

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 will be addressed quickly. However, much of the debris that washes ashore every day has living organisms on it, which are native or 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.

Q4. Who manages species that come ashore on tsunami debris?

A. The Oregon Department of Fish and Wildlife manages debris that contains living organisms associated with the tsunami.

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 is too large to remove, email beach.debris@state.or.us or call us at 211.

Q6. How do I find out more about invasive species?

A. The ODFW's Marine Invasive Species Web page, at: <http://tinyurl.com/oregonmarineinvasives>

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 211, 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? Call 211 and you'll be connected to the U.S. Coast Guard National Response Center (1-800-424-8802). If the debris is a hazard to navigation, call 211 and you'll be connected to the US Coast Guard Pacific Area Command (510-437-3701). Report the location (GPS latitude/longitude), time and a description of your boat. Do not attempt to move or remove vessels.



Japanese fishing floats found on the Oregon Coast.

Call 2-1-1

2-1-1 (1-800-SAFENET) is the number you can call to report large debris that may be found on our beaches. Please use this number in place of 9-1-1 for tsunami debris unless you have a serious emergency.

Where can I go for more information?

Oregon-specific information

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://cms.oregon.gov/deq/pages/index.aspx>
811 SW 6th Avenue, Portland OR 97204-1390
1-800-452-4011

Oregon Department of Fish and Wildlife:

<http://www.dfw.state.or.us>

2040 SE Marine Science Drive, Newport, OR 97365.
541-867-4741, Fax: 541-867-0311

Health Department:

<http://public.health.oregon.gov/preparedness/pages/04-2012japandebri.aspx>
500 Summer Street NE E-20, Salem, OR 97301-1097
877-398-9238

Federal agencies:

NOAA: <http://marinedebris.noaa.gov/tsunamidebris>

Marine debris reporting app:

<http://www.marinedebris.engr.uga.edu>

Volunteer Opportunities

SOLV:

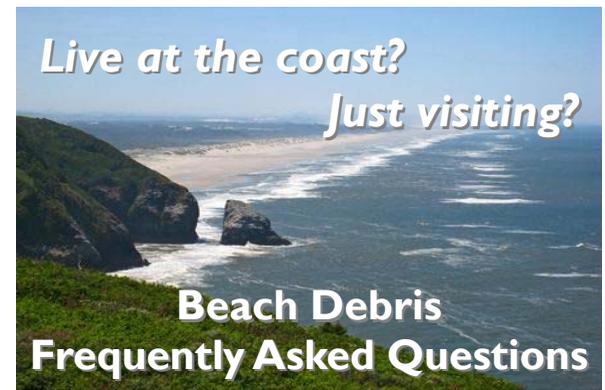
<http://www.solv.org>
2000 SW 1st Ave, Suite 400, Portland, OR 97201
1-800-333-SOLV

Surfrider Foundation:

<http://oregon.surfrider.org>

CoastWatch

(Ocean Shores Conservation Coalition):
<http://www.oregonshores.org/coastwatch.php5>
503-238-4450



You can help keep the beach clean by knowing how to handle debris that washes up on shore. Everyone is talking about debris from the tsunami that struck Japan in 2011.

We will see some of those objects here, but **debris lands on our shores all year long.** No matter where it came from, you can help to protect Oregon's beaches and have a great time!

(There are dozens of disposal stations on the coast ready to accept your bagged beach debris)



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Beach Debris Frequently Asked Questions

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

A. In March 2011, a tsunami struck Japan and washed a large amount of debris into the Pacific Ocean. While most of the debris sank, some debris will wash up on West Coast beaches during 2012-2013 and beyond.

Q2. Where is the debris now?

A. It is hard to pinpoint because the debris is spread over an area several times the size of the United States, making it difficult to track. Most of it will never reach Oregon shores and will most likely become trapped in a large, circular ocean current between the U.S. mainland and Hawaii. The National Oceanic and Atmospheric Administration is responsible for tracking the debris. For an updated model prediction, see NOAA's website, <http://marinedebris.noaa.gov>

Q3. When could some of it reach Oregon?

A. Some of the tsunami debris has already reached Oregon shores. However, not all the debris on the beaches is from the tsunami.

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

A. Typically, large debris stands out when washed ashore. You might not notice anything different. It really depends on the size and volume of debris. Keep in mind, debris comes ashore all year, every year. The two annual beach cleanups—volunteers coordinated by SOLV, the Oregon Parks and Recreation Department, and others—regularly remove tons of human-made debris.

Q5. Is tsunami debris radioactivity a concern?

A. There is consensus among scientists at The National Oceanic and Atmospheric Administration that it is highly unlikely the debris from Japan is radioactive. The International Atomic Energy Agency began radiation monitoring after the tsunami and as of August 2012, no radioactive tsunami debris has been detected. NOAA is coordinating regular monitoring that will continue through 2013.

Oregon Health Authority (OHA) Public Health Division (PHD) is also regularly monitoring air and water for **any** higher than normal levels of radiation. To see the data, visit the OHA PHD Radiation Protection Services website, <http://public.health.oregon.gov/healthyenvironments/radiationprotection/radiationmonitoring/pages/index.aspx>

Q6. What about toxins or hazardous liquids?

A. This is always possible. In the past we have seen and removed barrels, bottles and other containers holding oil and other chemicals. See Question 10.

Q7. Is there a chance 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 drowning. It is highly **unlikely** that any human remains associated with the Japan tsunami will be among the debris. There are already processes in place to deal with human remains found on Oregon beaches. Call 911 or an Oregon State Police dispatch center.

Q8. How will tsunami debris be different?

A. We might see unusual items like the dock that washed up on Agate Beach on June 5, 2012. Identifying tsunami debris apart from normal beach debris won't be easy. Unusual items could also be boats and large floats. 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.

Q9. How will items of value be handled?

A. If you find an object 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 call 211 to report it by phone, or send an immediate email with the date, location where found and a photo to beach.debris@state.or.us

Oregon Office of Emergency Management
<http://www.oregon.gov/omd/oem>
503-378-2911

Q10. 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

Example: Plastic bottles, aluminum cans and styrofoam.

Remove the debris and recycle as much of it as possible. If you can't remove the debris, move it above the high tide line so it doesn't wash back into the ocean. If you see a large amount of debris or anything that is too large to move, send an email with the date, location and photos to beach.debris@state.or.us or call 211 (1-800-SAFENET).

Except: Some areas of dry sand on the south coast are closed to protect nests for the threatened western snowy 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 items at sea

Example: Adrift fishing boats or shipping containers.

Call 911 in an emergency. If the debris is a hazard to navigation, call 211 (1-800-SAFENET) and you will be connected with the US Coast Guard. Do not attempt to move or remove vessels.

Mementos or possessions

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

If an item can be traced back to an individual or group and has personal or monetary value, we would like to make appropriate arrangements for its return to Japan. Call 211 (1-800-SAFENET) to report it, or send an email to: beach.debris@state.or.us

Potential hazardous materials

Example: Oil or chemical drums, gas cans, propane tanks.

Call 211 (1-800-SAFENET) and you will be connected to the US Coast Guard's National Response Center. Report as much information as possible. Do not touch the item or attempt to move it.

Q11. 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 possible increase in beach debris.

Working together, we will collect debris and dispose of it through recycling centers and landfills. We need to use 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.

Q12. Is there something more I can do now to help?

A. We are very proud of our Oregon beaches and we want to maintain their beauty for everyone to enjoy. However, human-made debris on the beach is a constant problem. We encourage you to 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 everyone.



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