

Tsunami Debris on B.C.'s coast

Frequently Asked Questions

Q. What is the Province doing to get ready for tsunami debris on B.C.'s coastline?

The Province and the Government of Canada including local governments and the volunteer sector are working together as members of a **Tsunami Debris Coordinating Committee**. The mandate of the committee is to ensure all ministries and governments understand their jurisdictional roles and responsibilities, and to help link stakeholders to appropriate government agencies. The Committee is also working with the U.S. National Oceanic and Atmospheric Administration (NOAA) and U.S. states from California to Alaska and Hawaii to develop a coordinated response to tsunami debris on our collective shorelines.

Q. What is government doing to respond?

No one agency or group has the sole responsibility or jurisdiction for responding to this challenge. It will require the resources and collaborative efforts of all. For example:

- Local governments will be a key partner, both in managing any debris that washes ashore along B.C.'s coast and in ensuring the community has accurate information.
- First Nations will have a role in managing the impacts of debris on their lands.
- Volunteer groups, many with a long history of beach clean-up activities, will continue to be an important part of keeping our beaches clean.
- And the senior levels of government, through the committee, will continue to foster this cooperation.

We have created the Tsunami Debris Coordinating Committee to ensure that Federal Provincial and Local government, First Nations and stakeholders understand and coordinate their jurisdictional roles, responsibilities, and activities and ensure an effective response to the potential arrival of Japanese tsunami debris. The Committee is intent on having formal plans together soon, well ahead of the arrival of most of the debris.

Q. How do you determine who is responsible for any tsunami debris found on B.C.'s coast?

Jurisdiction for the tsunami debris is a complex issue. It is primarily based upon the location of the debris, i.e., where it lands when it comes ashore:

- The federal government has primary jurisdiction in the marine environment and for all federally designated lands (for example, national parks, non-treaty First Nation reserve lands and Department of National Defence lands)
- The Province has primary jurisdiction for shorelines (inter-tidal zone) and provincial Crown lands above the high tide line

- Local government has primary jurisdiction for its designated lands above the high tide line

Cleaning up tsunami debris will require the resources and collaborative efforts of all.

Q. What activities is the Tsunami Debris Coordinating Committee engaged in?

The committee is focusing on three key areas:

Science and Monitoring: Committee members are engaging the scientific community in order to stay current on debris modeling, monitoring, sightings, and areas of debris accumulation.

Debris Management: Work is well underway on reviewing existing planning for marine debris management and developing a Tsunami Debris response plan for BC, including protocols for safe handling of various wastes.

Communications/Intergovernmental Relations: Staff is maintaining a Tsunami Debris website hosted by the Ministry of Environment so that partners, stakeholders, the Japanese government and the public are kept updated on our response.

Q. When is most of the tsunami debris expected to arrive?

It's impossible to accurately predict ocean currents and winds several months in advance, so there is no certainty regarding arrival, but the U.S. National Oceanic and Atmospheric Administration (NOAA) and University of Hawaii models suggest the majority of the debris will begin to arrive in 2013, and the Canadian government agrees.

The debris washing towards the Pacific Northwest was expected, although scientific modelling cannot predict with certainty when, how much, or for how long it will continue to arrive.

There are differing scientific opinions regarding the volume, make-up and specific timing of debris coming ashore. The Tsunami Debris Coordinating Committee will engage the scientific community in order to stay current on updated modeling, monitoring, sightings, and areas of debris accumulation.

Q. What can we expect will wash ashore?

We can expect mostly small, buoyant items like fish nets with floats, plastic bottles or bags, lumber and cans. As exemplified recently, durable, airtight items such as vessels and containers, can also survive the Pacific crossing.

According to the Marine Debris Program at NOAA, most of the heavier materials sank closer to Japan's shore while the buoyant materials moved on to make up the debris fields that can be seen in satellite imagery and aerial photos.

Beaten by ocean currents and winds, the debris field is expected to continue dispersing, breaking apart with items continuing to sink, as it moves towards us. The mass will essentially become more scattered – unlike the large debris fields seen initially.

NOAA and the Department of Fisheries and Oceans have suggested that one-third or less of the mass may actually make it here. The other two-thirds (of non-sinking material) will go back toward Hawaii or end up in the North Pacific convergence zone – an area in the ocean where objects come together in something like an eddy and form a massive garbage pile.

Q. What kinds of tsunami debris have arrived so far on B.C. shores?

Marine debris is an everyday problem for much of the Pacific region, and it washes upon our coasts from Asia all the time. Items need to be closely inspected before we can determine, if possible, that they were washed into the sea by the tsunami.

Recently, an unmanned vessel from Japan was sighted off Haida Gwaii, and a shipping container from Japan with a motorcycle inside was found in Naikoon Provincial Park, also on Haida Gwaii.

Items that are very buoyant and have large wind profiles (that act like sails) may arrive faster than other debris. It is also likely that there is an increased sensitivity to shoreline debris as a result of the interest in this issue.

Q. What happens if a wreck is found along B.C.'s coast?

Any person who finds and takes possession of a wreck in Canada, or who brings a wreck into Canada (within 12 nautical miles), is required to report the claim to the Receiver of Wreck (ROW). The Receiver of Wreck does not authorize salvage, but the salvor is required to report the salvaging of a vessel or cargo to the ROW upon completion of the salvage.

The Receiver of Wreck acts as custodian of wreck in the absence of the rightful owner.

Please refer to Part 7 of the Canada Shipping Act 2001, for more information on the roles and responsibilities of owners, salvors and the ROW.

(<http://www.tc.gc.ca/eng/marinesafety/oep-nwpp-wreck-541.htm>)

Q. If someone finds property of value or a personal item that is clearly from Japan and easily identified as such, what should they do?

In such cases, they should contact the U.S. National Oceanic and Atmospheric Administration (NOAA) using the email address designated specifically for collecting data on tsunami debris sightings or finds: DisasterDebris@noaa.gov.

Committee members are working with the Japanese government to establish protocols for the identification and management of any particularly sensitive items that wash ashore.

Q. Is there concern about radioactive materials arriving?

No, we do not believe that there will be any issues with radioactive contamination of the debris arriving on our shores. The majority of the debris will have been swept away from Japan during and immediately following the earthquake and tsunami – prior to the issues with the nuclear reactor. In addition, the length of time and conditions that the debris will have faced as it crossed the Pacific will have dispersed some, if not all, contamination that

could have occurred. Recent testing conducted in Washington State found no evidence of radiation in debris.

Q. Will debris be tested for radioactive contamination when it arrives?

While the risk of contamination is slight, as a precaution, samples of debris will be tested for radioactive contamination. The Province will work with Health Canada to determine the best methods to go about conducting this testing.

Q. What are the environmental impacts?

The environmental impacts depend on what and how much arrives on our coast. The Ministry of Environment (MOE) is engaged and will be monitoring. MOE will regulate the disposal of debris deemed to be waste. If a person sees something on the beach that appears to be a source of pollution or hazardous material, they should contact the **Provincial Emergency Coordination Centre at 1-800-663-3456**.

Q. How will hazardous material be dealt with?

The Canadian Coast Guard (for materials at sea) and the BC Ministry of Environment should be contacted to ensure assessment and appropriate containment and recovery of the materials. In some cases a hazardous waste contractor will be engaged to secure, recover and dispose of the waste.

Q. Will we see human remains come ashore?

Although it is highly unlikely, we are aware of the potential for human remains to wash ashore, a tragic reminder that many families in Japan are still grieving the loss of loved ones. The Province has been in touch with the Japanese consulate over culturally sensitive and repatriation issues. We will deal with this on a case-by-case basis. There are forensic, legal and legislative protocols in place, and the Coroners Service of British Columbia will be the lead should such a discovery be made.

Q. Will the arrival of tsunami debris be considered an “emergency”?

There is no imminent public safety threat in the debris that might wash ashore. Emergency Management BC (EMBC) is lending its expertise, knowledge and inter-agency information sharing where feasible, but is not directly involved in a leadership role.

EMBC does, however, have an “all-hazards” approach to emergency management across the province (it applies the same protocols, management structure and emergency management principles to floods, wildfires, hazmat accidents, earthquakes, etc.) and in working closely with the Ministry of Environment – the provincial lead – will provide advice as requested.