Cantwell Calls for Investment in Tsunami Warning System

Local News

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Olympia, WA - On the eve of the one-year anniversary of the devastating Japanese tsunami, U.S. Senator Maria Cantwell (D-WA) called for continued investment in life-saving tsunami detection and warning technology that helps protect Washington state’s coastal communities. Speaking from the Pacific Marine Environmental Laboratory (PMEL) in Seattle, which developed the high-tech tsunami detection buoys now deployed around the world, Cantwell highlighted the progress that has been made in protecting communities and coastal economies from tsunamis. Some 300,000 Washingtonians live in tsunami danger zones.Just six years ago, there were only six DART (deep-ocean assessment and reporting of tsunamis) buoys deployed in the Pacific Ocean – half of which were not operational. Based on lessons learned from the tragic Indonesian tsunami, Cantwell fought to pass tsunami preparedness legislation in 2006 that provided Washington state with support to improve tsunami evacuation routes, update inundation maps, and increase the number of DART warning buoys worldwide to 39. However, 10 of the 39 DART buoys are currently not operational, including one just off the mouth of the Columbia River. DART buoys are an integral part of the Pacific Ocean’s tsunami detection and warning system, providing instant details about whether a tsunami exists and its path, which equips officials with the data they need to issue immediate life-saving warnings to at-risk communities.

Tsunamis generated by powerful distant earthquakes in the Pacific Ocean or local quakes caused by an offshore fault called the Cascadia subduction zone are an ever-present threat to Washington state. The 680-mile long Cascadia subduction zone lies off the coasts of Washington and Oregon and is similar in size and geologic character to the fault responsible for the devastating Indian Ocean tsunami in 2004. Like last year’s Japanese tsunami, a Cascadia or Puget Sound generated tsunami would allow for only 20 to 30 minutes of warning before it comes ashore.**“Nearly 300,000 people live in a tsunami danger zone in Washington state,”** Cantwell said. **“That’s why we need to make sure we have the best tsunami detection technology in place to save lives, accurately gauge potential threats, and direct resources to at-risk community preparedness. Last year’s tragedy in Japan was another wake-up call that we must invest in lifesaving tsunami warning technology to protect Washington’s coastal communities. I’ll continue to fight to ensure that tsunami research is a top priority on the Senate’s ocean agenda.”**Cantwell said Saturday that she will continue to urge her colleagues to support technology and research that would save lives in the event of a tsunami.Since the Tsunami Warning and Education Act’s (TWEA) (P.L. 109-424) passage in 2006, the Washington State Department of Natural Resources Geology and Earth Resources Division has worked closely with the National Oceanic and Atmospheric Administration (NOAA), the Federal Emergency Management Agency, the U.S. Geological Survey, Washington state emergency management agencies, and local communities to better prepare Washington’s coastal communities for tsunami impacts.**“With the help of NOAA’s tsunami hazard programs, Washington has made real progress in making our communities safer,”** said Peter Goldmark, Washington State Public Lands Commissioner.

“A strong warning system, along with a commitment to state and local disaster preparedness are the keys to keeping them that way.”Since the passage of this legislation, many communities in Washington state are now “tsunami ready,” including: Aberdeen, Clallam County, Grays Harbor County, Ilwaco, Jefferson County, Long Beach, Ocean Shores, Pacific County, Quinault Indian Nation, Raymond, Shoalwater Bay Tribe, and South Bend. The regional network and coordination among coastal states has been significantly strengthened as well as a result of this legislation.In June of 2006, an earthquake off California triggered a tsunami warning from Baja, Mexico to Vancouver, Canada. However, emergency warning sirens in La Push and Neah Bay did not go off automatically as they were supposed to. In La Push, police had to manually turn on the alarms to evacuate 600 coastal residents to nearby bluffs. In Neah Bay, the sirens could not be turned on manually; instead, local police and U.S. Fish and Wildlife officials had to go door-to-door to evacuate residents.Following this incident, Cantwell fought to secure $443,000 for the Washington State Emergency Management Division (EMD) to install newer and better tsunami warning sirens in more coastal communities. The sirens were installed in Long Beach, Ocean Shores, Ilwaco, Tokeland, Tahola, Clallam Bay, Port Angeles, and Point Hudson near Port Townsend.NOAA has also led on development of tsunami flooding forecast efforts, including work done at the Pacific Marine Environmental Laboratory (PMEL). These efforts involve working with U.S. coastal states to develop tsunami inundation maps for evacuation planning in communities – including five in Washington state. PMEL has also developed real time flooding forecast capabilities to include 75 communities along U.S. coastline by the end of 2012.The DART buoys helped notify Washington state coastal communities last year after the devastating tsunami was detected off the coast of Japan. Approximately 25 minutes after last year’s earthquake off the coast of Japan, the approaching tsunami was recorded by a DART buoy off the east coast of Japan. NOAA was able to use that information to determine when and where waves would arrive in Hawaii and the continental United States. As a result of NOAA’s tsunami warnings, targeted coastal evacuations in Hawaii and along the U.S. West Coast were ordered. In Washington state, limited evacuations occurred in Pacific and Grays Harbor counties during the night. By morning, more than 600 people from both counties had left the tsunami danger zone.The high-tech DART buoys help first responders and emergency management officials focus their evacuation efforts only in those communities in the tsunami’s path, which prevents the unnecessary disruption of coastal commerce. Washington state’s coastal economy supports 165,000 jobs and produces $10.8 billion in economic activity each year. Tourism is Washington state’s fourth largest industry. Makah Chairman Micah McCarty applauded Cantwell’s efforts to use technology to protect and preserve lives: **"This effort not only protects our town but it provides increased tsunami readiness and protection for our visitors as well. After the great Alaska earthquake in 1964, our remote village needlessly evacuated our entire town during the 1960s and 1970s based on reports of earthquakes. Now, with the DART system we use technology to evaluate tsunami threat and evacuate only when necessary."**In 1994, a false alarm triggered an evacuation in Hawaii that cost the island community an estimated $30 million dollars in lost revenues. In 2003, when a 7.8-magnitude quake hit off the coast of Alaska’s Aleutian Islands, a tsunami warning was issued for Hawaii. Using the DART system, officials realized that the earthquake wouldn’t trigger a deadly tsunami and were able to withdraw a tsunami warning within an hour. According to the Associated Press, withdrawing this tsunami warning saved over $68 million dollars.