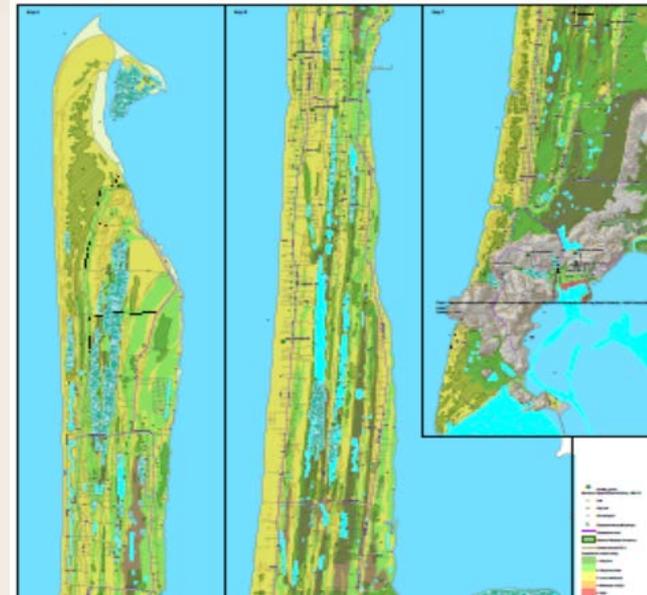


# 2009-10 Accomplishments

## Washington State Emergency Management & Department of Natural Resources

(2012-14 Extended Performance Period)

- The Cities of Raymond, South Bend, and Westport and the Lower Elwha Tribe were recognized as TsunamiReady Communities!
  - The City of Hoquiam and the Makah Indian Tribe are in the process of completing TsunamiReady requirements for recognition in the near future.
  - The City of Tacoma is beginning to evaluate TsunamiReady requirements and is in the process of establishing evacuation routes and creating a Tsunami Response Plan.
  - This would be the first Puget Sound jurisdiction to complete TsunamiReady requirements and will hopefully serve as a catalyst for other Puget Sound jurisdictions.
- Continuing to work with WA Department of Natural Resources to publish bi-monthly issues of *TsuInfo Alert*
  - *NTHMP MES evaluation completed in 2010.*
- Washington DNR completed the landslide and liquefaction susceptibility mapping of tsunami evacuation routes for the Long Beach Peninsula.



# Project Safe Haven: Tsunami Vertical Evacuation

- **Community-based, 'bottom-up' approach!**
  - Phase I- Siting of evacuation safe haven & recommendation on type of solution using the World Café approach.
  - Phase II – Urban design charrettes by architects and preliminary cost development by project engineers.
  - Phase III- Final community report delivered
- Phases I-III Completed through FY09-11 NTHMP
- Phase IV (FY12 NHTMP funds) – Site Specific Vertical Evacuation Modeling Analysis Completed to support 2 projects
  - Long Beach Elementary School Berm
  - Ocosta Elementary School Gym
- Used Oregon's L1 Source (~2,500 year recurrence) for consistency and based on FEMA/NOAA guidance and draft ASCE 7 recommendations.



# All-Hazard Alert Broadcast (AHAB) Tsunami Warning System

- Hired an independent third-party conduct a performance evaluation of the AHAB system with FY09 NTHMP Funds.
  - Overall, results indicated positive results from system implementation as well as a few areas in which reliability could be improved and those modifications have been occurring with FY10-12 NTHMP funds.
- Washington State and Local Emergency Management Agencies continued to implement a consistent monthly audible testing regimen of the AHAB system using the Westminster Chime tone.
  - Activated by Counties/Tribes on even numbered months
  - Activated by State Emergency Operations Center on odd numbered months.
- Continued Installation of All-Hazard Alert Broadcasting (AHAB) Sirens in coastal communities (2 were installed in 2013 with FY12 NTHMP Funds).
  - Quileute Tribal reservation at La Push (1) and City of Port Angeles (1). Installations were completed in July/August 2013.



# The Great Washington ShakeOut Earthquake/Tsunami Drill

## Pre-Event Awareness Campaign

- Target Markets:
  - Schools, Residents, Lodging Establishments, Media Outlets
    - PSA developed by EMD & NOAA/NWS
    - Press Releases issued by WA EMD & Local Communities
- Drills had EXTENSIVE media coverage and declared an overwhelming success!
  - Many, Many lessons learned for tsunami evacuation by local jurisdictions!!! (i.e. Whew... 300 kids to the top of a residential street in less than 15 minutes...now what?)
- 5 sirens did not activate as part of the Tsunami Warning Communications Test
  - Learned that new satellite pathway was not programmed to broadcast messages over a certain length. Corrections have been made.
  - Invaluable finding of this tsunami siren/evacuation drill!



## 2013 Participation totals for Coastal Region County

Region County	Total
<u>Clallam</u>	13,488
<u>Grays Harbor</u>	7,217
<u>Jefferson</u>	2,199
<u>Mason</u>	4,537
<u>Pacific</u>	4,646

**Chill - It's Only a Drill**  
**October 18, 10:18 a.m.**

**The Great WA ShakeOut Earthquake Drill**

**DROP! COVER! HOLD ON!**

**Tsunami Siren Test**  
 Siren will sound for 3 minutes & include an audio message.

For more information about the combined drills contact your local Emergency Management Office:

Clallam County 360-457-2007	Pacific County 360-274-9104	Quiltsa 360-374-0000	
Jefferson County ask@jefferson-em.com 360-285-8988	Colquhoun Harbor 360-276-8215 x397	Skagit County 360-374-4043	
Gray Harbor County 360-249-3911	Makah Tribe 360-645-8778	Lower Chehalis Tribe 360-453-8253 x41	
	Shoalwater Bay Tribe 360-367-8130		

Register for the Great ShakeOut at [ShakeOut.org/washington](http://ShakeOut.org/washington)