



SCIENCE ADVISORY BOARD

April 18, 2024

Dr. Richard W. Spinrad
Under Secretary of Commerce for Oceans and Atmosphere & NOAA Administrator
Herbert C. Hoover Building, Room 6811
14th Street & Constitution Avenue, NW
Washington, DC 20230

Dear Dr. Spinrad:

Subject: Transmittal of the NOAA Science Advisory Board Tsunami Science and Technology Advisory Panel 2023 Annual Report and White Paper on Prioritizing Upgrades to Tsunami Forecast Capabilities to Protect Public Safety in Large Coastal Population Centers and Complicated Waterways

On behalf of the NOAA Science Advisory Board (SAB), I am pleased to transmit to you the SAB Tsunami Science and Technology Advisory Panel (TSTAP) *2023 Annual Report and White Paper on Prioritizing Upgrades to Tsunami Forecast Capabilities to Protect Public Safety in Large Coastal Population Centers and Complicated Waterways*. The TSTAP delivered its first [quadrennial report](#) to Congress, the SAB, and NOAA in 2021. The TSTAP received a [response from NOAA](#) to their quadrennial report in April 2023. The TSTAP's 2023 annual report, presented here, focuses on the NOAA response and the TSTAP's understanding of which recommendations NOAA is acting on and which are still outstanding. This annual report also highlights briefings from subject matter experts, the NOAA National Tsunami Hazard Mitigation Program (NTHMP), and an overview of the TSTAP's first in-person meeting. The report was presented to and approved by the SAB at the March 2024 SAB Meeting.

As a supplementary document the TSTAP presents a white paper titled "*Prioritizing Upgrades to Tsunami Forecast Capabilities to Protect Public Safety in Large Coastal Population Centers and Complicated Waterways*" to highlight the details and necessary upgrades to the existing tsunami warning system to effectively alert high-risk communities located in complicated waterways, such as the Puget Sound, San Francisco Bay, the Cook Inlet, and Honolulu.

In 2023 there were 17 tsunami events globally reported by NOAA-NCEI. Of the 17 tsunamis, 13 were generated by earthquakes, one by volcanic activity, one by meteorological conditions, and two with unknown triggers. Two of these events impacted the U.S.: a meteotsunami in the Gulf of Mexico and an earthquake-triggered tsunami near Sand Point, Alaska. Tsunamis happen frequently, and it is only a matter of time before a major tsunami devastates U.S. shores. Therefore, it is imperative that NOAA continues its efforts to prepare the U.S. for these events.

At the time of this correspondence (April 2024), TSTAP informed the SAB that NOAA is diverting funding from the FY24 NOAA-NTHMP state partner grants to support upgrades to the internal analytical software at the Tsunami Warning Centers (TWCs). In its communications with the NTHMP, NOAA referenced recommendations in the 2021 TSTAP quadrennial report to support this software upgrade; however, reducing NTHMP support to fund TWC work was not TSTAP's intent. Reducing or eliminating NTHMP partner grants could cause a more critical outcome: severe reduction in the capability of state and local officials to continue tsunami preparedness and mitigation work related to catastrophic, life-threatening local tsunami events. In addition, cuts to the NTHMP partner grants will significantly hamper the NTHMP's ability to address other TSTAP 2021 recommendations, nearly half of which were delegated to the NTHMP by NOAA. This diversion of support away from the NTHMP partners is very concerning to TSTAP and the SAB, the impacts of which will be closely monitored by TSTAP going forward.

As this report is considered an annual update on TSTAP's activities to the SAB, a separate response from NOAA is not required. The SAB greatly appreciates the opportunity to provide this report to NOAA and we welcome the opportunity to further engage NOAA on TSTAP efforts.

Very respectfully,



John R. Kreider
SAB Chair

Cc:	Sarah Kapnick	Carrie Garrison-Laney
	Michael Morgan	Corina Allen
	Karen Hyun	Brad Colman
	Michael Weiss	Scott Glenn
	Kenneth Graham	Casey Stewart
	Michelle Mainelli	
	Greg Schoor	

Attachment: NOAA Science Advisory Board Tsunami Science and Technology Advisory Panel 2023 Annual Report and White Paper on Prioritizing Upgrades to Tsunami Forecast Capabilities to Protect Public Safety in Large Coastal Population Centers and Complicated Waterways