

# United States Senate

WASHINGTON, DC 20510

March 18, 2016

The Honorable Richard C. Shelby, Chairman  
The Honorable Barbara A. Mikulski, Vice Chairwoman  
Committee on Appropriations  
Subcommittee on Commerce, Justice, Science, & Related Agencies  
Washington, D.C. 20510

Dear Chairman Shelby and Vice Chairwoman Mikulski:

We greatly appreciate your support for the National Oceanic and Atmospheric Administration's (NOAA) Tsunami Program. One particularly important component of that program is the National Tsunami Hazard Mitigation Program (NTHMP). The NTHMP provides critical funding for preparedness and resilience activities in states across the Nation. We respectfully request that you maintain funding for the NTHMP at the level established in the Fiscal Year 2015 Omnibus Appropriations Act. For the third year in a row, NOAA has requested a \$6 million decrease in funding for this important program – eliminating NOAA's partner funding for education, outreach, and awareness programs through NTHMP.

Tsunami are not an abstract threat. The magnitude 8.3 earthquake that occurred off the coast of Chile on September 16, 2015, emphasized the continued need for tsunami preparedness. The quake sent a tsunami wave 15 feet high into the coastal town of Coquimbo and smaller waves hit towns up and down the coast. Tsunami waves as high as 3 feet were registered in Hawai'i, and smaller waves were registered as far away as Alaska and Japan. As news of the quake spread, the immediate question on the minds of coastal communities across the Pacific was not whether it would generate a tsunami, but how soon a tsunami would hit their shore. NOAA's Tsunami Warning Centers responded quickly, confirming that our nation's coastal communities were not at serious risk from devastating tsunami waves, though they issued warnings for many regions. The incident served as a reminder of the risk that our coasts face, as well as the need for sustained, robust preparedness activities.

West Coast states, Hawaii, and the U.S. Pacific territories take this risk seriously. Geologists predict a major earthquake along the Cascadia Subduction Zone, a fault that runs from northern California to Vancouver Island. This likely catastrophic earthquake could trigger tsunamis waves as high as 30 feet up and down the West Coast, leaving infrastructure destroyed or incapacitated and tens of thousands of people dead or injured. To prepare for such an earthquake – which is a matter of “when”, not “if” – the three West Coast states have stepped up their tsunami preparedness efforts. Last summer, the Washington National Guard staged a weeklong training exercise called “Evergreen Tremor” to practice response activities in the event of a catastrophic earthquake. Another drill called “Cascadia Rising”, led by FEMA, is scheduled for early June 2016. Nearly 6,000 emergency and military personnel and at least one naval vessel will participate in that upcoming exercise.

NTHMP grants were essential for civilian participants to play their role in these exercises; without the NTHMP grant program, local communities would not have the tools to respond to NOAA's tsunami warnings and watches. The NTHMP's state grant program leverages state funding to implement tsunami warning infrastructure such as sirens, evacuation planning and signage, and education programs for communities and schools. The NTHMP allows for state and local partners to ensure alignment of emergency response plans and mitigation programs in coastal areas. These community-level partnerships are important because tsunami preparedness hinges on local efforts. Warnings issued by NOAA's Tsunami Centers alone are insufficient because in order to save lives, coastal residents, schools, businesses, and visitors need to know how to react to those warnings. In its 2011 report, "Tsunami Warning and Preparedness: An Assessment of the U.S. Tsunami Program and the Nation's Preparedness Efforts," ("Tsunami Report") the National Academy of Sciences (NAS) observed:

Effective public education and emergency management can prepare individuals and reduce the likelihood of fatalities when tsunamis [sic] occur. Education is credited for saving thousands of lives during the 2004 Indian Ocean tsunami, the 2009 Samoan tsunami, and the 2010 Chilean tsunami, and education will save lives in future tsunamis [sic] that strike U.S. communities. (NAS Tsunami Report, p. 74)

Individual education alone is not enough. Communities also need to support residents and visitors with evacuation maps and plans to reach safety. The NAS's assessment of current evacuation plans showed room for improvement:

Evacuation maps are critical tools for preparing and educating the public about the hazard and the appropriate response before an impending tsunami. For most at-risk communities, the committee concludes that progress has been made toward generating improved evacuation maps. However, methods to produce evacuation maps vary greatly among NTHMP member states; that means at-risk populations must try to interpret different representations of tsunami risk. (NAS Tsunami Report, p. 7)

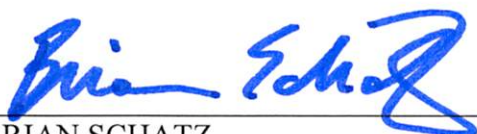
To address these concerns, the NAS Tsunami Report recommends additional action by the NTHMP to create uniform standards and metrics to assess the effectiveness of evacuation maps so that coastal communities across the nation can provide equal support to residents and visitors alike.

The Senate Commerce Committee incorporated this and other NAS Tsunami Report recommendations into its version of bipartisan tsunami legislation championed by Senators Cantwell, Sullivan, and Schatz last year: the Tsunami Warning, Education, and Research Act of 2015 (TWEREA). However, to make real progress, the NTHMP needs funding to sustain its current activities and act on the NAS Tsunami

Report's recommendations. We therefore urge the Subcommittee to fund this program at FY15 levels and not endorse NOAA's proposed cuts to this critical program.

Thank you for your consideration of this request.

Sincerely,



BRIAN SCHATZ  
United States Senator



MARIA CANTWELL  
United States Senator



MAZIE K. HIRONO  
United States Senator



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