

# Guidance for Safe Minimum Offshore Depth for Vessel Movement for Tsunamis



Created by the National Tsunami Hazard Mitigation Program  
With assistance from the U.S. Coast Guard

Updated March 30, 2017

**General Recommendations for Recreational and Commercial Boaters:** It is NOT recommended that boaters try to take vessels offshore before or during a tsunami. And, if they are offshore, they should not try to re-enter the harbor until the harbor master or port captain indicates it is safe to do so.

## **LARGE LOCAL-SOURCE TSUNAMI – Tsunami may arrive in 10-15 minutes**

- If you are on land or tied up at the dock: Do not attempt to take your vessel offshore. Leave your boat and go to high ground on foot as soon as possible. You do not have time to save your boat in this situation and put your life at risk if you try to do so.
- If you are in deep water or very close to deep water: Take your vessel further offshore beyond the “minimum offshore safe depth” outlined in the Table 1 for your U.S. state/territory/commonwealth or region. Typically, this depth is 50 to 100 fathoms (300 to 600 foot) depth, to be safe from local tsunamis.
- If you are on the water but very near shore: Use your best judgement to decide between two options: safely beach/dock the vessel and evacuate to high ground, or go beyond the minimum offshore safe depth. Attempting to beach the vessel could be challenging and dangerous, dependent on wave conditions, water levels, and the presence of sand bars. It is easy for a boat to run aground or capsize before reaching the shore only to then be swept away by the incoming tsunami. However, if you can safely beach or dock your boat and get to high ground before the tsunami, then this is your best option. If that is not possible, head to deep water as quickly as possible.

## **LARGE DISTANT-SOURCE TSUNAMI – Tsunami arrival at least two-hours away**

- It is NOT recommended that boaters try to take their vessels offshore before or during a tsunami. It is safer to keep your boat docked during a tsunami because most tsunamis are relatively small, and your personal safety is more important than saving your property/boat.
- On the rare occasion when a larger tsunami is expected (i.e. Warning level), the boat owner may consider taking their boat offshore bearing in mind the following:
  - The SIZE of the tsunami.
  - How much TIME before the tsunami arrives.
  - The PREPAREDNESS of the boat and EXPERIENCE of its captain to stay offshore for extended period of time (12-24 hours), or travel to safe, undamaged harbors.
  - The WEATHER at sea could be as dangerous as the tsunami itself.
- Do not go offshore unless you are very sure that you can get beyond the recommended minimum offshore safe depth at least 30 minutes before the estimated tsunami arrival time for your coastline. Please refer to the Table 1 for the recommended minimum safe depth for your U.S. state/territory/commonwealth or region.

**TABLE 1: Specific regional guidance for minimum offshore safe depths for maritime vessel evacuation prior to the arrival of tsunami.**

State/Territory	Distant Source (ships in harbor)*	Local Source (ships at sea)*	Notes on this Update
California	30 fathoms	100 fathoms	Evaluated; evaluating potential safe areas within large bays and ports
Oregon	30 fathoms	100 fathoms	Evaluated; also evaluating Columbia River
Alaska	30 fathoms	100 fathoms	Evaluated; ships should be at least 1/2 mile from shore for all scenarios
Washington	30 fathoms	100 fathoms	Evaluated; evaluating special conditions exist inside Puget Sound
Hawaii	50 fathoms	50 fathoms	Evaluated; implemented in Coast Guard response plans at some locations
American Samoa	50 fathoms	50 fathoms	Evaluating, guidance from others
Puerto Rico	50 fathoms	100 fathoms	Evaluated
USVI	50 fathoms	100 fathoms	Evaluating; possibly follow PR
Guam	50 fathoms	100 fathoms	Coordinated with USCG Guam Sector
CNMI	50 fathoms	100 fathoms	Coordinated with USCG Guam Sector
Gulf Coast States		100 fathoms	Evaluating; issues with long, shallow shelf complicate getting beyond safe depth
East Coast States		100 fathoms	Evaluating; issues with long, shallow shelf complicate getting beyond safe depth

\* Ships also recommended to be a minimum of ½ mile from shore or fringing reef

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