



COUNTY OF

For the meeting of: 8/18/202

File #: 20-270

To: Board of Supervisors

From: Sheriff

Agenda Section: Departmental

SUBJECT:

Updates to the Tsunami Hazard Inundation and Evacuation

RECOMMENDATION(S):

That the Board of Supervisors:

1. Adopt the attached resolution recognizing the necessity of updated tsunami inundation maps and adopting them for local planning use.
2. Receive a presentation from the Redwood Coast Tsunami Work Group, California Geological Survey and California Governor's Office of Emergency Services.
3. Direct the Clerk of the Board to return a certified copy of the attached resolution to the Sheriff's Office of Emergency Services.

SOURCE OF FUNDING:

California Office of Emergency Services
California Geologic Survey

DISCUSSION:

The California Tsunami Program, led by the California Governor's Office of Emergency Services and the California Geological Survey, is responsible for updating the state's tsunami inundation maps for evacuation planning and public safety. Communities use the State inundation maps to develop and update their evacuation maps and local response plans.

The State completed the current statewide tsunami inundation maps in 2009. Based on more recent information from tsunamis that have occurred since 2009, the State has determined that an update of the 2009 maps is warranted to protect the public from tsunami hazards.

The Tsunami Hazard Evacuation Maps for Emergency Planning are a new product from the State of California and are based on the Redwood Coast Tsunami Work Group (RCTWG) tsunami hazard map brochures first published in 2010. These new maps were produced via a process led by the RCTWG mapping subcommittee and have been vetted by emergency managers, first responders, and other important local stakeholders.

Are the existing 2009 tsunami inundation maps and related evacuation maps inaccurate or inadequate?

- The existing maps accurately capture the tsunami hazard from most major tsunamis from local and distant source threats.
- There are multiple reasons for the update: 1) to develop more precise tsunami hazard maps incorporating new information; 2) to follow national guidance on updating maps every 5 to 10 years; and 3) to provide more conservative, more consistent tsunami inundation maps statewide.
- Significant changes to the 2009 tsunami maps are not expected in most places.
- If significant changes are recommended, the State will work with community emergency planners to determine appropriate evacuation lines and to ensure they understand the reason for the change.

What new tsunami hazard information is available, and why is it appropriate for updating the 2009 maps?

- Over the past 10 years, tsunami science has significantly improved, with a better understanding of tsunami sources and enhancements to computer modeling.
- Tsunami events such as 2010 Chile, 2011 Japan, and 2018 Indonesia have taught scientists and planners a number of lessons about how to better plan for and respond to tsunamis.
- A new type of tsunami hazard map, the probabilistic tsunami hazard analysis (PTHA) map, represents all potential tsunami events with a 1000-year average return period, which translates to a 5 percent change of flood exceedance over a 50-year period.
- Overall, the new State tsunami inundation maps best characterize the state of tsunami science in California, and conservatively represent safe evacuation from all realistic tsunami events.

Before your Board today is a resolution adopting the newly updated Humboldt County tsunami inundation maps for local use in evacuation and public safety planning.

FINANCIAL IMPACT:

There is no cost to the county for the map update. The project was paid for by the California Office of Emergency Services and California Geologic Survey. This resolution is to adopt usage of the updated maps to be used for future planning.

STRATEGIC FRAMEWORK:

This action supports your Board's Strategic Framework by creating opportunities for improved safety and health

OTHER AGENCY INVOLVEMENT:

Redwood Coast Tsunami Work Group, California Geological Survey, California Governor's Office of Emergency Services, Humboldt County Sheriff's Office of Emergency Services.

ALTERNATIVES TO STAFF RECOMMENDATIONS:

Board discretion.

ATTACHMENTS:

1. 2020 California Tsunami Inundation Map and Community Evacuation Plan Updates - Process and Guidance

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2. 2020 California Tsunami Inundation Map and Community Evacuation Plan Updates - FAQ
3. Resolution for Adoption of the updated Humboldt County Tsunami Inundation Maps.

PREVIOUS ACTION/REFERRAL:

Board Order No.: N/A

Meeting of: N/A

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