OPRD Tsunami Debris Frequently Asked Questions

Version 20120622

Live at the coast? Just visiting? You can help keep the beach clean by removing human-made debris that washes up. Everyone is talking about debris from the tsunami that struck Japan in 2011, and we will see some of those objects here, but the truth is debris lands on our shores all year long. No matter where it came from, you have a chance to protect Oregon's beaches.

What can you do to help? Depends on what you find:

Litter and other typical marine debris.
Examples: Plastic bottles, aluminum cans, buoys, Styrofoam.
If practical, we encourage you to remove small debris and recycle as much of it as possible. If you can't remove the debris from the beach by hand, please move it far enough away from the water so it doesn't wash back out at high tide. If you see a ***significant amount*** of debris, or something ***too large to move*** by hand, report it by email with the date, location and photos to beach.debris@state.or.us. If the debris has organisms growing on it, throw it away in a garbage can or landfill, or move it above the high tide line and report it.

Derelict vessel or other large debris item.
Examples: Adrift fishing boat, shipping containers.
Contact 911. If the debris is a hazard to navigation, contact the US Coast Guard Pacific Area Command at 510-437-3701 for assistance. Do not attempt to move or remove vessels.

Mementos or possessions.
Examples: Items with unique identifiers, names, or markings.
If an item can 1) be traced back to an individual or group and 2) has personal or monetary value, contact the Oregon Parks and Recreation Department at 1-888-953-7677 or by email at beach.debris@state.or.us so we can make appropriate arrangements for return of items to Japan.

Potential hazardous materials.
Examples: Oil or chemical drums, gas cans, propane tanks.
Call 800-OILS-911 or the National Response Center at 1-800-424-8802 to report the item with as much information as possible. Do not touch the item or attempt to move it.

Ready to go? Carry it in your pocket!

Want more detail? Read on for Frequently Asked Questions related to the tsunami debris problem in **general**, and special questions on **boating**, and **ecological** effects.

General FAQ

Q1. Why could we see more debris on Oregon's beaches?

A. In March 2011, a tsunami struck the east coast of Japan and washed a large amount of debris into the Pacific Ocean. While it was easy to track with aircraft and satellites for the first few days, much of the debris—70% of it—soon sank. Some of the remaining debris sank later. Most of the material that is still floating will never reach land, but some of it will travel on ocean currents or be blown across the ocean surface and end up on west coast beaches.

Q2. Where is the debris now?

A. It is challenging to tell, exactly. Tracking is now very difficult because the debris is spread out over an area several times the size of the United States. The National Oceanic and Atmospheric Administration (NOAA) is coordinating the effort to use satellites, aircraft and ocean-going vessels to locate debris.

Q3. When could some of it reach Oregon?

A. Some of it is here now. Some objects – like things made of foam -- sit with most of their bulk above the water. Just like a sailboat, ocean winds can move that debris quickly. While most of it will never reach the shore, and instead get trapped in a large, circular ocean current between the US mainland and Hawaii, every storm has the potential to bring more of it onshore in 2012-2013 and beyond. This has always been true, so not all the debris is from the tsunami. Check out this website for the most updated model prediction:
http://marinedebris.noaa.gov/tsunamidebris/debris_model.html

Q4. How will the beach look different as we get debris?

A. You might not notice anything different, depending on when it arrives, and how much washes ashore at once. Debris normally comes ashore all year, every year, so identifying tsunami debris apart from normal human-made debris won't be easy. The two annual beach cleanups—volunteers coordinated by SOLV*E*, the Oregon Parks and Recreation Department, and other partners—regularly remove tons of human-made debris. Thousands of Oregonians have made it their family tradition to help keep our beaches clean.

Q5. Is tsunami debris radioactive?

A. 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. Some debris in West Coast states such as the dock washed up near Newport, Oregon, a small boat found at Cape Disappointment, Washington, and marine debris collected along the coast in Washington have been tested, and no radioactive contamination was found.

The Oregon Health Authority (OHA) Public Health Division (PHD) is regularly monitoring air and water for any higher than normal levels of radiation. To see the data, please visit the OHA PHD Radiation Protection Services webpage:
http://public.health.oregon.gov/HealthyEnvironments/RadiationProtection/RadiationMonitoring/Pages/index.aspx .

Q6. What about toxins or hazardous liquids? Could the debris contain that?

A. Yes, and has been the case for years. We already see barrels, bottles and other containers holding oil and other chemicals a couple times a year. For the proper way to report hazardous beach debris, please see Question 9 below.

Q7. Is there a chance that human remains could be in tsunami debris that washes ashore?

A. On very rare occasions, human remains are discovered on the beach following known and unknown incidents, such as accidents and drownings. It is highly unlikely that any human remains associated with the Japan tsunami will be located in any debris. There are already processes in place to deal with human remains found on the beaches. Call 911 or any Oregon State Police dispatch command center.

Q8. So if it's not radioactive, and no more or less hazardous than what we already see on the beach, how will tsunami debris be different?

A. We might see unusual items, and more beach debris. Unusual items could be docks, vessels, and large floats. They pose a hazard to navigation, especially to small vessels. We may see an increase in wood, plastic, rigid foam, lost fishing gear, and anything else that floats. It is possible that items with cultural or personal importance will survive the cross-ocean trip, and we need to handle this property with respect in cooperation with Japanese authorities. If you find a object that you think might be worth more than $100 or could be personal property, please turn it in to the nearest Oregon State Park office or local law enforcement, or keep it safe and report it by phone to 1-888-953-7677, or send an immediate email with the date, location where found and a photo to beach.debris@state.or.us.

Q9. So what do I do if I see debris on the beach?

A. Depends on what and where it is.

Litter and other typical marine debris.

Examples: Plastic bottles, aluminum cans, buoys, Styrofoam.

If practical, we encourage you to remove the debris and recycle as much of it as possible. If you can't remove the debris from the beach yourself, please move it far enough away from the water so it doesn't wash back out at high tide. Use your judgment. And if you see a significant amount of debris or anything you think might be related to the tsunami, send an email with the date, location and photos to beach.debris@state.or.us.

Exception for the south coast

Some areas of dry sand on the south coast are closed to protect nests for the threatened western snow plover. Do not enter these marked closure areas. If marine debris becomes a problem there, government agencies will organize cleanups when it will be least harmful to the birds. Snowy plovers are protected under the federal Endangered Species Act.

Derelict vessel or other large debris item.

Examples: Adrift fishing boat, shipping containers.

Contact 911. If the debris is a hazard to navigation, contact the US Coast Guard Pacific Area Command at 510-437-3701 immediately. Do not attempt to move or remove vessels.

Mementos or possessions.

Examples: Items with unique identifiers, names, or markings.

If an item can 1) be traced back to an individual or group and 2) has personal or monetary value, contact the Oregon Parks and Recreation Department at 1-888-953-7677 or by email at beach.debris@state.or.us so we can make appropriate arrangements for return of items to Japan.

Potential hazardous materials.
Examples: Oil or chemical drums, gas cans, propane tanks.
Call 800-OILS-911 or the National Response Center at 1-800-424-8802 to report the item with as much information as possible. Do not touch the item or attempt to move it.

Q10. So what's Oregon doing to prepare for unusual amounts of debris?

A. A partnership of agencies and nonprofits are working with coordination help from Oregon Emergency Management and NOAA—the lead federal agency—to prepare for the increase in beach debris. By working together—SOLV*E*, Department of Environmental Quality, Oregon Parks and Recreation Department, Surfrider Foundation, Sea Grant, US Coast Guard and other federal agencies, your local counties, cities and ports—we will all have to pitch in to collect debris and dispose of it through recycling and landfills.

We need to take **what we already know how to do**—locate, report and remove human-made debris—and be ready to do it quickly and correctly. Oregon State Parks is ready to issue special permits to help authorities and nonprofits act quickly if any unusually large objects or a high volume of debris appears.

Q11. Is there something more I can do now to help?

A. Sure is. Human-made debris on the beach is a constant problem. Work with the Oregon Shores Conservation Coalition's Coast Watch program, join the two annual beach clean-ups, or contact a coastal nonprofit like the Oregon chapter of the Surfrider Foundation. Even without the possibility of extra debris, keeping beaches clean is a challenge Oregon can only meet with help from her citizens.

Q12. Where can I go for more information?

A. For Oregon-specific information:

- OPRD: http://www.oregon.gov/OPRD/PARKS/tsunami_debris.shtml
  725 Summer St NE, Salem OR 97301, 1-888-953-7677.
- Dept of Environmental Quality:
  http://www.oregon.gov/deq/
  811 SW 6th Avenue. Portland OR 97204-1390, 800-452-4011.
- Health Department:
  http://public.health.oregon.gov/preparedness/pages/04-2012japandebris.aspx
  500 Summer Street NE E-20, Salem, OR 97301-1097, 877-398-9238
- SOLV*E*: Volunteer opportunities
  http://www.solv.org/
  2000 SW 1st Ave, Suite 400, Portland, OR 97201, 1-800-333-SOLV
- Surfrider Foundation: Volunteer opportunities
  http://oregon.surfrider.org/
- CoastWatch (Ocean Shores Conservation Coalition): Volunteer opportunities
  http://www.oregonshores.org/coastwatch.php5
  (503) 238-4450

Federal agencies

- NOAA: http://marinedebris.noaa.gov/info/japanfaqs.html
- A marine debris reporting app: http://www.marinedebris.engr.uga.edu

Boating

Q1. So what do you do if you see debris while you're boating?

A. **Safety first!** Large marine debris objects from the tsunami may be floating in the North Pacific, and pose a serious hazard to navigation, especially to small vessels. Watch out for such items, and if you see one, report immediately to the Coast Guard and provide date, time, location, and description. If it is just small trash you can safely retrieve (such as plastic, cans and so on), collect it if safe to do so and dispose of it at the boat ramp garbage container.

If it's a large amount of small debris, report it to the local state park staff or law enforcement, or call 1-888-953-7677, or send an email with the exact location, description and photo (if possible) to beach.debris@state.or.us .

Is it a big oil drum, gas can, propane tank (or other kind of chemical storage tank), boat or something similar? Contact the National Response Center at 1-800-424-8802. If the debris is a hazard to navigation, contact the US Coast Guard Pacific Area Command at 510-437-3701 for assistance. Report the location (GPS latitude/longitude), time and a description of your boat. Do not attempt to move or remove vessels.

Effects on the ecosystem

Q1. Are there plants and animals attached to tsunami debris?

A. In some cases, yes. A large item such as a dock or a vessel may contain invasive species, which should be addressed quickly and effectively. However, a lot of debris that washes ashore is not from the tsunami: much of the debris that washes ashore every day has living organisms on it; many of these are species to the open ocean and do not pose a threat to the environment.

Q2. What about species that could be invasive?

A. Much of the debris from the tsunami does not carry invasive species. The items most likely to carry invasive species are those that were floating in Japan's waters for some time before the tsunami—docks, buoys and boats, for example.

Q3. Why are invasive species a problem?

A. Marine invasive species pose a serious threat to Oregon's marine ecology and species by competing with native fish and wildlife for food and habitat and eating them. While not all nonnative species are destructive, most often, they exist at the expense of native fish and wildlife and the state's economy.

Q4. So who is involved in managing species that come ashore on tsunami debris?

A. The Oregon Department of Fish and Wildlife manages debris that contains living organisms and is associated with the tsunami that hit Japan in March 2011. Staff members coordinate with state and federal agencies; non-governmental organizations; universities; and other stakeholders and professionals on invasive species issues.

Q5. What should I do if I find debris and there's something growing on it?

A. It depends on what you find

- Remove and dispose of marine debris small enough for you to pick up—with or without living organisms on them—to a garbage can or a landfill.
- If this is not possible, move debris to dry sand—above the high tide line so that any organisms living on it will die and not be returned to the ocean.

- **Never** move debris with organisms on it to other bodies of water—an aquarium, pond or estuary.
- If the debris if too large to remove, contact Oregon Park and Recreation Department by email at beach.debris@state.or.us or by phone at 1-888-953-7677.

Q6. How do I find out more?

A. Visit ODFW's Marine Invasive Species page in the Conservation section of the website under Invasive Species. It will be updated regularly. http://tinyurl.com/oregonmarineinvasives

Staff contacts:
Rick Boatner, Aquatic Invasive Species Coordinator
Rick.J.Boatner@state.or.us
(503) 947-6308

Meg Kenagy, Conservation Communications Coordinator
meg.b.kenagy@state.or.us
(503) 947-6021