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NOAA Response to the Statement on the Need for National Tsunami Hazard Mapping and Improved Tsunami Characterization in FEMA's National Risk Assessment

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Recommendations from the Tsunami Science and Technology Advisory Panel (TSTAP): Recommendation 1

Recommendation 1: NOAA communicates to FEMA leadership and Federal decision makers that the National Risk Index (NRI) currently misrepresents tsunami risk and that these errors can have negative impacts to community preparedness, local and county planning, mitigation funding opportunities, access to funding, and policy-making.

Status:

- Concerns about the tsunami risk representation in FEMA's NRI were presented to representatives that attended the Summer Meeting of the National Tsunami Hazard Mitigation Program (NTHMP) in Portland, OR, in late July 2023.
- A team was formed to meet, discuss, and review the potential refinements in the NRI for tsunamis. Virtual working sessions have occurred in Aug. 2023, Feb. and April 2024 (3 sessions) thus far, with more soon to be scheduled (June/July).



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Recommendations from the Tsunami Science and Technology Advisory Panel (TSTAP): Recommendation 2

Recommendation 2: NOAA supports its Federal, state, and territory partners to develop interim tsunami hazard maps for local and distant tsunami sources for NRI use based on subject matter expertise that includes consistent hazard mapping assumptions and includes attributes relevant to the NRI (e.g., threat levels, annualized frequencies, and historic loss ratios).

Status:

- Engagements between NRI Team (FEMA, USGS, and NTHMP Partners) have produced substantial, detailed analysis of data provided to better estimate building and casualty loss, two key inputs that are used in the NRI risk representation.
- As of early June, the team was approaching completion of preliminary building and casualty average annualized loss results for the Pacific Coast, Pacific Territories, Caribbean Territories, Alaska, and Hawai'i. NRI team will be soon be scheduling meetings with these states and territories, individually, to review these preliminary results. Likely mid-to-late June for those meetings.
- The NRI team is preparing a National Tsunami Technical Report and supporting documentation for NTHMP review before the July 2024 NTHMP Summer Meeting.



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Recommendations from the Tsunami Science and Technology Advisory Panel (TSTAP): Recommendation 3

Recommendation 3: NOAA works with its partners to develop national probabilistic tsunami maps for local and distant tsunami sources that are updated every four years to align with the building code cycle and the USGS National Seismic Hazard Map.

Status:

- Through NTHMP grants, NOAA supports grants exploring probabilistic tsunami hazard analysis. Additionally, NTHMP modified strategy elements in the 2024 -29 NTHMP Strategic Plan to develop national probabilistic tsunami maps.

Note: On the **need to evaluate the non-tsunami hazard maps** and categorizations in FEMA's NRI: NRI Team has expressed that their focus is refining tsunami risk categorization, then using lessons learned to expand to other hazards.



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Contact Information

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