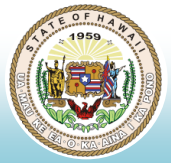




# Japan Tsunami Marine Debris

## What to do if you see debris in Hawaii's ocean or beaches



### – GENERAL GUIDANCE –

**Be Safe:** If you don't know what it is and it looks hazardous don't touch it. Collect as much information as you can from a safe distance and report it.

**Report the Debris:** Call DLNR at (808) 587-0400 or send an email to [dlnr.marine.debris@hawaii.gov](mailto:dlnr.marine.debris@hawaii.gov) and [disasterdebris@noaa.gov](mailto:disasterdebris@noaa.gov) to report findings of possible tsunami marine debris, including:

- Unusually large quantities of debris,
- Unusual debris items or items with identifiable markings (e.g., name, registration number),
- Debris with living organisms other than gooseneck barnacles on it, or
- Large-sized debris (too large to remove by hand).



Blue mussels (left) and chiton and limpets (right) not native to Hawaii are a concern. Call DLNR.

**Send the following information** to help DLNR staff determine if a more thorough investigation is necessary. This information will also be logged in NOAA's sightings tracker.

- Date and time sighted or found,
- Location of sighting,
- Detailed description of the object and any growing organisms on it,
- Photo of the debris, and
- Finder's contact information.



Gooseneck barnacles are not of concern.

**Do I have to worry about radiation? No.** Radiation experts agree that it is highly unlikely that any tsunami-generated marine debris will hold harmful levels of radiation from the Fukushima nuclear emergency. Numerous debris items have been tested, including items known to be from the tsunami, and no radioactive contamination above normal has been found. Marine debris in Hawaii has been monitored since April 2011, and no radioactive contamination above normal levels has been found.

### – GUIDELINES BY DEBRIS TYPE –

#### Litter and small marine debris items

*Examples: plastic bottles, floats, plastic tubs or beer crates, aluminum cans, buoys, and Styrofoam.*

**If practical, we encourage you to remove small debris safely and recycle as much of it as possible.** You can find *Beach Cleanup Guidelines* on page 2. Marine debris has been and continues to be a problem here in Hawaii. In most cases, it is extremely difficult to determine whether debris came from the tsunami without unique identifying information (e.g., registration number, person's name, etc.) Items with Asian characters, such as buoys, light bulbs, containers and bottles, wash up in Hawaii and on the U.S. Pacific coasts all the time.

#### Marine debris with living organisms

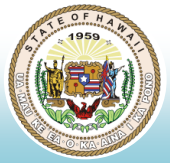
**If you see anything other than gooseneck barnacles, please report the item ASAP to DLNR and NOAA (directions on page 1).** Only if you can do so safely, remove the item from the water or shoreline and place it securely in a trash bag, or if it is large, but moveable, move the item out of the wash of the waves, or if not moveable, leave it in place, but be sure to notify DLNR. **Do not wash or brush the organisms off. Do not eat these organisms and never move debris with organisms on it into other bodies of water** (e.g., an aquarium or pond).

Most marine debris will have marine life of some kind growing on it. In Hawaii, preventing establishment of alien species that can become invasive and threaten native species is a constant concern. Gooseneck barnacles (photo 2<sup>nd</sup> from the top) are not considered a threat, since they commonly colonize objects floating in the Pacific. A main concern are items that may have originated in the nearshore waters of Japan, such as docks, piers, vessels, and other materials already in the water at the time of the tsunami.

For more information on the Japan Tsunami Marine Debris

visit <http://marinedebris.noaa.gov/tsunamidebris/>, <http://disasterdebris.wordpress.com/>, and [dlnr.hawaii.gov](http://dlnr.hawaii.gov)

*This document is made in coordination with information from the NOAA Marine Debris Program Updated 4/2013*



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### Potential hazardous materials

Examples: Drums, fuel tanks and containers, gas cans or cylinders, chemical storage totes, aluminum canisters. **Do not touch or attempt to move the item. Call 9-1-1 and report the item to the Fire Dept.** Give authorities a detailed report about what you've observed. When safe, report the item to DLNR and NOAA (*directions on page 1*). For more information, visit <http://marinedebris.noaa.gov/tsunamidebris/pdf/hazmat.pdf>. For information on gas cylinders that have been sighted on the West Coast, visit <http://disasterdebris.files.wordpress.com/2012/06/japanesegascylinderinfo.pdf>.

### Derelict boat or other large debris item

**Do not attempt to move or remove the boat or large items. Report the item to DLNR and NOAA** (*directions on page 1*). If at sea, once an individual attaches to take possession of a derelict vessel they are then responsible for the vessel.

### Personal effects or possessions from Japan

Example: Items with unique identifiers, names, registration numbers, or markings. Items that appear to be personal belongings should be treated with respect. They should be reported with as much relevant detail as possible. **Report the item to DLNR and NOAA** (*directions on page 1*). Agencies will work with the Consulate-General of Japan in Honolulu for appropriate arrangements.

### Woody debris

**Please don't report woody debris unless it is highly significant** (e.g., statue from Japan, looks like a piece of a temple). If it is not significant, you can leave woody debris on the beach to decay and become part to the beach ecology, unless the debris is studded with nails and other metal, in which case please dispose of it safely. Typically, any growth on woody debris is not invasive. If you have strong reason to believe it is, move the item above the high tide line, take photos, and contact DLNR.

## BEACH CLEANUP GUIDELINES

**Remember, SAFETY FIRST.** These basic guidelines are provided to help avoid any unintentional injury or distress:

1. Wear gloves when you are picking up trash and have clothing and sun-block to protect from the sun.
2. Be cautious and aware of the ocean waves; never turn your back on the ocean.
3. Always stay in teams of at least two. All children should be supervised by an adult at all times.
4. At the end of your clean up, place trash bags next to park dumpsters or trash cans and be sure to securely tie the bags so debris does not fall out. For remote locations, please take bags of debris to a refuse collection center. For more information on disposal options, please visit:
  - a. Kauai County - <http://www.kauai.gov/default.aspx?tabid=121>
  - b. City and County of Honolulu - [http://opala.org/solid\\_waste/what\\_goes\\_where\\_table.html](http://opala.org/solid_waste/what_goes_where_table.html)
  - c. Maui County - <http://www.co.maui.hi.us/index.aspx?nid=1017>
  - d. Hawaii County - <http://www.hawaiiizerowaste.org/facilities/#.UV454nf0Z1M>
5. Don't touch or pick up dead animals, or attempt to move injured animals. Instead, contact the responsible authorities:
  - a. Report stranded, entangled, or injured marine mammals (whales, dolphins, and seals) by calling the NOAA Fisheries Marine Mammal Hotline at 1-888-256-9840.
  - b. Report stranded, entangled, or injured marine turtles by calling the Marine Turtle Research Program at (808) 983-5730, or see the Marine Turtle Stranding Contact Information page for more numbers [http://www.pifsc.noaa.gov/marine\\_turtle/strandings.php](http://www.pifsc.noaa.gov/marine_turtle/strandings.php).

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